# McGill University

### MONTREAL

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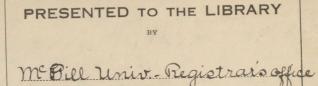
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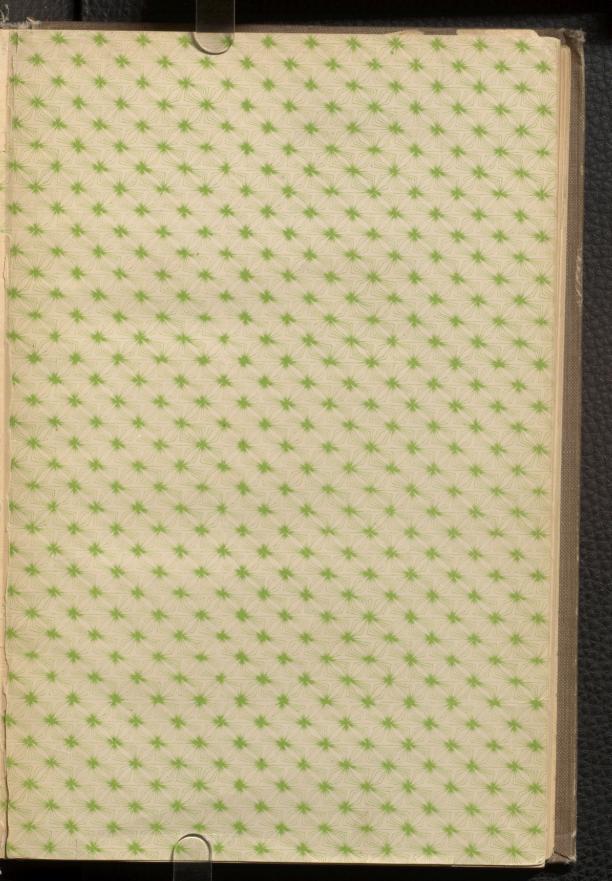
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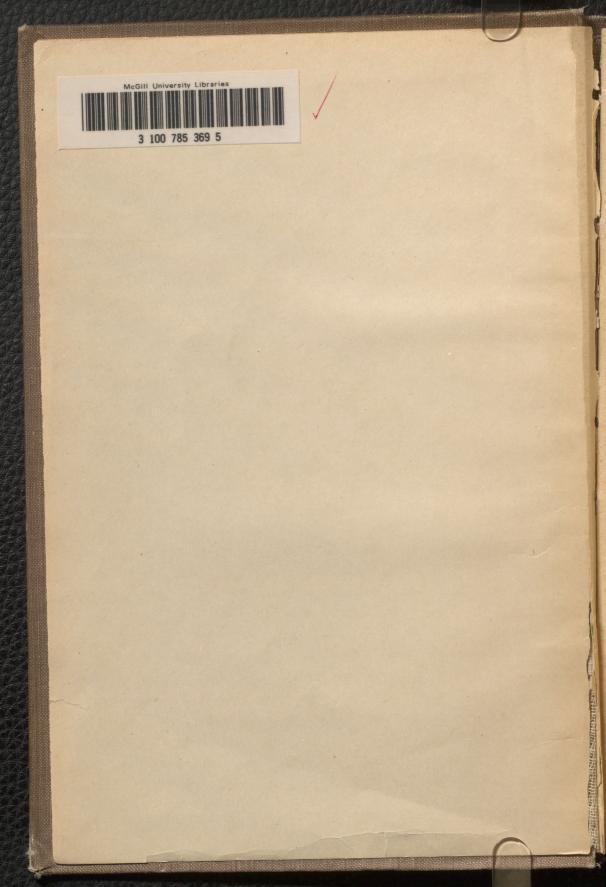




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DATE 1921





## McGILL UNIVERSITY MONTREAL

FOUNDED UNDER BEQUEST OF THE HON. JAMES McGILL; ESTABLISHED AS A UNIVERSITY BY ROYAL CHARTER IN 1821; AND REORGANIZED UNDER AN AMENDED CHARTER IN 1852



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C. B. KEENAN, D.S.O., M.D.	s' Building, Phillips Square.
Lecturer in Clinical Surgery. J. L. D. MASON, B.A., M.D.	376 Mountain St.
Lecturer in Pharmacology. A. T. BAZIN, D.S.O., M.D.	24 Park Ave.
Lecturer in Surgery, Clinical Surgery	and Applied
Anatomy. 147 Cla	andeboye Ave., Westmount.
	Sherbrooke St., Westmount.
F. M. FRY, B.A., M.D. Lecturer in Pediatrics and Demonstrat	or in Clinical
Medicine.	577 Dorchester St. W.
PHILIP BURNETT, D.S.O., M.D.	
Lecturer in Dermatology. 2 S A. MACKENZIE FORBES, M.D.	impson St. (Linton Apts.).
Lecturer in Orthopædic Surgery.	615 University St.
WILLIAM GEORGE TURNER, M.C., B.A., M.I.	D., M.R.C.S. (Eng.).
Lecturer in Orthopædic Surgery.	386 Sherbrooke St. W.
H. R. D. GRAY, B.A., M.D. Lecturer in Obstetrics.	214 Bishop St.
J. W. DUNCAN, M.D.	and provop ou
Lecturer in Obstetrics.	141 Crescent St.
H. C. Burgess, M.D.	TTO Crossout St
Lecturer in Obstetrics and Gynæcology A. H. GORDON, M.D.	118 Crescent St.
Lecturer in Medicine and Clinical Med	licine. 111 St. Famille St.
COLIN K. RUSSEL, B.A., M.D.	N
Lecturer in Neurology and in Clinical S. HANFORD MCKEE, C.M.G., B.A., M.D.	Neurology. 218 Bishop St.
Lecturer in Bacteriology and Demonstr	cator in
Ophthalmology.	158 Crescent St.
ROBERT H. CRAIG, M.D.	The Charles by Ct. W
R. ST. J. MACDONALD, B.A., M.D., D.P.H.	y. 510 Sherbrooke St. W.
Lecturer in Hygiene.	Medical Building.
C. A. PETERS, D.S.O., M.D., M.R.C.S., L.	R.C.P.
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F. M. EBERTS, M.D., M.R.C.S. (Eng.).	arcine. 142 crescent bt.
Lecturer in Surgery and Clinical Surg	gery. 219 Peel St.
W. B. Howell, M.D.	THE CLASS OF ME
Lecturer in Anæsthetics. F. S. JACKSON, M.D.	756 Sherbrooke St. W.
	3 Argyle Ave., Westmount.
F. B. JONES, M.D., D.P.H.	
Lecturer in Hygiene.	98 Sherbrooke St. W.
A. R. M. MACLEAN, M.Sc., Ph.D. Lecturer in Chemistry.	Chemistry Building.
A. O. FREEDMAN, M.D.	Chemistry Bundlig.
Lecturer in Anatomy.	255 Sherbrooke St. W.

FRASER B. GURD, B.A., M.D. Lecturer in Immunology and Assistant Demonstrator in Clinical Surgery. 115 Stanley St. C. A. PORTEOUS, M.D. Lecturer in Mental Diseases. Protestant Hospital for the Insane, Verdun, Que. F. S. PATCH, B.A., M.D. Lecturer in Genito-Urinary Surgery. 33 Bishop St. D. W. MACKENZIE, B.A., M.D. Lecturer in Genito-Urinary Surgery. 624 Sherbrooke St. W. WILLIAM G. HEPBURN, M.D. Lecturer in Anæsthetics. 1363 Greene Ave., Westmount. J. STAFFORD, B.A. (Toronto), M.A., Ph.D. (Leipzig) Lecturer in Zoology.
 Eddy, NATHAN B., M.D.
 Lecturer in Physiology.
 A. A. ROBERTSON, B.A., M.D.
 Demonstrator in Clinical Medicine. McGill University. 145 Bayle St. 136 Mansfield St. C. F. Wylde, C.B., M.D. Demonstrator in Clinical Medicine and Pediatrics. 101 Crescent St. CHARLES K. P. HENRY, M.D. Demonstrator in Clinical Surgery. 4549 Sherbrooke St., Westmount. A. R. PENNOYER, M.D. Demonstrator in Clinical Surgery. 418 Mackay St. F. T. TOOKE, B.A., M.D. Demonstrator in Ophthalmology. 368 Mountain St. J. APPLETON NUTTER, B.A., M.D., F.A.C.S. Demonstrator in Orthopædic Surgery. 609 Drummond Bldg. W. H. P. HILI, M.D., M.R.C.S. (Eng.), L.R.C.P. (Lond.). Demonstrator in Clinical Surgery. 409 I
R. H. M. HARDISTY, D.S.O., M.C., B.A., M.D. Demonstrator in Clinical Chemistry and in Clinical 409 Mackay St. Medicine. 52 McGill College Ave. W. H. SMYTH, B.A., M.D. Demonstrator in Anatomy and Assistant Demonstrator in Clinical Surgery. 4822 Western Ave., Westmount. JOSEPH KAUFMANN, M.D. Demonstrator in Pathology and Clinical Medicine and Assistant Curator of the Museum. 204 Mance St. E. J. MULLALLY, M.D. Demonstrator in Pathology. 603 Union Ave. F. E. MCKENTY, M.D., F.R.C.S. (London). Demonstrator in Clinical Surgery and in Operative Surgery. 464 Union Ave. J. G. BROWNE, B.A., M.D. Demonstrator in Clinical Medicine. 294 Sherbrooke St. W. E. HAMILTON WHITE, B.A., M.D. Demonstrator in Oto-Laryngology. 589 Dorchester St. W. J. T. ROGERS, B.A., M.D. Demonstrator in Oto-Laryngology. 464 Union Avenue. W. J. PATTERSON, B.A., M.D. Demonstrator in Clinical Surgery and Orthopædics. 386 Sherbrooke St. W.

D. W. MCKECHNIE, D.S.O., M.D.	THOP Doult Area
Demonstrator in Clinical Medicine. C. F. MOFFATT, B.A., M.D.	1798 Park Ave.
Demonstrator in Clinical Medicine.	9 Durocher St.
F. I. TEES, M.C., B.A., M.D.	
Demonstrator in Clinical Surgery.	6 Bishop St.
R. E. Powell, M.D.	
Demonstrator in Genito-Urinary Surgery. 4137 Dorchester	er St., Westmount.
F. A. C. SCRIMGER, V.C., B.A., M.D. Demonstrator in Clinical Surgery.	154 Metcalfe St.
Wesley Bojrne, M.D.	194
Demonstrator in Pharmacology.	34 St. Mark St.
J. R. FRASER, M.D. Demonstrator in Gynæcology. 577	Dorchester St. W.
VIOLET HENRY, M.Sc. 517	Dorenester St. W.
Demonstrator in Medical Physics.	
60 Arlington	Ave., Westmount.
W. E. ENRIGHT, B.A., M.D.	Arra Westingunt
Demonstrator in Pediatrics. 388 Roslyn A. H. PIRIE, B.Sc., M.D.	Ave., Westmount.
Demonstrator in Roentgenology. Roval	Victoria Hospital.
Demonstrator in Roentgenology. Royal W. A. WIIKINS, M.D.	
Demonstrator in Roentgenology.	289 Peel St.
C. T. CROWDY, M.D.	838 Oxenden Ave.
Demonstrator in Pathology. W. J. Scott, M.D.	030 Oxenden Ave.
	General Hospital.
D. GRANT CAMPBELL, M.D.	
Demonstrator in Clinical Medicine.	755 Shuter St.
H. P. WRIGHT, M.D. Demonstrator of Clinical Chemistry.	440 Mackay St.
H. A. SIMS, M.D.	440 Mackay St.
Assistant Demonstrator in Clinical Medicine.	
J. GUY W. JOHNSON, M.A., M.D., F.R.C.S. (Edin.)	).
Assistant Demonstrator in Clinical Surgery.	Sherbrooke St. W.
453 L. L. REFORD, M.D.	SHEIDIOOKE St. W.
Assistant Demonstrator in Pathology and Clin.	ical
Surgery.	307 Pine Ave. W.
J. A. MACMILLIAN, M.D. Assistant Demonstrator in Ophthalmology.	too Chamlen St
D. H. BALION, B.A., M.D.	129 Stanley St.
Assistant Demonstrator in Oto-Laryngology.	255 Bishop St.
G. S. MUNDIE, B.A., M.D.	
Assistant Demonstrator in Clinical Medicine.	
A. H. MACCORDICK, M.D.	Sherbrooke St. W.
A. H. MACCORDICK, M.D. Assistant Demonstrator in Clinical Medicine.	131 Stanley St.
A. G. MORPHY, M.D.	
Assistant Demonstrator in Clinical Medicine.	CI 1 1 C IV
	Sherbrooke St. W.
A. G. MCAULEY, M.D. Assistant Demonstrator in Ophthalmology.	
579	Dorchester St. W.

J.	ROSENBAUM, M.D.
-	Assistant Demonstrator in Ophthalmology. 36 Sherbrocke St. W.
E.	E. Robbins, M.D.
	Assistant Demonstrator in Medicine and Clinical Medicine. 1963 Park Ave.
А.	Stewart, M.D.
	Assistant Demonstrator in Anatomy. 1798 Park Avenue.
D.	L. MENDEL, M.D.
	Assistant Demonstrator in Clinical Medicine. 1729 Park Ave.
E.	C. LEVINE, M.D.
	Assistant Demonstrator in Clinical Surgery. 271 Bishop St.
D.	MACCALLUM, M.D.
	Assistant Demonstrator in Clinical Medicine. 154 Drummond St.
C.	R. BOURNE, M.D.
	Assistant Demonstrator in Clinical Medicine.
-	4172 St. Catherine St.
S.	S. SPERBER, L.R.C.P. (Edin.).
	Assistant Demonstrator in Bacteriology.
	1461 St. Lawrence Boulevard.
Α.	BRAMLEY-MOORE, M.D.
	Assistant Demonstrator in Ophthalmology. 820 Dorches.er St. W.

DEPARTMENT OF PHARMACY.

ALEXANDER B. J. MOORE, Ph.G. Head of the Department, and Professor of Materia Medica and Pharmacy. 12 Winchester Ave., Westmount.

# FACULTY OF AGRICULTURE.

(Macdonald College.)

THE PRINCIPAL.

F. C. HARRISON, D.Sc., F.R.S.C. Principal, Dean of the Faculty and Professor of Bactenology. WILLIAM LOCHHEAD, B.A., M.Sc., F.A.A.S. Professor of Biology. CARLETON J. LYNDE, Ph.D. Professor of Physics. J. F. SNELL, Ph.D. Professor of Chemistry. H. BARTON, B.S.A. Professor of Animal Husbandry. T. G. BUNTING, B.S.A. Professor of Horticulture. ROBERT SUMMERBY, B.S.A. Professor of Cereal Husbandry. M. A. JULL, M.Sc. Manager and Lecturer in Poultry Department. (The above Professors constitute the Faculty of Agriculture.)

OTHER OFFICERS OF INSTRUCTION.

B. T. DICKSON, B.A.

Assistant Professor of Biology.

J. B. MCCARTHY, B.A., M.Sc.

Assistant Professor of Chemistry. GEORGE E. EMBERLEY.

Lecturer in Agricultural Engineering and in Manual Training. DOUGLAS MACFARLANE, Ph.D.

Lecturer in English and History.

A. R. NESS, B.S.A. Lecturer in Animal Husbandry.

J. A. STARRAK.

Lecturer in Agricultural Engineering and Manual Training. L. C. MCOUAT, B.S.A. Lecturer in Animal Husbandry.

L. C. RAYMOND, B.S.A.

Lecturer in Cereal Husbandry.

W. A. TAWSE, B.S.A. Lecturer in Horticulture.

E. G. HOOD, B.S.A. Lecturer in Bacteriology.

Lecturer in Horticulture.

Lecturer in Physics. C. B. LARRY. Instructor in Home Dairving. P. I. BRYCE.

Assistant in Biology. MISS M. E. KENNEDY. Assistant in Bacteriology.

A. H. WALKER. Florist.

EMPLOYED UNDER THE AGRICULTURAL INSTRUCTION ACT OF 1913 (Canada).

A. SAVAGE, B.S.A., D.V.M. Veterinarian. E. M. DU PORTE, B.S.A., M.Sc. Assistant in Biology. N. C. MACFARLANE, B.A. Assistant in Chemistry. MISS M. M. CHUTE. Superintendent of Homemakers' Clubs of Quebec. A. G. TAYLOR, B.S.A. Extension Poultry Husbandman. E. A. Lods, B.S.A. Extension Cereal Husbandman. J. HAROLD MCOUAT, B.S.A. Demonstrator to Quebec Rural Schools. MISS F. A. BUZZELL. Demonstrator to Homemakers' Clubs of Quebec.

#### SCHOOL FOR TEACHERS.

SINCLAIR LAIRD, M.A., B.Phil. Dean of the School for Teachers and Professor of Education. H. D. BRUNT, M.A., Ph.D. Lecturer in English. A. R. B. LOCKHART, B.A. Lecturer in Elementary Education. W. P. PERCIVAL, B.A. Lecturer in Mathematics. JOHN GRANT THOMPSON, M.A. Lecturer in History and Geography. MISS LÉA E. TANNER. Lecturer in French. J. EGBERT MCOUAT, B.S.A. Lecturer in Nature Study and Elementary Agriculture. G. A. STANTON, L.R.A.M., A.R.C.M. Lecturer in Music. MISS L. W. BAILEY. Instructor in Drawing and Household Art. MISS MARGARET L. BRACKETT. Instructor in Physical Training.

#### SCHOOL OF HOUSEHOLD SCIENCE.

MISS ANITA E. HILL. Head of the School of Household Science.
MISS BESSIE M. PHILIP. Instructor in Household Science.
MISS J. BABB. Instructor in Household Science.
MISS L. M. HEBLER. Instructor in Household Science.
MISS EVELYN SMITH, B.S. Instructor in Household Science.
MISS W. J. WRIGHT. Instructor in Home Nursing.

## FACULTY OF DENTISTRY.

A. W. THORNTON, D.D.S., D.Sc. Dean of the Faculty and Professor of Clinical Dentistry. 147 Grey Ave.
GEORGE S. CAMERON, D.D.S. Professor of Prosthetic Dentistry. Birks' Building, 14 Phillips Square.
FRED, G. HENRY, D.D.S. Professor of Dental Pathology and Therapeutics. 444 Guy St.
F. H. A. BAXTER, D.D.S. Professor of Operative Dentistry. 518 St. Catherine St. W.
JAMES B. MORISON, D.D.S. Professor of Orthodontia. Birks' Building, Phillips Square.

(The above Professors constitute the Faculty of Dentistry.)

#### OTHER OFFICERS OF INSTRUCTION.

J. S. DOHAN, D.D.S.	
Lecturer in Crown and Bridge Work.	127 Stanley St.
W. L. BOND, B.A., B.C.L., K.C.	
Lecturer in Dental Jurisprudence.	247 Bishop St.
A. CLIFFORD JACK, D.D.S.	
Lecturer in Dental Anatomy.	416 Mackay St.
A. W. McClelland, D.D.S.	
Lecturer in Orthodontia.	14 Phillips Square.
A. R. PENNOYER, M.D.	Mary Strates
Lecturer in Oral Surgery.	418 Mackay St.
F. A. STEVENSON, D.D.S., D.M.D. (Harvard).	
Lecturer in Dental History, Ethics and Econo	omics.
	154 Metcalfe St.
ROBT. ALEX. HART, D.D.S.	

Superintendent of Dental Clinic. GEORGE MORAITES. Demonstrator of Dental Clinic.

# FACULTY OF MUSIC.

H. C. PERRIN, Mus. Doc. (Trinity College, Dublin). Dean of the Faculty and Professor of Music.

856 Lorne Crescent.

CLARA LICHTENSTEIN.

24

Associate Professor of Music, Lecturer in the history of Music and Resident Lecturer in Music.

Royal Victoria College.

(Names of additional members of the Faculty, as well as of other Instructors, will appear in the special syllabus issued by the Conservatorium of Music.)

# DEPARTMENT OF PHYSICAL EDUCATION.

A. S. LAMB, B.P.E., M.D.

Director of the Department.
F. W. HARVEY, B.A., M.D. University Medical Officer.
F. M. VAN WAGNER, B.P.E.
4007 Dorchester St., Westmount.

Track Coach, Assistant Physical Director.

F. J. SHAUGHNESSY.

Football and Hockey Coach. GEO. L. Fox, Jr.

McGill Union.

Instructor in Gymnastics. MISS ETHEL M. CARTWRIGHT, Graduate and Former Assistant of the Chelsea College of Physical Education, London, England.

Physical Director for Women. MISS GEORGINA M. WOOD, Graduate Chelsea College of Physical Education, London, England.

Assistant Physical Director for Women.

# DEPARTMENT OF SOCIAL SERVICE.

MR. J. HOWARD T. FALK, Director.

LECTURERS.

MR. J. HOWARD T. FALK. "Child Welfare," "Social Stu	tistics and Descent "
"Organization and Adminis MISS E. BOLDUC, University Settle "Social Development of Urba	tration." 36 Durocher St.
MR. JOHN BRADFORD.	179 Dorchester St. W.
"Social Development of Rura Dr. Wm. Caldwell.	el Communities." 99 Durocher St.
"Principles of Sociology." MR. JOHN B. DAWSON.	737 Shuter St.
"Treatment of Poverty." PROF. CARRIE M. DERICK.	275 Jeanne Mance St.
"Heredity and Environment." Mr. Francis Hankin.	85 Crescent St.
"Industrial History." Dr. Stephen Leacock.	648 Belgium Ave., Westmount.
"Economics." Gordon S. Mundie, M.D.	165 Cote des Neiges Rd.
"Psychiatry."	660 Sherbrooke St. W.
MISS HELEN R. Y. REID. "Public Health and Housing." W. A. L. STYLES, M.D.	698 Sherbrooke St. W.
"Child Health." Dr. W. D. TAIT.	249 Prince Arthur St. W.
"Social Psychology."	Arts Building, McGill University.

# Emeritus Professors.

(Retaining their Ranks and Titles, but retired from work.)

HON. MR. JUSTICE MATTHEW HUTCHINSON, D.C.L.

Emeritus Professor in the Faculty of Law. Sherbrooke, Que. HON. MR. JUSTICE J. EMERY ROBIDOUX, D.C.L., Officier de l'Instruction Publique, Chevalier de la Légion d'Honneur.

Emeritus Professor in the Faculty of Law. 679 University St. DUNCAN MCEACHRAN, D.V.S., F.R.C.V.S., LL.D.

Emeritus Dean and Professor in the Faculty of Comparative Medicine and Veterinary Science.

Ormsby Grange, Ormstown, Que.

SIR THOMAS RODDICK, M.D., LL.D. (Edin. and Queen's), F.R.C.S. (Eng.).

Emeritus Dean and Professor of Surgery in the Faculty of Medicine. 705 Sherbrooke St. W.

WILLIAM GARDNER, M.D. Emeritus Professor of Gynæcology. 457 Sherbrooke St. W.

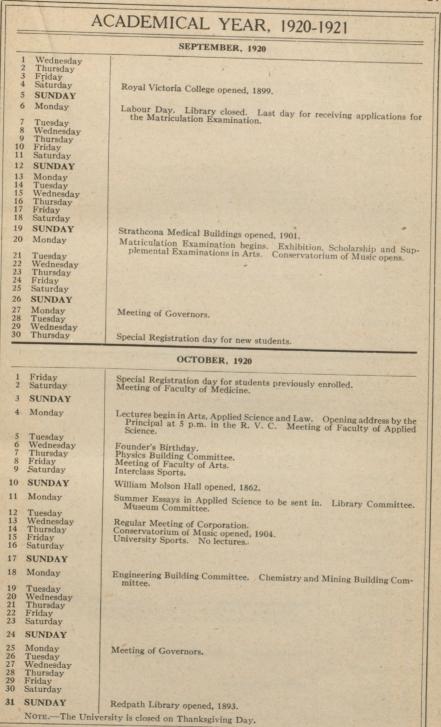
Hon. CHARLES J. DOHERTY, K.C., D.C.L., LL.D. Emeritus Professor of Civil, Commercial and International Law. Minister of Justice, Ottawa, Ont.

FRANCIS J. SHEPHERD, M.D., LL.D. (Edin. and Harvard), F.R.S.C. (Hon. Edin. and Eng.). Emeritus Dean and Professor of Anatomy. 152 Mansfield St.

Emeritus Dean and Professor of Anatomy. 152 Mansfield St. HON. SIR CHARLES DAVIDSON, Kt., M.A., D.C.L., LL.D.

*Emeritus Professor of Criminal Law.* 125 Metcalfe St. CHARLES E. MOYSE, B.A., LL.D.

Emeritus Vice-Principal, Dean of the Faculty of Arts and Professor of English.



NOVEMBER, 1920		
	NOVENIDER, 1749	
1 Monday 2 Tuesday 3 Wednesday 4 Thursday 5 Friday 6 Saturday	Meeting of Faculty of Applied Science. Macdonald College opened, 1907. Meeting of Faculty of Arts. Meeting of Faculty of Medicine.	
7 SUNDAY		
8 Monday 9 Tuesday 10 Wednesday 11 Thursday 12 Friday 13 Saturday		
14 SUNDAY		
15 Monday	Engineering Building Committee. Chenistry and Mining Building Committee.	
16 Tuesday 17 Wednesday 18 Thursday 19 Friday 20 Saturday		
21' SUNDAY		
<ul> <li>22 Monday</li> <li>23 Tuesday</li> <li>24 Wednesday</li> <li>25 Thursday</li> <li>26 Friday</li> <li>27 Saturday</li> </ul>	* Meeting of First Year (Arts) Committee .	
28 SUNDAY		
29 Monday 30 Tuesday	Meeting of Governors.	
	DECEMBER, 1920	
1 Wednesday 2 Thursday 3 Friday 4 Saturday	Meeting of Academic Board. Physics Building Committee. Meeting of Faculty of Arts. Meeting of Faculty of Medicine.	
5 SUNDAY		
6 Monday 7 Tuesday	Meeting of Faculty of Applied Science. Museum Committee. Library Committee.	
7 Tuesday 8 Wednesday 9 Thursday 10 Friday 11 Saturday	Regular Meeting of Corporation.	
12 SUNDAY 13 Monday		
14 Tuesday 15 Wednesday 16 Thursday 17 Friday 18 Saturday		
19 SUNDAY		
20 Monday	Engineering Building Committee. Chemistry and Mining Building Committee. Chemistry and Mining kuilding opened, 1898. Last day of lectures in Arts, Law and Applied Science.	
21 Tuesday 22 Wednesday 23 Thursday 24 Friday		
25 Saturday	Christmas Day. Library closed.	
26 SUNDAY 27 Monday	Meeting of Governors.	
24 Monday 28 Tuesday 29 Wednesday 30 Thursday 31 Friday	Actual of Outdates	

the state of the s	CALENDAR OF MEETINGS 29
	JANUARY, 1921
1 Saturday	New Year's Day. Library closed.
2 SUNDAY	
3 Monday 4 Tuesday	Meeting of Faculty of Applied Science.
5 Wednesday 6 Thursday	Lectures resumed in all Faculties.
7 Friday 8 Saturday	Meeting of Faculty of Arts. Meeting of Faculty of Medicine.
9 SUNDAY	ancennig of Faculty of Arculenic.
10 Monday	
11 Tuesday 12 Wednesday	
13 Thursday 14 Friday	First term lectures end in Arts and Law.
15 Saturday	First term lectures end in Applied Science.
16 SUNDAY 17 Monday	Engineering Building Committee Charging and Mining Building Com
18 Tuesday	Engineering Building Committee. Chemistry and Mining Building Com- mittee. First Term Examinations in Arts and Law begin.
19 Wednesday 20 Thursday	First term examinations in Applied Science begin.
21 Friday 22 Saturday	
23 SUNDAY	
24 Monday	Second Term begins in Arts, Law and Applied Science.
25 Tuesday 26 Wednesday	
27 Thursday 28 Friday	The second se
29 Saturday	
30 SUNDAY 31 Monday	Masting of Conservation
51 Monday	Meeting of Governors.
	FEBRUARY, 1921
1 Tuesday	
2 Wednesday 3 Thursday	Physics Building Committee.
4 Friday 5 Saturday	Meeting of Faculty of Arts. Meeting of Faculty of Medicine.
6 SUNDAY	and the second sec
7 Monday	Meeting of Faculty of Applied Science. Museum Committee. Library
8 Tuesday 9 Wednesday	Committee. Meeting of First Year (Arts) Committee.
10 Thursday 11 Friday	Ash Wednesday. No Lectures. Regular Meeting of Corporation.
12 Saturday	
13 SUNDAY	
14 Monday	Engineering Building Committee. Chemistry and Mining Building Committee.
15 Tuesday 16 Wednesday	
17 Thursday 18 Friday –	
19 Saturday	
20 SUNDAY 21 Monday	
22 Tuesday 23 Wednesday	
24 Thursday 25 Friday	Physics and Engineering Buildings opened, 1893.
26 Saturday	
27 SUNDAY	
28 Monday	Meeting of Governors.

00	Allan Statistics	CALENDAR OF MEETINGS
		MARCH, 1921
1 2 3 4 5 6	Tuesday Wednesday Thursday Friday Saturday SUNDAY	Meeting of Faculty of Arts. Meeting of Faculty of Medicine.
7 8 9 10 11 12	Monday Tuesday Wednesday	Meeting of Faculty of Applied Science.
13 14 15 16 17 18 19	SUNDAY Monday Tuesday Wednesday Thursday Friday Saturday	
20 21	SUNDAY Monday	Engineering Building Committee. Chemistry and Mining Building Committee.
22 23 24 25 26	Tuesday Wednesday Thursday Friday Saturday	Good Friday. No Lectures. Library closed.
27 28 29 30 31	SUNDAY Monday Tuesday Wednesday Thursday	Easter Sunday. Meeting of Governors.
-		APRIL, 1921
1 2 3	Friday Saturday SUNDAY	Meeting of Faculty of Arts. Meeting of Faculty of Medicine.
4 5 6 7 8 9	Monday Tuesday Wednesday Thursday Friday Saturday	Meeting of Faculty of Applied Science. Macdonald Engineering Building burned, 1907. Physics Building Committee.
10	SUNDAY	
11 12 13 14 15 16	Monday Tuesday Wednesday Thursday Friday Saturday	Library Committee. Museum Committee. Regular Meeting of Corporation. Second Term Lectures end in Arts, Law and Applied Science. Medical Building burned, 1907.
17	SUNDAY	
18 19 20 21 22 23	Monday Tuesday Wednesday Thursday Friday Saturday	Engineering Building Committee. Chemistry and Mining Building Committee. Sessional Examinations in Arts, Law, and Applied Science begin.
24	SUNDAY	
25 26 27 28 29 30	Monday Tuesday Wednesday Thursday Friday Saturday	Meeting of Governors. New Engineering Building opened, 1909.
-		

1		CALENDAR OF MEETINGS	31
		MAY, 1921	
2 Mo 3 Tu 4 We 5 Th 6 Fri 7 Sat	urday	Meeting of Faculty of Applied Science Meeting of Faculty of Arts. Meeting of Faculty of Medicine.	
9 Mo 10 Tue 11 We 12 Thu 13 Frie 14 Sat	urday	Convocation for Conferring Degrees in Arts, Law and Applied Science.	
16 Mo 17 Tue 18 We	NDAY nday sday Inesday ursday lay	Engineering Building Committee. Chemistry and Mining Building Committee.	
21 Sat 22 SU 23 Mo 24 Tue 25 We 26 Thu	urday NDAY nday sday inesday ursday	Victoria Day. Library closed.	
29 SUI 30 Mo	lay 1rday NDAY nday sday	Meeting of Governors.	and the second
		JUNE, 1921	
2 Thu 3 Frid 4 Satu	ırday	Physics Building Committee. Meeting of Faculty of Medicine.	
6 Mor 7 Tue 8 Wea 9 Thu 10 Frid 11 Satu	Irday	New Medical Building opened, 1911. Museum Committee. Library Committee. Regular Meeting of Corporation.	
13 Mon 14 Tue 15 Weo 16 Thu 17 Frid	NDAY aday sday Inesday rsday ay irday		
20 Moi 21 Tue 22 Weo 23 Thu	NDAY nday sday Inesday rsday	Engineering Building Committee. Chemistry and Mining Building Committee.	
26 SUN	nday NDAY		
28 Tue 29 Wee	nday sday Inesday rsday	Meeting of Governors.	

JULY, 1921, March		
	Friday Saturday	Dominion Day. Library closed.
3	SUNDAY	
4	Monday	Gift of Frothingham, Molson and Law Properties by Sir Wm. Macdonald,
5	Tuesday Wednesday	1911.
7	Thursday	
8 9	Friday Saturday	
10	SUNDAY	
11 12	Monday	
13 14	Tuesday Wednesday Thursday	
15	Friday Saturday	
	SUNDAY	
18	Monday	
20	Tuesday Wednesday	
22 ]	Thursday Friday	The second se
	Saturday SUNDAY	
	Monday	
26	Fuesday Wednesday	
28	Thursday Friday	A CONTRACTOR OF
30 8	Saturday	
31 5	SUNDAY	
		AUGUST, 1921
1 1	Monday	
3 1	Fuesday Wednesday	A starting of the starting and the starting of
5 I	Thursday Friday	The second se
6 8	Saturday	A REAL PROPERTY AND A REAL PROPERTY A REAL PROPERTY AND A REAL PROPERTY A REAL PROPERTY A REAL PROPERTY AND A REAL PROPERTY A REAL
7 5	SUNDAY	
8 1 9 1	Monday Fuesday	A CONTRACT OF A
10 V 11 7	Fuesday Wednesday Fhursday	
12 I	Friday Saturday	
	SUNDAY	
15 I	Monday	
16 1 17 V	Fuesday Wednesday	Peter Redpath Museum opened, 1882.
18 1 19 H	Thursday Friday	
20 5	Saturday	and the second sec
	SUNDAY	
23 ]	Monday Fuesday	
24 1	Wednesday Thursday	
26 H	Friday Saturday	
	SUNDAY	The second se
	A HAR AND A REAL PROPERTY OF A R	
	Monday	

# McGill University.

# HISTORY AND CONSTITUTION.

## FOUNDATION AND EARLY HISTORY.

McGill University owes its origin to a private endowment. It was founded by the Hon. James McGill, a leading merchant and public-spirited citizen of Montreal, who died in 1813. By his will, dated January 8th, 1811, he bequeathed his property of Burnside (consisting of 46 acres of land with the dwelling house and other buildings thereon) and a sum of £10,000 in money to found a college in a provincial university, the erection of which had already been provided for by the British Government. The four trustees appointed under his will were directed to convey the property of the bequest to the Royal Institution for the Advancement of Learning, a body which, in 1802, had been incorporated by the Legislature "for the establishment of free schools and the advancement of learning" in the Province of Quebec. The conditions upon which the property was to be transferred to the Royal Institution for the Advancement of Learning were, mainly, that that Institution should, within ten years after the testator's decease, erect and establish on his Burnside estate "a University or College, for the purposes of education and the advancement of learning in this Province," and that the college, or one of the colleges in the University, if established, should "be named and perpetually be known and distinguished by the appellation of McGill College." Owing to persistent opposition by the leaders of one section of the people to any system of governmental education and to the refusal by the Legislature to make the grants of land and money which had been promised, the proposed establishment of the provincial university by the British Government was abandoned.

In so far as the McGill College was concerned, however, the Royal Institution at once took action by applying for a Royal Charter. Such a charter was granted in 1821, and the Royal Institution prepared to take possession of the estate, but, owing to protracted litigation, this was not surrendered to them till 1829, when the work of teaching was begun in two faculties, Arts and Medicine. The record of the first thirty years of the University's existence is an unbroken

#### FOUNDATION AND HISTORY

tale of financial embarrassment and administrative difficulties. The charter was cumbrous and unwieldy, and unsuited to a small college in the circumstances of this country, and the University, with the exception of its medical faculty, became almost extinct. But after thirty years the citizens of Montreal awoke to the value of the institution which was struggling in their midst. Several gentlemen undertook the responsibility of its reorganization, and, in 1852, an amended charter was secured. The Governor-General of Canada for the time being, Sir Edmund Head, became interested in its fortunes, and in 1855, with the advent of a new Principal, an era of progress and prosperity began.

A course in Law was begun in connection with the Faculty of Arts, in 1848, and the department was established as a separate faculty in 1853. The Faculty of Applied Science was not regularly organized till 1878, but a course in Engineering, which was amplified into the Department of Practical Science in 1871, was given under the Faculty of Arts as far back as 1856. The Faculty of Agriculture was established in 1907.

#### Principal Dates in the History of the University.

First Charter obtained.—1821.

College opened.-1829.

Amended Charter secured.-1852.

William Molson Hall opened.-October 10th, 1862.

Peter Redpath Museum opened.—August 16th, 1882.

Physics and Engineering Buildings opened.—February 24th, 1893. Redpath Library opened.—October 31st, 1893.

Chemistry and Mining Building opened.-December 20th, 1898.

Royal Victoria College opened.-September 4th, 1899.

Strathcona Medical Buildings opened.-September 18th, 1901.

Conservatorium of Music opened.-October 14th, 1904.

Macdonald Engineering Building burned.—April 5th, 1907.

Medical Building burned.—April 16th, 1907.

Macdonald College opened.—November 5th, 1907.

New Engineering Building opened.—April 27th, 1909.

New Medical Building opened.-June 5th, 1911.

Gift of Frothingham, Molson, and Law properties (comprising about 25 acres), from Sir William C. Macdonald.—July 4th, 1911.

One million five hundred thousand dollars raised (chiefly from Montreal citizens) in aid of the funds of the University.—November 20-24, 1911.

Gift of \$1,000,000 from the Carnegie Corporation, New York, "in recognition of the noble and devoted service and sacrifice of McGill towards Canada's part in the Great War."—February 25th, 1918.

#### CONSTITUTION OF THE UNIVERSITY

### GOVERNMENT OF THE UNIVERSITY.

By the amended Charter "the Governors, Principal, and Fellows" of the University are constituted a body politic and corporate, with all the usual rights and privileges of corporate bodies. The supreme authority, however, is vested in the Crown, and is exercised by His Excellency the Governor-General of Canada, for the time being, as **Visitor**. This is a special and important feature of the constitution, for, while it gives the University an imperial character and removes it at once from any merely local or party influence, it secures the patronage of the head of the political system of the country.

The **Governors** of the University are the members of the Royal Institution for the Advancement of Learning, above mentioned, and in them are vested the management of finances, the passing of University statutes and ordinances, the appointment of professors, and other important duties. Their number is limited to twenty-five, and vacancies are filled by the nomination of the remaining members with the approval of the Visitor. The President of the Board of Governors is *ex-officio* Chancellor of the University.

The **Principal** is the academic head and chief administrative officer. He is appointed by the Board of Governors (of which body he is a member *ex-officio*). He also holds the office of Vice-Chancellor of the University.

The Fellows (42 in number) are selected with reference to the representation of all the faculties and departments of the University, and of the graduates, affiliated colleges, and other bodies.

The Governors, Principal and Fellows together, constitute the **Corporation**, the highest academical body. Its powers are fixed by statute, and include the framing of all regulations touching courses of study, matriculation, graduation, discipline and the granting of degrees.

The administration of these regulations, along with direct responsibility for the conduct of the educational work of the University, is entrusted to the several **Faculties**,—Arts, Medicine, Law, Applied Science, Agriculture, Dentistry, and Music.

The Principal, the Deans of the several Faculties, the Professors and Associate Professors, and other members, not exceeding ten in number, of the teaching staff, constitute the **Academic Board** of the University, with the duty of considering such matters as pertain to the interests of the University as a whole, and of making recommendations concerning the same.

# INCORPORATED AND AFFILIATED COLLEGES.

#### INCORPORATED COLLEGES.

Macdonald College is situated at Ste. Anne de Bellevue, about twenty miles from Montreal. It consists of three departments:—The School of Agriculture, the School of Household Science, and the School for Teachers. Courses leading to the Bachelor's and Master's degrees in Agriculture are under the control of the Corporation of McGill University; all the short term courses in agriculture, as well as the courses in domestic science, are under the direction of the Macdonald College Committee; and those for diplomas to teach in the Province of Quebec are subject to the immediate supervision of the Teachers' Training Committee. Further information is given on page 315, and full details as to the college buildings, courses, terms of admission, fees, etc., will be found in the Macdonald College Announcement, which will be sent on application to the Principal, Macdonald College, Que.

The Royal Victoria College is the women's College of McGill University for courses in the Faculty of Arts. For further particulars, see page 308.

#### AFFILIATED COLLEGES.

Acadia, Alberta and Mount Allison Universities and the University of St. Francis Xavier's College are affiliated to McGill University to the extent that students who have completed the twoyear course in Engineering given by these universities are admitted directly to the third year in the courses of Civil, Mining, Metallurgical, Chemical, Mechanical, and Electrical Engineering of the Faculty of Applied Science.

Students from these universities entering the third year in either of the first two of these courses must take the summer school in surveying, which opens in 1920 on September 6th; those entering the third year in Metallurgical Engineering or Chemical Engineering will take the summer course in Chemistry. Students from these universities entering the courses in Mechanical or Electrical Engineering are advised to take the summer school in mechanical drawing, physics and shopwork, but they are not required to do so.

Alberta University is also affiliated in the Faculty of Medicine, students who have completed the third year in the Medical course there being admitted directly to the fourth year in the Faculty of Medicine of this University.

Royal Military College.—Graduates of the Royal Military College of Kingston are admitted to the third year in the several

#### AFFILIATED COLLEGES

departments of the Faculty of Applied Science above mentioned. They must in all cases take the respective summer schools pertaining to these several courses, which open in 1920 on September 6th.

Arrangements have also been made whereby graduates and students of the Mechanical Science course in the University of Cambridge will be admitted to advanced standing in the Faculty of Applied Science under definite regulations, particulars of which can be obtained from the Dean of the Faculty.

#### AFFILIATED THEOLOGICAL COLLEGES.

The Theological Colleges named below are affiliated to the University under the following arrangements:—Students in these institutions who are pursuing a double course in Arts and Theology (six years at least) will be exempted from a half course in Arts in each of the third and fourth years or a whole course in either.

The Congregational College of Canada, Montreal.—Principal, Rev. D. L. Ritchie, B.A., D.D., 58 McTavish St.

The Diocesan College of Montreal.—Principal, Rev. E. I. Rexford, M.A., LL.D., 743 University St.

The Presbyterian College, Montreal, in connection with the Presbyterian Church in Canada.—Principal, Rev. D. J. Fraser, M.A., LL.D., D.D., 69 McTavish St.

The Wesleyan College of Montreal.—Principal, Rev. James Smyth, LL.D., 760 University St.

A movement was inaugurated in the session 1912-13 for a large measure of co-operation among the above Colleges, with the result that a considerable portion of the work which had hitherto been done separately is now taken in joint classes.

For Calendars and all necessary information, apply to the Principals of the several Colleges.

#### AFFILIATION TO OTHER UNIVERSITIES.

The University is affiliated to the universities of Oxford, Cambridge and Dublin, under conditions which allow an undergraduate who has taken two years' work, and has passed the second year sessional examination in Arts, to pursue his studies and take his degree at any of these universities on a reduced period of residence.

# FACULTIES AND COURSES.

The educational work of the University is carried on in McGill College, the Royal Victoria College for Women, and other University buildings in Montreal; and also in Macdonald College at Ste. Anne de Bellevue.

# COURSES FOR DEGREES AND DIPLOMAS.

The several courses offered by the University are as follows :--

# In the Faculty of Arts.

For the degree of Bachelor of Arts. """"Bachelor of Science. """""Bachelor of Commerce.

The undergraduate courses of study which lead to the degree of B.A. or of B.Sc., extend over four sessions of about seven and a half months each. In the second, third and fourth years extensive options are provided, and certain exemptions are also allowed to professional students. (See pages 122 to 124.)

The course for the degree of Bachelor of Commerce extends over three years. Full particulars are given on pages 159 to 175.

The following courses are also offered:—one leading to the degree of Bachelor of Science in Agriculture, with the privilege of qualifying for an Academy Diploma; another to the degree of Bachelor of Household Science, and a third to the degree of Bachelor of Laws. The first two years are taken in the Faculty of Arts and the last two in the Faculty of Agriculture, or the School of Household Science, or the Faculty of Law, as the case may be. Details of the first two courses will be found in the Macdonald College Announcement, and of the last under "Faculty of Law," page 258.

The undergraduate course in Arts can be taken along with the undergraduate course in Medicine, in eight years, or with that in Applied Science or Dentistry, in six years. (See pp. 122 to 124.)

The courses in Arts are open to women (who are educated mainly in separate classes) on equal terms with men. Residential accommodation for women students is provided in the Royal Victoria College. (For further particulars, see page 308.)

Holders of the degree of B.A. from this University are admitted to the study of the learned professions, without preliminary examination, in the different provinces of Canada, and in Great Britain and Ireland, and elsewhere. They will also be granted Academy Diplomas

#### FACULTIES AND COURSES

to teach in the Province of Quebec, provided they have passed an examination in pedagogy and have taught, under supervision, for the time required by law.

#### In the Faculty of Applied Science.

For the degree of Bachelor of Architecture (B. Arch.).

For the degree of Bachelor of Science (B.Sc.), in the departments of Chemical Engineering, Civil Engineering, Electrical Engineering, Mechanical Engineering, Metallurgical Engineering, and Mining Engineering.

The undergraduate courses of study for the degree of B.Sc. extend over four sessions, averaging (with summer sessions) about eight months each, and provide a thorough professional training in the departments mentioned above. The course for the degree of B. Arch. extends over five years. Full particulars are given on pages 183 to 257.

The undergraduate course in Arts can be taken along with the undergraduate course in Applied Science, in six years. (See page 122.)

#### In the Faculty of Law.

For the degree of Bachelor of Civil Law (B.C.L.) """ "Bachelor of Laws (LL.B.)

The undergraduate course for each of these degrees extends over four sessions of eight months each, except for graduates in Arts, Applied Science or Medicine, who can obtain the former (B.C.L.) in three years and the latter (LL.B.) in two. The degree of B.C.L. can also be obtained in three years by (1) ex-soldiers and sailors, and (2) by those who are taking the B course for the degree, recently instituted for persons who do not intend to practise in the Province of Quebec.

Candidates for the degree of LL.B., who are not graduates as above specified, take the first two years in the Faculty of Arts and the last two in Law. (Full particulars are given on page 258.)

# In the Faculty of Medicine.

For the degree of Doctor of Medicine and Master of Surgery (M.D., C.M.).

For the Diploma of Public Health. For the Diploma of Pharmacy.

The undergraduate course of study leading to the degree of M.D., C.M., extends over six sessions of eight months each. For further information, see pages 276 to 284.

The undergraduate course in Arts can be taken along with the undergraduate course in Medicine in eight years. (See page 123.)

#### FACULTIES AND COURSES

The course in Public Health and Sanitary Science is open to those only who have graduated in Medicine, or who possess some other qualification for practice. Generally speaking, it occupies a period of eight months.

# In Macdonald College.

For the degree of Bachelor of Science in Agriculture (two courses.)

Other courses in the School of Agriculture.

For the degree of Bachelor of Household Science (two years in Arts, and two in the School of Household Science.)

Other courses in the School of Household Science.

The several courses for teachers' diplomas.

The course of study for the degree of Bachelor of Science in Agriculture extends over four sessions of about eight months each. It aims to provide a thorough theoretical and practical training in the several branches of the science. (See also page 315.)

The Macdonald College announcement, containing full details as to buildings, courses, terms of admission, fees, etc., can be obtained from the Principal, Macdonald College P.O., Que.

# In the Faculty of Dentistry.

For the degree of Doctor of Dental Surgery (D.D.S.)

The undergraduate course of study leading to the degree of D.D.S. extends over four sessions of eight months each. (For further particulars, see page 286.)

The undergraduate course in Arts can be taken along with the undergraduate course in Dentistry in six years. (See page 124.)

# In the Faculty of Music.

For the degrees of Bachelor of Music (Mus. Bac.) and Doctor of Music (Mus. Doc.).

For the Diploma of Licentiate in Music, and the several Grade examination certificates.

Students are admitted as *Regular Students* taking an organized course leading to the Diploma of Licentiate in Music or the degree of Bachelor of Music (See page 288), or as *Partial Students*, who under certain conditions and after examination, can obtain certificates bearing the imprimatur of the University. Full details can be obtained on application to the Secretary of the McGill Conservatorium of Music, 323 Sherbrooke street west, Montreal.

# FACULTIES AND COURSES

# In the Graduate School.

For the degrees of Master of Arts, Master of Science, Master of Laws, Doctor of Philosophy, Doctor of Science, Doctor of Literature and Doctor of Civil Law.

Full information as to admission and departments in which studies are offered will be found on page 299, and can also be obtained from the Chairman or Secretary of the Committee on Graduate Studies, to which Committee are also submitted all applications for the Degrees of D.Sc., D.Litt. and D.C.L. The Chairman of the Committee is Professor James Harkness.

# The Course for the First Class Academy Diploma of the Province of Quebec.

Certain courses are given by the Department of Education, which when supplemented by practice teaching and observation (except in the case of holders of the Model Diploma) lead to a First Class Academy Diploma on graduation. (See page 158.)

This diploma can also be obtained by those who qualify for the degree of B.S.A. by taking two years in Arts, followed by two in the Faculty of Agriculture. (See Macdonald College announcement.)

# Extension Courses.

Evening lectures on a variety of subjects. Particulars will be found on pages 169 to 174.

#### DEGREES.

The degrees conferred by the University are as follows:-B.A.; B.Sc.; B. Arch.; B.C.L.; LL.B.; B.S.A.; Mus. Bac.; B. Com.; B.H. S.; M.D., C.M.; D.D.S.; M.A.; M.Sc.; LL.M.; Mus. Doc.; D.C.L.; Ph.D.; D.Sc.; D.Litt.; and LL.D. (Honorary).

#### I. LOWER DEGREES.

In order to obtain the degrees of B.A.; B.Sc.; B. Arch.; B.C.L.; LL.B.; B.S.A.; B.Com.; B.H.S.; M.D., C.M.; and D.D.S., students are required to attend lectures (for length of courses, see pages 38 to 41), to complete the course of study for the degree sought, to pass all the prescribed examinations during the course, and any special examination for graduation, and to perform such other exercises as may be prescribed to that end.

The requirements for degrees in Music are stated on page 288.

#### II. HIGHER DEGREES.

All theses for higher degrees, in order to be accepted, must be sent to the Chairman of the Committee on Graduate Studies before April 1st, 1921, except in the case of theses involving experimental work, when the time will be extended to April 16th. The examination will be held in April. No thesis will be received, or examination granted, until the fee for the degree has been paid.

#### Degree of M.A.

For requirements, see under "Graduate School," page 299.

#### Degree of M.Sc.

For requirements, see under "Graduate School," page 301.

#### Degree of LL.M. (Master of Laws).

For requirements, see under "Graduate School," page 302.

#### Degree of D.Litt.

Candidates for the degree of Doctor of Literature must be Masters of Arts, and graduates of at least five years' standing, who shall have distinguished themselves by special research and learning in the domain of literature or philosophy. They are required to present a satisfactory thesis or published work.

#### DEGREES

#### Degree of D.Sc.

Candidates for the degree of Doctor of Science must be Masters of Arts, Masters of Science, or Doctors of Medicine, and graduates of at least five years' standing, who shall have distinguished themselves by special research and learning in the domain of science. They are required to present a satisfactory thesis or published work.

#### Degree of Ph.D.

For requirements, see under "Graduate School," page 302.

# Degree of D.C.L. (Doctor of Civil Law).

For requirements, see under "Graduate School," page 303.

## Degree of LL.D.

The degree of Doctor of Laws is given only as an honorary degree.

#### III. ADMISSION "AD EUNDEM GRADUM."

The following are the regulations applicable to admission ad eundem gradum:-

## Extract from the Statutes, Chap. VIII.

"Graduates of other universities desirous of admission to the like "degree in this University, may be so admitted by the Corporation; "due enquiry being first made as to their moral character and sound "learning, and opportunity given to the several Faculties, or the "Committee on Graduate Studies, as may be required, to make such "representation in the premises as they may see fit. Provided always "that, except in the case of candidates proceeding to a higher degree, "such application for admission shall not be put to vote until after "three months' notice, unless by unanimous consent, and shall not be "ordered if as many as five members of the Corporation shall vote "against it."

#### Extracts from the Regulations of the Corporation.

"In all cases in which anyone is proposed for an *ad eundem* "degree, it shall be necessary for the member or members of the Cor-"poration making such proposal, to state in writing therewith the "grounds upon which the granting of such degree is advocated, and "when the case shall be referred to the Faculties, under Chap. VIII. "of the Statutes, copies of such proposal and grounds shall be trans-"mitted to the Faculties by the Registrar for their consideration."

Note. In considering applications, under the above regulations, the Faculties will require as "grounds" the pursuit of a course of study

#### DEGREES

or research in this University; association with the academic work of the University; or similar qualifications.

Admission "ad eundem gradum" is not granted merely as a titular distinction.

"The degree of Bachelor of Arts or Bachelor of Science, ad "eundem, shall be granted only to candidates who are proceeding to "a higher degree, the lower degree being granted only when the can-"didate has gualified for the higher."

"Graduates of other universities desiring an *ad eundem* degree "of this University, as a condition of entering on a course of study "leading to a higher degree, shall make application to the Committee "on Graduate Studies, who shall immediately take action without "previous reference to the various Faculties or to Corporation."

### ENTRANCE REQUIREMENTS.

#### JUNIOR MATRICULATION.

I. REGULATIONS.

I. Matriculation examinations (for entrance into all Faculties) are held only in June and September—in June at McGill University and the local centres named below; in September, at Montreal only, except in cases which require special consideration.

ALL INQUIRIES RELATING TO THE EXAMINATIONS SHOULD BE ADDRESSED TO THE REGISTRAR OF THE UNIVERSITY.

For the convenience of candidates in Great Britain, who are not otherwise qualified for entrance, an examination will be held regularly in London, Eng., each year, commencing on or about the 12th of June. Full information regarding the exact date of the examination, fee, etc., may be obtained from the Honorary Representative of the University, W. A. Bulkeley-Evans, Esq., M.A., Secretary Headmasters' Conference, 12 King's Bench Walk, Temple, London, E.C.

2. Every candidate for examination is required to fill up an application form and return the same with the necessary fee (for which see page 48, one month before the examination begins. Blank forms may be obtained from the Registrar.

No application for examination in June will be received after May 20th.

3. Examinations will be held in June at the following centres, outside of the Province of Quebec, if a sufficient number of candidates apply:—Sydney, N.S.; Rothesay, N.B.; Ottawa, Ont.; Brockville, Ont.; Port Hope, Ont.; Toronto, Ont.; Hamilton, Ont.; St. Catharines, Ont.; Winnipeg, Man.; Regina, Sask.; Calgary, Alta.; Kingston, Jamaica, and London, Eng.

Candidates who are not within easy reach of any of the above centres are advised to prepare for entrance by taking an examination recognized by the University, as shown on pages 47 and 48.

4. The matriculation examination may be taken in two parts, but in order to be valid for entrance it must be completed within two years from the date of the first attempt. Credit will not be given for less than four papers passed at one time,\* except in the case of those who are not required to take as many as four papers to

<sup>\*</sup> For the purpose of this regulation the June and September examinations of the same year will be considered as "one time."

complete the examination; nor will credit be given for less than four papers on certificates which may be presented for exemption from the examination, and no certificate will be accepted which has been obtained under easier conditions than those which are imposed on candidates who are attempting to qualify for entrance by taking the regular University examination.

5. Candidates will not be considered as having passed in any subject unless they obtain at least 50 per cent. of the maximum marks in that subject (in subjects in which two papers are set, 50 per cent. on the two and not less than 40 in either).

This regulation applies also in the case of certificates.

6. Candidates for admission to the Faculties of Arts, Applied Science, Law, Agriculture and the Department of Music who have failed to complete the matriculation requirements will be allowed to enter the first year as conditioned undergraduates, provided (a) that they have not failed in more than two papers (which cannot both be in the mathematical section nor in two languages) and (b) that they have obtained at least 25 per cent. in the subjects in which they have failed and 50 per cent. of the aggregate.<sup>†</sup>

This regulation applies also to candidates who seek to satisfy the matriculation requirements by means of certificates granted by other recognized examining bodies.

This condition must be removed before the student can be admitted to the second year.

In order to be admitted to the Faculty of Medicine, or Dentistry, a candidate must pass in every subject required.

Students who are conditioned in a language must attend a special tutorial class during their first session, for which a fee of \$10.00 is exigible. Any student so conditioned who fails to attend this class with regularity will not be allowed to present himself for examination.

7. Matriculation certificates will be issued to candidates who have passed the entrance examination conducted by the University, but not to those who have qualified by means of certificates, except when the greater part of the requirements has been satisfied by passing the University examination.

8. The certificates and diplomas named below will, if submitted to the Registrar, be accepted *pro tanto* in lieu of the junior matriculation examination, *i.e.*, in so far as the subjects and standard of the examination taken to obtain them are, to the satisfaction of the Matriculation Board, equivalent to those required for the matriculation examination of this University. Candidates offering certificates which are not a full equivalent will be required to pass the matri-

† See, however, for French, page III.

culation examination at the regular time set therefor (June or September), in such of the necessary subjects as are not covered thereby.

Intending students who wish to enter by certificates should under no circumstances come to the University without having first obtained from the Registrar a statement of the value of the certificates they hold, as many of these lack one or more essential subjects, or the work done in a subject may not be adequate, or again, the percentage gained may not be sufficiently high (see regulation 5). Moreover, it must be remembered that a certificate may admit to one Faculty and not to another. When a diploma or certificate does not show the marks obtained in the several subjects of the examination, it must be accompanied by an official statement containing this information.

## Province of Quebec.

The University School Leaving Certificate. The Model School Diploma.

## Province of Ontario.

Certificates of entrance to the Normal School. Junior Matriculation Certificate.

#### Province of New Brunswick.

First Class, Superior and Grammar School Licenses. Grade XI and XII Certificates.

#### Province of Nova Scotia.

The Leaving Certificate of Grade XI.

## Province of Prince Edward Island.

First Class Teachers' License. Second Year Certificate of Prince of Wales College.

# Province of British Columbia.

Intermediate Grade Certificates.

## Province of Manitoba.

Second Class Teachers' Certificate.

# Provinces of Alberta and Saskatchewan.

The Departmental Certificate of Standard XI.

#### Newfoundland.

Associate Grade Certificate.

#### United States.

Certificates granted by the College Entrance Examination Board and by the New York State Board of Regents.

#### Great Britain.

The holder of a Higher Certificate or a School Certificate of the Oxford and Cambridge Schools Examination Board, of the Senior Certificate of the Oxford or Cambridge Board of Examiners, of a First Class Certificate of the College of Preceptors or of a Higher Examination Certificate of the Scotch and Welsh Educational Departments is entitled to exemption from the matriculation examination, *pro tanto*, if the candidate has at one and the same examination passed in certain specified subjects.

Applications for exemption from the matriculation examination, based upon certificates of having passed examinations other than those above mentioned, will be considered as occasion may require. Every such application must be accompanied by certificates and full particulars, and should be addressed to the Registrar.

## II. MATRICULATION EXAMINATION FEES.

For an examination in six or more papers...... \$7.00

- (For examination at a local centre where not more than four candidates are writing the fee will be determined by the Registrar.)
- For examination of certificates, in respect of which candidates are exempted from the whole of the matriculation examination ..... 2.00

Matriculation examination fees must be sent to the University Registrar at the time of application for the examination. No application will be accepted unless accompanied by the regular fee.

Certificates will be issued to successful candidates without additional fee.

# III. SUBJECTS OF EXAMINATION.

# Faculty of Arts.

For candidates intending to take the B.A. course.

- I. English (two papers).
- 2. History (one paper).
- 3. Latin or Greek (two papers).
- One of the following (two papers in each): Greek or Latin (the one not already chosen), French, German.
- 5. Elementary Mathematics [Algebra (one paper) and Geometry (one paper).]
- One of the following: Botany, Chemistry, Physics, Geography—including Physiography—(one paper); a Language not already chosen (two papers).

# For candidates intending to take the B.Sc. course in Arts, or the course leading to the degree of Bachelor of Science in Agriculture (two years in Arts and two in Agriculture).

- I. English (two papers).
- 2. History (one paper).
- 3. Elementary Mathematics [Algebra (one paper) and Geometry (one paper).]
- 4. French (two papers).
- 5. Latin or German (two papers) or Physics (one paper).

6. One of the following:

Botany, Chemistry, Geography—including Physiography—, Physics—if not already chosen (one paper); Latin, if not already chosen (two papers); Greek (two papers).

Candidates who intend ultimately to proceed to the study of medicine are reminded that for medical registration it is necessary to take Latin.

For candidates entering on the course for the Degree of Bachelor of Commerce.

One of the following examinations :--

(1) The ordinary matriculation examination for the B.A., or the B.Sc. Course.

(2) An examination on the following subjects :-

- 1. English (two papers).
- 2. History (one paper).

- 3. French or Spanish (two papers).
- 4. Elementary Mathematics [Algebra (one paper) and Geometry (one paper).]
- 5. Advanced Mathematics or a Second Foreign Language.
- One of the following, viz.: Chemistry, Physics, Geography—including Physiography— (one paper).

Holders of Model Diplomas who are certified by the Dean of the School for Teachers of Macdonald College to have taken 75 per cent. of the total marks at their final examinations, with not less than 50 per cent. of the marks in (1) mathematics, (2) French, and (3) Latin or Greek, respectively, will be admitted without further examination as undergraduates of the first year in Arts.

#### Faculty of Applied Science.

(For all courses leading to the Degree of B.Sc. in the different branches of Engineering.)

- I. English (two papers).
- 2. History (one paper).
- 3. One of the following:
  - French, German, Latin, Greek (two papers).
- 4. Elementary Mathematics [Algebra (one paper) and Geometry (one paper).]
- 5. Advanced Mathematics [Algebra (one paper) and Geometry and Trigonometry (one paper).]
- 6. One of the following:

Botany, Chemistry, Physics (one paper), a Language not already chosen (two papers).

(For the course leading to the Degree of B. Arch.)

- I. English (two papers).
- 2. History (one paper).
- 3. French (two papers).
- 4. Elementary Mathematics [Algebra (one paper) and Geometry (one paper).]
- 5. Advanced Mathematics [Algebra (one paper) and Geometry and Trigonometry (one paper).]
- One of the following: Greek, Latin, German (two papers), Chemistry, Physics (one paper).
- 7. Freehand and Geometrical Drawing.

In the case of No. 7, applicants may send specimens of their work to the Head of the Department or take an examination at the time of the regular matriculation examination in September. No examinations taken elsewhere are accepted as equivalent for this subject.

No student will be admitted to the Department of Architecture as an undergraduate, until he has satisfied the matriculation requirements in drawing.

# Faculties of Medicine and Dentistry.

- I. English (two papers).
- 2. History (one paper).
- 3. Latin (two papers).
- 5. Elementary Mathematics [Algebra (one paper) and Geometry (one paper).]
- One of the following:--Botany, Chemistry, Physics, Geography-including Physiography-(one paper).

It is possible that the requirements for entrance to Medicine may be raised, beginning with the session 1921-22. If so, full particulars will be given in the special Calendar issued by the Faculty or in a separate announcement.

In addition to the certificates mentioned on pages 47 and 48, the following are accepted *pro tanto* in lieu of the matriculation examination in these Faculties:

The degree of Bachelor of Arts obtained from any recognized university.

A certificate of having passed the examination of a Provincial Medical or Dental Council, as the case may be.

In the case of candidates from the United States, a certificate of having passed a State or University examination.

No candidate will be admitted to the Faculties of Medicine or. Dentistry without having satisfied all the matriculation examination requirements.

Those who intend to practise medicine in any of the Provinces of Canada will obtain information regarding registration and admission to study by corresponding with the Registrars of the several Provincial Medical Councils. (For names, see page 278.)

The requirements for the admission of women to the Faculty of Medicine are as follows:--

(1). B.A. or B.Sc. degree from a recognized university, or (2) completion of the first two years in the Faculty of Arts at any approved university.

In either case candidates must have satisfied the Matriculation requirements in Latin.

#### Faculty of Law.

- 1. English (two papers).
- 2. History (one paper).

3. Latin (two papers).

- 4. French (two papers).
- 5. Elementary Mathematics [Algebra (one paper) and Geometry (one paper).]
- 6. One of the following:

Botany, Chemistry, Physics, Geography—including Physiography—one paper), Greek, German (two papers).

In addition to those who qualify on the certificates mentioned on pages 47 and 48, 3achelors of Arts, Science, or Letters of any Canadian or British University are admitted without examination.

Candidates who intend to practise law or to be admitted to the notarial profession in the Province of Quebec are referred to the statutory requirements as shown on page 269. If they are not graduates they should pass the examination for admission to study required by the Council of the Bar or by the Board of Notaries, as the case may be, before seeking to enter. In that case they will be admitted without examination.

Commencing with the Session 1921-22 no candidate for the B.C.L. degree who intends to pracise law in the Province of Quebec will be admitted to the Faculty, who has no previously satisfied all the examination requirements of the Council of the Bar.

## Faculty of Agriculture.

(For the course leading to the Degree of B.S.A.)

- I. English (two papers).
- 2. History one paper).
- 3. Latin or French or German (two papers).
- Elementary Mathematics [Algebra (one paper) and Geometry (one paper).]
- 5. Any one of the following:

Botany, Chemistry, Physics, Zoology (one paper).

A matriculation certificate for entrance to any other Faculty of the University wll\_also be accepted.

# Faculty of Music.

(For the course leading to the Degree of Bachelor of Music.

- 1. English (two papers).
- 2. History (one paper).
- 3. Two of the following:

French, German, Italian, Latin (two papers).

- 4. Arithmetic or Algebra or Geometry (one paper).
- 5. Rudiments of Music, musical intervals, scales clefs, time signatures, construction of chords, elementary harmony to chord of dominant seventh (one paper).

# IV. REQUIREMENTS IN EACH SUBJECT.

#### Arithmetic.\*

All the ordinary rules, including square root, and a knowledge of the metric system.

One examination paper of two hours.

#### History and Historical Geography.

The Groundwork of British History, editors Warner and Marten (Blackie & Sons, Edinburgh), Sec. III, from 1714 to 1911; Canadian History (Grant), 1763 to date.

For candidates outside of Canada an option will be allowed in this subject on British History from 1485 to 1911, same text-book as is prescribed above, Secs. II and III.

The geography required will be that relating to the history prescribed.

An option will be allowed on the Ontario requirements in this subject.

One examination paper of two hours.

## English.

A. Composition. As in the Ontario High School Composition (Copp, Clark Co.) with a short essay on a general subject and two or three others based on the works prescribed for reading, as follows:—George Eliot, Silas Marner (The Macmillan Co. of Canada); Shakespeare, The Tempest (The Macmillan Co. of Canada); Browning's Shorter Poems (The Macmillan Co. of Canada).

\* For candidates intending to enter the Faculty of Music.

These books should be read carefully, but the student's attention should not be so fixed upon details that he fails to appreciate the main purpose and beauty of the work.

Frequent practice in composition is essential.

B. Literature (for critical study).—Shakespeare, Julius Cæsar; Poems of the Romantic Revival (Copp, Clark Co., Ltd., Toronto).

Candidates will be expected to have memorized some of the finest passages.

Two examination papers of two hours each, one on Composition and the other on Literature (for critical study).

An alternative paper will be set on the work specified in English for the Junior Matriculation Examination of the Province of Ontario.

Spelling will be tested by the candidates' papers in English. Examiners in other subjects will also take note of mis-spelled words and will report flagrant cases to the Board.

# Greek.

Texts:-Philpotts and Jerram, Easy Selections from Xenophon, chaps. 3, 4, 5; Homer, Iliad I, lines I to 350.

Grammar.—Knowledge of grammar will be tested by translation and by grammatical questions based on the specified texts.

Translation at Sight from Greek into English.

Two papers of two hours each will be set; one on Xenophon, with questions in grammar, and translation of easy English prose sentences into Greek; the other on Homer, with questions in grammar, and translation at sight.

Alternative questions will be set on the work prescribed in Greek for the Junior Matriculation Examination of the Province of Ontario, if this differs from that specified above.

At the September examination other texts equivalent to those specified may be accepted, if application be made to the Registrar at least one month before the date of the examination.

## Latin.

Texts.—Cæsar, De Bello Gallico, Books II and III; and Virgil, Aeneid II (Wainwright, Bell's Illustrated Classics), verses I to 505.

*Grammar.*—Knowledge of grammar will be tested by translation and composition, and by grammatical questions based on the specified texts.

Translation at Sight from Latin into English.

Composition.—Translation into Latin of detached English sentences and easy narrative based on the prescribed texts.

Two papers of two hours each will be set; one on translation at sight, Virgil and accidence; the other on Cæsar, syntax and translation of English into Latin.

Note.-The "Roman" method of pronouncing Latin is recommended.

An alternative paper will be set on the Latin texts prescribed for the Junior Matriculation Examination of the Province of Ontario, if these differ from those specified above.

At the September examination other texts in Latin equivalent to those specified may be accepted, if application be made to the Registrar at least a month before the day of the examination.

## French.

Grammar.—A thorough knowledge of French accidence and of those points of syntax which are of more frequent occurrence in an ordinary easy style.

*Translation at Sight* into English of a French passage of moderate difficulty.

Translation at Sight into French of detached English sentences and an easy English passage. Material for such translation is selected with a view to testing the candidate's general knowledge of French grammar.

Books recommended:-Fraser and Squair's French Grammar or Bertenshaw's French Grammar (Longmans), and Cameron's Elements of French Prose Composition (Holt & Co.).

A list of French texts suitable for class reading can be obtained by applying to the Registrar.

Two papers will be set, of two hours each, one on grammar, including translation of short English sentences into French, and one on translation of continuous passages from French into English and from English into French.

#### German.

Grammar.—A thorough knowledge of German accidence and syntax, as in Van der Smissen, or any other German grammar of equally good standing.

Translation at Sight into English of a German passage of moderate difficulty.

Translation into German of detached English sentences and of an easy English passage. Material for such translation is selected with a view to exemplifying the points of grammar included within the above limits.

Texts:-(Translation and grammatical study):-

Gluck auf (Ginn & Co.), to be read first, then Fritz auf Ferien (Copp, Clark Co.).

Texts for 1922.-

Guerber, Märchen und Erzaplungen (Heath), omitting Nos. 3, 4, 10, 14 and Poems; Baumbach, Das Habichtsfraulein (Heath).

The Ontario Junior Matriculation requirements in German will be accepted in place of the texts specified above.

At the September examination other texts equivalent to those specified may be accepted, if application be made to the Registrar at least one month before the date of the examination.

Two papers will be set, of two hours each, one on prescribed texts and grammar, including translation of short English sentences into German, and one on translation of continuous passages from German into English and from English into German.

#### Elementary Mathematics.

Algebra.—Elementary rules, involution, evolution, fractions, indices, surds, simple and quadratic equations of one or more unknown quantities; as in Hall and Knight's Elementary Algebra, to the end of surds (omitting portions marked with an asterisk), or as in similar text-books.

One examination paper of two hours.

*Geometry.*—The paper shall contain questions on practical and on theoretical geometry. Every candidate shall be expected to answer questions in both branches of the subject.

The questions on practical geometry shall be set on the constructions contained in the annexed Schedule A, together with easy extensions of them. In cases where the validity of a construction is not obvious, the reasoning by which it is justified may be required. Every candidate shall provide himself with a ruler graduated in inches and tenths of an inch, and in centimetres and millimetres, a set square, a protractor, compasses and a hard pencil. All figures should be drawn accurately. Questions may be set in which use of the set square or the protractor is forbidden.

The questions on theoretical geometry shall consist of theorems contained in the annexed Schedule B together with questions upon these theorems, easy deductions from them, and arithmetical illustrations. Any proof of a proposition shall be accepted which appears to the examiners to form part of a systematic treatment of the subject;

the order in which the theorems are stated in Schedule B is not imposed as the sequence of their treatment.

In the proof of theorems and deductions from them, the use of hypothetical constructions shall be permitted. Proofs which are only applicable to commensurable magnitudes shall be accepted.

#### SCHEDULE A.

Bisection of angles and of straight lines.

Construction of perpendiculars to straight lines.

Construction of an angle equal to a given angle.

Construction of parallels to a given straight line.

Simple cases of the construction from sufficient data of triangles and quadrilaterals.

Division of straight lines into a given number of equal parts or into parts in any given proportions.

Construction of a triangle equal in area to a given polygon.

Construction of tangents to a circle and of common tangents to two circles.

Simple cases of the construction of circles from sufficient data.

Construction of a fourth proportional to three given straight lines and a mean proportional to two given straight lines.

Construction of regular figures of 3, 4, 6 or 8 sides in or about a given circle.

Construction of a square equal in area to a given polygon.

# SCHEDULE B.

If a straight line stands on another straight line, the sum of the two angles so formed is equal to two right angles; and the converse.

If two straight lines intersect, the vertically opposite angles are equal.

When a straight line cuts two other straight lines, if (i) a pair of alternate angles are equal, or (ii) a pair of corresponding angles are equal, or (iii) a pair of interior angles on the same side of the cutting line are together equal to two right angles, then the two straight lines are parallel; and the converse.

Straight lines which are parallel to the same straight line are parallel to one another.

The sum of the angles of a triangle is equal to two right angles.

If the sides of a convex polygon are produced in order, the sum of the angles so formed is equal to four right angles.

If two triangles have two sides of the one equal to two sides of the other, each to each, and also the angles contained by those sides equal, the triangles are congruent.

If two triangles have two angles of the one equal to two angles of the other, each to each, and also one side of the one equal to the corresponding side of the other, the triangles are congruent.

If two sides of a triangle are equal, the angles opposite to these sides are equal; and the converse.

If two triangles have the three sides of the one equal to the three sides of the other, each to each, the triangles are congruent.

If two right-angled triangles have their hypotenuses equal, and one side of the one equal to one side of the other, the triangles are congruent.

If two sides of a triangle are unequal, the greater side has the greater angle opposite to it; and the converse.

Of all the straight lines that can be drawn to a given straight line upon a given point outside it, the perpendicular is the shortest.

The opposite sides and angles of a parallelogram are equal, each diagonal bisects the parallelogram, and the diagonals bisect one another.

If there are three or more parallel straight lines, and the intercepts made by them on any straight line that cuts them are equal, then the corresponding intercepts on any other straight line that cuts them are also equal.

Parallelograms on the same or equal bases and of the same altitude are equal in area.

Triangles on the same or equal bases and of the same altitude are equal in area.

Equal triangles on the same or equal bases are of the same altitude.

Illustrations and explanations of the geometrical theorems corresponding to the following algebraical identities:

 $k (a + b + c \dots) = ka + kb + kc + \dots$   $(a + b)^{2} = a^{2} + 2ab + b^{2}$   $(a - b)^{2} = a^{2} - 2ab + b^{2}$  $(a^{2} - b^{2}) = (a + b) (a - b).$ 

The square on a side of a triangle is greater than, equal to, or less than the sum of the squares on the other two sides, according as the angle contained by those sides is obtuse, right, or acute. The difference in the cases of inequality is twice the rectangle contained by one of the two sides and the projection on it of the other.

The locus of a point which is equidistant from two fixed points is the perpendicular bisector of the straight line joining the two fixed points.

The locus of a point which is equidistant from two intersecting straight lines consists of the pair of straight lines which bisect the angles between the two given lines.

A straight line, drawn from the centre of a circle to bisect a chord which is not a diameter, is at right angles to the chord; conversely, the perpendicular to a chord from the centre bisects the chord.

There is one circle, and one only, which passes through three given points not in a straight line.

In equal circles (or in the same circle) (i) if two arcs subtend equal angles at the centres, they are equal; (ii) conversely, if two arcs are equal, they subtend equal angles at the centres.

In equal circles (or in the same circle) (i) if two chords are equal, they cut off equal arcs; (ii) conversely, if two arcs are equal, the chords of the arcs are equal.

Equal chords of a circle are equidistant from the centre; and the converse.

The tangent at any point of a circle and the radius through the point are perpendicular to one another.

If two circles touch, the point of contact lies on the straight line through the centres.

The angle which an arc of a circle subtends at the centre is double that which it subtends at any point on the remaining part of the circumference.

Angles in the same segment of a circle are equal; and, if the line joining two points subtends equal angles at two other points on the same side of it, the four points lie on a circle.

The angle in a semicircle is a right angle; the angle in a segment greater than a semicircle is less than a right angle; and the angle in a segment less than a semicircle is greater than a right angle.

The opposite angles of any quadrilateral inscribed in a circle are supplementary; and the converse.

If a straight line touch a circle, and from the point of contact a chord be drawn, the angles which this chord makes with the tangent are equal to the angles in the alternate segments.

If two chords of a circle intersect either inside or outside the circle, the rectangle contained by the parts of the one is equal to the rectangle contained by the parts of the other.

If a straight line is drawn parallel to one side of a triangle, the other two sides are divided proportionally; and the converse.

If two triangles are equiangular, their corresponding sides are proportional; and the converse.

If two triangles have one angle of the one equal to one angle of the other and the sides about these equal angles proportional, the triangles are similar.

The internal bisector of an angle of a triangle divides the opposite side internally in the ratio of the sides containing the angle, and likewise the external bisector externally.

The ratio of the areas of similar triangles is equal to the ratio of the squares on corresponding sides.

Text-book recommended:-Godfrey and Siddons' Elementary Geometry (Pitt Press, Cambridge), or Hall and Stevens' School Geometry.

An alternate paper will be set on the Ontario Junior Matriculation requirements in this subject.

One examination paper of two hours.

## Advanced Mathematics.

Algebra.—The three progressions, ratio, proportion, variation, permutations and combinations, binomial theorem, logarithms, theory of quadratic equations, as in the remainder of Hall and Knight's Elementary Algebra (omitting Chaps. 40 to 44 inclusive), or as in similar text-books.

One examination paper of two hours.

#### Geometry.

#### Constructions.

To draw the inscribed, escribed, and circumscribing circles of a triangle.

To construct triangles under given conditions.

To divide a given line externally and internally in medial section. To construct an isosceles triangle, such that each of the base angles is twice the vertical angle.

To describe a regular pentagon.

To construct a polygon similar to a given polygon, and such that their areas are in a given ratio.

To construct a figure equal in area to a given figure A, and similar to another figure B.

#### Theorems.

If two sides of one triangle be equal respectively to two sides of another, that with the greater contained angle has the greater base; and conversely.

If a triangle is such that the square on one side is equal to the sum of the squares on the other two sides, the angle contained by these sides is a right angle.

The three medians of a triangle are concurrent.

Perpendiculars from the angles to the opposite sides of a triangle are concurrent.

The complements of parallegrams about the diagonal of any parallelogram are equal.

If the circumference of a circle be divided into n equal arcs:— (1) The points of division are the vertices of a regular polygon

of *n* sides inscribed in the circle.

(2) If tangents be drawn to the circle at these points, these tangents are the sides of a regular polygon of n sides circumscribed about the circle.

If  $OA:OB=OC^2$ , OC is a tangent to the circle through A B C.

If two triangles have an angle in each equal, and the sides about two other angles proportional, the remaining angles are equal or supplemental.

The perpendicular from the right angle of a right-angled triangle on the hypotenuse divides the triangle into two triangles which are similar to the original triangle.

The sum of the rectangles contained by the opposite sides of a quadrilateral, about which a circle can be described, is equal to the rectangle contained by its diagonals.

The squares on two sides of a triangle are together equal to twice the square on half the third side and twice the square on the median to that side.

If from the vertical angle of a triangle a straight line be drawn perpendicular to the base, the rectangle contained by the sides of the triangle is equal to the rectangle contained by the perpendicular and the diameter of the circle described about the triangle.

If the vertical angle of a triangle be bisected by a straight line which also cuts the base, the rectangle contained by the sides of the triangle is equal to the rectangle contained by the segments of the base together with the square on the straight line which bisects the angle.

The areas of two similar polygons are as the squares on corresponding sides.

In a right-angled triangle the rectilineal figure described on the hypotenuse is equal to the sum of the similar and similarly described figures on the other two sides.

If three lines be proportional, the first is to the third as the figure on the first is to a similar figure on the second.

If the straight lines joining a point to the vertices of a given polygon are divided (all externally or all internally) in the same ratio, the two points of division are the vertices of a similar polygon.

Two similar polygons may be so placed that the lines adjoining corresponding points are concurrent.

Triangles of equal altitude are as their bases.

In equal circles, angles, whether at the centres or circumferences, are proportional to the arcs on which they stand.

If P is any point on the circumscribing circle of a triangle, ABC, and PL, PM, PN are perpendicular to BC, CA, AB, respectively, LNM is a straight line.

A point P moves so that the ratio of its distances from two fixed points, Q and R, is constant; prove that the locus of P is a circle.

## Areas.

Area of a circle. Area of a sector of a circle. Area of a segment of a circle.

#### Use of Squared Paper.

Marking points.

Finding areas of rectilinear and curvilinear figures.

Examples of plotting loci; in particular, the ellipse, hyperbola, and parabola.

Examples of loci and envelopes.

# Deductions and Applications.

Deductions from and simple applications of the constructions and theorems given above.

Text-book:-Godfrey and Siddons' Elementary Geometry (Pitt Press, Cambridge), or Hall and Stevens' School Geometry.

An option will be set in Geometry on the work prescribed for Honour Matriculation in the Province of Ontario.

Trigonometry.—Measurement of angles, trigonometrical ratios or functions of one angle, of two angles, and of a multiple angle; as in Lock's Elementary Trigonometry, Chaps. I to XII; Hall and Knight's Trigonometry, Chaps. I to XII, inclusive, omitting Chap. V. or as in similar text-books.

For Trigonometry and Advanced Geometry, one examination paper of three hours.

#### Botany.

Text-books recommended:-Bergen and Davis, Principles of Botany, or Atkinson, Elementary Botany.

One examination paper of two hours.

#### Chemistry.

Elementary inorganic chemistry, comprising the preparation and properties of the chief non-metallic elements and their more important compounds, the laws of chemical action, combining weight, etc. Text-book:—"Elementary Chemistry for High Schools," by Nevil Norton Evans (Educational Book Company, Limited, Toronto), Chaps. I to XVI inclusive.

One examination paper of two hours.

### SENIOR MATRICULATION

#### Physics.

Properties of matter; elementary mechanics of solids and fluids, including the laws of motion, simple machines, work, energy; fluid pressure and specific gravity; thermometry, the effects and modes of transmission of heat.

Text-book recommended:-Household Physics, by C. J. Lynde (Macmillan Co. of Canada), Chaps. I to XIII inclusive.

One examination paper of two hours.

#### SEPTEMBER EXAMINATION.

The September matriculation examination in 1920 will commence on Monday, the 20th.

#### SENIOR MATRICULATION.

(1) For admission to Second Year Arts-B.A. Course.

#### SUBJECTS OF EXAMINATION.

- I. Latin or Greek.
- 2. English.
- 3. History.
- 4. Latin or Greek (the one not already taken) or French or German.
- 5. Mathematics (Algebra, Geometry and Trigonometry).
- 6. Physics.

Candidates intending to take the Double Course in Arts and Medicine must take German instead of Physics.

(2) For admission to Second Year Arts-B.Sc. Course.

- I. Chemistry.
- 2. English.
- 3. French.
- 4. German.
- 5. Mathematics.
- 6. Physics.

This examination is held under the same regulations as apply in the case of students of the first year. It will be held only in September, commencing in 1920, on the 20th.

#### FEES.

For	the	first exa	mination			\$15.00
For	a si	ibsequent	examination,	per	subject	2.00

#### SENIOR MATRICULATION

REQUIREMENTS IN EACH SUBJECT.

#### Chemistry.

*Text-books*:-Alex. Smith, General Chemistry; or Macpherson and Henderson, General Chemistry, as for second year.

# English.

*Composition.*—The examination will be designed mainly to test the candidate's ability to write English. He will be expected to have acquired a fairly clear and accurate style, to be able to arrange material in an effective fashion, and to show discrimination in the choice of words. In preparation for the examination, it is suggested that students be requred to write mainly on simple, expository subjects that are within the range of their actual experience.

Carpenter's thetoric and English Composition (Macmillan) is recommended as a suitable text-book.

Literature.— The examination will be based on the following texts:—Chaucer's Prologue to the Canterbury Tales; Spenser's Faerie Queene, Book I, Cantos I and 2; Shakespeare's Macbeth and As You Like It; Milton's Minor Poems (L'Allegro, Il Penseroso, Lycidas and Comus); and Buryan's Pilgrim's Progress, Part I.

Candidates wll also be expected to read Long's English Literature (Ginn & Co.), Clapters I-VII, inclusive, with special emphasis on the portions most closely connected with the foregoing list of books.

#### French.

# (1) For B.A. Course.

Vreeland & Koren, French Syntax and Composition (Holt); Super, Histoire de France (Holt); About, Roi des Montagnes (Heath); Erckmann-Chatrian, Waterloo (Heath); Dumas, La Question d'Argent (Allyn & Bacon); Merimée, Quatre Contes (Holt); Bruce, Récit et Contes de la Guerre de 1870 (Holt).

For 1921:-Augier, Le Gendre de Monsieur Poirier (Heath), in place of Dumas, la Question d'Argent.

# (2) For B.Sc. Course.

The requirements for Junior Matriculation as on page 55, and in addition, Bower's First Scientific French Reader (Heath).

#### German.

## (I) For B.A. Course.

Van der Smssen und Fraser, High School German Grammar (Copp, Clark Cc); Heyse, Die Blinden (Holt); Moser, Ultimo

#### SENIOR MATRICULATION

(Holt); Stern, Geschichten von deutschen Stadten (American Book Co.).

For 1921:-Storm, In St. Jürzen (Holt), in pace of Moser, Ultimo.

## (2) For B.Sc. Course.

The requirements for Junior Matriculation (page 55), or the course in Beginners' German (page 144).

#### Greek.

Homer, Iliad, XVIII (Platt, Blackie's Illustrated Series); Euripides, Hecuba (Upcott, Bell's Illustrated Classics); Lysias, pages 108 to 140 in Shuckburgh's Lysias, Orationes (Macmillan.

N.B.—Although the above editions are suggested, others may be used.

The examination will include a paper on grammar, composition and sight translation.

One of the following books is recommended for grammar: First Greek Grammar, Rutherford (Macmillan); Goodwin': Greek Grammar (Ginn & Co.).

## History.

Gilbert Murray, Greece (Home Univ. Library); Wheeler, Alexander The Great (Heroes of the Nations); Herodous, Books VII and VIII (Everyman's Translation); Fowler, Rome (Home Univ. Library); Fowler, Social Life at Rome in the Age of Cicero (Macmillan); Botsford, History of Rome (Macmillan); Livy, Book XXI (Everyman's Translation); Plutarch, Lives of Pericles, Caius Gracchus, Cato the Younger and Julius Cæsar.

# Latin.

A.—Virgil, Aeneid, VIII (Tetlow, Ginn). B.—Ether (1) Livy, Book VI (Laming, Blackic's Illustrated Latin Series), or (2) Pliny, Selected Letters (Prichard and Bernard, Oxford Clarendon Press), Letters I to 40 inclusive, omitting letter 21.

The examination will include a paper on grammar, composition and sight translation.

The grammar recommended is:--New Latin Grammar by Sonnenschein (Clarendon Press. N.B.--Note the exact title.)

#### Mathematics.

Plane and Solid Geometry.—The equivalent of 300ks IV, VI and XI of Euclid, with supplementary matter from Hal and Stevens' Euclid.

# PHYSICAL EXAMINATION AND HEALTH

Algebra.—Hall and Knight's Elementary Algebra (omitting chapters 40-42 inclusive), or the same subject matter in similar textbooks.

Trigonometry.—Hall and Knight's Elementary Trigonometry to page 210 and chapter 19; nature and use of logarithms (Bottomley's four-figure tables).

#### Physics.

A general knowledge of the more important principles of elementary physics will be required.

Text-book:-Kimball, College Physics (Henry Holt & Co., New York, 1912).

#### ADMISSION TO ADVANCED STANDING.

A student of another university applying for exemption from any subject or subjects which he has already studied is required to submit with his application a Calendar of the University in which he had previously studied, together with a complete statement of the course he has followed and a certificate of the standing gained therein.

The Faculty concerned, if otherwise satisfied, will decide what examination, if any, or what other conditions may be necessary before admitting the candidate.

#### PHYSICAL EXAMINATION, VACCINATION AND HEALTH.

In order to promote as far as possible the physical welfare of the student body, every student, on entering the University, will be required to pass a physical examination to be conducted by, or under the direction of, the Director of the Department of Physical Education, or by a recognized representative.

By such examination physical defects and weaknesses may be discovered. If such defects and weaknesses are amenable to treatment by corrective gymnastics special exercise will be prescribed and instruction provided. The students will be advised as to what forms of exercise will be likely to prove beneficial or harmful.

Students who do not present themselves for this examination (or otherwise satisfy the Director) before November 1st, will not be allowed to attend the University.

Re-examinations will be held frequently throughout the Session for those students who are of low category, or who are suffering from physical disabilities.

All students entering the University for the first time are required to present a certificate, or other satisfactory evidence, of successful vaccination, failing which, they shall at once be vaccinated in a manner satisfactory to the medical examiner.

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# AGE OF ADMISSION

For regulations concerning the required physical work for men see page 291.

For regulations concerning students of the Royal Victoria College, see page 294.

The University is responsible for providing medical attention for all students throughout the session.

# AGE OF ADMISSION.

Except under special circumstances, no student under the age of sixteen is admitted to the first year courses in Arts, Applied Science or Medicine, or under the age of seventeen to the second year, and no student under the age of seventeen is admitted to the course in Law.

# OPENING AND CLOSING DATES OF SESSION, 1920-1921.

The Session 1920-1921 will open in all Faculties on Monday, October 4th, 1920, and on the afternoon of that day (at 5 p.m.) the Principal will deliver the usual opening address in the Assembly Hall of the Royal Victoria College. It will end in the Faculties of Arts, Law and Applied Science on Thursday, May 12th, 1921.

For information regarding registration, see page 69.

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# CLASSES OF STUDENTS.

There are four classes of students in the University:

- (1) Graduates—students who have previously obtained an ordinary degree at McGill, or elsewhere, and who are now pursuing courses for the Master's degree (in Arts, Applied Science or Law), or for the degree of Ph.D.
- (2) Undergraduates—students who have passed the matriculation examination and, in the case of second, third and fourth year students, all the examinations of their course in the years below that in which they are registered.
- (3) Conditioned undergraduates—those with defective entrance qualifications or who have failed in one or more of the subjects of their course in the year below that in which they are registered.
- (4) Partial students—comprising all those who, not belonging to one of the above classes, are taking a partial course of study in the University. In order to obtain admission, such students must pass the matriculation examination in the subject, or subjects, which they wish to take, or, failing this, must be able to satisfy the Head of the Department concerned that they are qualified to proceed with the course.

# **REGISTRATION AND ATTENDANCE.**

#### I. REGISTRATION.

Between September 20th and September 20th, both dates inclusive, students in Law and Medicine, and those without conditions in Applied Science, may register for the Session 1920-21 at the office of the University Registrar and students in Arts at the Dean's office.\* Thursday, September 30th, will be special registration day for new students. On Friday, October 1st, those who had been enrolled in any previous session will register as follows, if they have not already done so:—Arts students in the Dean's office,\* Applied Science students in the Engineering Building; and Medical students in the office of the University Registrar. Lectures will commence on Monday, October 4th. The complete regulations regarding registration are as under:

I. Candidates entering on a course of study in any Faculty, whether as undergraduates, conditioned undergraduates, partial students, or graduate students, are required to attend at the office of the University Registrar, or such other place as he may designate, some time during the week preceding the opening day of the session, in order to furnish the information necessary for the University records, to register for the particular classes which they wish to attend, and to sign the following declaration in the matricula or register:—

"I hereby accept and submit myself to the statutes, rules, regulations and ordinances of McGill University, and of the Faculty or Faculties in which I am registered, and to any amendments thereto which may be made while I am a student of the University, and I promise to observe the same."

2. On the day immediately before the opening of the session students who had been previously enrolled shall register for particular subjects as follows:—Arts students in the Dean's Office; Medical and Law students at the office of the University Registrar, and Applied Science students in the Engineering Building. With the exception of students in Applied Science, who have conditions, they may also register during the five preceding days at the Registrar's Office.

3. Students who for any reason have failed to register at the times specified above will be permitted to do so at the Registrar's

<sup>\*</sup> Women students of the Faculty of Arts are also required to enter in the Roll Book of the Royal Victoria College their names, home address and addresses in Montreal. (See page 310).

#### REGISTRATION

Office withir a limited time thereafter. In the Faculty of Applied Science, stulents previously enrolled who do not register on the regular registration day, Friday, October 1st, will be allowed to do so thereaster only when they have paid a fee of \$5.00 to the Bursar for late registration.

4. The Registrar is empowered to register all students whose records show that they are entitled to attend the classes applied for. All doubtful cases shall be dealt with by committees as follows: in the case of candidates registering for the first time, by a committee of the Matriculation Board; in the case of all others, by a committee of the Faculty concerned.

5. The names of those who have registered for separate classes shall be set by the Registrar to the Heads of Departments on registration day and subsequently, as new names are received, and only those for whom cards have been received by an instructor shall be given credit for attendance.

6. Students desiring to make a change in their choice of studies must make upplication to the Registrar to do so on a regular form. This application must be approved by the Dean of the Faculty in which he is enrolled, whereupon due notice will be sent by the Registrar to all parties concerned. No change in registration will be allowed, except under special circumstances after the fifteenth day of the session.

7. Persons who wish to pursue courses in the University without a view to qualifying for a degree shall be classified as partial students and shall nct be admitted to any course until they have obtained the permission of the Head of the department concerned. The application must then be approved by the Dean of the Faculty or the committee appointed for this purpose.

8. In the Faculty of Arts, where there is a choice of courses, students in attendance shall be required to choose their electives for the next year before the close of the preceding session, or (in cases where this cannot be done) not later than one week before the opening of the session.

#### 2. ATTENDANCE.

I. Students are required to attend at least seven-eighths of the total number of lectures in any one course.\* Those whose unexcused absences exceed one-eighth of the total number of lectures in a course shall not be permitted to come up for the regular examination in that course; and, in the Faculty of Applied Science, those whose unexcused absences have exceeded one-fourth of the total number of lectures in any course nust repeat the work in that course.

\* Physical education is included under this regulation. (See page 293.)

#### ATTENDANCE

Excuses on the ground of illness or domestic afflicton shall be dealt with only by the Deans of the respective Faculties.

2. A record shall be kept by each professor or lecture, in which the presence or absence of students shall be carefully inted. This record shall be submitted to the Faculty when required.

3. Credit for attendance on any lecture or class may be refused on the grounds of lateness, inattention, neglect of study, or disorderly conduct in the class room or laboratory. In the case las mentioned the student may, at the discretion of the Professor, be required to leave the room. Persistence in any of the above offeices against discipline shall, after admonition by the Professor, be repirted to the Dean of the Faculty concerned. The Dean may, at his discretion, reprimand the student, or refer the matter to the Faculty at its next meeting, and may in the interval suspend from classes.

4. The following special regulation with regard to narking the attendance of students has been adopted by the Faculties of Arts and Applied Science:---

Lectures will commence at five minutes after the hur, on the conclusion of the roll call. After the commencement d a lecture students are not allowed to enter, except with the permision of the Professor. If permitted to enter, they will, on reporting themselves at the close of the lecture, be marked "late." Two late: will count as one absence. Lectures end at five minutes before the hur.

# STUDENTS' EXPENSES.

#### I. BOARD AND RESIDENCE.

No college residences have as yet been erected for men students. but dormitory accommodation for about 60 is provided in Strathcona Hall, the home of the McGill Y.M.C.A. Full particulars concerning terms of residence, etc., may be obtained from the Secretary of the Association, 348 Sherbrooke street west, Montreal, who will also make arrangements to have students who are strangers to the city met on arrival and helped to secure lodgings, if due notice is sent of the station and time at which they will arrive.

A list of suitable boarding and lodging houses in the city is prepared about a fortnight before the opening of the session each year, and may be obtained on application to the Secretary of the McGill Y.M.C.A., Strathcona Hall.

Women students may board and reside either in private houses or in the Royal Victoria College, which provides, in addition to separate lecture rooms, residental accommodation for the women students of the University. The expense of board and residence for the session in the Royal Victoria College is \$340. Further particulars will be furnished by the Warden.

Board and lodging can be obtained in private houses in the vicinity of the University buildings at a cost of from \$50 and upwards - per month; or, separately, board at \$40 to \$50 per month, rooms from \$12 to \$20 per month.

Board is furnished in the McGill Union at low rates. The dining room, which is a special feature of the Union, will accommodate over 120 students at a time. There is also a lunch counter where meals are served  $\hat{a}$  la carte.

# 2. APPROXIMATE ESTIMATE OF COST OF COURSE.

(The session extends from October 1st to May 1st.)

Faculty of Arts (men).*	Minimum	Moderate	
Tuition Fees	. \$100	\$100	
Fee for Athletics, Union, etc	. 10	IO	
Board and Lodging	. 350	420	
Books and Apparatus	. 20	25	
	State of the second sec	1	
	\$480	\$555	

\* For estimate of expenses for women students see page 311, and the Announcement of the Royal Victoria College.

# STUDENTS' EXPENSES

# Faculty of Applied Science.

(The session extends from October 1st to May 1st.)

Tuition Fees		Moderate \$205
Fee for Athletics, Union, etc		IO
Board and Lodging	. 350	420
Books and Instruments	. 40	50
	\$605	\$685

Students attending summer courses, required in certain years, for an additional period of one month, will have to spend from \$50 to \$60 extra in those particular years.

# Faculty of Medicine.

(The session extends from October 1st to May 25th.)

	Minimum	Moderate
Tuition Fees	. \$200	\$200
Fee for Athletics, Union, etc	. 10	IO
Board and Lodging	. 400	480
Books, Instruments, etc	. 100	IIO
	and the second second	and the state
	\$710	\$800

Undergraduates in Arts residing in affiliated theological colleges, with a view to a course in theology, are able to obtain board and lodging for less than the minimum shown above, and in all Faculties the expense under the head of "Books and Instruments" can be reduced by purchasing these at second-hand.

It will be noticed that in the above estimate no account is taken of personal expenses, such as cost of clothes, laundry, etc., nor yet of the caution money deposit which is made by each student at the commencement of the session. This amounts to \$5.00 in the Faculties of Arts and Law and \$10.00 in the Faculties of Medicine and Applied Science. It might be well also to reckon on at least \$20.00 or \$25.00 per annum for subscriptions of various kinds.

# LOAN FUNDS.

I. A fund has been established by the Applied Science Class of 1899, to be known as "The Class of 1899 Fund," for the purpose of aiding, each year, one or more students who, upon the completion of their second year work, require assistance to enable them to finish their course of study. The loans from this fund made to students will be repayable after graduation. Applications should be made through the Dean.

2. The George Henry Frost Fund was created by the gentleman whose name it bears for the purpose of aiding students who, when commencing the work of the second or subsequent years, in the Faculty of Applied Science, require assistance to enable them to complete their course. Loans from this fund will bear interest at three per cent. and will be repayable within three years after graduation. In making loans from this fund the academic standing of the students will be taken into account.

# SCHOLARSHIPS, FELLOWSHIPS, MEDALS AND PRIZES.

# 1. SCHOLARSHIPS, EXHIBITIONS AND PRIZES-GENERAL.

I. THE RHODES SCHOLARSHIP.—This scholarship is of the annual value of £300 sterling and is tenable at the University of Oxford for three years. The scholar must be a British subject, must be over 19 and under 25 years of age, and must have reached at least the end of his sophomore or second year in the University.

Rhodes Scholarships have been awarded by McGill as follows:-1904, Herbert J. Rose, B.A., and John G. Archibald, B.A.; 1905, Talbot M. Papineau, B.A.; 1906, Alexander R. McLeod, B.A.; 1908, Frank E. Hawkins, B.A.; 1911, Walter J. Pearse; 1913, W. E. Gladstone Murray, B.A.; 1915, Percy E. Corbett, M.A.; 1919, Terence William Leighton MacDermot, B.A.

Beginning with 1920 the old method of selection by the Universities of the Province in a certain order of rotation was discontinued, and now scholars are chosen by a general committee and the competition is open to candidates from the whole Province without any regard to Universities at all.

2. SCIENCE SCHOLARSHIPS GRANTED BY HER MAJESTY'S COMMIS-SIONERS FOR THE EXHIBITION OF 1851.—These scholarships, of the value of £200 sterling a year, are tenable for two, or, in rare instances, three years. They are limited, according to the Report of the Commission, "to those branches of science, such as physics, mechanics and chemistry, the extension of which is specially important for our national industries." Their object is not to facilitate ordinary collegiate studies, but "to enable students to continue the prosecution of science with the view of aiding in its advance or in its application to the industries of the country."

It is open to students of not less than three years' standing who have shown evidence of capacity for original research, and is tenable at any university or other institution approved by the Commission.

A nomination to one of these Scholarships may be granted to McGill University in 1921, in which event applications should be sent to the Registrar on or before March 1st.

This Scholarship has been awarded as follows :---

Evans, P. N., 1891; Macphail, J. A., 1892; King, R. O., 1895; Gill, J. L. W., 1897; McLean, W. B., 1899; McClung, R. K. 1901; Cooke, H. Lester, 1903; Johnson, F. M. G., 1905; Simpson, J. C., 1907; Boyle, R. W., 1909; Shaw, A. Norman, 1911; Meldrum, W.

#### SCHOLARSHIPS AND EXHIBITIONS

Buell, 1912; Maass, Otto, 1913; Warneford, Frank H. S., 1915; Russell, John, 1919; Bieler, Etienne S., 1920.

3. THE MCGILL DELTA UPSILON MEMORIAL SCHOLARSHIP.—This scholarship has been founded by the McGill Chapter of the Delta Upsilon Fraternity to perpetuate the memory of the members of that Chapter who gave their lives in the Great War.

It is open to all graduates of the University, and the following considerations will govern the award:—(a) The general scholarship of the candidate; (b) His need of financial assistance for further study; (c) The general usefulness to the community of the special branch of study he proposes to follow; (d) The likelihood that the candidate will reflect credit on the University.

The present value of the scholarship is about \$750.

4. THE DR. T. STERRY HUNT RESEARCH SCHOLARSHIP IN CHEM-ISTRY.—It is proposed to offer this scholarship each year to graduate students in the Faculties of Arts and Applied Science.

5. THE P. S. Ross EXHIBITION OF \$100.00, founded by Mr. P. D. Ross, B.A.Sc., in memory of his late father, Mr. P. S. Ross, and given through the Ottawa Valley Graduates' Society, will be awarded annually to the candidate from the Ottawa Valley for entrance to any Faculty, who obtains the highest percentage at the June matriculation examination, and attends the University during the ensuing session. Candidates must apply before July 1st.

6. THE OTTAWA VALLEY GRADUATES' SOCIETY EXHIBITION, value \$50. This exhibition will be awarded annually to the candidate from the Ottawa Valley for entrance to any Faculty who obtains the second highest percentage at the June matriculation examination and attends the University during the ensuing session. Applications must be made before July 1st.

7. THE SIDNEY J. HODGSON EXHIBITIONS, founded by his father, Arthur J. Hodgson, Esq., in memory of his late son, Sidney James Hodgson, a student of the First Year in Arts, who was killed in action on September 27th, 1918, while serving in the 66th Battery of the Canadian Field Artillery. One of these exhibitions is of the value of \$125, tenable in the Faculty of Arts, and another of the value of \$300, tenable in the Faculty of Applied Science or of Medicine. They are open to pupils of the Westmount High School who have been in attendance for at least one year, and will be awarded on the result of the June matriculation examination to the two pupils who obtain the highest percentage on the subjects required for entrance to the Faculties of Arts, Applied Science or Medicine, as the case may be, and who attend the University during the ensuing session.

#### SCHOLARSHIPS IN ARTS

8. THE CHESTER MACNAGHTEN PRIZE of the value of \$25.00 in books, established by Russell E. Macnaghten, Esq., M.A., in memory of his late uncle, will be awarded annually, through the University Literary and Debating Society, for reading in English.

#### II. SCHOLARSHIPS IN ARTS.

#### GENERAL REGULATIONS.

I. No student can hold more than one scholarship at the same time.

2. Scholarships will not necessarily be awarded to the candidates who have obtained the highest marks. An adequate standard of merit will be required.

3. If in any college year there be not a sufficient number of candidates showing adequate merit, any one or more of the scholarships offered for competition may be given to more deserving candidates in another year.

4. A successful candidate must, in order to retain his scholarship, proceed regularly with his college course to the satisfaction of the Faculty.

5. The annual income of the scholarships will be paid in four instalments, viz:—In October, December, February and April, about the 20th of each month.

#### SCHOLARSHIPS AVAILABLE IN ARTS.

The Macdonald Scholarships, founded by the late Sir William C. MacDonald. Ten scholarships of the annual value of \$125 each.

- The Jane Redpath Scholarship, founded by the late Mrs. Redpath, of Terrace Bank, Montreal:—value \$115; open to both men and women.
- The Charles Alexander Scholarship (for men students), founded by the late Charles Alexander, Esq., Montreal, for the encouragement of the study of Classics and other subjects:-value, \$115.
- The Major H. Mills Scholarship, founded by bequest of the late Major Hiram Mills-value, \$115.
- The Barbara Scott Scholarship, founded by the late Miss Barbara Scott, Montreal, for the encouragement of the study of the Classical languages and literature, to be awarded to "the student excelling in classics in the First Year":--value, \$115.

#### SCHOLARSHIPS IN ARTS

The Hannah Willard Lyman Scholarship:-value, \$80.

The Dr. Barclay Scholarship, to be awarded in the Classical Department:-value, \$50.

The Houston Scholarship, available for students studying for the Presbyterian Ministry:-value, \$50.

#### FIRST YEAR SCHOLARSHIPS IN ARTS.

# Scholarship Granted by the Graduates' Society of the District of Bedford.

This scholarship, of the value of \$120, will be awarded annually to a "matriculated student in Arts whose parents reside in the District of Bedford, and whose candidature has been approved by a committee of the Society."

## Narcissa Farrand (Mrs. N. Pettes) Scholarship.

This scholarship, of the value of \$300 (\$150 for two years), founded by Mr. and Mrs. H. V. Truell, of Sweet Acre, Knowlton, Que., and endowed by them with the sum of \$7,000 out of the Narcissa Fairand Fund, will be awarded annually to the candidate from the Eastern Townships who obtains the highest marks at the Arts matriculation examination in June, and who has had his domicile in the Eastern Townships for five consecutive years immediately preceding the examination. Intending competitors must apply to the Registrar before July 1st each year.

#### The Trafalgar Scholarship.

This scholarship was founded in 1913 by certain friends and former pupils of Miss Grace Fairley, to signalize her long and faithful services to education in Montreal, and particularly as head of the Trafalgar Institute. It is of the value of \$135, is tenable for one year only, and will be awarded annually to the student of Trafalgar Institute who obtains the highest marks in the June matriculation examination and matriculates as an undergraduate in the Faculty of Arts.

#### Scholarship for Holders of Model Diplomas.

A scholarship of \$150 is offered annually in the Faculty of Arts to holders of Model diplomas obtained after a course of study in Macdonald College, under the following conditions:—

(1) Candidates must apply through the Head of the School for Teachers before May 1st.

(2) They must satisfy the entrance requirements of the Faculty of Arts and declare their intention to proceed to a First Class Academy diploma following the course prescribed by the University.

The scholarship will be awarded on the academic subjects of the examination for the Model diploma; but although the practice marks will not be taken into account directly, the opinion of the Macdonald College staff as to the general fitness of the applicant for a University course will be considered. In case there is no applicant from the graduating class in any year, applications from graduates of previous years will be considered on their merits.

Holders of this scholarship will be permitted to count practice teaching and post-graduate work towards the fulfilment of their agreement to teach for a period of three years in the Province of Quebec.

# University Entrance Scholarships.

The following scholarships will be offered for competition in June, 1921, to candidates for admission to the first year:--

Five scholarships, of the value of \$150.00 each (three open only to candidates not residing on the Island of Montreal), three of the value of \$100.00 each and two of the value of \$75.00 each (one of each value open only to candidates not residing on Montreal Island), will be awarded on the result of the matriculation examination in June. In addition, two scholarships open to women only and conditional on residence in the Royal Victoria College, are offered each year, one of the value of \$200, and one of \$100.

# The Hon. Robert Jones' Scholarship.

THE HON. ROBERT JONES' SCHOLARSHIP, having a value of One Hundred and Twenty-five Dollars (\$125.00) per annum, "is granted from time to time to some poor student for the full term of study in the Faculty of Arts."

Application for this scholarship should be made through the Dean of the Faculty of Arts. In awarding the scholarship the standing of the student in the matriculation examination will be considered, and the scholarship will not be continued if the standing of the student at any time during his course proves to be unsatisfactory.

#### SECOND YEAR SCHOLARSHIPS IN ARTS

# SECOND YEAR SCHOLARSHIPS IN ARTS.

Six scholarships, ranging in value from \$100 to \$150 each, will be offered for competition to students entering the second year, in September, 1920.

The subjects of examination are divided into two groups as follows:--

Group I.-Greek, Latin, French, German, English.

Group II.-Mathematics, Physics.

Candidates are required to offer two major subjects and one minor subject. The two major subjects must be selected from the same group, the minor subject from either group, the examination in the major subject being more extensive than that in the same subject presented as a minor subject. Two scholarships of \$150 each and two of \$100 each are offered to candidates taking their major subjects from group I, and one of \$150 and one of \$100 to candidates taking their major subjects from group II.

The above scholarships are open to all undergraduates in Arts, whether they are taking the B.A. or the B.Sc. course.

#### Requirements in each Subject.

#### Greek.

#### (As a Major Subject.)

- I. (a) Homer, Odyssey I.
  - (b) Euripides, Hecuba.
- II. Composition and translation at sight.
- III. History:—Greek History for Schools, Edmonds (Camb. Univ. Press) down to p. 217.

#### (As a Minor Subject.)

The same as above, omitting I (a) and III.

Latin.

#### (As a Major Subject.)

- I. (a) Tacitus, Histories, Book I, cc. 1-50 inc.
- (b) Gleason, a Term of Ovid, pp. 49-84.
- II. Composition and translation at sight.
- III. Roman History:—Short History of Rome, Ferrero and Barbagallo, Putnam, pp. 133-360.

N.B.—Before reading the above History candidates should write to Prof. Slack for a list of corrections.

the first year sessional examinations, provided that not more than two sessions have elapsed since their admission to the University.

# SECOND YEAR SCHOLARSHIPS IN ARTS

# (As a Minor Subject.)

The same as above, omitting III and either I (a) or I (b).

#### French.

# (As a Major Subject.)

(a) Grammar; (b) translation at sight of an English passage into French; (c) French essay on a prescribed subject; (d) translation of passages taken from the prescribed texts; (e) a critical study of the following texts, tested by questions in the French language to be answered in French:—

Corneille, Cinna (Holt); Molière, Le Malade Imaginaire (Macmillan); Thiers, Expédition de Bonaparte en Egypte (Holt); France, Le Crime de Sylvestre Bonnard (Holt). In 1921: Loti, Pêcheurs d'Islande (Rivington), in place of Crime de Sylvestre Bonnard.

# (As a Minor Subject.)

The same as above, omitting Molière and Thiers.

#### German.

# (As a Major Subject.)

(a) Grammar; (b) translation at sight from German into English, and from English into German; (c) a critical study and translation of the following texts:-

Schiller, Jungfrau von Orleans, with vocabulary (Heath & Co.); Kleist, Michael Kohlhaas (Holt); Fulda, Talisman (Heath).

# (As a Minor Subject.)

The same as above, omitting Schiller.

## English and History.

### (As a Major Subject.)

Shakspere, Richard II. (ed. Macmillan); Macaulay, History of England, Vol. I., Chap. 3 (England in 1685); Scott, Marmion.

History:-Sabatier, St. Francis of Assisi, or Symonds, J. A., A Short History of the Renaissance in Italy.

# (As a Minor Subject.)

The same as above, omitting Macaulay and Scott.

#### Mathematics.

#### (As a Major Subject.)

Plane Geometry .- Ordinary and advanced section courses of the First Year.

Algebra.-Hall and Knight's Algebra as in the advanced course of the First Year; also Fine's College Algebra (Ginn & Co.), pp. 424 to 511.

Plane Trigonometry .- As in the advanced course of the First Year; also Carslaw's Trigonometry (Macmillan & Co.), pp. 144 to 149, and Chaps. 14, 15, 17, 18.

# (As a Minor Subject.)

The mathematics of the First Year ordinary course.

#### Physics.

# (As a Major Subject.)

Duncan and Starling's Heat, Light, and Sound (Macmillan).

# (As a Minor Subject.)

Kimball's "College Physics" (Henry Holt & Co.).

#### THIRD YEAR SCHOLARSHIPS IN ARTS.\*

The following five scholarships, of the value of \$150 per year, for two years, will be open for competition to students entering the third year in September, 1920.

One for English and another language.

One for Latin or Greek and another languaget (English excepted).

One for French or German and another languaget (English excepted).

Two for Mathematics and Physics.

In addition to the above scholarships, the three following scholarships, of the value of \$150.00 each, are also offered for competition to students entering the third year :---

One for Philosophy and Psychology.

One for Chemistry and Physics.

One for Biology.

\* Third year scholarships are open to students who have passed the second year sessional examination, provided that not more than three sessions have elapsed since their admission to the University; and also to candidates who have obtained what the Faculty may deem equivalent standing in some other university, provided that application be made before the end of the session preceding the examination. Double course students (Arts and Applied Science or Arts and Medicine) are not eligible for these scholarships. † The language not chosen in the first instance may be taken as

the second language.

A bursary of \$25 will be awarded to that one of the holders of these three scholarships who is considered most deserving on entering the fourth year.

An exhibition of \$50, to be known as the Hannah Willard Lyman Exhibition, will also be awarded annually in the fourth year, to the best woman student who may have been the holder of a third year scholarship in biology or chemistry or philosophy. Should there be no sufficiently deserving candidate, this exhibition may be awarded at the beginning of the third year to a woman candidate who may fail to obtain one of the five regular scholarships offered to third year students.

Of the two third year scholarships assigned to mathematics and physics, one is open to women only, the other to men only. Should, however, no candidate be eligible for the scholarship open to men only, it may be awarded to a woman.

In the award of third year scholarships, the second year standing of candidates, in the subjects selected, will be taken into account.

In the event of no candidate of sufficient merit presenting himself, the scholarship assigned to any group of subjects may, at the discretion of the Faculty, be awarded in another group, whether a scholarship has been already assigned to that group or not.

#### REQUIREMENTS IN EACH SUBJECT.

#### Greek.

Prose composition; translation at sight.

Study of the following texts:-Aeschylus, Persae; Homer, Odyssey I and II.

Greek History:—Greek History for Schools, Edmonds (Cambridge Univ. Press), down to p. 217.

#### Latin.

Prose composition; translation at sight.

Study of the following texts:-(a) Horace, Odes III; (b) Tacitus, Hist. I.; (c) Gleason, a Term of Ovid, pp. 49-84.

Short History of Rome, Ferrero and Barbagallo, Putnam, pp. 242 to end.

N.B.—Before reading the above History, candidates should write to Prof. Slack for a list of corrections.

#### English and History.

Literature.-Shakspere, Hamlet (ed. Deighton, Macmillan); Milton, Paradise Lost, Books I and II, ed. Macmillan (Macmillan);

Ruskin, Sesame and Lilies, Crown of Wild Olive; Arnold, Essays in Criticism, Second Series (Macmillan's Colonial Library).

History.—The selections from Gibbon, Decline and Fall of the Roman Empire, required for History Honour students in the Fourth Year, Chaps. 1, 2, 3, 23, 50, 57, 58.

Composition.—The candidate will be required to write an essay on some subject connected with the literature or history prescribed. High marks will be given for this subject.

#### French.

(a) French essay; (b) translation at sight from French into English, and from English into French; (c) translation of passages from the prescribed texts; (d) questions on the subject matter of the following texts, and the lives of their authors:---Mdière, Le Médecin Malgré Lui (Heath); Racine, Phèdre (Heath); Hugo, Les Misérables (Heath); Taine, Introduction à l'Histoire de la Littérature Anglaise (Heath); Rostand, Cyrano de Bergerac Holt).

In 1921: Taine, L'Ancien Régime (Heath), in place of Taine, Introduction, and Hugo, Notre Dame de Paris (Cinn), in place of Les Misérables.

The entire examination will be held in the French language.

# German.

(a) German essay; (b) translation at sight from German into English, and from English into German; (c) critica study and translation of the following texts:—Goethe, Dichtung und Wahrheit, Books I, II, III (Heath); Schiller, Das Lied von der Glocke (Holt), and Wallenstein's Lager (Holt); Eichendorff, Aus dem Leben eines Traugenichts (Holt); Heine, Prose Selections (Macmillan).

#### Mathematics and Physics.

Mathematics.—Differential and Integral Calcuus—Lamb's Infinitesimal Calculus, pp. 1 to 250.

Analytic Geometry.—Fine and Thompson's Analytical Geometry (Macmillan & Co.); and the corresponding Chapters of C. Smith's Analytical Geometry.

Higher Trigonometry .- Carslaw's Plane Trigonometry.

Physics .- Edser's Light (Macmillan).

In addition to the above scholarships three of the value of \$40 each will be offered as follows :---

One for Philosophy and Psychology. One for Chemistry and Physics.

One for Biology.

# REQUIREMENTS IN EACH SUBJECT.

# Philosophy and Psychology.

Mellone, Text-book of Logic, Chaps. 1-10 inclusive; Mill, System of Logic, Book II, Chap. 3, and Book III, Chaps. 1-12, 14 and 21; Pillsbury, Fundamentals of Psychology; Berkeley's "Three Dialogues between Hylas and Philonous" (Open Court Philosophical Classics).

# Chemistry and Physics.

Chemistry.—Modern Inorganic Chemistry (J. W. Mellor, 1912 edit.)

Subject of Essay.-"Aqueous Solution."

Physics .- Draper's Heat (Blackie & Son).

#### Biology.

Animal Biology.—G. H. Parker, The Elementary Nervous System (Lippincott, Philadelphia), 1919; Dendy (Constable & Co., London, 1912).

Reference Book:-Parke and Haswell, Text-book of Zoology, Vol. I (Macmillan, 1910).

Plant Biology.—Candidates for this scholarship will be expected to pursue an independent study of classification of plants during the summer months. An original collection of 75 species must be made and properly identified, and must form a basis of an understanding of the general interrelations of the larger groupings. A few lectures will be given during the latter part of the session for the benefit of those who wish to undertake this work. These will deal with the rationale of taxonomy and methods of collection and study. Advice as to the proper literature will also be given at this time.

Candidates for any of the above must make application to the Registrar before July 1st.

#### SCHOLARSHIPS IN ARTS

The following special scholarships are also available in the third and fourth years:--

#### Mackenzie Scholarships.

Four scholarships, known as the Mackenzie Scholarships, are awarded annually in the Department of Economics and Political Science. Two of these, of the value respectively of \$100 and \$50, tenable for one year, are awarded on the result of the second year examination in political economy (Economics, Course 1), but no student is eligible who has not completed the work of this year. The tenure of the scholarships is conditional upon the holders pursuing their studies in the honour work in economics and political science of the third year. The other two scholarships, of the value respectively of \$100 and \$50, are awarded on the results of the honour examination of the third year in economics and political science. The scholarships will not be awarded except on satisfactory evidence of merit; their tenure is conditional upon the holders pursuing their studies in the honour work in economics and political science of merit; their tenure is conditional upon the holders pursuing their studies in the honour work in economics and political science of the fourth year.

A fourth year Mackenzie scholarship may be held by a student who holds another; a third year scholarship cannot.

#### GRADUATE SCHOLARSHIP IN ARTS.

The Allen Oliver Scholarship (in Economics and Political Science).

This scholarship has been established by Mrs. Frank Oliver, of Edmonton, Alta., in "proud and loving memory of her son, the late Allen Oliver, B.A.,\* M.C., Lieutenant 26th Battery, C.F.A., who was killed in action at the Somme on November 18th, 1916." The scholarship will be awarded annually to the student who stands highest in First Class Honours in the Department of Economics and Political Science at the final B.A. examination, and the holder is required to pursue his studies in Economics and Political Science in some university outside of Canada. The present value of the scholarship is about \$650.

The first award will be made in 1921 (class entering in 1917).

\* Lieut. Oliver was an Honour graduate of 1915 in the Department of Economics and Political Science.

#### MEDALS AND PRIZES IN ARTS

#### III. MEDALS IN ARTS

Gold Medals will be awarded in the B.A. Honour examinations to students who take the highest honours of the first rank in the subjects stated below, and who shall have passed creditably the ordinary examination for the degree of B.A., provided they have been recommended therefor to the Corporation by the Faculty, on the report of the examiners :-

The Henry Chapman Gold Medal, for Classical Languages and Literature.

The Prince of Wales Gold Medal, for Mental and Moral Philosophy. The Anne Molson Gold Medal, for Mathematics and Natural Philosophy.

The Shakespeare Gold Medal, for English Language and Literature. The Logan Gold Medal, for Geology, Mineralogy and Palæontology.

The Major Hiram Mills Gold Medal, for Biology.

The Governor-General's Gold Medal, for Modern Languages and Literature.

The Allen Oliver Gold Medal, for Economics and Political Science (founded by Mrs. Frank Oliver, in memory of her late son, Allen Oliver, B.A., M.C., Lieutenant 26th Battery, C.F.A., who was killed in action at the Somme, on November 18th, 1916).

In addition to the above, certain medals are offered annually by the Alliance Française, at the discretion of the Department of Modern Languages.

If there be no candidate for any medal, or if none of the candidates fulfill the required conditions, the medal will be withheld, and the proceeds of its endowment for the year may be devoted to prizes in the subject for which it was intended.

#### IV. PRIZES IN ARTS.

I. The Neil Stewart Hebrew Prize.-An annual prize of \$15 is open to all undergraduates and graduates of this University, and also to graduates of any other university, who are students of theology in some college affiliated to this University. It will be awarded on the result of the sessional examination in Hebrew of the second year.

The prize, founded by the late Rev. C. C. Stewart, M.A., and terminated by his death, was re-established by the liberality of the late Neil Stewart, Esq., of Vankleek Hill.

2. Early English Text Society's Prize.-This prize, the annual gift of the Early English Text Society, will be awarded for proficiency in the subjects of the language group in the English honour curriculum of the third and fourth years.

3. New Shakespeare Society's Prize.-This prize, the annual gift of the New Shakespeare Society, open to graduates and undergra-

#### SCHOLARSHIPS IN APPLIED SCIENCE

duates, will be awarded for a critical knowledge of the following plays of Shakespeare:-Hamlet, Macbeth, Othello, King Lear.

4. Charles G. Coster Memorial Prize.—This prize, of the value of \$25.00, and intended as a tribute to the memory of the late Rev. Chas. G. Coster, M.A., Ph.D., Principal of the Grammar School, St. John, N.B., is offered for competition, by Mr. Colin H. Livingstone, B.A., to undergraduates (men and women) from the Maritime Provinces (Nova Scotia, New Brunswick and Prince Edward Island). It is awarded on the decision of the Dean of the Faculty of Arts to that student in Arts from the Maritime Provinces who shows the greatest proficiency in the examinations at the end of the session.

5. Annie Macintosh Prize.—The income of the sum of \$1,130.00 (\$425 of which was subscribed by the pupils and friends of the late Miss Annie Macintosh, and \$618.97 bequeathed by the late Miss L. G. Macintosh), will be offered as a prize or prizes, to students of the Royal Victoria College in such subject, or for such work as the Faculty may determine.

6. Penhallow Prize.—The income of the sum of \$1,100 collected by the Arts Undergraduates Society in 1911, will be assigned annually to the Department of Botany for a prize to be known as the "Penhallow" prize.

7. Henry Chapman Prize.—This prize, of the value of \$15.00, is given in such modern languages as may be taught in the Faculty of Arts, other than English, and Hebrew shall also be included.

8. The names of those who have taken honours or certificates will be published in order of merit, with mention, in the case of students of the first and second years, of the schools in which their preliminary education has been received.

# V. SCHOLARSHIPS, EXHIBITIONS AND PRIZES IN APPLIED SCIENCE.

I.-Awarded on the result of Special Examinations.

I. Two prizes, each of \$10.00, presented by J. M. McCarthy, Esq., B.A.Sc., to students entering the third year, for proficiency in levelling and transit work.

2. Messrs. Babcock & Wilcox, Limited, offer every second year, a scholarship of the value of \$200.00 per annum, tenable for two years, to the best all-round man among the Engineering students who, having completed the work of the first and second years, is about to enter the third year, and who intends to make a special study of the subject of Steam Engineering. The conditions under which this scholarship is awarded may be ascertained on application to the Dean of the Faculty.

3. Scholarships covering four years' tuition in the Faculty of Applied Science are awarded annually by the Canadian Pacific Railway Company. These are open for competition to apprentices and other employees of the Company under twenty-one years of age, as

### SCHOLARSHIPS AND PRIZES IN APPLIED SCIENCE

well as to minor sons of employees, and the award is made on the result of the June Matriculation Examination. For full particulars as to number of scholarships available, etc., application should be made to C. H. Buell, Esq., Staff Registrar and Secretary, Pension Department, C.P.R. Offices, Montreal.

4. The P. S. Ross, Ottawa Valley, and Sidney J. Hodgson Entrance Scholarships. For particulars, see page 76.

# II.—Awarded on results of Sessional Examinations or for special theses.

I. A British Association exhibition of \$50.00 and a prize of \$25.00 at the end of the third year, to the students who obtain the highest and the second highest aggregate marks, respectively, in the sessional examinations in strength of materials and mechanics of the third year.

2. Three prizes of \$25.00, \$15.00 and \$10.00, at the end of the second year, to the students obtaining the highest, and the second and third highest, aggregate marks, respectively, in the sessional examinations in analytic geometry, calculus and mechanics of the second year.

3. A Scott exhibition of \$50.00, founded by the Caledonian Society of Montreal, in commemoration of the centenary of Sir Walter Scott, and two prizes of \$25.00 and \$15.00, at the end of the first year to the students obtaining the highest, and the second and third highest aggregate marks, respectively, in the sessional examinations in the mathematics, descriptive geometry and physics of the first year.

4. Workshop Prize.—A prize of \$20.00 presented by Mr. C. J. Fleet, B.A., B.C.L., for bench and lathe work in the wood-working department, open to students of not more than two terms standing in workshop practice.

5. A prize of \$50.00, presented by Mr. James Tighe, B.A.Sc., for research work in hydraulics.

6. An exhibition offered to graduates by Mr. A. E. Childs, M.Sc., for a special research on "The flow of gas through pipes under pressure."

7. A prize of \$25.00, presented by Messrs. Anglin's, Ltd., to the student obtaining the highest aggregate marks in the subject of architectural drawing in the second year of the Department of Architecture.

8. A prize of \$25.00, presented by Messrs. Anglin's, Ltd., to the student obtaining the highest aggregate marks in construction (Courses Nos. 24, 25, 26, 27) in the second and third years in the Department of Architecture.

9. The Louis Robertson Prize, founded by Mr. and Mrs. John A. Robertson, in memory of their son, John Louis Armour Robertson, who was killed in the Great War, on July 18th, 1916. To be awarded to the undergraduate student who ranks highest in Design in the final year of the course in Architecture.

### SCHOLARSHIPS AND PRIZES IN APPLIED SCIENCE

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10. The following prizes are offered for the best summer essays:--

To the students of the Civil Engineering course a prize of \$25.00, presented by Charles Graham Drinkwater, Esq., B.Sc.

To the students of the Electrical Engineering course, from a friend, a prize of \$25.00.

To the students of the Metallurgical course, a prize of \$25.00, presented by Milton L. Hersey, Esq., D.Sc.

To the students of the Mechanical Engineering course, a prize of \$25.00 presented by the Crosby Steam Gauge and Valve Co.

To the students of the Mining Engineering course, a prize of \$25.00, presented by J. T. McCall, Esq.

Four prizes, each of the value of \$25.00, are offered for competition to student members of the Engineering Institute of Canada, for the best papers on subjects in any department of engineering. The summer theses prepared by students of this University are available for this competition.

Three prizes, each of the value of \$25.00, and the President's gold medal, are offered for competition to student members of the Canadian Mining Institute for the best papers on mining subjects.

II. In the Department of Architecture two prizes will be offered at the opening of the session to those students of the Department submitting the best architectural drawings.

12. The sum of \$40.00 has been voted by the Undergraduates' Society of the Faculty of Applied Science, to be given as prizes for the best papers read before the Society during the session 1920-21.

13. The Sir William Dawson Exhibition, given by the New York Graduates' Society:-value, \$60.

14. Certificates of merit are given to such students as take the highest place in the sessional and degree examinations.

### III .- Awarded at the Discretion of the Faculty.

I. THE HON. ROBERT JONES' SCHOLARSHIP, having a value of One Hundred and Twenty-five Dollars (\$125.00) per annum, "is granted from time to time to some poor student for the full term of study in the Faculty of Applied Science."

Application for this scholarship should be made through the Dean of the Faculty of Applied Science. In awarding the scholarship the standing of the student in the matriculation examination will be considered, and the scholarship will not be continued if the standing of the student at any time during his course proves to be unsatisfactory.

2. The Baylis Scholarship, founded in memory of Mr. and Mrs. James Baylis, of Montreal, and having an annual value of \$100.00, is awarded to some student who is in need of financial assistance to

### MEDALS IN APPLIED SCIENCE

complete his course on entering the second year of the Faculty. The scholarship will be continued during the third and fourth years, if the student's standing continues to be satisfactory.

Applications should be made through the Dean of the Faculty of Applied Science.

3. Three research and teaching fellowships, of the value of \$500 each, have been established in the Mining Department—one endowed in memory of the late Sir William Dawson, one endowed by the late Dr. James Douglas, and a third supported by graduates in Mining in the name of the late Dr. B. J. Harrington. All three fellowships are awarded annually if suitable candidates offer.

4. The late Dr. James Douglas, who was a member of the Board of Governors, provided during his lifetime for twelve, or more, tutorial bursaries in the Faculty of Applied Science. In assigning these bursaries account will be taken of the circumstances of the applicants as well as of their academic standing.

These bursaries have a value of \$100.00 per annum, and carry the obligation of giving tutorial instruction equivalent to one evening a week, to the satisfaction of the Faculty Committee. Students in the third and fourth years of Applied Science only are eligible.

### VI. MEDALS IN APPLIED SCIENCE.

1. The Governor-General's silver medal (the gift of His Excellency, the Duke of Devonshire) will be awarded for graduate research work.

2. A British Association medal is open for competition to students of the graduating class in each of the nine courses, and, if the examiners so recommend, will be awarded to the student taking the highest position in the final examinations. The British Association medals and exhibition were founded by the British Association for the Advancement of Science, in commemoration of the meeting held in Montreal in the year 1884.

3. A gold medal and three prizes of \$25.00, offered by the Canadian Mining Institute. For further particulars, see page 244.

4. Honours.—On graduation, honours will be awarded for high standing in professional subjects.

### VII. FELLOWSHIPS IN MEDICINE.

The A. A. Browne Memorial Fellowship:—From the proceeds of the sum of \$10,000 which was received by the Faculty from the committee of the A. A. Browne Memorial Fund, a fellowship has been established, to be known as the "A. A. Browne Memorial Fellowship." This fellowship is open to graduates of any recognized Medical School and is for the advancement of medical science, special preference being given to the subjects of obstetrics and gynæcology.

### FELLOWSHIPS AND MEDALS IN MEDICINE

The James Douglas Research Fellowship:—This fellowship, founded by the late Dr. James Douglas, with an endowment of \$25,000, is awarded to promote co-ordinated research in the laboratories of pathology in or associated with the University.

### SCHOLARSHIPS IN MEDICINE.

1. The P. S. Ross, Ottawa Valley, and Sidney J. Hodgson Scholarships. For particulars, see page 76.

2. The Walter J. Hoare Memorial Scholarship. Founded by Dr. Charles W. Hoare, a graduate of McGill University, in memory of his son, Walter J. Hoare, who was killed in the Great War.

It is limited to pupils of the Windsor Collegiate Institute, Ontario, is tenable only in the Faculty of Medicine of McGill University, and is awarded on the result of the June Matriculation Examination each year.

### VIII. MEDALS IN MEDICINE.

1. The Holmes Gold Medal, founded by the Medical Faculty in the year 1865, as a memorial of the late Andrew Holmes, Esq., M.D., LL.D., late Dean of the Faculty of Medicine, is awarded to the student of the graduating class who receives the highest aggregate number of marks in the different branches comprised in the medical curriculum.

The student who gains the Holmes Medal has the option of exchanging it for a bronze medal and the money equivalent of the gold medal.

2. The Sutherland Gold Medal, founded in 1878 by the late Mrs. Sutherland, in memory of her late husband, William Sutherland, M.D., formerly Professor of Chemistry in this Faculty, is awarded for the best examination in general and medical chemistry, together with a creditable examination in the primary branches. The examination is held at the end of the third year.

3. The Wood Gold Medal, founded by Casey A. Wood, M.D., is awarded to the student of the graduating class who receives the highest aggregate number of marks in the clinical branches of the final year. The winner of the Holmes Medal and the winner of the Final Prize are not permitted to compete for this medal.

### IX. PRIZES IN MEDICINE.

1. The Final Prize.—A prize in books (or a microscope of equivalent value), awarded for the best examination, written and oral, in the final branches. The Holmes' medalist is not permitted to compete for this prize.

2. The Fourth Year Prize.—A prize in books, awarded for the best examination, written and oral, in all the branches of the fourth year course.

### EXHIBITIONS AND PRIZES IN LAW

3. The Joseph Hils Prize.—(Founded by the late Dr. Joseph Hils, of Woonsocket, R.I.)—A prize in books, awarded to the student who obtains the highest number of marks for a special examination in materia medica and therapeutics.

4. The Third Year Prize.—A prize in books, awarded for the best examination, written and oral, in the branches of the third year.

5. The Joseph Morley Drake, M.D., Prize.—(Founded by the late Joseph Morley Drake, M.D.)—A microscope, to be awarded to the student of the third year who obtains the highest number of marks for the examinations in pathology and bacteriology.

6. The Second Year Prize.—A prize in books for the best examination in all the branches of the second year course.

7. The First Year Prize.—A prize in books for the best examination in all the branches of the first year course.

#### X. EXHIBITIONS AND PRIZES IN LAW.

I. An exhibition, of the value of \$50.00 per annum—to be known as the Alexander Morris Exhibition—has been founded in memory of the late Hon. Alexander Morris, M.A., D.C.L., of Toronto, Ont., and will be awarded to the student who obtains the highest standing in the second year.

2. Various money prizes (among the number being a prize of \$15.00, given by the Junior Bar Association of the Province of Quebec, to the student of the final year who takes the highest standing in civil procedure), are awarded to the students of each year who obtain the highest distinction at the examination held at the close of the session. No prize will, however, be awarded to any student unless a sufficiently high standing is attained.

3. The Montreal Bar Prize, value \$50.00, is awarded by the Montreal Bar Association for the highest standing in Commercial Law.

4. A travelling scholarship has been established by the Will of the late Sir William Macdonald, "for the purpose of enabling the Englishspeaking Law students to take a course of studies in France," the donor "deeming it of great importance that the English-speaking members of the legal profession should be proficient in the French language."

The value of this scholarship is the income derived from the sum of \$20,000.

### XI. MEDALS IN LAW.

I. The Elizabeth Torrance Gold Medal is awarded to the student who obtains the highest marks in the final examinations, provided that his answers are, in the estimation of the Faculty, of sufficient merit to entitle him to this distinction.

### MEDALS AND PRIZES IN DENTISTRY

### XII. MEDALS IN DENTISTRY.

The F. A. Stevenson Gold Medal, founded by Dr. F. A. Stevenson, of Montreal, is awarded to the student in the final year who stands first in the science and practice of Dentistry. The standing will be determined not only by the written and practical examinations at the end of the year, but by the general work of the student during the whole year.

### XIII. PRIZES IN DENTISTRY.

Final Year Prize:—A prize in books will be awarded to the final year student who stands second in the class. The standing will be determined in a manner similar to that followed in the awarding of the gold medal.

Third Year Prizes:—Two prizes in books will be awarded to third year students in the science and practice of Dentistry. The method of determining the winners of these prizes will be similar to that adopted in awarding the prizes in the final year.

For medals and prizes in the Faculty of Agriculture, see Macdonald College announcement.

## FEES.

### GENERAL REGULATIONS.

I. Fees are due and payable to the Bursar on or before October roth (if paid in instalments, one on or before October roth, the other on or before February Ist.). The registration ticket must be shown to the Bursar at the time of the first payment. After October roth or February Ist, as the case may be, an additional fee of \$2.00 will be exacted of all students in default.

2. Immediately after October 20th, or February 5th (in the case of students who pay by instalments), the Bursar shall send to the Deans of the several Faculties a list of the registered students who have not paid their fees, on receipt of which the Deans shall cause their names to be struck from the registers of attendance, and such students cannot be readmitted to any class except on presentation of a special ticket, signed by the Bursar, certifying to the payment of fees.

3. Students registering after October 20th shall pay their fees at the time of registration, failing which they become subject to the provisions of regulation 2.

4. No fees will be refunded to partial students under any circumstances whatever.

### MATRICULATION EXAMINATION FEES.

See page 48.

#### FEES IN ARTS.

#### (For Regulations re payment, see above.)

Sessional fee for the undergraduate course in Arts...... \$100.00 (This includes fees for library, gymnasium and graduation.)

By instalments:--

First instalment,	if	paid before	October	10th	\$51.00
Second instalment	Ŀ.,	if paid befor	re Februa	ary Ist	51.00

Sessional fee for the undergraduate course in School of	
Commerce	\$150.00
By instalments :	
First instalment, if paid before October 10th	\$ 77.00
Second instalment, if paid before February 1st	77 00

At the request of the students themselves and by the authority of Corporation, an additional fee of \$10.00 will be exacted from all men undergraduates and conditioned undergraduates, for the support of the Literary Society, the Undergraduates' Society, the Canadian Club, the Union, the McGill Daily and athletics. Women students pay an additional fee of \$3.00 for athletics, and \$2.50 for the Royal Victoria College Undergraduates' Society.

# Fees for Laboratory Courses.

Fees for supplies, as detailed below, will include all laboratory materials, reagents, and the use of instruments, and will cover ordinary wear and tear of instruments and apparatus, but they will not cover losses through waste, neglect, or breakage. The charges under this head will be deducted from the students' caution money at the end of the session.

General Chemistry (1)	\$5.00
Organic Chemistry (2)	5.00
Analytical Chemistry (3)	10.00
Organic Chemistry, advanced (5)	15.00
Physical Chemistry, advanced (7)	10.00
Quantitative Analysis, advanced (8)	10.00
Biological Chemistry (10)	5.00
Biological Chemistry, advanced (11)	5.00
Food Chemistry Laboratory	J.00
Physics (per session)	
Botany (for sessional courses)	5.00
Botany (for term recurses)	5.00
Botany (for term courses)	2.50
Zoology (for sessional courses)	5.00
Zoology (for term courses)	2.50

# Fees for partial students-(first and second years).

\$25.00 per session for one courset and \$15.00 for one half-courset of lectures, including the use of the library; \$18.00 per session for each

<sup>&</sup>lt;sup>†</sup> The lectures and laboratory work, if any, in one subject in any of the four college years constitute a "course," if occupying three hours per week; a "half-course," if occupying less than three hours per week.

additional course; \$12.00 per session for each additional half-course. In addition there will be a fee of \$3.00 for athletics.

Fees for partial students—(third and fourth years).—\$30.00 per session for one course† and \$18.00 for one half-course† of lectures, including the use of the library; \$24.00 per session for each additional course; \$15.00 per session for each additional half-course. In addition there will be a fee of \$3.00 for athletics.

Partial students taking the full curriculum in any one year pay the same fees as undergraduates in that year.

For fees payable by students taking the double course in Arts and Applied Science, see page 98; and for the fees payable by those in the double course in Arts and Medicine, see page 99.

Graduates in Arts of this University are allowed, on payment of one-half of the usual fees, to attend all lectures in the undergraduate course, except those for which a special fee is exigible. Graduates of other universities attending full courses in affiliated theological colleges are given the like privilege.

For fees for Extension Courses, given in connection with the School of Commerce, see pages 169 to 174.

### Special fees:-

Supplemental examination, taken at the regula	r date fixed
by the Faculty	\$ 2.00
Supplemental examination, when granted at an	y other time
than the regular date fixed by the Facu	lty, for each
examination period	\$ 5.00

All fees for supplemental examinations must be paid to the Bursar, and the receipts shown to the Dean before the examination.

**Caution Money.**—Every student is required to deposit with the Bursar the sum of \$5.00, as caution money, to cover damages done to furniture, apparatus, books, etc. This amount, less deductions (if any), will be returned at the close of the session.

### FEES IN APPLIED SCIENCE.

(For Regulations re payment, see page 95.)

Sessional fee for the undergraduate course...... \$205.00 By instalments:---

Second instalment,	if paid before February 1st	105.00

Students taking the summer schools in September are required to pay the sum of \$35 (including Caution Money Deposit), which will be placed to their credit on the fee for the session.

At the request of the students themselves, and by authority of Corporation, an additional fee of \$10.00 will be exacted from all undergraduates and conditioned undergraduates for the support of the Literary Society, the Undergraduates' Society, the Canadian Club, the Union, the McGill Daily and athletics.

Graduates of this Faculty taking an additional undergraduate course will pay one-half of the undergraduate fee.

Students taking the six-year double course in Arts and Applied Science shall pay full fees in Arts for the first three years of their course and the following fees in Applied Science:—

Sessional fee for second and third years of double course

First instalment, if paid before October 10th...... \$105.00 Second instalment, if paid before February 1st...... 105.00

The fees for partial students are:-\$4.00 for library, \$3.00 for athletics, \$1.00 for the Undergraduates' Society, and a fee at the rate of \$7.00 for an hour a week of instruction during the academic year, but the maximum fee shall in no case exceed the full undergraduate fee.

**Caution Money.**—Every student is required to deposit with the Bursar the sum of \$10.00, as caution money, to cover damage done to furniture, apparatus, books, etc. This amount, less deductions (if any), will be returned at the close of the session.

Fee for the degree of B.Sc., conferred in absentia (except

when the candidate has been specially exempted by

the Faculty) ..... \$ 20.00

For a regular supplemental examination, the fee is \$2.00, for a special supplemental examination \$5.00. These fees must be paid to the Bursar of the University and receipt for the same shown to the Examination Committee not later than the day before the examination.

### FEES IN MEDICINE.

# (For Regulations re payment, see page 95.)

Sessional fee for the undergraduate course	\$200.00
By instalments :	the set
First instalment, if paid before October 10th	\$102.00
Second instalment, if paid before February 1st	102.00
Fee for athletics, Union, etc.*	10.00
Caution money (deposit) †	10.00
	and the second second
	\$220.00

Graduation fee for the degree of M.D., C.M.<sup>‡</sup>..... \$ 30.00

Double course students in Arts and Medicine, qualifying for the degrees B.A. or B.Sc. and M.D., shall pay full fees in Arts for two years and in Medicine for six. They shall also pay \$30.00 as a graduation fee in the Faculty of Arts, as well as in Medicine.

and make the usual caution money deposit of \$10.00.

Fee for students from other colleges who have paid full fees

there for courses to be taken..... \$100.00

These students are also required to pay in addition, \$10.00 for athletics, etc.,\* the hospital fees exacted in the year to which they are admitted, and to make the usual caution money deposit of \$10.00.

An *ad eundem* fee of \$10.00 will be charged students entering from another university in any year above the first.

Partial students will be admitted on payment of special fees.

<sup>†</sup> The caution money deposit is intended to cover breakages in the different laboratories, etc. The amount of the deposit, less deductions (if any), will be returned at the close of the session.

<sup>‡</sup>When the degree is conferred in absentia an additional fee of twenty dollars will be exacted, unless the candidate has been specially exempted by the Faculty.

<sup>\*</sup> At the request of the students themselves and by authority of Corporation, this additional fee of \$10.00 is exacted from all men undergraduates and conditioned undergraduates for the support of the Literary Society, the Undergraduates' Society, the Canadian Club, the Union, the McGill Daily, and athletics.

### FEES IN DENTISTRY.

tuden	its in	Dentistry	pay th	ne follow	ing fees :
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Sessional fee	\$200.00
By instalments:-	
First instalment, if paid on or before October 10th	\$102.00
Second instalment, if paid on or before February 1st	102.00
Fee for athletics, the Union, etc.*	10.00
Caution money deposit <sup>†</sup>	10.00

### FEES IN PHARMACY.

Registration fee \$	5.00
Fee for athletics	3.00
Course in Junior Chemistry	25.00
Course in Senior Chemistry	25.00
Course in Junior Materia Medica and Pharmacy	25.00
Course in Senior Materia Medica and Pharmacy	25.00
Course in Practical Pharmacy	25.00
Course in Analytical Chemistry	30.00
Course in Botany	20.00
Graduate Diploma	15.00
Supplemental Examination, each subject	5.00

Certain fees are payable to the Pharmaceutical Association of the Province of Quebec for registration, examinations, and for the licentiate in pharmacy (see announcement of Department of Pharmacy).

The fee of \$10:00 for the Union, McGill Daily, etc., etc., is optional for students in Pharmacy, but they are required to pay the athletics fee of three dollars.

The sum of \$5.00 is collected from all students of Pharmacy at the time of registration as "caution money," to cover breakages in the laboratories or lecture rooms. The balance will be refunded at the end of the session.

The University supplies all reagents and apparatus in the various laboratories. Charge is made for breakages only.

Partial students will be admitted to one or more courses on payment of special fees.

\* See foot note on preceding page.

‡ See foot note on preceding page.

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<sup>†</sup> See foot note on preceding page.

# FEES IN LAW.

# (For Regulations re payment, see page 95.)

Sessional fee for Courses A and C for the B.C.L. degree	\$150.00
By instalments :	
First instalment, if paid on or before October 10th	\$ 77.00
Second instalment, if paid on or before February 1st	77.00
Sessional fee for the LL.B. Course, and Course B for the	
B.C.L. Degree	100.00
By instalments :	
First instalment, if paid on or before October 10th	\$ 51.00
Second instalment, if paid on or before February 1st	51.00
Fee for athletics, the Union, etc.*	10.00
Graduation feet	12,50
Fee for a Regular Supplemental Examination	5.00

Students taking the course leading to the degree of LL.B. shall pay full fees in Arts for the first two years and full fees in Law for the third and fourth years.

Fees for partial students:-	
Registration fee	\$ 5.00
For course in Roman Law	40.00
For each of the following courses: successions, criminal law,	
commercial law, obligations, civil procedure	30.00
For each of the shorter courses	20.00
Athletics fee	3.00

**Caution Money.**—Every student is required to deposit with the Bursar the sum of \$5.00, as caution money, to cover damage done to furniture, loss of books, etc. This amount, less deductions (if any), will be returned at the close of the session.

\* At the request of the students themselves and by authority of Corporation, this additional fee of \$10.00 is exacted from all men undergraduates and conditioned undergraduates for the support of the Literary Society, the Undergraduates' Society, the Canadian Club, the Union, the McGill Daily, and athletics.

<sup>‡</sup> When the degree is conferred in absentia an additional fee of twenty dollars will be exacted, unless the candidate has been specially exempted by the Faculty.

# FEES FEES IN THE GRADUATE SCHOOL.

For the resident course leading to the degree of M.A., M.Sc.	
or LL.M	\$40.00
Registration fee for the non-resident courses for M.A. or M.Sc.	15.00
Annual registration fee thereafter for these courses	5.00
For each year of the course leading to the degree of Ph.D	40.00
Graduation fee for M.A., M.Sc., or LL.M	20.00
" " (In absentia)	40.00
" " Ph.D	30.00
Fee for the degree of D.Sc.	80.00
" " D.Litt	80.00
" " D.C.L	80.00

The examination and graduation fee is payable when the candidate presents himself for examination and is not returnable if he is unsuccessful. No thesis can be accepted unless it is accompanied by a receipt from the Bursar for this fee. If, however, a candidate for the degree of M.A. or M.Sc. fails, he may present himself in a subsequent year without further payment of fees. A candidate for the degree of Ph.D., D.Sc. or D.Litt., in case of failure, may present himself in a subsequent year upon payment of an additional sum amounting to one-half of the usual fee for this degree.

Lecturers, tutors and demonstrators in the University who are proceeding to the degree of Master of Arts, Master of Science, or Doctor of Philosophy, shall, so long as they remain members of the teaching staff, be exempt from the tuition fee, but will be required to pay the fee for graduation in every case. In the event of their leaving the staff after one year of the course, they are required to pay a tuition fee of \$20.00 in the M.A. or M.Sc. course and the prescribed fee in the Ph.D. course.

No fee shall be charged for the degree of LL.D., granted honoris causa.

### FEES IN MUSIC.

Regular students, per session	
Senior partial students, per term of II weeks	\$ 40.00
Junior partial students, per term of 11 weeks	33.00
Examination and graduation fees for Mus. Bac., when the	
course is taken extra-murally; for each examination	
(first, second or third)	20.00
For the diploma	20.00
Examination and graduation fee for Mus. Doc	100.00

The fee for the degree of Mus. Doc. is payable in two instalments. Fifty dollars must be paid when the candidate submits his exercise. If the exercise is not approved, he may in a subsequent year submit another exercise upon payment of \$25.00. The second instalment of \$50.00 must be paid before the subsequent examination. If the candidate be unsuccessful, he may in a subsequent year present himself again for examination upon payment of \$25.00.

Information regarding fees to be paid by students for class work and by occasional students, as well as regarding fee for certificates and examinations, when these are not covered by the regular fee, will be found in the special syllabus issued by the Conservatorium of Music.

### FEES IN THE SOCIAL SERVICE DEPARTMENT.

For Diploma students	\$ 70.00
Partial Students :	
For a single sessional course	7.50
For a single term course	5.00
For course No. 7	10.00
For the Extension Course	5.00

# FEES IN THE DEPARTMENT OF PHYSICAL EDUCATION.

Gymnasium fo	r partial	students	(optional	)	\$ 5	5.00
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### SCHOOL OF PHYSICAL EDUCATION.

Educational	Course, per	session		\$150.00
Massage and	Remedial C	ourse, per	session	150.00

By instalments :--

First instalment, if	paid on or	before October 10th	\$ 62.00
Second instalment,	if paid on	or before February Ist	92.00

### MISCELLANEOUS FEES.

Certificate of standing (general)	\$ I.00	
Certificate of standing, accompanied by a statement of classi-		
fication in the several subjects of examination	2.00	

All applications for certificates must be addressed to the Registrar of the University, accompanied by the required fee.

No certificates are given for attendance on lectures unless the corresponding examinations have been passed.

# MORALS AND DISCIPLINE.

I. University discipline shall be exercised by the several Faculties, and by the Committee on Morals and Discipline, subject in the cases hereinafter mentioned to revision or confirmation by Corporation.

2. Subject to the provisions of the following sections, each Faculty shall be entitled to exercise University discipline over its own students.

3. All cases of discipline involving the interests of more than one Faculty, or of the University in general, shall be dealt with by a standing committee of Corporation, to be known as the Committee on Morals and Discipline, which shall consist of the Vice-Principal, the Deans of the several Faculties, one member of the Board of Governors and another member of Corporation who must be outside of the University staff. The two members last named shall be appointed annually at the regular meeting of the Corporation in February. The Committee shall have power to add to their number the President and Vice-President of the Students' Council in cases in which that body has taken action and made a report.

4. All such cases of discipline as are referred to in sub-section 3 shall be reported to the Principal, or, in his absence, to the Vice-Principal, or, in the absence of both, to the senior Dean present in the city. If the Principal, or, as the case may be, the Vice-Principal or the Dean, deems action necessary the matter shall be reported to the Committee on Morals and Discipline. Corporation shall also have the power to report such matters to the said Committee.

5. When sentence of expulsion, or of suspension for more than three months, has been pronounced or recommended by a Faculty, or by the Committee on Morals and Discipline, the Corporation may entertain an appeal, which shall be final.

6. "University discipline" shall mean any appropriate method of exercising authority over students, and shall, but without prejudice to the foregoing generality, include the power of expulsion, suspension, disqualifying from competing for scholarships, exhibitions, medals, prizes or honours, imposing fines, not exceeding \$25.00, on any student, levying assessments for damage done, reporting to parents or guardians and admonition.

7. Any student found guilty of immoral, dishonest, disorderly or improper conduct, or of wrongfully causing damage to person or property, shall be liable to University discipline.

### MORALS AND DISCIPLINE

The following resolution should be noted here: "The Corporation of the University viewing with marked disfavour the organized kidnapping or other proceedings of a violent and objectionable character practised by the students of the First and Second Years at the beginning of the Session, hereby requires the student body to discontinue such practices under severe penalties."

8. If on an occasion of general disorder on the part of a year, class, or group of students, damage be done to University property, or acts committed meriting discipline, and the individuals who have done such damage, or committed such acts, have not been discovered, an assessment to cover the damage may be laid, or a fine imposed, or both, on all the members of such year, class or group.

9. While in College, or in the college grounds, students shall conduct themselves in the same orderly manner as in the class-rooms. Smoking is prohibited in the college buildings, except in such rooms, if any, as may be set apart for that purpose. Any professor observing improper conduct on the part of the student in the college buildings or grounds may admonish him, and, if necessary, report him to the Dean of the Faculty in which he is enrolled. Without as well as within the walls of the college, every student is required to maintain a good moral character.

# COLLEGE GROUNDS AND ATHLETICS.

I. The management of the college grounds and of out-door athletics and sports is under the control of the Committee on Physical Education. This Committee is responsible for the general maintenance of all University grounds, and retains the ultimate authority and power of supervision in all matters affecting athletics in the University. All matters which may in any way affect athletics must be referred to this Committee, and its approval must be obtained before any departure is made from the authorized routine.

All students entering the University for the first time and all others desirous of taking part in football matches, or otherwise engaging in violent athletic contests, must pass a medical examination to be held under the direction of the Director of Physical Education during the month of October. A complete record of all such examinations shall be kept by the Director or some other officer appointed to this duty. The managers and captains of clubs, or other responsible executive officers, are required to insist upon the strict observance of the rule in regard to medical examination, and all the rules and regulations of the Committee which concern them.

All clubs must submit their regulations, rules, and by-laws, and any changes in the same, for the approval of the Committee. They must make application for the use of such portions of the grounds as they require, and for any special privileges.

Clubs must not engage in matches with outside clubs, except with the approval of the Committee.

During the session, and including the Christmas holidays, all teams and individual students desiring to participate in outside athletics\* must first obtain a sanction from the Athletic Association, such sanction to be approved by the Committee on Physical Education.

Students who participate in outside athletics without having received such sanction may be suspended from the University by the Committee on Physical Education, if the consent of the Principal has been given, until Corporation shall meet to deal with the matter.

The Athletic Association must submit its programme for each year for the approval of the Committee.

<sup>\*</sup> Outside athletics is interpreted to mean those athletics over which the Athletic Association of the University or the Canadian Intercollegiate Athletic Union does not have control.

### COLLEGE GROUNDS AND ATHLETICS

All students in good standing who are taking a course of study held to be sufficient by a special committee of the Faculty in which they are enrolled will be allowed to take part in athletics, subject, however, to the general regulation regarding medical examination.

Suspension from lectures for any cause, or absence from more than one-eighth of the total number of lectures given in any course, as shown by the monthly reports furnished to the Dean of each Faculty by the several professors and lecturers, shall be considered as sufficient ground to disqualify a student from engaging in athletic contests.

All students of the University are required to pay a fee of three dollars (\$3.00) for the use of the grounds (this is included in the general fee of \$10.00 paid by undergraduates). The amount so paid is handed over to the Executive of the Students' Council, and is by this body expended in the interest of college athletics, under the general direction of the Committee on Physical Education.

The amount derived as grounds and athletics fees from the students of the Royal Victoria College is placed at the disposal of the Committee in charge of the grounds, for expenditure in the interests of women-students.

The annual sports of the University are held on the third Friday of October in each year. The day is observed as a holiday.

Such persons as are entitled to use the grounds shall be provided with tickets, renewable each year. Those entitled to tickets are the members of the University and prominent benefactors, and the families of Governors and Professors.

### UNIVERSITY ATHLETIC ASSOCIATION.

All matters connected with athletics at the University are under the immediate supervision of the University Athletic Association, which in turn is responsible to the "Committee on Physical Education." The executive of the Athletic Association consists of the presidents of the various clubs of the Association, twelve in number.

The Track Club is entrusted with the regulation and encouragement of "track and field athletics"; the management of the Interclass sports and of the annual University sports.

The Rugby Football Club is represented by a senior and intermediate team in the Intercollegiate Union, and a junior team in the Q.R.F.U. In addition to these championship matches, a series of inter-class matches is played annually for the "Wood Cup."

### ATHLETICS

The Hockey and Skating Club is represented by a Senior Team in the Intercollegiate and City League and by Intermediate and Junior Teams in the City League. A series of Inter-class games is played annually for the "Capper-Porter Trophy."

The Basketball Club is represented by the Senior Teams in the Intercollegiate and City Leagues and by Intermediate and Junior Teams in the City League. A series of Inter-class games is played annually.

The Boxing, Wrestling and Fencing Club, in addition to holding an annual "Assault at Arms," is represented in the Intercollegiate competition.

The remaining clubs, most of which are represented in Intercollegiate Unions, are: Harriers, Association Football, English Rugby, Ski-ing, Gymnastics, Tennis, Swimming and Water Polo.

### PHYSICAL EDUCATION.

For particulars, see page 291.

# ACADEMIC DRESS.

Professors, lecturers and students are required to wear academic dress at lectures, except in those cases in which a dispensation shall have been granted by the Faculty.

Undergraduates shall wear a plain black stuff gown, not falling below the knee, with round sleeve cut above elbow.

Bachelor of Arts.—Black stuff gown, falling below knee, with full sleeve cut to elbow and terminating in a point (similar to that of the Cambridge B.A.); hood, black silk, lined with pale blue silk and edged with white fur.

Bachelor of Science.—The same gown as Bachelors of Arts; hood, black silk, lined with yellow silk and edged with white fur.

Bachelor of Science in Agriculture.—The same gown as Bachelors of Arts; hood, black silk, lined with dark green silk and edged with white fur.

Bachelors of Civil Law.—The same gown as Bachelors of Arts; hood, black silk, lined with French grey silk and edged with white fur.

Bachelor of Laws.—The same gown as Bachelors of Arts; hood, black silk, lined with scarlet silk and edged with white fur.

Bachelor of Architecture.—The same gown as Bachelors of Arts; hood, black silk, lined with white silk and edged with white fur.

Bachelor of Music.—The same gown as Bachelors of Arts; hood, black silk, lined with pale mauve silk and edged with white fur.

Master of Arts.—Black gown of stuff or silk, falling below knee, with long sleeve with semi-circular cut at the bottom (similar to that of the Cambridge M.A.); hood, black silk, lined with pale blue silk.

Master of Science.-The same gown as Master of Arts; hood, black silk, lined with yellow silk.

Master of Laws.-The same gown as Masters of Arts; hood, black silk, lined with scarlet silk.

Doctor of Medicine.—The same gown as Masters of Arts; hood, scarlet cloth, lined with dark blue silk.

Doctor of Dental Surgery.—The same gown as Masters of Arts; hood, scarlet cloth, lined with pink silk.

### ACADEMIC DRESS

Doctor of Laws.-The same gown as Masters of Arts; hood, scarlet cloth, lined with white silk.

Doctor of Literature.-The same gown as Masters of Arts; hood, scarlet cloth, lined with pale blue silk.

Doctor of Science.-The same gown as Masters of Arts; hood, scarlet cloth, lined with yellow silk.

Doctor of Civil Law.-The same gown as Masters of Arts; hood, scarlet cloth, lined with French grey silk.

Doctor of Music.—The same gown as Masters of Arts; hood, scarlet cloth, lined with pale mauve silk.

Doctor of Philosophy.—The same gown as Masters of Arts; hood, scarlet cloth, lined with pale green silk.

Doctors of Laws, Doctors of Civil Law, Doctors of Literature, Doctors of Science, Doctors of Philosophy and Doctors of Music shall be entitled to wear for full dress a robe of scarlet cloth (similar in pattern to that of the Cambridge LL.D.), faced with silk of the same colour as the lining of their respective hoods.

All hoods shall be in pattern similar to that of the masters of Arts of Cambridge University.

Undergraduates and graduates shall wear the ordinary black trencher with black tassel, but Doctors of Laws, Doctors of Civil Law, Doctors of Literature, Doctors of Science, Doctors of Philosophy and Doctors of Music shall wear for full dress, a black velvet hat with gold cord, similar to that worn by Doctors of Laws of Cambridge University.

Samples of the colours of the linings of all hoods shall be kept for inspection in the office of the Registrar.

For the information of graduates in Great Britain it may be stated that the gowns and hoods for the various degrees specified above can be purchased from Messrs. Ede, Son & Ravencroft, 93 and 94 Chancery Lane, London, W.C. 2.

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# FACULTY OF ARTS.

### COURSES FOR THE DEGREE OF B.A.

Students may enter the Undergraduate Course by passing either the Junior or the Senior Matriculation Examination. In the former case, in order to obtain the degree of B.A. or B.Sc., they are required to attend regularly the prescribed courses of lectures for four years; in the latter, for three. No course or courses can be counted towards a degree or diploma in the Faculty of Arts except such as have been taken and passed after matriculation requirements have been satisfied and according to the regulations governing the various years of the Undergraduate Course. Undergraduates are arranged in years, from first to fourth, according to their academic standing. The respective conditions of passing into the last three years of the course are stated on page 121.

An undergraduate may proceed to the degree of B.A. by taking either the Ordinary Course or some one of the Honour Courses prescribed.

I. ORDINARY COURSE FOR THE DEGREE OF B.A.

### First Year.

Greek I or 2, or Latin I. English I and 2. History I. Mathematics I or 2. Latin I, or Greek-I or 2, or French I, or German I (a) or 2. Physics I.

Details of the work in each subject are given on pages 125 to 152. French cannot be taken as a qualifying option in the first year, except by students who have passed the matriculation examination in that subject, or, failing this, are able to satisfy the Head of the Department that they are qualified to proceed with the course.

German may be taken instead of trigonometry, in addition to two other foreign languages, by students who intend to read for honours in modern languages or English. Greek may be taken instead of trigonometry, in addition to two other foreign languages, by students who intend to read for classical honours, or by those who intend to study theology. This option will, however, be granted only on the recommendation of the departments concerned.

Application to take additional courses must be made to the Dean at the beginning of the session.

Advanced Courses.—A student qualified to take work of a more advanced character than the ordinary course of the first year

### FACULTY OF ARTS

in any subject, shall, with the consent of the B.A. Advisory Committee, take such advanced work in that subject as the department concerned may recommend. Students taking advanced courses may be excused from the corresponding ordinary courses on the recommendation of the department.

Commercial Course.—An outline of the first year course for the degree of Bachelor of Commerce will be found on page 160.

### Second Year.

### Compulsory.

English 3. Greek 3 or 4. Latin 2.

### Optional Courses.

From the following subjects any three, or three and a half, in wholes or halves must be selected. Two and a half courses must be taken from Group II in order to qualify for the B.A. degree, but not more than two full courses can be selected from this Group in the Second Year. The subjects of Group II are not compulsory for students intending to take honours in the Third and Fourth Years. The asterisk denotes a half course.

GROUP I.		GROUP II.		
Courses	PREREQUISITES	Courses.	PREREQUISITE	
Economics *1 English 4 French 3 German 4 Greek 3 or 4 History *2	1 and 2 1 1 or 2	Chemistry 1 Geology 1 Physics 2	1	
Latin 2 Mathematics 3 Philosophy $\begin{cases} *1 \\ *2 \\ *3 \\ two \end{cases}$	1 1			
Semitic Languages 2				

An exemption from any one of the subjects specified above, except English composition, may be granted to honour students in mathematics who take both the ordinary and the advanced course in mathematics, but to no others.

# THIRD AND FOURTH YEAR COURSES IN ARTS

Commercial Course.—An outline of the second year course for the degree of Bachelor of Commerce will be found on page 160.

# Third and Fourth Years.

Four courses are to be selected in each year. Of the eight, six must be chosen from Group I, and of these six, five must be chosen in one department, or from courses which are indicated as allied to that department, but not less than three and not more than four courses can be taken in any one department and not more than three courses in any one department in the same year. In the whole B. A. course, at least two and a half courses are to be taken from Group II. No course can be selected unless the prerequisite courses, if any, have already been taken. An asterisk denotes a half course.

Department.	Courses Offered.	PREREQUISITES.	Allied Courses.
Classics	{Latin 4, 6 Greek 6, 8 (*1	Greek 3 or 4	Any one full course in any other depart- ment of Group I.
Economics and Political Science	2 3 *4,*5,*6,*7,*8,	*1	English Literature, but not more than one full course; His- tory, but not more than one full course.
Education	*1, *2		Any ancient or mo-
English	*0 *10 *11 *12	3 *13	dern language, but not more than two full courses; His-
	*9, *10, *11, *12, *16, *20		tory, but not more than one full course. Philosophy or Eco- nomics and Politi- cal Science, but not more than one full course.
History	*2, *5, *7, 9	1	Economics and Political Science, but not more than one full course; English, but not more than one full course.

GROUP I.

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# FACULTY OF ARTS

GROUP I.-Continued

DEPARTMENT.	Courses Offered.	PREREQUISITES.	Allied Courses.
Mathematics	$\begin{cases} 3 \\ 4, *6, (*5 and 12) \\ 7 \end{cases}$	1 or 2 3 4	Any two full courses in any department of Group I.
	(12),7		Any language or
Modern Languages	French 6,7,8,9, German 5,6,7,8	German 4	languages, Philo- sophy, or History, but not more than two full courses. Classics, Modern
	(*1, *2, *3, *4 *5 *6	$ \begin{cases} 4 \\ *1 \\ *2 \end{cases} any two. $	Languages, Educa- tion, Economics and Political Science, but not more than
Philosophy	*7*, 8, 9, 11, *12, *10	(*3) *1 and *2 7 (*1)	two full courses.
	*13	*2 any two.	
Semitic Languages	3, *4, *5 6, 7	and 4 2	Classics, History, Philosophy, but not more than two full courses.

# GROUP II.

(Science Subjects.)

DEPARTMENT.	Courses Offered.	PREREQUISITE.
	(Botany *2	
	4, *5	*2
Biology		4
D1010gy	0.	*2
		3
Chemistry		1
		2
Geology		1
		1
Physics	3	and the second
	9	3

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### SUMMER READINGS IN ARTS

### GROUP III.

(Subjects taught in other Faculties.)

FACULTY.	Courses Offered.	Prerequisite.
Law	{Jurisprudence Roman Law	

No selection of courses can be made that conflicts with the timetable (see page 153).

Every undergraduate shall, on entering the Third Year, register in the Office of the Dean a statement of the work he intends to take during the remainder of his undergraduate course. Subsequent changes can be made only with the approval of the Dean.

Details of the work in each subject are given on pages 125 to 152. For regulations whereby the double course in Arts and Applied Science can be taken in six years or Arts and Medicine in eight, see pages 122 and 123.

Commercial Course.—An outline of the Third Year Course for the degree of Bachelor of Commerce will be found on page 161.

### SUMMER READINGS.

### (For students entering the Second, Third and Fourth Years.)

Summer readings are obligatory for every undergraduate and conditioned undergraduate in the Faculty, except in the case of candidates who read and compete for scholarships and exhibitions in September.

The readings prescribed for the session 1920-21 are posted on the notice boards of the Arts Building and the Royal Victoria College.

The summer readings for honour students are left in the hands of the departments concerned.

Students will be required at the beginning of the session (Saturday, October 2nd, a.m.) to pass an oral examination in each of the books selected by them.

Students who fail to do this must, before the end of the first term, take a written examination; failure to pass this examination involves the same penalties as failure in one subject in the sessional examinations.

### FACULTY OF ARTS

II. HONOUR COURSES FOR THE DEGREE OF B.A.

Honours of the first, second or third class will be awarded in any of the following Honour courses :---

Biology.	Greek and Hebrew.
Chemistry.	History.
Chemistry and Biology.	History and English.
Classics.	Latin and English.
Economics and Political Science.	Latin and French.
English.	Latin and German.
English and French.	Mathematics and Physics.
English and German.	Modern Languages.
English and Philosophy.	Philosophy and German.
Geology and Mineralogy	. Philosophy and Psychology.
Greek and English.	Semitic Languages.

Honour lectures are open to candidates for the ordinary degree in the third and fourth years, on the recommendation of the department concerned and with the approval of the Dean.

No student is allowed to take more than one Honour course.

A student who has failed to obtain honours in the third year may, on the recommendation of the department, be permitted to enter the ordinary course of the fourth year.

### COURSES FOR THE DEGREE OF B.Sc. (Arts).

An undergraduate may proceed to the degree of B.Sc. (Arts) by taking either one of the two Ordinary Courses or an Honour Course.

### I. ORDINARY COURSE.

There are two Ordinary Courses, designated respectively A and B.

### Ordinary Course A.

This course has been arranged to give students a thorough training in science as a preliminary to entering a technical business or profession, or for teaching.

# First Year.

Chemistry 1. English 1 and 2. French 2. German 1 (b) or 3. Mathematics 1. Physics 1.

Special arrangements will be made for students who have passed the matriculation examination in German.

Details of the work in each subject are given on pages 125 to 152.

### COURSE FOR B.SC. IN ARTS

### SELECTION OF COURSES.

Second Year .- In addition to English Composition, which is compulsory, three subjects must be chosen, of which two must be selected from Group I below; the third subject may be taken from Group I or Group II. Third and Fourth Years .- The three subjects selected in the second year must be continued in the third and fourth years. If biology, however, which consists of a half-course in botany and a half-course in zoology, is chosen in the second year, it may be followed in the third and fourth years by a full course in each of those subjects, in which case one of the sciences chosen in the second year need not be continued.

# GROUP I.

SUBJECTS.	SECOND YEAR.	THIRD YEAR.	FOURTH YEAR.
Biology	Zoology 2. Botany 2.	Zoology 3, or 5; or Botany 7.	Botany 7; or Zoo- logy 3 or 5.
Chemistry.	2 or 3; and 4.	2 or 3 and 9.	5 or 6; and 8.
Geology.	1.	5 and 6.	2, 3, 4.
Mathematics.	3.	4 and 5.	7.
Physics.	2 or 3.	2 or 3 and one of	4, 5, 6, 11, 12,
	37111111	4 or 5 or 12.	(7 and 10), (10
GROUP II. and 13).			
SUBJECTS.	SECOND YEAR	. THIRD YEAR.	FOURTH YEAR.
Economics and	2 or 3.	Any two of:	Any two of Econ-
Political Science.		Economics and	omics and Poli-
		Political Science	tical Science, 4 to

4 to 12. 12, not chosen in the third year. English 3 and 4. Any two of: Any two, not taken 5, 6, 7, 15, 19. in the third year, of 5, 6, 7, 9, 10, 11, 12, 15, 19. History. 9; or 5 and 7. 9; or 5 and 7 9. (whichever has not been taken in the second year). Philosophy. Any two of:-4 or 7 or 11 or 4 or 7 or 11 (which-1, 2, 3. any two of:-6, 8, 12, 13, 14.

ever has not been taken in the third year) or 9 or any two of:-5, 6, 8, 10, 12, 13, 14 (if not already taken)

### FACULTY OF ARTS

Students who so desire may on application be permitted to substitute Education in either the third or fourth year for one course in Group II.

Students selecting Physics, as one of the three subjects of the ordinary B.Sc. course, must also elect Mathematics.

### Ordinary Course B.

### DOUBLE COURSE B.Sc., M.D.

This course in the physical and biological sciences is especially devised for students who might wish to proceed to a degree in Medicine or to advanced work in physiology, biological chemistry, pharmacology or allied subjects. Students intending to enter the Faculty of Medicine must pass the matriculation examination in Latin before admission to the third year of the B.Sc, course.

Graduates in this course are qualified to enter the third year in the Faculty of Medicine.

### First Year.

English I and 2. German I (b) or 3. Mathematics I. Physics I. Chemistry I. French 2.

Second Year.

English Composition 3. Physics 2 and 3. Biology (Botany 1, Zoology 1). Chemistry 3.

Third Year.

Chemistry 2 and 4. Zoology 5. Anatomy (as in first year Medicine).

Fourth Year.

Chemistry 7 and 10.

Anatomy (as in second year Medicine or Special Advanced Biology).

Physiology (as in second year Medicine).

### II. HONOUR COURSE FOR THE DEGREE OF B.SC.

Students proposing to take an Honour Course must select one principal subject from Group I (page II7), in which subject they must have obtained at least high Second Class standing in the First Year;

### COURSE FOR DEGREE OF B.H.S.

if the subject chosen for honours is not offered in the First Year, an aggregate standing of high second class must be obtained in all subjects of the First Year.

Students who fail to retain their honour standing, will be required either to repeat the year in honours or to proceed to the following year, reverting to the ordinary course, in which case they must take the ordinary work of the honour subject, together with two of the following subjects:—Mathematics, Physics, Chemistry.

The exact courses of study will be specified by the department concerned. All students will be required to take a course in German 3, and English 3.

### B.Sc. IN AGRICULTURE.

Particulars regarding the course for the degree of Bachelor of Science in Agriculture, the first two years of which are taken in the Faculty of Arts, are given in the Macdonald College Announcement.

### DEGREE OF BACHELOR OF HOUSEHOLD SCIENCE (B.H.S.).

The first two years are to be taken in the Faculty of Arts, McGill University, and the last two in the School of Household Science, Macdonald College.

Proposed subjects to be taken in the Faculty of Arts, which may be either in the B.A. or the B.Sc. Course.

# First Year (B.A. Course).

Greek I or 2, or Latin I. English I and 2. History I. Mathematics I or 2. Latin I, or Greek I or 2, or French I, or German I (a) or 2. Physics I.

French is strongly recommended as the alternative language.

# Second Year (B.A. Course).

English 3. Latin 2 or Greek 3 or 4. Compulsory.

For the remaining three, or three and a half courses, the following are required:

Botany 2. Chemistry 1. Zoology 2.

English 4 or French 3, with the remaining possible half course at the choice of the student from Economics 1 or History 2 or Philosophy 1 or 2 or 3.

### FACULTY OF ARTS

First Year (B.Sc. Course).

Chemistry 1. English 1 and 2. French 2. German 1 (b) or 3. Mathematics 1. Physics 1.

### Second Year (B.Sc. Course).

English 3.

Biology:-Botany 2, Zoology 2.

Chemistry 2; and one course from among the following:— Geology 1; Mathematics 3; Physics 2 and 3; Economics and Political Science 2 or 3; English 4; History 3 or 5 and 7; Philosophy, any two of 1, 2, 3.

Proposed subjects to be taken in the School of Household Science at Macdonald College:

### Third Year.

Economics (1 hour).

English (2 hours).

Principles of Teaching (1 hour—half-year). Bacteriology (1 hour lecture, 2 laboratory periods—half-year). Biology (1 hour lecture, 1 laboratory period). Chemistry (1 hour lecture, 2 laboratory periods). Foods (2 hours lecture, 2 laboratory periods). The Home (1 hour lecture, 1 laboratory period). Textiles and Clothing (3 hours—half-yearly).

### Fourth Year.

English (2 hours). Principles of Teaching (2 hours lecture—practice teaching). Bacteriology (2 hours lecture, 1 laboratory period). Chemistry (2 hours lecture, 2 laboratory periods). Physics (3 hours—half-year). Foods (2 hours lecture, 2 laboratory periods). The Home (2 hours).

### PARTIAL STUDENTS.

Students desiring to take a Partial Course in Arts are required to pass the matriculation examination in the subject or subjects which they intend to study, or, failing this, they must satisfy the Head of the Department as to their ability to follow the course. Subject to the above limitations, lectures are open to Partial Students in both Honour and Ordinary Courses, but no course or courses taken by such students

### EXAMINATIONS IN ARTS

can count for a degree. Medals, scholarships, exhibitions and prizes shall not be awarded to Partial Students. A certificate of standing can be obtained from the Dean if requested. A partial student who fails in any subject at the First Term Examinations shall be allowed to continue that subject only on the recommendation of the Head of the Department concerned.

### EXAMINATIONS IN ARTS.

There are two examinations in each session, the Intermediate and the Final. Intermediate Examinations are held either at the end of the first term, or at such intervals during the session as each department may prescribe. In the second, third and fourth years, Intermediate Examinations will be held or not, as may be determined by each department.

Students prevented by illness from attending the Intermediate Examinations will, on presenting a medical certificate to the Dean, be given sessional standing on the results of the Final Examination.

Undergraduates and conditioned undergraduates of the first year who fail in more than three subjects at the Intermediate Examinations will be allowed to attend not more than three full courses in the second term, for each of which they must obtain the permission of the Dean.

Seventy-five per cent. of the marks given for the sessional work in each subject will be assigned to the Final Examination.

Successful students are arranged in three classes.

Mid-term examinations for first year students will be held not later than November 15th. Absence from a mid-term examination will be excused only on presentation of a medical certificate. Failure to comply will mean loss of the year.

First Class General Standing at Graduation.—For an Ordinary B.A. degree of the first class, a candidate shall obtain first class standing in at least four of the eight subjects taken in the third and fourth years and not lower than second class in the remainder.

### SUPPLEMENTAL EXAMINATIONS.

Examinations supplemental to final examinations are held in the month of September simultaneously with the matriculation examination. The date of the Supplemental examinations will be fixed by the Faculty, and no examination will be granted at any other time, except by special permission of the Faculty, and on payment of a fee of five dollars.

# ADVANCEMENT FROM YEAR TO YEAR.

Advancement to the Second Year.—A student may proceed to the second year with any one full course of the first year (or its equivalent) unpassed.

### FACULTY OF ARTS

Advancement to the Third Year.—A student may proceed to the third year with any one full course (or its equivalent) unpassed, unless that full course (or any part of it) belongs to the first year.

Advancement to the Fourth Year.—A student may proceed to the fourth year with any one full course (or its equivalent) unpassed, unless that full course (or its equivalent) is compulsory in the second year.

Repeating a Year.—By special permission of the Faculty, a student who is required to repeat a year may, on application:

(a) Be exempted from attending lectures and passing examinations in the subjects in which he has already passed;

(b) Be permitted to take, in addition to the subjects in which he has failed, one of the subjects of the following year in his course.

N.B.—The choice of subjects must involve no conflict of hours as printed in the time-table.

### DOUBLE COURSES.

### ARTS AND APPLIED SCIENCE.

Candidates for the degree of B.A. and B.Sc. (Applied Science) in six years will take the first three years in Arts only, before attending any regular courses in Applied Science, except the *Summer Courses*. They will then enter the Faculty of Applied Science and devote the remaining three years entirely to the work of that Faculty.

The summer courses (see page 204) are necessary in order to overtake the work in descriptive geometry, drawing and shopwork, which form part of the regular curriculum of the first year in Applied Science. These summer courses must be taken for two periods of one month each (in successive Septembers), after the completion of the regular session of the first and second years in the Faculty of Arts, respectively, and must not be taken during the regular session in any of the three years assigned to that Faculty.

Students who intend to take the double course in Arts and Applied Science must notify the Dean of the Faculty of Applied Science to that effect at or before the close of their first year in Arts (May Ist), and must, before the first of September following, pay the fee of \$50.00 to the Bursar, for the first of their summer courses.

The requirements for each of the three years in the Faculty of Arts are as follows:--

# First Year.

The curriculum as laid down for the B.A. degree, except that a modern language must be taken. It is recommended that mathematics 2 be taken instead of mathematics I.

### DOUBLE COURSES

### Second Year.

English 3.

French 3, or German 4.

German 4, or French 3, or English 4, or Economics and Political Science 1, and History 2, or Philosophy, any two of:--1, 2 and 3.

Latin 2, or Greek 3 or 4.

Mathematics 3 and 5 and 6 (students who have taken 2 may substitute 4 for 3).

### Third Year.

Physics 2.

Any three of the following:-

English, any two of 5, 6, 7, 15, 18; Latin 3; French 6 or 7; German 5 or 6; Philosophy 4 or 7 or 11 or any two of 6, 8, 12; History 9 or 5 and 7; Economics and Political Science 2, 3.

The degree of B.A. will be conferred on double course students in Arts and Applied Science on the completion of the prescribed curriculum in Arts and the requirements of the second year in Applied Science.

### ARTS AND MEDICINE.

The degrees of B.A. and M.D. may be obtained in eight years, of which the first two shall be taken in the Faculty of Arts, and the remaining six in the Faculty of Medicine. The course in Arts is as follows:---

### First Year.

I. B.A., M.D.

English I and 2. History I. Mathematics I or 2. Latin I or Greek I or 2. Any two additional languages.

### Second Year.

English Composition 3. Latin 2. Any three of the following: Economics and Political Science 1, and History 2. English 4. French 3. German 4. Hebrew 1. Greek 3 or 4 or Latin 2. Philosophy, any two of:---1, 2, 3. Mathematics 3.

### FACULTY OF ARTS

In the double course for the degrees of B.A., M.D., the degree of B.A. will be conferred on the completion of the above curriculum in Arts and of the second year in Medicine.

### II. B.Sc., M.D.

For the requirements of the B.Sc. course for students proceeding to the Faculty of Medicine, see page 118.

### ARTS AND DENTISTRY.

The degrees of B.A. and D.D.S. may be obtained in six years, of which the first two shall be taken in the Faculty of Arts and the remaining four in the Faculty of Dentistry. The course in Arts is the same as that prescribed for the double course of B.A., M.D. (see I, above).

## B. COM. AND B.A.

Graduates in Commerce who desire to obtain the degree of B.A. may be admitted to the Third Year in Arts provided that at some time before entering Third Year Arts they shall have taken Latin I and 2 of the B.A. curriculum.

#### ARTS AND THEOLOGY.

Students who are pursuing a double course in Arts and Divinity (six years at least) will take in the third and fourth years the courses which constitute the ordinary curriculum in Arts, less a half course in each of these years, or a whole course in either.

# COURSES OF LECTURES IN ARTS.

The hours of the ordinary lectures only are indicated; the hours for honour lectures will be arranged by the several departments at the opening of the session.

#### DEPARTMENT OF BOTANY.

PROFESSOR :--FRANCIS ERNEST LLOYD. PROFESSOR OF MORPHOLOGICAL BOTANY :--CARRIE M. DERICK.

- 1. General Biology. As in first year Medicine,.....Professor Lloyd, Dr. Jackson.
- Elements of Botany.
   2 hrs. 2nd term; Mon., Wed., at 10....4 hrs. lab.; Sat., 9 to 1. Professor Lloyd or Professor Derick.
   Prerequisite for all courses except 3, and also with Zoology for Honours in Biology.
- Classification of the Pteridophyta and Spermatophyta. Eight lectures (optional). 2nd Term (Mar.-Apr.).
   Professor Lloyd or Professor Derick.
- 4. Comparative Plant Morphology. 2 hrs. sess.; Tu., Fri., at 10....6 hrs. lab.....Professor Derick.
- 5. Variation, Heredity and Evolution. 2 hrs. sess.; Tu., Fri., at 11.....Professor Derick.
- Histology and Anatomy.
   hrs. sess.....4 hrs. lab......Professor Lloyd.
- Elementary Plant Physiology.
   2 hrs. sess.....6 hrs. lab.....Professor Lloyd.
- Algae of Water Supplies; Plant Pathology.
   2 hrs. sess......6 hrs. lab......Professor Derick.

## HONOUR COURSE IN BIOLOGY.

Prerequisites: Botany 2, Chemistry I, Zoology 2. *Third Year*: Botany 4 and 6; Zoology 3 and 4. *Fourth Year*: Botany 7 and 8; Zoology 5 and 6.

## GRADUATE COURSE.

Prerequisites: Botany 2 to 8; Chemistry 1; Zoology 2; or equivalent courses taken elsewhere.

Special courses to meet the needs of students who may be preparing for particular vocations can usually be arranged for on consultation with the Professor.

# DEPARTMENT OF CHEMISTRY.

PROFESSOR :- R. F. RUTTAN.

Associate Professors :-- {
N. N. Evans. F. M. G. Johnson. V. J. Harding. Assistant Professors :-- {
V. K. Krieble. Otto Maass. Lecturer :-- A. R. M. MacLean. G. S. Whitey. C. Greaves. W. McG. Mitchell. C. A. Wright. J. F. Logan. G. M. Fowler. L. Amdur. W. F. Emmons.

(Unless otherwise specified, all lectures and laboratory courses are given in the Chemistry Building.)

## General Chemistry.

3 hrs. sess.; Mon., Tu., Th., at 2.... Professors Ruttan and Evans. 4 hrs. lab., Mon., Thu., 3 to 5..

Dr. A. R. MacLean and Messrs. Wright and Amdur. *Text-books*:—Alex. Smith, General Chemistry for Colleges, new edition.

## 2. Organic Chemistry.

3 hrs. Ist term; Mon., Wed., Fri., at 3......Professor Ruttan (Old Medical Building).
2 hrs. 2nd term; Tu., at 10, Th., at 12...Asst. Professor Krieble.
6 hrs. lab., 2nd term.....Dr. A. R. MacLean and Mr. Whitby. Text-books:—Remsen or Perkin and Kipping.

## 3. Analytical Chemistry.

(a) QUALITATIVE ANALYSIS.

I hr. 1st term; 9 hrs. lab.....Professor Evans and Mr. Amdur. Text-book:-Steiglitz, Qualitative Analysis.

(b) QUANTITATIVE ANALYSIS.

I hr. 2nd term; 12 hrs. lab... Professor Johnson and Mr. Greaves. Text-book:-Cumming and Kay, Quantitative Analysis.

## 4. Elementary Physical Chemistry.

2 hrs. 1st term; Tu., at 10, Th., at 12.....Asst. Professor Maass. *Text-book*:—Walker, Introduction to Physical Chemistry.

## CHEMISTRY

5.	Organic Chemistry (Advanced). 2 hrs. sess.; Tu., at 9, Fri., at 11 Professors Ruttan and Harding. 12 hrs. lab
	Professor Ruttan, Assistant Professor Krieble, Dr. MacLean and Mr. Whitby.
5.	Inorganic Chemistry (Advanced).
7.	2 hrs. sess.; Wed. and Fri., at 10Professor Johnson. Physical Chemistry (Advanced).
	2 hrs. sess.; Wed. and Fri., at 9Asst. Professor Maass. 6 hrs. lab.; Mon. and Wed., 2 to 5
	Asst. Professor Maass and Mr. Wright.
8.	Quantitative Analysis (Advanced).
	I hr. sessProfessor Johnson and Mr. Greaves. I2 hrs. lab.
9.	Historical Chemistry.
	I hr., 2nd termAsst. Professor Maass.
0.	Biological Chemistry.
	3 hrs. sess., 2nd term; Mon., Wed. and Fri., at 3 (Old Medical Building.) Professor Ruttan.
	6 hrs. lab., 2nd term; Wed. and Sat., 9 to 12
	Professor Ruttan, Professor Harding and Mr. Logan, Text-book:—Hawk's Practical Physiological Chemistry.
I.	Biological Chemistry (Advanced).
	5 hrs. lab., 2nd term
	(Old Medical Building.)
	Professor Ruttan and Professor V. J. Harding.
(2.	<b>Electro-Chemistry.</b> 2 hrs., 1st term; Mon., at 9, Fri., at 12Asst. Professor Maass.
13.	Food Chemistry.
	I hr., 2nd term; Tu., at IIProfessor Ruttan.
14.	Industrial Inorganic Chemistry.
	2 hrs., 1st term; Wed. and Fri., at 11 Professor Johnson.
15.	Industrial Organic Chemistry.
	2 hrs., 2nd term; Wed. and Fri., at 11 Professor Ruttan.

HONOUR COURSE IN CHEMISTRY.

Prerequisites : 1.

Third Year: 2, 3, 4; Physics 2; and a half-course in calculus or biology or geology or mineralogy or scientific German.

Fourth Year: (a) 5, 7, 9, 10 (11 optional), or, (b) 6, 7, 8, 9; Physics 3.

HONOUR COURSE IN CHEMISTRY AND BIOLOGY.

Second Year: Latin 2; English 3; Chemistry 1; Botany 2; Zoology 2; and either French 3, or German 4. Third Year: Either Physics 2 or French 7 or German 6 and Chemistry 2 (first term only), 3 (a) and 10; Zoology 3; Botany 4 or 7. Fourth Year: A full course in physics or biology or advanced chemistry and Chemistry 3 (b), 11; Zoology 5 and 6; Botany 6.

#### DEPARTMENT OF CLASSICS.

PROFESSOR:-S. B. SLACK. ASSISTANT PROFESSOR:-R. A. MACLEAN.

Lecturers :-- { A. M. Thompson.

Sessional Lecturer and Tutor (Royal Victoria College) :-Elizabeth A. Irwin,

#### Greek.

All students taking Greek are expected to provide themselves with a grammar, a Greek-English dictionary, 'a classical dictionary, and an Atlas of ancient geography. The following are recommended: —An Elementary Greek Grammar, Bryant and Lake (Oxford Univ. Press); or Goodwin's Greek Grammar (Ginn & Co.); Liddell and Scott's Greek Lexicon (abridged or intermediate); Classical Atlas (Everyman Series, Dent); Smith's Smaller Classical Dictionary (Everyman Series, Dent).

## 1. Beginners' Greek.

4 hrs. sess.; Mon., Tu., Th., Fri., at 3.....

Text-books:—White's First Greek Book (Ginn & Co.); Passages for Greek Translation (Peacock & Bell, Macmillan). Students who take the Beginners' Greek Course will be required to attend a continuation class during May and June, unless specially exempted.

## 2. Ordinary Greek.

4 hrs. sess.; Mon., Tu., Th., Fri., at 3 .....

Text-books:-Cebetis Tabula (Jerram, Clarendon Press); Euripides, Heraclidae (Jerram, Oxford Univ. Press). Composition:-

#### GREEK

Greek Exercises, Bryant and Lake (Oxford Univ. Press) and Elementary Greek Grammar, Bryant and Lake (Oxford Univ. Press). *Translation at sight:*—Jerram Anglice Reddenda, Second Series.

## 3. Greek.

4 hrs. sess.; Mon., Tu., Th., Fri., at 4 .....

Summer reading:-Greek History for Schools, Edmonds, pp. 140-217 (Camb. Univ. Press).

Text-books:—Greek Reader, Vol. I, by E. C. Marchant (Clarendon Press), pp. 8 to 60, omitting Part II, Section I. Composition:— North and Hillard, Greek Prose Composition (Rivingtons), Translation at sight:—As in 2. Prerequisite:—I.

## 4. Greek.

4 hrs. sess.; Mon., Tu., Th., Fri., at 4.....

Summer reading:—As in 3. Texts:—Sophocles, Antigone; Plutarch, Coriolanus (Clarendon Press). Composition:—North and Hillard, Greek Prose Composition (Rivingtons). Translation at sight: —As in 2.

5. For the Session 1921-1922. To be announced next year.

## 6. Greek Language and Literature.

4 hrs. sess.; Mon., Tues., Wed., Fri., at 11.... Professor Slack.

Texts:-Plato, Protagoras; Euripides, Phoenissae. Composition: -As in 4; also Sidgwick, Introduction to Greek Prose Composition (Longmans). Translation at sight:-Fowler, Sportella. Literature: -A course of twelve lectures on some period of Greek history or literature or on some aspect of Greek life or thought.

7. For the Session 1921-1922. To be announced next year.

## 8. Greek.

4 hrs. sess.; Mon., Tu., Wed., Th., at 9 .....

Texts:—Thucydides VII; Aeschylus, Agamemnon. Composition: —Mackie, Parallel Passages (Macmillan & Co.), and from dictation. Translation at sight:—Models and Exercises in Unseen Translation. Fox and Bromley (Clarendon Press).

#### HONOUR COURSE,

Prerequisites :- Greek 1 and 3, or 2 and 4.

Third and Fourth Years: Greek 6 and 8. Honour students will also do the following private readings. Third and Fourth Years, Aeschylus, Persae; Fourth Year only, Xenophon, Oeconomicus; Demosthenes, Androtion.

#### GRADUATE COURSES.

Suggested Subjects :--

I. The Phoenicians in Homer.

2. Socialistic theories in antiquity.

3. The accounts of Egypt in Herodotus and other Greek writers.

4. Life and times of Demosthenes.

5. The position of Proclus in philosophy.

N.B.-See note under Latin Graduate Courses.

#### Latin.

All students taking Latin are expected to provide themselves with a grammar, a Latin-English Dictionary, a classical Dictionary, and an Atlas of Ancient Geography. The following are recommended:— Sonnenschein. New Latin Grammar (Clarendon Press, 1912; N.B.— Note the exact title); Lewis, School Dictionary, or White, Junior Students' Latin-English Dictionary; "Everyman" Classical Atlas (Dent.); Smith, Smaller Classical Dictionary ("Everyman" Series, Dent.).

The following book is also recommended: Roman History Literature and Antiquities by A. Petrie (Oxford Univ. Press).

#### I. Latin.

4 hrs. sess.; Mon., Wed., Th., Fri., at 10 (Men).

4 hrs. sess.; Mon., Tu., Wed., Fri., at II (Women, R.V.C.).

• Text-books:—Virgil Aeneid VI; Petrie's Latin Reader, Extracts from Cicero, Sallust and Pliny (omitting Nos. 40 and 68). (Oxford Univ. Press.) Composition:—North and Hillard, Latin Prose Composition (Rivingtons). Translation at sight:—Rivingtons' Class Books of Latin Unseens, Book III. Grammar:—Sonnenschein, New Latin Grammar (Clarendon Press, 1912. N.B.—Note the exact title), pages 178-211.

Advanced Class:-See 7.

#### 2. Latin.

4 hrs. sess.; Mon., Tu., Th., Fri., at 12 (Men); Mon., Tu., Th., Fri., 12 (Women, R.V.C.).

Texts:—Cicero, Pro Roscio Amerino (Stock, Clarendon Press); Horace, Odes I; Ovid, Elegiac Poems, Vol. I., pp. 30-51 (Pearce, Clarendon Press). Composition:—North and Hillard, Latin Prose Composition. Translation at sight:—Anglice Reddenda, Second Series (Clarendon Press). Grammar:—Sonnenschein, New Latin Grammar (Clarendon Press, 1912. N.B.—Note the exact title), pages 123-178.

Advanced Class:-See 7.

#### LATIN

3. For the Session 1921-1922. Subjects to be announced next year.

# 4. Latin Language, Literature and History.

4 hrs. sess.; Mon., Wed., Th., Fri., at 10.....

Lectures:—Texts: Horace, Epistles II, and De Arte Poetica, Literature of the Empire, Education, Literature and Philosophy (Latin Literature of the Early Empire, Brown, Clarendon Press); Seneca, Letters, p. 97 to end (Seneca, Summers, Macmillan). Composition:—Continuous Latin Prose, Dakers (Rivingtons). Translation at sight:—Alford's Latin Passages for Sight Translation (Macmillan). Literature:—A course of twelve lectures on Roman history, antiquities, literature or religion.

5. For the Session 1921-1922. Subjects to be announced next year.

#### 6. Latin.

4 hrs. sess.....

Texts:-Cicero, Tusculans I and Pro Milone; Lucretius V. Composition:-Nixon, Prose Extracts for Translation into English and Latin (Macmillan). Translation at sight:-Fox and Bromley, Models and Exercises in Unseen Translation (Clarendon Press).

7. At the beginning of the second term, if not before, an Advanced Class will be formed to prepare for Second Year Exhibitions and Third Year Scholarships. This class will be open to qualified students of the first two years......Professor Slack.

## HONOUR COURSE.

Prerequisites :- Latin I and 2.

Third and Fourth Years:-Latin 4 and 6 and the following additional books for private reading: For Third and Fourth Years, Horace, Odes III; For Fourth Year only, Cicero pro Cluentio; Virgil, Aen. VI.

#### GRADUATE COURSES.

For students who wish to take the above, the following subjects are suggested:-

I. Virgil as an Epic Poet.

2. The treatise ad Herennium.

3. Social Life of the Empire.

4. Latin poetry from the death of Terence to the death of Lucretius.

5. The History of the East, including Egypt, from 3I B.C. to 96 A.D.

N.B.—It is not likely that more than one of the ten subjects given under the headings Latin and Greek can be taken up in the session 1920-1921. The list therefore is intended for the guidance of students,

but precise details with regard to the books prescribed and the thesis are reserved for further discussion.

#### Comparative Philology.

I. Introductory Course.

2 hrs. 1st term ...... Professor Slack.

2. Latin and Greek Historical Grammar. 2 hrs. 2nd term......Professor Slack.

DEPARTMENT OF ECONOMICS AND POLITICAL SCIENCE.

PROFESSOR:—STEPHEN LEACOCK. Associate Professor:—J. C. Hemmeon. Assistant Professor:—B. K. Sandwell.

- 1. Elements of Political Economy. 2 hrs. sess.; Mon., Fri., at 11......Professor Leacock.
- 2. Principles of Economic Theory. 4 hrs. sess.; Mon., Tu., Wed., Fri., at 11.. Professor Hemmeon.
- 3. Principles of Political Science. 4 hrs. sess.; Mon., Tu., Th., Fri., at 2.....Professor Leacock.
- 4. Labour Problems.
  4 hrs. 1st term; Mon., Tu., Wed., Fri., at 10....Prof. Hemmeon. (Given in 1921-22.)
- 5. Money and Banking. 4 hrs. 2nd term; Mon., Tu., Th., Fri., at 3....Professor Leacock. (Given in 1921-22.)
- 6. Political Economy Prior to the Nineteenth Century. 4 hrs. 1st term; Mon., Tu., Wed., Fri., at 10..Prof. Hemmeon. (Given in 1920-21.)
- Political Economy in the Nineteenth Century.
   4 hrs. 2nd term; Mon., Tu., Th., Fri., at 3. Professor Leacock. (Given in 1920-21.)
- Economic Factors in the Development of Society.
   4 hrs. 1st term; Mon., Tu., Wed., Fri., at 10..Prof. Hemmeon. (Given in 1922-23.)
- 9. The Political and Social Theories of Modern Times. 4 hrs. 2nd term; Mon., Tu., Th., Fri., at 3. Professor Leacock. (Given in 1922-23.)
- 10. Canada:—Federal and Provincial Governments. 4 hrs. 1st term; Mon., Tu., Th., Fri., at 3...Professor Leacock.

## ECONOMICS AND POLITICAL SCIENCE

## 11. Public Finance.

4 hrs. 2nd term; Mon., Tu., Wed., Fri. at 10. Prof. Hemmeon.

- 12. Canada:-Industrial and Economic Problems.
- 2 hrs. sess.; Tu., Wed., at 9.....Prof. Hemmeon. 13. Seminar.

Conferences with graduate students at hours specially arranged. Prof. Leacock, Assoc. Prof. Hemmeon and Asst. Prof. Sandwell.

## HONOUR COURSE.

Prerequisite: No. 1. Third Year: Nos. 2 and 3, together with 4 and 5, or 6 and 7, or 8 and 9 (according to the year), and one approved course in History or French or Philosophy. Fourth Year: Nos. 4 and 5, or 6 and 7, or 8 and 9 (according to the year), and Nos. 10, 11, 12 and one half-course (approved) in History or French or Philosophy or Roman Law.

## GRADUATE COURSE FOR M.A. DEGREE.

Prerequisites: Nos. 2, 3, 4 and 5 (or 6 and 7; or 8 and 9); 10, 11, or equivalent courses taken elsewhere. Resident study, one year, with at least eight lectures a week selected from (a) any courses among Nos. 4 to 12 (inclusive), not already taken, (b) any special courses offered from time to time, (c) any courses approved by the department, together with a thesis. Non-resident study: At least two years' work covering the same ground as above, with examinations, and a thesis.

Students who propose to take Economics and Political Science as a minor subject for the M.A. degree must have taken as undergraduates Courses Nos. 1, 2, 3 and two other full courses, or work in another University recognized by the department as the equivalent of this.

#### SCHOLARSHIPS.

For scholarships, see page 86.

#### DEPARTMENT OF EDUCATION.

DEAN OF THE SCHOOL FOR TEACHERS, MACDONALD COLLEGE, AND PROFESSOR OF EDUCATION :- SINCLAIR LAIRD.

(For the staff of the School for Teachers, see Officers of Instruction.)

## 1. Theory and Practice of Education.

2 hrs. sess.....

A. First Term,

(a) General Theory; Mon., at 5.

- (b) Modern History; Th., at 5.
- B. Second Term,
  - Contemporary Problems, Mon., Th., at 5.

2. History of Education:—Ancient and Medieval. 2 hrs. sess.; Wed., Fri., at 5.....

 I and 2 are required for the First Class Academy Diploma of the Province of Quebec, together with (a) fifty half-days of observation and practice, which can be taken partly in term time, and may be divided between the years; (b) a course in physical education qualifying for the Strathcora certificate B. This course is taken in the fourth year, before Christmas. See page 294.

#### GRADUATE COURSE.

#### 3. Readings, Reports, Theses.

#### TRAINING OF TEACHERS.

The University, through its Department of Education undertakes the training of teachers in all grades required by the Province; and through the Teachers Training Committee offers training for specialists in certain subjects. See page 158.

#### DEPARTMENT OF ENGLISH.

## I. English Composition.

I hr. sess.; Mon., at 12 (Men); Tu., at 9 (Women, R.V.C.)...Asst. Professor Latham and Mr. Scott. Required of all first year undergraduates.

#### 2. English Literature: General Course.

2 hrs. sess.; Tu., Th., at 12 (Men)......Professor Macmillan. Mon., Wed., at 9 (Women, R.V.C.).....Miss Carr. Required of all first year undergraduates.

#### 3. English Composition.

I hr. sess.; Fri., at 3 (Men).....Professor Macmillan. Fri., at 3 (Women, R.V.C.).....Miss Carr. Required of all second year undergraduates.

## 4. English Prose From Bacon to Stevenson.

3 hrs. sess.; Mon., Tu., Th., at. 3......Professor Lafleur, Professor Macmillan, Asst. Professor Latham and Miss Carr.

# ENGLISH

5.	Pre-Shakesperian Drama and Shakespere. 2 hrs. ess.; Mon., Th., at 4Professor Macmillan. (Omitted in 1920-21.)
6.	Shakespere (Five Plays). 2 hrs. less.; Tu., Th., at 11Professor Macmillan.
7.	Poetry and the Drama From Dryden to Moore. 2 hrs. sess.; Tu., Th., at 10Professor Macmillan.
8.	Argumentation and Debating. 2 hrs. lessAsst. Professor Latham and Professor Macmillan. (Omitted in 1920-21.)
9.	Poets of the Nineteenth Century. 2 hrs. ess.; Tu., Friday, at 4 Professor Lafleur and Miss Carr.
10.	English Novelists, From Defoe to George Eliot. 2 hrs. sess.; Mon., Fri., at 11Professor Lafleur.
11.	The English Drama, 1590-1642. 2 hrs. sess.; Mon., Wed., at 12Professor Macmillan.
12.	Methols of Literary Criticism. 2 hrs. sess.; Wed., Th., at IIProfessor Lafleur.
13.	Anglo-Saxon. 2 hrs. ;ess.; Tu., Fri., at 2Asst. Professor Latham. <i>Text-biok</i> :—Sweet, Anglo-Saxon Reader (all the prose).
14.	AngloSaxon Poetry and Introduction to Germánic Philology. 2 hrs. sess.; Tu., Fri., at 3Assistant Professor Latham. Text-books:—Sweet, Anglo-Saxon Reader (all the verse); Wight, Old English Grammar (second edition); Wright, Prmer of the Gothic Language. Prerequisite:—I3.
15.	Chaucer and Milton. 2 hrs. sess.; Tu., Th., at 9Miss Carr.
16.	<ul> <li>Comparative Literature.</li> <li>The influence of English literature upon the continent of Europe, chefly during the 18th and 19th centuries.</li> <li>2 hrs. sess.; Mon., Fri., at 10</li></ul>
17.	Comparative Methods in Literary Study. The lterary relations between the continent of Europe and Ergland through the works of leading French, German, Spanish and Italian writers, beginning with Montaigne.

## 18. American and Canadian Literature.

2 hrs. sess.; Tu., Th., at 12.....

Assoc. Prof. Macmillan and Asst. Prof. Latham.

#### HONOUR COURSE.

Prerequisite :---4.

Third Year:-5, 6, 7, 13, 15, 16 or 17, and another half course.

Fourth Year:-9, 10, 11, 12, 14, 16 or 17, 19.

English requirements for the honour courses in English and Latin, English and French, and English and German:--

Third Year:-13, and three courses (aggregating six hours) chosen from 5 to 19.

Fourth Year:--14, and three courses (aggregating six hours) chosen from 5 to 19, not taken in the third year.

English requirements for the honour courses in English and History, English and Philosophy:---

Third Year:—Any courses aggregating eight hours chosen from 5 to 19.

Fourth Year:—Any courses aggregating eight hours chosen from 5 to 19, not taken in the third year.

#### GRADUATE COURSES.

20.	Aligio-Baxoli.
	Beowulf.
	2 hrs. sessMiss Carr.
21.	Germanic Philology.
	2 hrs. sessAsst. Professor Latham.
22.	Comparative Literature.
	Epistolatory Literature.
	2 hrs. sessProfessor Lafleur.
23.	Comparative Literature.
	Memoirs and Memoir-Writers beginning with Philippe de Commines.
	2 hrs. sessProfessor Lafleur.
24.	Chaucer.
	2 hrs. sessAsst. Professor Latham.
	Prerequisite :—15.

## 25. Drama in England From 1642 to 1900.

2 hrs. sess......Professor Macmillan. Candidates for M.A. in English must take twelve hours of lectures a week, six of which shall be selected from "Graduate Courses." The

## GECLOGY AND MINERALOGY

remainder may be selected from 5 to 19, inclusive, if not already taken; 13 is compulsory.

Candidates for M.A. with English as a major subject must take eight hours of lectures a week, four of which must be selected from "Graduate Courses." Course 13 or its equivalent is compulsory.

Candidates for M.A. with English as a minor subject must take four hours of lectures a week, exclusive of 1 to 4.

# DEPARTMENT OF GEOLOGY AND MINERALOGY.

PROFESSORS :--- { FRANK D. ADAMS. J. AUSTEN BANCROFT. ASSISTANT PROFESSOR OF MINERALOGY :---RICHARD P. D. GRAHAM. LECTURER :------

SESSIONAL LECTURER :- JOHN A. DRESSER.

## 1. General Geology.

3 hrs. sess.; Mon., Wed., Fri., at 9.....

Professors Adams and Bancroft. Weekly excursions on Saturday morning while the season permits. On their discortinuance, 2 hrs. lab., Sat., at 10. *Text-book*:—Scott, Introduction to Geology.

## 2. Physiography.

2 hrs. sess.; Th., Fri., at 2.....Professor Bancroft. Prerequisite:-I.

## 3. Canadian Geology.

I hr., Ist term. Wed., at II.....Professor Bancroft. Prerequisite:--I.

# 4. Historical Geology (Advanced).

I hr. sess. (hour to be arranged); 2 hrs. lab., 2nd term. Prerequisite:-I.

# 5. Mineralogy.

2 hrs. sess.; Tu., Th., at 9.....Assistant Professor Graham.

## 6. Determinative Mineralogy.

2 lab. periods of 3 hrs. each during the first term. Th., Fri., at 2.....Assistant Professor Graham.

- 7. Ore Deposits. 4 hrs., 2nd term; T1., at 10; Wed., Th., at 11. Professor Adams.
- 8. Economic Geology. 1.hr., 1st term; Th., at 11......Professor Bancroft.

## 9. Mineralogy.

2 lab. periods, 1st term, 3 hrs. each.

Hours to be arranged ..... Assistant Professor Graham.

## 10. Petrography.

I hr., 1st term; Tu., at 10; I lab. (3 hrs.) sess.... Professor Bancroft and Assistant Professor Graham.

#### 11. Palaeontology.

I hr., Ist term; I lab. (3 hrs.), Ist term. All hours to be arranged.

#### 12. Geological Colloquium.

One evening in alternate weeks (to be arranged)..... Professor Adams, Professor Bancroft, Asst. Professor Graham.

## 13. Geological Survey.

Two weeks at the close of the third year, or immediately before beginning the regular course of the fourth year.

## HONOUR COURSE.

Third Year:--1, 5, 6; also Zoology 2 and Chemistry 1 (if not already taken, in which case equivalent courses will be assigned). Fourth Year:--2, 3, 4 and 7 to 13, inclusive; also Botany 2.

#### DEPARTMENT OF HISTORY.

PROFESSOR:—CHARLES W. COLBY. (On leave.) Associate Professor:—C. E. Fryer. Sessional Lecturer:—

The courses enumerated below are the same as those which were offered in 1919-20. A revised announcement for the Department will be made at the beginning of the session 1920-21.

I. Great Men and Great Movements.

2 hrs. sess.; Tu., at 10; Th., at 11 (Men); Fri., at 9; Wed., at 12 (Women, R.V.C.).....

- The European States System.
   2 hrs. sess.; Tu., Wed., at 11......Professor Fryer.

3. History of Europe, 1519-1789. 4 hrs. sess.; Mon., Wed., Th., Fri., at 10.....

4. The Renaissance.

#### HISTORY

5. The Political History of Europe From 1815-1878. 2 hrs. sess..... (Omitted in 1920-21.) 6. Europe Since the Fall of Bismarck. 2 hrs. sess.; Mon., Wed., at 4..... (Omitted in 1920-21.) 7. History of Canada, 1763-1837. 2 hrs. sess.....Professor Fryer. 8. Historical Method and Criticism. Seminar, 2 hrs. sess..... Professor Fryer. The History of England Since 1784. 9. 4 hrs. sess.; Mon., Tu., Th., Fri., at 9..... Professor Fryer. 10. Recent History of the Great Powers. 2 hrs. sess......Professor Fryer. 11. History of European Colonisation. 2 hrs. sess..... HONOUR COURSE. Prerequisites :- I and 2. History requirements for the honour course in History and English (1920-21) :--Third Year :--- 5, 7, 9. Fourth Year :-- 5, 9, 8 or 10 or Economics and Political Science 10. GRADUATE COURSE. Prerequisites :-- I and 2 and two full courses selected from courses 3 to 10, inclusive, or equivalent courses taken elsewhere. LAW.

PROFESSOR :- R. W. LEE.

- 1. Roman Law. 3 hrs. sess.; Mon., Wed., Fri., at 9.30 a.m.....Dean Lee.
- 2. Jurisprudence. 2 hrs. sess.; Tues., Th., at 9.30..... Professor Smith.

## DEPARTMENT OF MATHEMATICS.

 $\begin{array}{l} PROFESSOR: & --J. & HARKNESS. \\ Associate & Professors: & & \left\{ \begin{matrix} T. & Ridler & Davies. \\ L. & V. & King. \\ \end{matrix} \right. \\ Assistant & Professor: & -C. & T. & Sullivan. \\ \end{matrix}$ 

## I. Ordinary Mathematics.

4 hrs. sess.; Mon., Tu., Wed., Th., at 9 (Men); Mon., Tu., Th., Fri., at 12 (Women, R.V.C.)....Associate Professor Davies. Plane and Solid Geometry:-2 hrs. 1st term.

Text-book :---Hall and Stevens.

Algebra :-- 2 hrs. 2nd term.

Text-book:—Hall and Knight (omitting chaps. 40 to 42 inclusive). Trigonometry:—2 hrs. sess.

Text-books:-Hall and Knight, Elementary Trigonometry (to page 210 and chap. 19); Bottomley, Logarithmic Tables.

## 2. Advanced Ordinary Mathematics.

Geometry and trigonometry and modern pure geometry; advanced algebra, higher trigonometry and theory of equations.

4 hrs. sess... Professor Harkness and Associate Professor Davies.

 Solid Geometry and Geometrical Conic Sections and Algebra.
 3 hrs. sess.; Mon., Wed., Fri., at 11. Associate Professor Davies. Solid Geometry:—

Text-book :- Wilson, Solid Geometry and Geometrical Conics.

Algebra:—Permutations and combinations; binomial theorem; exponential and logarithmic series; interest, annuities and bonds; undetermined co-efficients; partial fractions; summation of typical series; probabilities; determinants; graphic methods.

Text-book :- Hall and Knight, Higher Algebra.

## 4. Analytical Geometry and Infinitesimal Calculus.

4 hrs. sess.; Mon., Wed., Th., Fri., at 10....Professor Harkness. Advised Elective No. 5.

5. Spherical Trigonometry.

I hr., 2nd term.....Associate Professor Davies.

- Dynamics, Statics and Hydrostatics.
   2 hrs. sess.....Associate Professor King Prerequisite:—I or 2—preferably 2.
- 7. Advanced Differential Calculus, Differential Equations and Geometry of Three Dimensions.

4 hrs. sess......Professor Harkness.

## MATHEMATICS

0.	I neory of Functions.
	3 hrs. sessProfessor Harkness.
9.	Modern Differential Equations.
	2 hrs. sessProfessor Harkness.
το.	Modern Analytical Geometry.
	5 hrs. sessProfessor Harkness. (Omitted in 1920-21.)
Π.	Differential Equations of Physics.
	5 hrs. sessProfessor Harkness. (Omitted in 1920-21.)
12.	The Elements of Astronomy.
	2 hrs. 1st or 2nd term as may be arranged Prerequisites :—1 and 3. Associate Professor Davies.
	Honour Course in Mathematics and Physics.
	Prerequisites :Mathematics 2; Physics 1.

Second Year:—Mathematics 4, 5, 6; Physics 2, 4. Third Year:—Mathematics 7, 12; Physics 3, 5, 6, 7. Fourth Year:—Mathematics 8, 9; Physics 8, 9, 10, 11, 12, 13.

## GRADUATE COURSE.

# DEPARTMENT OF MODERN LANGUAGES.

PROFESSOR :--- HERMANN WALTER. Associate Professor :-- R. Du Roure.

 $\label{eq:Assistant Professors:} \begin{array}{l} \text{Assistant Professors:} {-} \left\{ \begin{matrix} J. \ L. \ Morin. \\ E. \ T. \ Lambert. \\ P. \ Villard. \end{matrix} \right. \end{array} \right.$ 

LECTURER IN FRENCH (ROYAL VICTORIA COLLEGE) :- MILLE L. TOUREN.

## A.-French.

Owing to the position which this University occupies in the midst of a very large French-speaking population, there is a permanent demand for courses of a practical, conversational character. The Department profits by the co-operation of French church services, French newspapers, French theatres, French literary clubs, and public lecture courses in the French language.

## 1. French Language.

4 hrs sess....

Mon., Wed., Th., Fri., at 10 (Women, R.V.C.). Mon., Tu., Wed., Fri., at 11 (Men).

Asst. Professors Morin, Villard and Mlle Touren. Texts:—(a) Bouvet, French Syntax and Composition (Heath); Super-Histoire de France (Holt); Mansion, Extracts for French Composition (Heath); Fabliaux et Contes du Moyen Age (Heath). (b) Daudet, Trois Contes Choisis (Heath); Maupassant, Huit Contes Choisis (Heath); Labiche, Le Voyage de M. Perrichon (Holt); Malot, Sans Famille (Heath); Poésies Choisies.

Advanced Section, in place of course (b):-Daudet, Tartarin de Tarascon (A.B. Co.); Sand, La Petite Fadette (Heath); Racine, Andromaque (Ginn); Mérimée, Colomba (Heath); Montesquieu, Lettres Persannes (Macmillan); Poésies Choisies.

#### 2. French Science Readings.

2 hrs. sess.....Asst. Professor Villard. Text:-Bowen, A First Scientific French Reader (Heath).

#### 3. French Language.

4 hrs. sess.; Mon. Tu., Wed., Th., at 9 (Women, R.V.C.).

Mon., Tu., Wed., Th, at 9 (Men)....

Asst. Professors Morin, Villard, and Mlle Touren. *Texts*:—(a) Grandgent, French Composition (Heath); Corneille, Le Cid (Heath); Vigny, Cinq-Mars (Heath); Elementary Historical French Grammar. (b) Racine, Britannicus (Holt); Moliere, Les Femmes Savantes (Heath); Sand, La Mare au Diable (Heath); Chateaubriand, Atala (Heath); Mansion, Littérature française.

Advanced Section, in place of course (b):—Molière: Les Précieuses ridicules (Heath); Lesage: Gil Blas (A. B. Co.); Voltaire: Zadig (Macmillan); Musset: Trois Comédies (Heath); Balzac: Cinq Scènes de la Comédie humaine (Heath); Mansion: Littérature française.

*Private Readings*: — Pailleron: Le Monde où l'on s'ennuie (Heath); Hugo: Quatre-Vingt-Treize (Heath).

## 4. French Commercial Course.

2 hrs. sess.....Asst. Professor Villard Text:—Janau, Commercial French Correspondence (Longmans). Commercial students also take 3 (a).

5. French Commercial Course. Asst. Professor Villard. Histoire de la Littérature française au 19ème siècle; Janau, Commercial French Correspondence; Clerget, Manuel d'économie commerciale.

#### FRENCH

## 6. French Literature:—General Course to the end of the Seventeenth Century.

4 hrs. sess.; Mon., Tu., Th., Fri., at 12.

(Given in 1920-21.)......Prof. Du Roure and Mlle Touren. Texts:—Oxford Book of French Verse; Darmsteter, Morceaux Choisis du XVIIe siècle (Delagrave); Montaigne, Selections (Heath); Rabelais, Selections (Macmillan); French Prose of the XVIIth Century (Heath); Corneille, Nicomède (Macmillan); Racine, Les Plaideurs (Heath); Molière, Le Misanthrope (Oxford); Boileau, Selections (Heath); Doumic, Histoire de la Littérature française.

Prose Composition:--Spiers, Translation into French Prose (Simpkin, Marshall).

## 7. French Literature:-General Course, Eighteenth and Nineteenth Centuries.

4 hrs. sess.; Mon., Tu., Th., Fri., at 12.

(Given in 1921--22.)

Texts:—Lesage, Gil Blas (Heath); Buffon, Discours sur le style; Marivaux, Le jeu de l'amour et du hasard (Macmillan); Diderot, Selections (Heath); Sedaine, Le Philosophe sans le savoir; J. J. Rousseau, Selections; Voltaire, Zaire; Chateaubriand, Atala René (Nelson); Flaubert, Trois Contes (Nelson); Hugo, Préface de Cromwell (Oxford); Balzac, Eugénie Grandet (Nelson); Taine, Origines de la France Contemporaine (Holt); Les Maitres de la Critique Contemporaine (Heath); Doumic, Histoire de la Littérature française.

Prose Composition:-Spiers, Graduated Course of Translation into French Prose (Simpkin, Marshall & Co., London).

N.B.—In order to be admitted to courses 5 and 6 a student must know French well enough to take lectures delivered in French and express himself in French with some fluency and correctness.

## 8. Mediaeval French Literature and Philology.

3 hrs. sess,.....Professor Walter. (Given in 1921-22.)

Texts:-Darmsteter's Cours de Grammaire Historique, Parts I and II, and Bartsch, Chrestomathie de l'Ancien Français.

## 9. Composition.

I hr. sess......Professor Du Roure. Nicholson and Brennan, Passages for Translation into French and German (Oxford University Press).

## 10. History of the French Novel.

2 hrs. sess......Professor Du Roure. (Given in 1920-21.)

11. Evolution of the French Lyric.

I hr. sess...... (Given in 1921-22.)

#### HONOUR COURSE.

#### Prerequisites :--- I, 3.

Third and Fourth Years:--6, 7, 8, 9 (two years), 10, 11.

In order to obtain honours, candidates must be able to speak French fluently.

## GRADUATE COURSE.

The following resident graduate courses will be offered in 1920-21.

#### M.A. COURSES.

- I. Comparative Literature (English Section, Course 16). Two hours weekly.
- 2. Versification, histoire et technique. One hour.
- 3. Le mouvement réaliste dans la seconde moitie du XIXe siècle. Two hours.
- 4. Histoire de la langue depuis le XVIe siècle. One hour.
- 5. Histoire de la Comédie en France. Two hours.
- 6. Exercices pratiques. One hour.

Candidates taking French only will take all the above courses; those taking French as a major along with another subject as a minor will omit I and either 2 or 4; those taking French as a minor will take either 3 or 5 and one of the one-hour courses.

Candidates who have not taken French Philology in their undergraduate course must take it as part of their M.A. course, except when French is taken as a minor. For further M.A. requirements, see page 290.

#### B.—German.

#### 1. German, Beginners' Course.

4 hrs. sess.; Mon., Tu., Th., Fri., at 2 (Women, R.V.C.);

Mon., Tu., Th., Fri., at 4 (Men)....Asst. Professor Lambert. *Texts*:—(a) For B.A. students, Van der Smissen und Fraser, High School German Grammar (Copp, Clark Co.); Guerber, Marchen und Erzahlungen, vol. I (Heath); Baker, German Stories (Holt).

(b) For B.Sc. students, Bierwirth, Beginner's German (Holt); Guerber Marchen und Erzahlungen, vol. I (Heath); German Science Reader (Heath).

Students intending to proceed to course 4 will be required to take a supplementary examination in September (for which no fee will be charged) covering the rest of the grammar and the following texts: -Richl, Die vierzehn Nothelfer (A. B. Co.); Moser, Der Biblio-

#### GERMAN

thekar (Heath); Schrakamp, Ernstes und Heiteres (A. B. Co.). Arrangements will be made by which students will be enabled to do this work by correspondence. This examination will take place at the time of the regular supplemental examinations.

## 2. German Language.

4 hrs. sess.; Mon., Tu., Th., Fri., at 2 (Women, R.V.C.);

Mon., Tu., Th., Fri., at 4 (Men)....Asst. Professor Lambert. *Texts*:—Van der Smissen und Fraser, High School German Grammar (Copp, Clark Co.); Nichols, Two German Tales (Holt); Freytag, Die Journalisten (Ginn); Fulda, Talisman (Holt); Collmann, Easy German Poetry (Ginn, Ed. 1913); Horning, German Composition.

# 3. German Science Reading Course.

A course in reading Science German is given for students who have matriculated in this language or have taken it in the first year. The text will be chosen to meet the requirements of the class.

#### 4. German Language.

4 hrs. sess.; Mon., Tu., Wed., Fri., at 11 (Women, R.V.C.); Fri., at 9, Tues., at 10, Thurs., at 11; Wed., at 12 (Men)....

Assistant Professor Lambert.

Texts:—Horning, German Composition; Schiller, Jungfrau von Orleans (Holt); Scheffel, Trompeter von Säkkinzen (Heath); Goethe, Egmont (Ginn); Keller, Bilder aus der Deutchen Literatur (American Book Co., edition 1905).

## 5. German Literature (Nineteenth Century).

Prerequisite :-- I or 2, and 4.

4 hrs. sess.; Mon., Wed., Th., Fri., at 10..... Professor Walter. (Given in 1920-21.)

Texts:-Kleist, Prinz Friedrich von Homburg (Ginn); Grillparzer, Sappho (Ginn); Hebbel, Agnes Bernauer; Heine, Prose (Oxford Univ. Press); Heine, Verse; Hauptmann, Die versunkene Glocke; Keller, Sieben Legenden; History of Literature, Nineteenth Century (Kluge).

Prose Composition :- Wiehr, German Composition (Oxford).

## 6. German Literature (Eighteenth Century).

Prerequisite :-- I or 2, and 4.

4 hrs. sess.; Mon., Wed., Th., Fri., at 10.....Professor Walter. (Given in 1921-22.)

Texts:-Lessing, Emilia Galotti (Ginn); Lessing, Nathan (A. B. Co.); Goethe, Iphigenie (Pitt Press); Schiller, Wallenstein's Tod; Collins, Selections from German Classics' (Oxford Univ. Press); Kluge, Geschichte der deutschen Literatur. Prose Composition:-

Wiehr, Prose Composition (Oxford University Press).

N.B.—In order to be admitted to courses 5 and 6 a student must know German well enough to take lectures delivered in German and express himself in German with some degree of fluency and correctness.

## 7. Geschichte des deutschen Trauerspiels.

3 hrs. sess.....Professor Walter. (Given in 1921-22.)

## 8. German Composition.

I hr. sess.....Professor Walter. *Text*:—Nicholson and Brennan, Passages for Translation into French and German (Oxford Univ. Press).

## 9. Mediaeval German Literature and Philology.

3 hrs. sess.....Assistant Professor Lambert. (Given in 1920-21.)

Texts:—Bachmann, Mittelhochdeutsches Lesebuch (Fæsi and Beer, Zurich); Behaghel, Die deutsche Sprache.

## 10." Entwicklung der deutschen Lyrik.

3 hrs. sess.....Professor Walter. (Given in 1920-21.)

## HONOUR COURSE.

Prerequisites :-- 1 or 2, and 4.

Third and Fourth Years :-- 5, 6, 7, 8, 9, 10.

The German language alone is used in class instruction, and, in order to obtain honours, candidates must be able to speak German fluently.

#### GRADUATE COURSE.

The following resident Graduate Courses will be offered in 1920-21:--

#### M.A. COURSES.

- I. Comparative Literature (see English section, course 16). Two hours weekly.
- 2. Goethe. Two hours.
- 3. Geschichte des deutschen Romans. Two hours.
- 4. Grillparzer's Dramen. One hour.
- 5. Praktische Ubungen. One hour.

Candidates taking German only will take all the above courses; those taking German as a major along with another subject as a minor will omit I and either 2 or 5; those taking German as a minor will take either 3 or 4 and one of the one-hour courses.

#### HEBREW

Candidates who have not taken German Philology in their undergraduate course must take it as part of their M.A. course, except when German is taken as a minor. For further M.A. requirements, see page 299.

#### DEPARTMENT OF ORIENTAL (SEMITIC) LANGUAGES AND LITERATURE.

PROFESSORS :-- { C. A. BRODIE BROCKWELL. A. R. GORDON.

- 1. Elementary Class, Hebrew Composition and Grammar. (Not qualifying for a degree.) 2 hrs. sess......
- 2. Hebrew Grammar, Composition and Selected Biblical Texts. 4 hrs. sess.; Mon., Tu., Th., Fri., at 5....Professor Brockwell.
- Hebrew Readings in the Old Testament.
   4 hrs. sess.; Mon., Tu., Wed., Fri., at 11....Professor Brockwell. Prerequisite:-2.
- Literature of the Jewish Hellenists:—Prophetic (Greek) Texts.
   2 hrs. sess.....Dr. Abbott-Smith.

Prerequisite :---2.

 Literature of the Jewish Hellenists:—Prophetic (Hebrew) Texts.
 2 hrs. sess......Professor A. R. Gordon. Prerequisite:—2.

# 6. Arabic and Aramaic. 4 hrs. sess......Professor Brockwell.

- 8. Hebrew Texts. 4 hrs. sess......Professors Brockwell and Gordon.
- 9. History of the Greek and Roman Periods. I hr. sess......Professor A. R. Gordon.
- 10. Arabic and Aramaic, or Phoenician, or Ethiopic, or Transliterated Assyrian Texts.

3 hrs. sess......Professor Brockwell.

Semitic Archaeology, or the History of Jewish Literature (from the close of the Old Testament Canon to A.D. 1500), or The Comparative Philology of the Semitic Languages, or Semitic Myths and Social Institutions.

3 hrs. sess.....Professor Brockwell.

HONOUR COURSE IN SEMITICS.

Prerequisite :--2. *Third Year* :--8, 9, 10, 11. *Fourth Year* :-- The same, continued.

#### DEPARTMENT OF PHILOSOPHY.

PROFESSOR:--W. CALDWELL. Associate Professor of Logic and Metaphysics:--J. W. A. Hickson.

Assistant Professor of Psychology :-- William D. Tait.

1. Elementary Psychology.

2 hrs. sess.; Mon., Wed., at 10.....Asst. Professor Tait. *Text-book*:—Human Psychology by H. C. Warren (Houghton, Mifflin & Co.).

- Logic:—An Introductory Course.
   2 hrs. sess.; Th., Fri., at 10......Professor Hickson. Text-book:—Mellone, Introductory Text-book of Logic (6th ed.).
- Introduction to Philosophy.
   2 hrs. sess.; Tu. 10, Th. 11......Professor Caldwell.
- 4. Moral Philosophy. 4 hrs. sess.; Mon., Tu., Th., Fri., at 12..... Professor Caldwell.
- 5. Advanced Moral Philosophy. 2 hrs. sess.; Mon., Tu., at 4.....Professor Caldwell.
- 6. Greek Philosophy. 2 hrs. sess.; Mon., Tu., at 5.....Professor Caldwell.
- History of Modern Philosophy.
   4 hrs. sess.
   1st term: From the Renaissance to Kant....Professor Hickson.
   2nd term: From Kant to the Present Time..Professor Caldwell.
- 8. The Theory of Scientific Method. 2 hrs. sess.; Wed., 12, Fri., 12......Professor Hickson.
- Theory of Knowledge and Metaphysics.
   4 hrs. sess......Professor Hickson.

# PHILOSOPHY

0.	Main Philosophical Tendencies since 1860. 2 hrs. sessProfessor Hickson.
	Prerequisite:
I.	Experimental Psychology. 4 hrs. sessAssistant Professor Tait.
2.	Social Psychology. 2 hrs. sessAssistant Professor Tait.
13.	Problems of Comparative Psychology in relation to the Theory of Knowledge:—Discussions and Lectures. 2 hrs. sessProfessor Hickson. Prerequisite:—I.
4.	Philosophy of Religion. 2 hrs. sessProfessor Caldwell.
5.	Advanced Psychology. 2 hrs. sessAssistant Professor Tait.
6.	Abnormal Psychology. 2 hrs. sessAssistant Professor Tait.
7.	Educational Psychology. 2 hrs. sess (1921-22)Assistant Professor Tait.
thos subj ohys Eng	HONOUR COURSE. Prerequisites:I, 2. Third Year:Any three full courses from 4 to 13 inclusive. Fourth Year:Any three full courses from 4 to 13 other than a already selected. In addition, a course in any of the following ects:education, history, economics, English literature, physics, siology, zoologyis required in each of the third and fourth years. The Philosophy requirements for honours in Philosophy and dish, and Philosophy and German, are eight hours selected from 4 o in each of the third and fourth years. COURSES PRIMARILY FOR GRADUATES. Psychological Laboratory. Subject to be announcedAssistant Professor Tait.
19.	Cosmological Problems of the Present Time; Lectures,
	Papers, and Discussions. 2 hrs. sessProfessor Hickson.
20.	Ethical Seminary. 2 hrs. sess

#### DEPARTMENT OF PHYSICS.

PROFESSOR :	. S. Eve.
Associate Professors :	L. V. King. J. A. Gray. A. N. Shaw.
ASSISTANT PROFESSORS :	N. E. WHEELER. H. E. REILLEY.
Demonstrators :	A. A. Scott. Violet Henry. G. H. Henderson. R. J. Clark. L. A. Smith. H. L. Nichols.

## 1. General Course.

2	hrs.	sess.	; ]	u.,	Fr.,	at	2	(M	len	);	Tı	1.,	Fr.,	at	3	(Women);	
2	hrs.	lab.														. Professor	Eve.
T	ext-t	book:	]	Kim	ıball'	s (	Co	lleg	e ]	Ph	ysi	cs.					

## 2. Heat, Sound and Light.

2 hrs. sess.; Tu., Th., at II; 2 hrs. lab......Professor Shaw. Text-book:—Duncan and Starling's Heat, Light and Sound (Macmillan's).

## 3. Electricity and Magnetism.

2 hrs. sess.; Mon., Fri., at 10; 2 hrs. lab......Professor Gray. *Text-book*:—Duncan and Starling's Electricity and Magnetism; Laboratory manuscripts (Renouf Publishing Co.).

# 4. Dynamics, Statics and Hydrostatics.

2 hrs. sess.....Professor King.

5. Properties of Matter.\*

2 hrs. sess.....Assistant Professor Wheeler.

6. Statics, Dynamics of a Particle and Rigid Dynamics. 2 hrs. sess......Professor King.

#### 7. Vector Analysis.

- 2 hrs. 1st term.....Professor Eve.
- 8. Advanced Statics, Dynamics, Hydrodynamics and Sound. 2 hrs. sess......Professor King.

# g. Electrical Measurements. 2 hrs. sess.; Wed., at 10; 5 hrs. lab.....Professor King.

# PHYSICS AND ZOOLOGY

о.	Radioactivity.* 2 hrs., 2nd termProfessor Eve.
<b>I</b> .	Physical Optics and Electromagnetic Theory.* 2 hrs. sessProfessor Gray.
2.	Molecular Physics. 2 hrs. sessProfessor Shaw.
:3.	Theory of Heat.* I hr. sessProfessor Shaw.
(4.	Kinetic Theory of Matter, and Electron Theory. 2 hrs. sessProfessor King.
15.	Advanced Mathematical Physics. 2 hrs. sessProfessor King.
tб.	Quantum Theory and Relativity. I hr. sessProfessor Eve.
17.	Advanced Electricity and Magnetism. 2 hrs. sessProfessor King.
	HONOUR COURSE IN MATHEMATICS AND PHYSICS. Prerequisites:—Mathematics 2; Physics I (or 2). Second Year:—Mathematics 4, 5; Physics 4; Chemistry I. Third Year:—Mathematics 7, 12; Physics 5, 6, 9, 12, 13. Fourth Year:—Mathematics 8, 9; Physics 7, 8, 10, 11, 14.
	GRADUATE COURSES.
	Physics 15, 16, 17; thesis, etc.
	DEPARTMENT OF ZOOLOGY. PROFESSOR : ARTHUR WILLEY. LECTURERS : { J. STAFFORD. F. S. JACKSON.
Ι.	
2.	Elementary Zoology.* 2 hrs., 1st term; Mon. and Wed., at 10Professor Willey. 4 hrs. lab.; Sat., 9 to 1.

\* With laboratory experiments.\* Zoology 2 will not exempt from Zoology 1.

- 3. Zoology of Invertebrata.<sup>†</sup> 2 hrs. sess..... Dr. J. Stafford 4 hrs. lab.
- Historical Zoology.

   hr. sess......Professor Willey.

   Zoology of Vertebrata.
  - 2 hrs. sess......Professor Willey. 4 hrs. lab.
- 6. Comparative Embryology.
  - 2 hrs., 2nd term.....Professor Willey. 4 hrs. lab.

# HONOUR COURSE IN BIOLOGY.

Prerequisites:—Botany 2, Chemistry 1, Zoology 2. Third Year:—Botany 4 and 6; Zoology 3 and 4. Fourth Year:—Botany 7 and 8; Zoology 5 and 6.

<sup>†</sup> This is a prerequisite for students who may hereafter wish to undertake zoological work at the Marine Laboratories under the Biological Board of Canada.

## TIME TABLES OF LECTURES IN ARTS.

#### TIME TABLES OF LECTURES, 1920-21.

## FACULTY OF ARTS.

Hour.	FIRST YEAR MEN.	FIRST YEAR WOMEN.	SECOND YEAR.	THIRD & FOURTH YEARS.
Lectures at 9, omitting Friday.	Mathematics, 1.	English, 1 and 2. (Comp., Tues., Lit., Mon. and Wed.) Hist., 1 (Fri.).	French, 3. German, 4—Men (Fri.)	Geology, 1. (Mon., Wed., Fri.) Greek, 7 and 8. English, 5 (Tu., Th.). Economics, 12 (Tu., W.) History, 9. Geology, 5 (Tu., Th.).
Lectures at 10, omitting Tuesday.	German 1 (b). Latin, 1. Hist., 1(Tues.)	French, 1.	Botany, 2 (M., W.). Zoology, 2 (M., W.). Logic, 2 and Psychol., 1. German,4—Men (Tu.)	English, 7 (Tu., Th.). English 16 and 17 (M.F.). Economics, 4, 6, 8, 11. Latin, 3 and 4. History, 3. Mathematics, 4. German, 5 & 6. Botany, 4. Physics, 3 (Mon., Fri.).
Lectures at 11, omitting Thursday.	French, 1. Hist., 1 (Thur.)	Latin, 1.	Econ., 1 (M., Fri.). History, 2 (1., W.). German, 4—Women. German, 4—Men (Th.) Mathematics, 3. (M., W., Fri.)	English, 6 (Tu., Th.). Greek, 5 and 6. Economics, 2. Hebrew, 2. English, 12 (Wed., Th.): 10 (Mon., Fri.). Physics, 2 (Tu., Th.).
Lectures at 12, omitting Wednesday.	English, 1 & 2. (Comp., Mon., Lit., Tues, & Thurs.)	Mathematics, 1. Hist., 1( Wed.).	Latin, 2. German, 4—Men (W.).	English, 11 (M., W.). English, 20 (Tu., Th.). Philosophy, 4. French, 6 & 7.
Lectures at 2, omitting Wednesday.	Physics, 1. (Tu. & Fri.).	German, 1 & 2.	Chemistry, 1 (Mon., Tues. & Thurs.).	Geology, 2 (Th., Fri.), Folitical Science, 3. Zoology, 3 (Tu. & Fri.).
Lectures at 3, omitting Wednesday.	Physics, 1 (B. Sc.) (Tu, & Fri.) Greek, 1 & 2.	Physics, 1. (Tues. & Fri.) Physical Educa- tion. (Mon. & Thurs.)	English Lit., 4 (Mon., Tues. and Thurs.). English Comp., 3 (Fri.).	Economics, 5, 7, 9, 10. Chemistry, 2. Psychology, 11. Mechanics (Maths., 6). (Mon. & Thurs.) Astronomy (Math. 12).
Lectures at 4, omitting Wednesday.	German, 1 (a) & 2.	Greek, 1 & 2,	Greek, 3 & 4.	Philosophy, 5 (M., Tu.) Pnilosophy, 9. English, 9. (Tues., & Fri.) English, 5. (Mon. & Thurs.) Comp. Philology, 5. (Tues. & Thurs.)
Lectures at 5, ømitting Wednesday,			Hebrew, 1.	Education, 1 & 2. Philosophy, 6 (M., Tu.)

Laboratory periods and hours for Honour classes will be arranged at the commencement of the session.

The hours for Physical Education for women students of the second, third and fourth year will be arranged by the department.

## EXAMINATION TIME TABLES—Faculty of Arts.

SCHOLARSHIP AND SUPPLEMENTAL EXAMINATIONS, SEPTEMBER, 1920.

DATE.	Hour.	Supp. to First Year Sessional.	Second Year Scholarships.	Supp. to Second Year Sessional.	Scholarships (Third Year).	Supp. to Third Year Sessional.*
Monday20	9.00	English, 1.	English Literature (Shakspere); History.	English, 3.	English Literature (Shakspere and Milton).	English, 5.
	2.00	English, 2.	English Literature (Macaulay and Scott).	English, 4.	English Literature (Ruskin and Arnold).	English 9 & 22.
ſuesday21	9.00	Latin, 1 (Books).	<sup>e</sup> Latin Books.	Latin, 2 (Books).	Latin Texts.	History, 9.
	2.00	Latin, 1 (Composition, Sight Translation and Roman History).	Latin Composition, Sight Translation and Roman History.	Latin, 2 (Composition and Sight Translation).	Latin Composition, and Sight, and Roman History.	History, 7.
Wednesday22	9.00	French, 1, 2.	French Texts.	French, 3, 4.	French Books.	French, 5.
1 - Star Alle	2.00	History, 1.	German Texts.	Physics, 2. Semitics, 1.	French Composition and Sight.	Philosophy, 14.
Thursday23	9.00	Maths. 1 (Algebra).	Geometry (Major); Geometry and Trigonometry (Minor).	Maths. 3 (Algebra).	Animal Biology. Analytical Geometry and Trigonometry.	Maths. 4. Education, 2.
inter in	2.00	Maths. 1 (Geometry).	French Composition and Sight.	Philosophy, 1 & 3.	German Books. Plant Biology. Logic.	Education, 1
Friday	9.00	Maths. 1 (Trigonometry).	Greek Books. Algebra (Minor), Algebra and Trigonometry (Major).	Greek, 3 & 4 (Books) German, 4. Philosophy, 2.	Greek Texts. Physics. Psychology.	History, 3.
	2.00	Physics, 1.	Greek Composition, Sight Translation, and History.	Greek, 3 & 4 (Composi- tion and Sight Transla- tion). Geology, 1, Zoology, 2 & 6.	Chemistry, Greek Composition, Sight Translation, and History. Economics.	Chemistry, 2, 6.
Saturday25	9.00	Greek, 1 & 2 (Books). German (1, (a), 1, (b), 2, 3.)	German Composition and Sight.	Maths., 3 (Conics and Solid Geometry). Botany, 2.	Infinitesimal Calculus, German Comp. and Sight.	Chemistry, 9. Economics, 2.
	2.00	Greek, 1 & 2 (Composition and Sight).	Physics.	Chemistry, 1. History, 2. Economics, 1.	Economics, History and English Composition. Philosophy (Berkeley),	Economics, 3. Physics, 3.

\*Periods for other subjects to be arranged at the time of the Examination.

# EXAMINATION TIME TABLES IN ARTS 155

## EXAMINATION TIME TABLES.

## FACULTY OF ARTS.

FIRST TERM EXAMINATIONS, 1921.

	First Year	Second Year
Tuesday, January 18, 1921-		
9-12 A.M.	Geometry, 1.	French. 3. Zoology, 2.
2-5 P.M.	Greek, 1 & 2. Physics, 1 (B.Sc.).	English 4.
Wednesday, January 19-	24.0	
9-12 A.M.	English, 1 & 2.	Latin, 2.
2-5 P.M.	• Latin, 1.	Fhilosophy, 1.
Thursday, January 20-	The second s	
9-12 A.M.	Cerman, 1 & 2.	Greek, 3 & 4.
2-5 P.M.	History, 1.	German, 4.
riday, January 21—		
9-12 A.M.	French, 1.	Economics, 1. Mathematics, 3.
2-5 P.M.	Physics, 1 (B.A.).	Hebrew, 1. Chemistry, 1, 3 (a).
Saturday, January 22—	The second second	
9-12 A.M.	Trigonometry, 1.	History, 2.
2-5 P.M.		Philosophy, 2 & 3.

# EXAMINATION TIME TABLES IN ARTS

## EXAMINATION TIME TABLES.

## FACULTY OF ARTS.

SESSIONAL EXAMINATIONS, 1921.

Morning examinations commence at 9; afternoon examinations at 2.

(Numbers do NOT indicate years, but the number of the course in the Department.)

DATE	Forenoon.	Afternoon.		
Tuesday, April 19	Latin, 5. Philosophy, 2 & 3. Maths., 7, (Calculus). Physics (I Yr. Com.). Educ. Psychology. Economics (II Yr. Com.). Maths. (III Yr. Com.).	Latin, 5 History, 5. Chemistry, 3 (a & b). Zoclogy, 4.		
Wednesday, April 20	Accountancy (I, II & III Com.). Physics, 1. Hebrew, 1. Education, 1. English, 15.	Hebrew, 1. Maths., 5. Education, 2.		
Thursday, April 21	Maths., 1 (Alg.), Maths., 2 (Geom.), French, 3 (a), 4 & 5. Geology, 1 & 10. German, 7. History, 9. Chemistry, 5. Zoology, 5. Philosophy, 8 & 12.	History (I Yr, Com.). History, 1. French, 3 (b) Advanced & 5. Geology, 1. History, 9.		
Friday, April 22	Econ.Geo.(I & IICom.) Latin, 1 (Authors) & 3. Philosophy, 1. Economics, 11. English, 16 & 111 Com. German, 6. Physics, 3. Hebrew, 6. Maths., 6.	Physics, 2. Latin, 1 (Prose etc.) & 3. Botany, 2. English, 7. German, 6. Chemistry, 6. Indus. Orgn. (III Yr. Com.).		
Saturday, April 23	French, 1 (a) & 2. Economics, 1, 2 & III Com. Maths., 3 (Alg.). English (II Com.) & 10. Physics, 15. Botany, 5. Chemistry, 15. Hebrew, 5.	French, 1(b) & Advanced. History, 2. Economics, 2. English, 12. Hebrew, 5.		

# EXAMINATION TIME TABLES IN ARTS

SESSIONAL EXAMINATIONS-Continued.

DATE.	Forenoon.	Afternoon.
Monday, April 25	English, 1 & I. Com. Latin, 2 (Authors). Maths. (Il Com.). Philosophy, 4 & 7. French, 7. English, 20. Spanish (III Com.). Physics, 12.	History of Commerce (II Yr.). Latin, 2. (Prose, etc.). Philosophy, 4 & 7. French, 7. Greek, 5. Chemistry, 2. English, 2 & 11. Investments (III Com.).
Tuesday, April 25	Chemistry, 1 & 13. Economics, 3. English, 17. Econ. of Transport (HI Com.).	Maths., 1 (Trig.). Maths., 2 (Alg.). Economics. 3. English, 13. Geology, 2. Zoology, 3.
Wednesday, April 27	Greek, 1. English, 4. Economics, 9. Physics, 5,	Commercial Law (II Com.). Greek, 1. English, 3 & 19. Chemistry, 7.
Thursday, April 28	Business Organiz.(II Com) German, 1 & 2. Greek, 3 & 4. English, 9. Chemistry, 8.	German, 1, 2 & 3. Greek, 3, & 4. Greek, 5. English, 5.
Friday, April 29	German, 4. Philosophy, 6. Chemistry, 10. Economics, 12. French, 8.	German, 4. English, 6.
Saturday, April 30	Geology, 5. Chemistry, 9. Maths., 8. Greek, 7.	Geology, 4. Greek, 7.
Monday, May 2	Maths. 4 (Calculus). History, 7 & 8. Physics, 7. English, 14. Botany, 4 & 6.	Maths., 4 (Conics). History, 10. Maths., 7 (Anal. Geom.). Botany, 4 & 6.

# THE TRAINING OF TEACHERS.

#### THE FIRST-CLASS ACADEMY DIPLOMA.

In order to qualify for this, the highest teaching diploma of the province, students are required to take, during the last two years of their undergraduate course, courses I and 2 in the Department of Education; and (unless they hold the Model Diploma or show an equivalent in successful teaching experience) to do the specified fifty half days of practice and observation, either before or after graduation (see page 134). They are also required to take in the fourth year a course on the principles and practice of physical education in relation to schoolwork. This entitles them, if successful, to the Strathcona B. Certificate. Full particulars on page 294. Miss Cartwright, Dr. Lamb.

School Art. A course of twenty lessons on the principles and practice of art in relation to schoolwork, comprising: brushwork, drawing, blackboard work, elements of design. Prof. Armstrong. Sat., 9-10.30 or 11-12.30.

# ELEMENTARY, MODEL AND KINDERGARTEN DIPLOMAS.

The training for these diplomas is given at Macdonald College. (See Macdonald College Announcement.)

# COURSES FOR TEACHERS OF SPECIAL SUBJECTS.

(Given under the Teachers' Training Committee.)

French. A summer school for teachers of French leading to a Specialist Diploma recognized by the Council of Public Instruction.

School Art. See above.

(Conducted by the School for Teachers, Macdonald College.)

**Kindergarten Assistants.** A two-session course leading to a certificate, recognized by the Council of Public Instruction, and accepted for entrance to the Kindergarten Class of Macdonald College.

Particulars of the above courses, which are published separately, may be obtained on application to the Registrar.

(Given under the Department of Physical Education.)

**Physical Education.** A two-years' course leading to a Diploma for Teachers in Physical Education recognized by the Council of Public Instruction. See page 296.

# SCHOOL OF COMMERCIAL STUDIES.

(OPEN TO BOTH MEN AND WOMEN.)

# STAFF OF INSTRUCTION.

DIRECTOR-SECRETARY :	Mr. R. M. Sugars.	
	( DR. MACMILLAN.	
English	ASST. PROFESSOR G. W. LATHAM.	
	MR. B. K. SANDWELL.	
MATHEMATICS		
	MR. HARVEY-JELLIE.	
POLITICAL ECONOMY	Mr. B. K. SANDWELL.	
HISTORY OF COMMERCE	. Mr. B. K. SANDWELL.	
	(Assistant Professor Morin.	
FRENCH	DR. VILLARD.	
GERMAN	ASSISTANT PROF. LAMBERT.	
COMMERCIAL LAW	MR. S. DALE-HARRIS.	
ACCOUNTANCY	MR. R. M. SUGARS.	
SPANISH		
INDUSTRIAL ORGANIZATION	. Mr. B. K. SANDWELL.	
BUSINESS ORGANIZATION	. MR. B. K. SANDWELL.	
CHEMISTRY	PROFESSOR EVANS.	
INDUSTRIAL CHEMISTRY	SPECIAL LECTURERS.	
ECONOMIC GEOGRAPHY	MR. B. K. SANDWELL.	
BANKING	MP MCCHLIOCH	
INSURANCE Economics of Transport	MR B K. SANDWELL.	
ECONOMICS OF IRANSPORT	· · · · · · · · · · · · · · · · · · ·	

The School of Commercial Studies offers :--

I. A systematic course of study, embracing the principal commercial sciences, and designed, with due modifications in each case, to prepare students for different business careers and for the profession of Chartered Accountant.

The course extends over three years, and students who successfully complete it will be granted the Degree of Bachelor of Commerce (B. Com.).

2. Extension Classes, open to anyone-whether engaged in business or not-whose general education and credentials are considered satisfactory to the University.

# SCHOOL OF COMMERCIAL STUDIES

# COURSE FOR THE DEGREE OF BACHELOR OF COMMERCE.

Candidates for entrance must qualify by passing the following examination:-

- I. English (two papers).
- 2. History (one paper).
- 3. French or Spanish (two papers).
- 4. Elementary Mathematics [Algebra (one paper) and Geometry (one paper)].
- 5. Latin or German (two papers) or Physics (one paper).
- 6. One of the following: Botany, Chemistry, Geography—including Physiography—Physics—if not already chosen— (one paper), Latin—if not already chosen—Greek (two papers).

For particulars of the work in each subject, see under "Junior Matriculation."

N.B.—The Advanced Mathematics and Second Foreign Language will not be required until the 1921-22 session.

The Course of Instruction is as follows:

#### FIRST YEAR.

- I. English (4 hours).
  - (a) English Literature.
  - (b) English Composition.
- 2. Mathematics (4 hours).
- 3. French or Spanish.
- 4. Economic Geography (I hour).
- 5. Accountancy (3 hours).
- 6. Political Economy (2 hours).
- 7. Physics (2 hours).

#### SECOND YEAR.

- I. English (2 hours).
- 2. Mathematics (4 hours).

(Commercial and Actuarial Mathematics.)

- 3. French or Spanish.
- 4. Accountancy (3 hours).
- 5. Chemistry and Industrial Chemistry (2 hours).
- 6. Commercial Law (2 hours).

Also one of the following two groups of subjects (as may be assigned), to be taken in conjunction with the Third Year. These groups are given alternately, so that a student will take in the third year what he does not take in the second.

#### GROUP I.

- I. Industrial Organization (I hour).
- 2. Economic Geography (2 hours).
- 3. Economics (2 hours).

(Distribution, Labour Problems, and Industrial Legislation.)

### GROUP 2.

- I. Business Organization and Combination (I hour).
- 2. History of Commerce (2 hours).
- 3. Economics (2 hours). (Money, Exchange, Banking, Investments.)

### THIRD YEAR.

### (a) Obligatory Subjects.

- I. English (2 hours).
  - (The study of trade journals and trade reports will enter into this course.)
- 2. French or Spanish.
- 3. Fire and Marine Insurance (I hour).
- 4. Banking and Banking Practice (I hour).
- 5. One of the two groups of subjects (given under "Second Year") and which will be taken in conjunction with Second Year students, the groups alternating or rotating, so that any student will take in the Third Year what he did not take in the Second (5 hours).
  - (b) Additional groups, one or other of which must be taken.

#### I. ACCOUNTANCY.

- (a) Theoretical Work, Problems and Exercises in Accountancy and Auditing (3 hours).
- (b) Practical Work in Accountancy and Auditing (2 hours).

#### 2. TRADE AND COMMERCE.

(a) I. A second modern foreign language (to be taken during at least two years, and to be preceded where necessary by a preparatory class).

### or

## 2. Specially selected courses in Economics.

### (b) Specially selected courses in Law.

N.B.—A number of visits to factories will be arranged for each calendar year. These visits will be obligatory for Third Year students.

To obtain the diploma of Licentiate in Accountancy, which carries with it right of entrance into the Association of Accountants in Montreal (Chartered Accountants), or into the Institute of Accountants and Auditors of the Province of Quebec, the student must satisfy the following conditions:

- (a) He must pass all the examinations required for, and leading up to, the Degree of Bachelor of Commerce.
- (b) He must pursue the course of studies prescribed in this programme for Accountancy students.
- (c) He must comply with all ordinances regulating the practical work to be done by students during the vacation.
- (d) He must spend at least one year, subsequent to his obtaining the Degree of Bachelor of Commerce, in the office of a practising accountant.
- (e) He must then pass successfully a Final Examination in Accountancy and Auditing before a board of five examiners, composed as follows: the Director-Secretary of the School of Commercial Studies, two Professors of McGill University, a member of the Association of Accountants in Montreal, and a member of the Institute of Accountants and Auditors of the Province of Quebec; or before a board composed of four examiners, in case either of the Associations mentioned fails, after due notice, to nominate its delegate; or before a board composed of three examiners, in case each of the Associations mentioned fails mentioned fails to nominate its delegate.

### POLICY OF THE SCHOOL.

In all subjects the work will be, as far as possible, of a practical nature. Thus the English courses will include a drilling in letterwriting, precis-writing, and the preparation of reports. The French, German and Spanish courses will aim at imparting facility in speaking as well as in writing, and will consider the special phraseology employed in business correspondence. The mathematical and scientific courses will deal in the fullest manner with applications to industry, commerce, and finance. In the lectures on History, Political Economy, and Commercial Law, the aim will be in the first case to trace the growth and development of modern ideas and institutions; next, to impart a knowledge of those general economic principles which are necessary to a full understanding of other subjects; in the third instance, to give the student such an acquaintance with the law as may be of real service in everyday business transactions. Finally, in Accountancy, the conditions and methods imposed by the increasing complexity of commercial, industrial and financial organizations will be considered in detail.

At the same time it will be among the chief concerns of the School of Conmerce to accustom the student to the exercise of independent thought on all subjects, and particularly on those related to industry, commerce, and finance. To this end he will be expected from time to tme to analyse his mental attitude towards each subject, to note the bearings of each on all other subjects, and to embody the results of his analysis in an essay or essays. These methods will compel him to call into play his independent judgment, and will thus assist in developing those qualities of adaptability, self-reliance, and resourcefulness that make for leadership.

#### FEE FOR COURSE.

The sessional fee is \$150.00.

At the request of the students themselves, and by the authority of Corporation, an additional fee of \$10.00 will be exacted for the support of the Literary Society, the Undergraduates' Society, the Canadian Club, the Union, the "McGill Daily," and Athletics.

### COURSES OF LECTURES.

#### English.

The fundamental purpose of the course in English is to train students to deal with such problems of expression as arise in commercial life. Considerable attention will be given to business correspondence and other forms of commercial writing. The interests of students, however, are best served, even for these special purposes, by a more general training in English. These courses will therefore include practice in various kinds of writing, as well as some study of modern English literature. As far as possible the writing prescribed for students will be related to the work they are doing in other classes.

The following is a brief outline of the work :----

#### FIRST YEAR.

- (a) A course on English Literature from Chaucer to the present day.
- (b) English Composition, including the study and analysis of representative works of modern English.

#### SECOND YEAR.

Continuation of work of the first year. Writing of reports; study of contracts and other commercial documents; essays dealing with the subject-matter of courses on Business Organization, Economics, History of Commerce.

#### THIRD YEAR.

In this year the student, while continuing the work begun in the first year and carried on into the second, will be further required to write a series of essays involving research work.

#### French.

The study of French will be first approached from the literary side, both in order to increase its value to the student as an element of culture and in order to afford a sufficient background for the commercial studies which are to come later. These commercial studies will begin in the second year and will comprise about half of the work done in that year. In the third year the work will be almost entirely of a commercial character.

The following is a synopsis of the work:-

### FIRST YEAR.

The student will have a choice between:

- (a) The Advanced Arts Course in French, as indicated on page 142; and
- (b) The Ordinary Arts Course in French (see page 142), strengthened by tutorial class work.

#### SECOND YEAR.

In this year the work will be divided into two sections :--

- I. A selected Arts course. (See page 142).
- II. Work of a commercial nature, embracing:
- Commercial Correspondence:—Letters of introduction, offers of services, inquiries, acceptance of offers, execution of orders, circulars, invoices and account sales; study of trade reports and commercial documents; study of contracts.—Bills of sale, mortgage deeds, bills of lading, charter-party, insurance contracts.

#### THIRD YEAR.

During this year one hour a week will be devoted to a study of modern French literature. The remaining 3 hours will be taken up with commercial work, which may be conveniently divided into:

- (a) Commercial Correspondence, study of trade reports, etc., in continuation of work begun in the second year; and (b) Colloquial French.
  - (The text-book to be used for this part will be P. Clerget, Manuel d'économie commerciale.)

The students will be called upon to take part in discussions, which will follow addresses to be delivered by French speakers on commercial and industrial subjects. Visits, too, will be organized to French commercial and industrial establishments, and all explanations during these visits will be given in the French language.

Class instruction in the three years will be given in French.

### Spanish.

The study of Spanish will extend through all three Commerce years. The programme of work will be announced at the beginning of the Session.

### Mathematics.

#### FIRST YEAR.

In this year the work will be that prescribed for First Year Arts students and will afford a sound training in general mathematics.

#### SECOND YEAR.

The second year will be devoted to a study of Commercial and Actuarial Mathematics.

The subject-matter dealt with will embrace: Compound interest; annuities-certain; the amortization schedule; the valuation of bonds; the mortality table and problems involving the elements of mortality, such as life annuities and the various insurance benefits.

### Accountancy.

The accountancy work has been carefully graduated and correlated, and is intended not merely to fulfil its part in a general scientific business training but also to prepare and assist those who purpose taking up accountancy as a profession.

No previous knowledge of bookkeeping is assumed or required; the subject is developed rapidly along the lines that prevail in practice

#### FIRST YEAR.

The following plan will give a good indication of the ground covered in this year:--

The principle of debit and credit; books of original record, how they should be kept, and how utilized; documents employed in connection with them; sales, purchases, consignments, and how to handle them; returns inwards and returns outwards; subsidiary ledgers, and controlling accounts to represent them in the general ledger; special forms of cash-book required to facilitate such control; notes and drafts, discounting and renewal of notes, and the proper methods of treating these operations in the accounts; single entry, how to change to double entry, and vice versa; distinction between revenue and capital expenditure; income statement and balance sheet; single proprietorships and partnerships.

The student will be required to sift and classify his detail, write up all the books of record and account mentioned, and focus results of the various transactions or operations into the final statements.

#### SECOND YEAR.

The subject matter for this year will be as follows :--

Special Problems that occur in connection with Partnerships.— The deed of partnership; rights of partners; effects of dissolution; methods of distributing profits; the bringing in of other partners; goodwill; transformation of a firm into a corporation; Departmental Accounts; Organization and records required; sectional balancing of ledgers and systems of internal check; analysis of expenses; distribution of expenses over departments; results in each department; comparison of these results with those shown in other periods; Manufacturing accounts; the elements of cost accounting; records to take care of purchases; the voucher system; depreciation and methods of providing for it; allowances and reserves; sinking funds.

#### THIRD YEAR.

The work of the third year will embrace :-

(a) Theory of the Balance Sheet; Its form and elements; valuation of these elements; comparative balance sheets; double account system of balance sheet; the income statement.

(b) Corporation Finance: Development of the corporation; status and interior organization of the corporation; how to incorporate; promotion and underwriting; stock and bond issues; temporary loans; initial operations; earnings and their disposition; secret reserves; betterments; surplus; control exercised by directors and majority stockholders; its abuse; consolidations; insolvency and receiverships; re-organizations; different bases of capitalization.

Problems connected with Stock and Bond Issues; bonus stock; treasury stock; watered stock; discount and premium on bond issues.

(c) Branches, Consolidations, Mergers; Accounts of head-office and of branches; consolidated statements and balance sheets; control of stock and bond issues; minority holdings; advances to subsidiaries; inter-company profit; capital assets and capital liabilities; initial surplus and goodwill.

(d) Cost Accounting: General considerations, the advantages of a cost system; the control of stores, purchasing and issuing, the running inventory; quality, remuneration, and control of labour; overhead expenses or "burden," methods of distributing it and their limita-

tions; waste and leakage in factories; idle time; calculation of machine rates; connection of costs records with general accounts.

(e) Accounting in Insurance Companies: Sources of income; expenditures to be incurred; registers and their uses; control of agents; reserve and its constitution; sources of profit; presentation of accounts; indications of strength or of weakness.

(f) Bank Accounts: Classification of operations; sources of entries in books; registers, diaries, ledgers; correlation of departments; cash journal or daily summary; published accounts.

(g) Municipal Accounts: Principles involved; current methods of reporting statistics; inadequacy of these methods; methods now recommended; sources of revenue; estimated revenue; appropriations; balances; various forms of municipal debt; municipal bonds; contract and order liabilities; sinking-funds; form of balance sheet recommended.

(h) Insolvency Accounts: Various schedules adopted; statement of affairs; realisation and deficiency account; deficiency statement.

(i) Trustees' Accounts: Executorships and administratorships; accrued claims; accrued expenses; corpus and income.

(j) Peculiarities in the form of accounts required in other undertakings will also be dealt with.

(k) Auditing: General principles applicable to all undertakings; special considerations applicable to particular concerns; laboratory practice in auditing.

#### Economics.

#### FIRST YEAR.

Elementary Economics, including analysis of the production, exchange, distribution and consumption of wealth.

### SECOND OR THIRD YEAR.

### (Given in 1920-21.)

Economics of Industry: Labour organization; industrial legislation; capital organization; international relations of labour and capital.

Industrial History: Development of the productive and distributive organization since the Industrial Revolution, with particular reference to problems connected with the relations of capital, labour and the State.

#### (Given in 1921-22.)

Economics of Finance: Money, exchange, banking, financial organization, credit, public finances, taxation.

Investment: Nature and variety of securities; government securities; municipal bonds; railroad securities; other corporation securities; mortgages; analysis of financial reports; the stock market; manage-

ment of investments; rights and duties of the shareholder; default and foreclosure; reorganization.

### Industrial Organization.

A course of lectures for the second and third years and dealing with the following subject-matter:

The launching of an industrial enterprise; the planning of a factory; departmental functions; the purchase and control of raw materials; labour, and its control; wage systems; welfare work; power and its transmission; the reorganization of a factory; the committee system; the location of industries; principles of management; types of management; departmental relations; standardization and equipment; standardised operations; written standard-practice instructions; adequate records; efficiency rewards.

The student will be required to write in idiomatic English a summary of each lecture.

## Business Organization.

Origin and growth of business organization: Different methods in which business organization may be classified; useful inferences to be drawn from each method of classification; tests of efficiency in business organizations; social, economic and legal aspects of the following types of organization:—the Single Proprietorship; the Partnership; the Joint-stock Company; the Corporation; Agreements, Pools, Kartells; Simple Business Trusts; Combination Trusts; Community-of-interest Organizations; Securities-holding Organizations, Amalgamations, and Mergers.

## Economic Geography.

### FIRST YEAR.

General: The solar system; epochs in the history of the earth; divisions of the earth's surface into land and water; elements of geology; effects of sun's heat and rays; effects of altitude; effects of moisture, temperature and winds; ocean currents; mankind, races and characteristics; distribution of natural products; centres of population, and reasons for their development; chief commercial products; chief traffic channels and movements.

Canada: General configuration; climatic conditions; natural products—agriculture, animal products, products of the mine, of the sea, of rivers; population centres, their history and growth.

Canadian Production for Home Consumption: Location of important industries, with reasons; markets; means of distribution; cost of distribution; means of improvement and development of established industries; means of creating new industries.

#### SECOND AND THIRD YEARS.

#### (Given in 1920-21.)

Canadian Export Trade: Production for export; raw materials; manufactured products; foreign markets; means of creating new markets; nature of Canadian export markets—distance, climate, population, habits, credit, currency, government, tariffs, transport facilities, competition.

Canadian Import Trade: Products imported; countries of origin; purposes for which employed—direct consumption, further manufacture; reimportation of Canadian raw materials manufactured abroad.

Economics of Transport-Water Transport: Ocean shipping; services, rates and organization; shipping policies of leading commercial nations; internal water transport in North America.

Economics of Transport-Land Transport: Organization and service of railway traffic departments; systems of rates; car service, demurrage and claims; legislative regulation; motor transport; light railways.

#### History of Commerce.

#### SECOND AND THIRD YEARS.

#### (Given in 1921-22.)

Review of Commerce from the Dawn of Civilization to the Present Time, tracing the influence of physical, economic, political and technical factors in its development: Ancient and mediæval commerce; effect of revival of learning and discovery of America; commencement of modern commerce; the industrial revolution and recent commerce; special details in history of commerce of Canada and other British Dominions; lives of eminent leaders of commerce from the Fugger family to the present time.

#### Banking.

A course of special lectures on banking practice for Third Year students.

#### Insurance.

A course of special lectures on Insurance for Third Year students.

#### EXTENSION CLASSES.

The Extension Classes are open to the public, no examination test being required. They embrace (a) subjects that form a part of the curriculum, and (b) subjects that lie outside this curriculum. At the conclusion of each session written examinations will be held, and special certificates will be awarded to successful students.

Civil Service students and those preparing for the examinations held in connection with the Chartered Institute of Secretaries, Lon-

don, England, and with the Association of Accountants, Montreal, will find some of these classes especially useful. The programme of classes, as organized for 1920-21, together with the scale of fees, hours of lecture, etc., is as follows:—

(A) SUBJECTS THAT ENTER INTO THE DIPLOMA CURRICULUM.

### Industrial Chemistry.

A course of 25 lectures, given after the Christmas holidays, on the important industrial processes involving chemistry. Only those processes which are represented in Canada will be discussed.

These lectures will be given by a number of chemists and engineers, each an expert in the subject on which he will lecture, and they will not necessitate, for their proper comprehension, any special knowledge of chemistry on the part of the student.

The planning and arrangement of the course has been placed in the hands of Mr. C. R. Hazen, M.Sc., of the firm of Milton Hersey & Co., and its scope and importance will be indicated by the outline, given below, of the work covered last session.

Wednesdays and Fridays, at 7.30 p.m. Fee for the course, \$7.50.

Outline of course given in the session 1919-20:

IWater, its industrial uses and purificationC. Hazen.
2Apparatus & Machinery used in the chemical industries. Dr. Bates.
3Solid Fuel Coal, ash and peats, powdered coalDr. Porter.
4Liquid Fuel, crude petroleum and its productsDr. Porter.
5.—SugarC. F. Bordarf.
6Lead and its alloysH. Roast.
7.—IronG. W. Dauncey.
8.—Steel " "
9Fats and Oils, their origin, composition and uses
as foods, etcDr. R. F. Ruttan.
10.—Leather TanningT. A. Faust.
11.—Dyes and DyeingW. R. Allen.
12.—Ethyl Alcohol and DistillingG. M. Appell.
13.—PulpJ. N. Stephanson.
14.—Paper"
15.—Sulphuric, nitric acid and atmosphereDr. R. McLean.
16.—Explosives"
17.—Starch Dextrine and GlucoseDr. R. F. Ruttan
18.—Portland CementC. A. Tagge.
19.—GlassPercy Cole,
20.—Fertilizers and GlueC. Hazen.

21.—Paints and Colors			
22.—Varnishes		"	**
23.—Electro Metallurgy	.Dr.	А.	Stansfield.
24.—Coal Gas		R.	Kennedy.
25Ethyl Alcohol and its Products		.H.	C. Shuck.
26Distillation of Wood and its Products			C. Hazen.
27-Textiles			

### Spanish.

A course of 50 lectures, intended for beginners.

With the aid of a suitable grammar and text-books, the student will be first taught to read in Spanish and to translate, with a view to his acquiring a correct pronunciation and a vocabulary. When the latter is deemed sufficient for the purpose, conversational practice will be introduced on current topics or on the subject-matter of the textbooks.

It is hardly necessary to dwell on the advantages a knowledge of Spanish would possess for those who may be called upon to enter into business relations with Spanish America.

Mondays and Wednesdays, at 8.15 p.m. Fee for the course, \$10.

### Commercial Law.

A course of 25 lectures on the general principles of commercial law, specially designed to render service to the business man, banker, and accountant in their everyday transactions, and to help students who may be preparing for any of the examinations held in connection with the Association of Accountants in the Province of Quebec.

The subject is taken up from a practical point of view, with illustrations from actual cases, and the lectures deal with the questions that are likely to arise in the ordinary course of business.

The matter treated is as follows:—Persons and their capacity to contract—minors, married women, and other persons whose capacity is limited; the different kinds of property; the general principles of contracts; payment, and other methods in which debts are extinguished; the sale of goods; the lease and hire of property; the lease and hire of services; building contracts; carriers by land and water; agency; hypothec; pledge; contracts of guarantee; bills of exchange and other negotiable instruments; partnership; corporations; banking; rights of creditors over a debtor's property; privileges; insolvency law.

Each lecture lasts an hour and a half, and is complete in itself. The course is open to the public, both men and women. Tuesdays, at 7.45 p.m. Fee for the course, \$10.

ee for the course, \$10. Mr. Dale Harris.

## (B) SUBJECTS OUTSIDE THE DIPLOMA CURRICULUM.

### Political Economy.

A course of 25 lectures, especially intended to meet the needs of candidates studying for the final examination of the Association of Chartered Accountants, candidates for the Civil Service Examination, Division B, junior clerks in banks, and other persons interested in the subject from a practical standpoint.

The following subdivision will indicate broadly the subjectmatter dealt with in these lectures:---

Wealth and its productions; the theory of value; the theory of monopoly price; money; index numbers and the rise in the cost of living; international trade and the foreign exchanges; free trade and protection; distribution—rent, wages, interest, profits and the theory of population; taxation and public finance; social legislation and socialism; the economic aspect of the war.

Thursdays, at 7.30 p.m.

Fee for the course, \$7.50. Mr. B. K. Sandwell

### Algebra.

A course of 25 lectures, which will be found especially useful by Civil Service candidates and by those who desire to pass the examination held in connection with the Association of Chartered Accountants. A number of lectures will be devoted to higher arithmetic problems.

Thursdays, at 8.30 p.m.

Fee for the course, \$7.50.

## English Composition and Business Correspondence.

A course of 25 double lectures on the general principles of English Composition with especial reference to commercial correspondence, and other kinds of writing that are likely to be serviceable in business life. Such topics as mastery of English idioms, the increasing of one's vocabulary, sentence-structure, clearness and force will be discussed. There will be frequent opportunities for practice in writing.

Students in Accountancy offices and those intending to take up secretarial work should derive great benefit from this course. Friday evenings, from 7.30 to 9.30. Fee for the course, \$10.

Fee for the course, \$10. Assistant Professor Latham.

### Elementary Accountancy.

A series of lectures to be given three times a week, and dealing with the subject-matter outlined on page 168 for First Year Commerce students.

This course is intended for students preparing for the Intermediate Examination held in connection with the Association of

Accountants in Montreal, and will be found especially useful by anyone desirous of laying a solid groundwork in Accountancy.

Mondays, from 7.30 to 8.30 p.m., and Wednesdays from 7.30 to 9:30 p.m. Fee for the course, \$10. Mr. Brimacombe.

#### Higher Accountancy.

A course of 20 lectures, dealing with the following subject-matter:-

- Business Organization and Corporation Finance: The classification of business enterprises; the development of the corporation; different corporation securities, their nature and uses; premium and discount on bonds; the amortization of bonds; promotion; underwriting; bonus stock; treasury stock; watered stock; the stock market; extensions and reorganizations.
- Theory of the Balance Sheet: Capital assets; fixed assets; intangible assets; permanent investments; investment of reserves; working assets; current assets; capital stock; fixed liabilities; bonds and mortgages; contingent liabilities; current liabilities; profits; surplus and reserves; secret reserves; the sinking fund; comparative balance sheets; the consolidated balance sheets.
- Manufacturing Accounts: General considerations; the advantages of a costs system; the control of stores; purchasing and issuing, the running inventory; quality, remuneration, and control of labour; overhead expenses or "burden," methods of distributing it and their limitations; waste and leakage in factories; idle time; calculation of machine rates; connection of costs records with general accounts, special records required, the voucher system.

Accounts of Trusteeships and Executorships. Accounts of Municipalities.

Wednesdays at 7.15 p.m.

Fee for the course, \$10.00.

#### English Literature.

A course of 20 lectures on Representative Modern Dramatists and their Work, from 1860 to the present day.

France-Dumas to Rostand; England-Jones, Pinero, Barker, Shaw, Galsworthy; Ireland-Yeats, Synge, Lady Gregory; Germany-Hauptmann, Sudermann; Norway-Björnson, Ibsen; Sweden-Strindberg; Italy-D'Annunzio; Spain-Echegaray. Fridays, at 5 p.m.

Fee for the course, \$5.00. Professor Lafleur.

### French Literature.

A course of 20 lectures on contemporary French novelists. These lectures will deal first with the older writers whose reputation is established—Anatole France, Pierre Loti, Paul Bourget, René Bazin, Henri Bordeaux, and Maurice Barrès; then with the younger, innovating generation of novelists, such as André Gide, Marcel Proust, Jean Giraudoux, Georges Duhamel, Pierre Benoit, one of the principal objects of the course being to unfold the actual position occupied by the French novel.

(This course of lectures will be given in French.) Thursdays at 5 p.m. Fee for the course, \$5.

Professor du Roure.

## Payment of Fees for Extension Courses.

Fees for Extension Classes should be paid at the Bursar's office before the session begins. For the convenience, however, of those who may be unable to get to the University during business hours, a person authorized to collect the fees will attend at the lecture hall about the beginning of the course. All fees must be paid by the evening of the third lecture, and in no case shall any fee be returned.

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Hour	Yr.	Monday	Yr.	Tuesday	Yr.	Wednesday	Yr.	Thursday	Yr.	Friday	Yr.	Hour	LEC
9 a.m. (	$\begin{array}{c}1\\2\\3\end{array}$	Economics French Acct. B	$\begin{array}{c}1\\2\\3\end{array}$	Economics Maths Spanish	$\begin{array}{c}1\\2\\3\end{array}$	Physics(Lab.) French Acct. B	$\begin{array}{c}1\\2\\3\end{array}$	Physics Ind. Org Ind. Org}	1 2 3	Acet Acet Spanish	$\begin{array}{c}1\\2\\3\end{array}$	9	CTURE
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12 a.m.	$\begin{array}{c}1\\2\\3\end{array}$	Maths English French	$\begin{array}{c}1\\2\\3\end{array}$	Eng. Lit English French	$\begin{array}{c}1\\2\\3\end{array}$	Maths	1 2 3	Eng. Lit	1 2 3	Econ. Geog French	1 2 3	} 12	IN SCI
2 p.m.	$\begin{array}{c}1\\2\\3\end{array}$	Spanish	$\begin{array}{c}1\\2\\3\end{array}$		$\begin{array}{c}1\\2\\3\end{array}$		1 2 3	• • • • • • • • • • • • • • • • • • • •	1 2 3	Spanish	1 2 3	} 2	SCHOOL C
3 p.m	1 2 3	English Econ. (Spec.)	1 2 3	Maths Econ. (Spec.)	$\begin{array}{c}1\\2\\3\end{array}$		1 2 3	Maths Econ. (Spec.).	1 2 3	English Econ. (Spec.)	1 2 3	}- 3	OF COM
4 p.m	1 2 3		$\begin{array}{c}1\\2\\3\end{array}$	Com. Law.	1 2 3	Physics Law (Spec.)	1 2 3	Chemistry	1 2 3	Law (Spec.)	1 2 3	} 4	COMMERCE
5 p.m	1 2 3	Banking	1 2 3	Com. Law Law (Spec.)	1 2 3		1 2 3	Law (Spec.)	1 2 3		1 2 3	} 5	/1 2

# TIME TABLE OF LECTURES FOR THE B. COM. (3 YEAR COURSE)

(Subject to revision at beginning of Session)

#### CALENDAR 1920-21.

Sept. 27th, Monday	. Registration begins, 9.00 a.m.
Oct. 2nd, Saturday	. Registration closes at 12.00 noon for
	Diploma students.
Oct. 4th, Monday	First Term begins at 9.00 a.m.
	. University Sports Day (Holiday).
	Thanksgiving Day (Holiday).
Dec. 21st, Tuesday	
Jan. 5th, Wednesday	
Jan. 14th, Friday	
Jan. 18th, Tuesday	
Jan. 24th, Monday	. Second Term Lectures begin.
Feb. 9th	. Ash Wednesday (Holiday).
Mar. 25th	. Good Friday (Holiday).
	. Second Term Lectures end.
Apr. 19th, Tuesday	
	. Intensive Field Work commences.
June 23rd, Thursday	
June 24th, Friday	
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## GENERAL INFORMATION.

### Admission.

Qualifications.—The work of the Department should be considered in the light of post-graduate work. The most desirable student for such work is a college graduate or person of equivalent education who has had from three to five years experience in some other field of work, such as teaching or business. Graduate nurses with general education equivalent to matriculation standard should take the course successfully. Persons under twenty-one years and over thirty-five years of age will only be admitted for exceptional reasons.

Training may make a social worker efficient, but in social work as in much other work, it is the human qualifications which distinguish the effective from the ineffective. The success of the social worker is largely dependent upon personality; therefore, tact, patience, sympathy, poise, cheerfulness, and that something which we may term "religion", and which "calls" a person into social work, may be considered the prerequisites of an embryo social worker.

Applications.—Candidates for admission are required to file application on a form supplied by the Department. Applications should be made as soon as possible to the Secretary of the Department.

### Fees and Other Expenses.

- I. The fee for Diploma students is \$70.00, payable in two instalments, in October and January.
- 2. For Partial students the fee is \$7.50 for a full course and \$5.00 for a half or term course, and for course No. 7, \$10.00.
- 3. The fee for the Extension Course is \$5.00.
- 4. Books and other school expenses should not exceed \$20.00.

### Requirements for the Diploma.

The Diploma of the Department is awarded to students who obtain an average mark of 50 in all, and not less than 40 in any one written examination. Students must also receive satisfactory reports from the social agencies in which their field work has been taken.

Students holding degrees from any recognized university will be given credit for courses which may have been covered by the student in taking a degree, but the Department may require such students to write an examination on such subjects.

Students satisfying the examiners in Courses I and 2 and 7 to 15, and taking the full amount of field work, will receive a certificate for the work taken.

### Field Work.

Too much emphasis cannot be given to the importance of field work as part of the training of a social worker. The field work during the first term will be taken with the Charity Organization Society. In the second term the student will be permitted to choose from one of several fields which will include work with Hospital Social Service Departments, Children's Agencies, the Women's Directory, which works with unmarried mothers, and the Social Settlements.

### Time Required.

Students cannot expect to do the work of the Department satisfactorily unless able to give their full time. The Lecture and Field Work schedule and reading required will allow ample time for necessary recreation.

#### Library and Reading Room.

Students will have the privilege of using the Redpath Library, on making the customary deposit of \$5.00; a small reference library is maintained for the use of the students in the Reading Room of the Department's offices in the Arts Building.

#### Board and Lodging.

Accommodation for a limited number of out-of-town students of either sex can be arranged at the University Settlement, fifteen minutes walk from the University. Rates \$10.00 to \$15.00 per month for room alone, \$35.00 to \$40.00 per month for room and board. Residents are required to give one or two evenings a week to helping in the work of the Settlement.

### Bursaries.

A small loan fund is at the disposal of the Committee from which assistance can be given to a student who would otherwise be unable to take the work of the Department.

Loans will be repayable on easy terms.

Applications for assistance from this fund should be made not later than September 1st.

### Opportunities for Employment.

Students qualifying for the Diploma of the Department, who have had no previous experience in Social Work, may expect to secure positions at a salary of not less than \$900 per annum.

Maturer students with previous experience as teachers or in business may expect to secure from \$1,200 to \$1,800 at once.

The services of two of the Certificate students of the year 1919-20 have already been engaged at salaries of \$1,800 and \$1,200 per annum.

Diploma students may expect to find positions in one or other of the following fields:—Care Work with "Family Care" Agencies, such as the Charity Organization Society or the Associated Charities; with "Child Placing" or "Child Welfare" or "Children's Protective" Agencies; with Agencies caring for the unmarried mother; as Probation Officers with Juvenile Courts; as Hospital Social Workers; as Social Settlement Workers; as Recreation Centre or Playground Supervisors.

#### TIME TABLE (Subject to Change).

### First Seven Months.

	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat.
9–10 a.m		11 A.B.				1
10-11		8	×.	·		15
11–12	3		Work.	· · · · ·	3	15
12–1 p.m						
2–3			Field			
3-4	13-14	2		10	6	ty .
4-5	7	4		9-12	5	Holiday
5-6				1	7	Ho

#### DESCRIPTION OF COURSES.

## I. The Principles of Sociology.

One Hour.....Dr. Wm. Caldwell. The sociological idea and the different attempts at the creation of a sociology; the history and theory of social organization.

### 2. Industrial History.

One Hour.....Mr. Francis Hankin. The Industrial Revolution; the rise of the Trade Union; the cooperative movement; Collective Bargaining; Joint Councils and the Trust; the influence of organization of Employers and Employees on social and political conditions.

Bibliography for reference:—"The Town Laborer," J. L. and Barbara Hammond; "History of Trade Unionism," Sidney Webb; "Co-operation at Home and Abroad," C. R. Fay; "Co-partnership and Profit Sharing," Anourin Williams; "The Whitley Report"; "Man to Man," J. L. Leitch; "Self Government in Industry," G. D. H. Cole.

### 3. Elements of Political Economy.

Two Hours.....Dr. Leacock. Text-book:--Walker.

A discussion of the elementary principles of Economics, including an analysis of the production, exchange, distribution and use of wealth.

### 4. Heredity and Environment.

One Hour.....Professor Derick. Phenomena of Development; Influence of Environment in lower forms of life and in man; Heredity, racial and individual characteristics; Laws of Inheritance; Control of Heredity; Selection; Eugenics.

#### 5. Social Psychology.

One Hour.....Dr. Tait. An outline of the psychological aspects of Society, with special reference to the abnormal mind in so far as it affects the social organism.

#### 6. Neuro-Psychiatry.

One Hour.....Dr. Mundie. Definitions of fallacious sense perceptions, such as Hallucinations, Illusions, Delusions; Different types of mental diseases; Symptoms;

causes and treatment of mental deficiency; epilepsy; History and Case Record-making; relation of social work to Psychiatry; differential diagnosis of organic and functional nervous diseases.

In connection with the course the students will have the opportunity to witness clinical examinations and tests.

### 7. The Treatment of Poverty.

Two Hours......Mr. J. B. Dawson. Poverty and Social Life—Historical review; The Family, a normal standard of life; factors in the breakdown of family life, individual and social; machinery for dealing with poverty, public and private; the scientific basis for social work.

Social Case Work—Value of evidence; planning rehabilitation; the use of volunteers; co-ordination of effort; case conferences. How to Help Various Types—widows, deserted women, the aged, etc., etc.

Community Effort-Social Insurance, Legislation; Conditions in Industry.

*Text-books*:—"Social Diagnosis," Mary E. Richmond, Russell Sage Foundation; "American Charities," Warner, 1919 Edition, Crowell & Co.

### 8. Child Welfare.

One Hour......Mr. Falk. Influences necessary to the normal development of the child in its home, at school, at play, and at work; the treatment of Dependent, Neglected, Delinquent, and Defective Children; the child of the unmarried mother; Child-Welfare Legislation.

Text-books:—" Child Placing in Families," Slingerland, Russell Sage F.; "How Two Hundred Children Live and Learn," Reeder, Noble; "Juvenile Courts and Probation," Baldwin and Flexner, Century Co.; "Delinquent Child and the Home," Breckenridge and Abbott, Russell Sage.

### 9. Child Health.

One Hour, First Term.....Dr. Styles. Pre-natal care; maternity care; baby welfare; the pre-school age; medical inspection in school nursing.

### 10. Public Health and Housing.

One Hour.....Miss H. R. Y. Reid. Historical sketch of origin and development of Public Health work; Government (Federal, Provincial, Municipal) measures for prevention of disease and preservation of health; sanitation, milk and food supply; control of drugs and alcohol; contagious diseases; housing; community resources as aids to Public Health (Nursing,

Hospitals, Clinics, and Dispensaries, Hospital Social Work, Industrial Hygiene); National Organizations for conservation of health; International health work.

### 11. Social Development of a Community.

Urban.—One Hour, Second Term......Miss Bolduc. The development of the modern city; city problems, work, recreation, education, immigration, community organization, school centres, social settlements, etc.

Rural.—One Hour, First Term.....Mr. Bradford The Rural Survey; Social Organizations; Movements of Population; Town versus Country; The Land Question and Rural Welfare; Farmers' Organizations; The Rural School; Recreation in Rural Communities; The Rural Church; The Mind of the Farmer; A Practical Program.

Text-book :- Paul L. Voght, "Introduction to Rural Sociology," Appleton.

### 12. Home Economics.

One Hour, Second Term.....Not appointed. Household management, the dietetic and caloric value of food; economy in buying; economical menus.

#### 13. Organization and Administration.

One Hour, First Term.....Mr. Falk. Organization; forms of management; responsibilities of a Director or Trustee; responsibilities of Executive Secretary; office management, conduct of meetings; charitable accountancy and auditing; financial statements; publicity in Social work; financing Social Agencies; Federation in Social work.

#### 14. Social Research and Statistics.

One Hour, Second Term......Mr. Falk. Research, necessity for, methods of, preparation of questionnaires. Statistics, value and use of, preparation, tabulation, and presentation. *Text-book*:---"Statistics," Bailey and Cummings, McClung.

## 15. The "Survey" and "Social Welfare."

Two Hours......Mr. Falk. Students will be required to present for discussion subjects discussed in the current issues of these periodicals. This exercise is intended to train students in presenting topics before committees and public meetings.

### 16. The Psychology of Play and Playground Supervision.

Students intending to enter the Social Settlement field will be required to take this course which is given in the School of Physical Education. Practical work is taken at the Montreal Athletic Association, and opportunity for instruction under supervision is given in the Children's Institutions of the city. An additional fee is payable for this course. Students taking this course will be excused from taking Course 3.

### EXTENSION LECTURES.

### Child Welfare.

10 Lectures......Mr. Falk. Wednesday afternoons, at 3.00 p.m. October 13th to December 15th, 1920, illustrated by lantern slides. Fee, \$5.00.

This course is primarily intended for persons serving on the Boards of Management of Montreal's Children's Agencies and Institutions, but should be of interest to any citizen interested in Child Welfare work.

## FACULTY OF APPLIED SCIENCE.

#### DEGREES.

The degrees conferred by the University upon such undergraduates of the Faculty as fulfil the conditions and pass the examinations hereinafter stated are "Bachelor of Architecture" (B.Arch.), and "Bachelor of Science" (B.Sc.), mention being made in the diplomas of the latter of the particular course of study pursued.

Students who take the Bachelor of Science degree in one of the courses provided by the Faculty may graduate in any of the remaining courses by attending one or more subsequent sessions and passing the prescribed additional examinations.

Students who wish to obtain the degrees of B.A. and B.Sc. (Applied Science) in six years, will spend the first three years in Arts before attending any classes in Applied Science, except in the summer courses referred to below; they will then enter the Faculty of Applied Science and devote the remaining three years entirely to the work of this Faculty. The special summer courses mentioned take the place of the work in descriptive geometry, drawing (freehand and mechanical) and shopwork, which form part of the regular course of the first year in Applied Science. This work must be taken in two periods of one month each, prior to the regular work of the second and third years in the Faculty of Arts; and must not be taken during the regular session in any of the three years spent in that faculty.

Every student who intends to take this double course must notify the Dean of the Faculty of Applied Science to this effect, on or before the close of his first year in Arts (May 1st), and must pay the fee of \$50.00 to the Bursar, for the first of his summer schools, before the date scheduled for the beginning of the school in question.

By a resolution of the Institution of Civil Engineers (England) the holders of the degree of B.Sc., in the courses of civil, electrical, mechanical and mining engineering, who are desirous of becoming Associate Members of the Institution, may under certain conditions be exempted from the examination prescribed for admission to the Institution.

#### EXAMINATIONS.

I. Final examinations are held in all lecture subjects. Class examinations, for which credit may be given in the sessional standing, are held from time to time, at the option of the professor.

### FACULTY OF APPLIED SCIENCE

- (1) The regular supplemental examinations held immediately before the opening of the session, or
- (2) The final examinations in a subsequent session, or
- (3) Special examinations, which shall be given only under exceptional circumstances and by authority of the Faculty.

3. Failures in drawing room and laboratory subjects may under certain conditions be made good by atendance on special classes during the afternoon of the first six weeks of the following session.

4. No undergraduate will be allowed to take instruction in any subject until he has passed the examinations in the necessary prerequisite subjects, for particulars regarding which see page 250.

#### SCHOLARSHIPS, PRIZES AND MEDALS.

See pages 88 to 91.

#### FEES.

See page 98.

### ENGINEERING SCCIETIES.

I. The headquarters of the Engineeing Institute of Canada are located in Montreal. Students in all departments of engineering are strongly recommended to become student members of the Institute, which they can do on payment of a fee of \$3.00. They are then entitled to the "Transactions," which are published annually, to the monthly journal of the Institute, and to the use of the Institute's rooms, 176 Mansfield Street. They also have opportunities of meeting the prominent engineers of the country, and o being present at the fortnightly sessions, at which papers are mad on current engineering subjects and works of construction.

Students are invited to compete for the prizes which are offered by the Institute.

2. Students in Mining and Metallurgy are strongly recommended to become members of the McGill Mining Society, which, although a student body (see page 244), is affiliated with the Canadian Mining Institute, the headquarters of which are in Montreal. Members of this Society receive the Monthly Bulletin and the Transactions of the Institute without extra expense, and are entitled to attend all meetings and to compete for the prizes offered.

### COURSES IN APPLIED SCIENCE

#### COURSES OF INSTRUCTION.

The instruction in this Faculty is designed to afford a thorough training of a practical as well as theoretical nature, in the following branches of applied science:—

I.—Architecture, II.—Chemistry.\*\* III.—Chemical Engineering.\* IV.—Civil Engineering and Surveying, V.—Electrical Engineering, VI.—Mechanical Engineering, VII.—Metallurgical Engineering, VIII.—Metallurgy.\*\* IX.—Mining Engineering,

The courses in Chemistry and Metallurgy heretofore offered have been discontinued, except for students who had already entered them and were in attendance in good standing in the session of 1919-20.

MILITARY INSTRUCTION (subject No. 400) may be given as alternative to certain subjects in connection with courses III to VII. inclusive (see pages 193 to 203).

#### CURRICULUM.

The curriculum as laid down in the following pages may be changed from time to time as deemed advisable by the Faculty, and in no case shall it be binding beyond the session covered by this calendar announcement.

The regular work of each session in Applied Science will end about the 30th of April, at the close of the sessional examinations. The summer work will be taken during the month of May except as specified on page 204.

The work prescribed for the first two years is the same in all courses, except in that leading to the degree of Bachelor of Architecture (Course I).

The first two years of the engineering courses (III to VII) are mainly devoted to mathematics, mechanics, physics, chemistry, drawing and shopwork, as it is deemed necessary that students in these courses should master the general principles underlying scientific work before commencing the subjects of the professional courses.

\* No student shall be permitted to enter the third year of this course, who has failed to secure at least second class standing in Second Year Chemistry and Laboratory.

\*\* This course will be discontinued in the early future. See p. 190.

#### FACULTY OF APPLIED SCIENCE

The subjects of instruction in the engineering courses in these years, and the number of hours per week devoted to each, are as follows:--

SUBJECT	Subject Number		tures week Second Term	Laboratory, etc., periods per week First Second Term Term		For details see page
Algebra. Descriptive Geometry *English. Freehand Drawing and Let-	< 192 341 131	5 1 2	4 1 2	··· 2⁄3 ··	· · · · · · · · · · · · · · · · · · ·	231 224 227
tering. Geometry. Mechanical Drawing. Mechanics. Physics. Physics Lab. Shopwork and Shop Methods Trigonometry.	342, 343 191 211 194 311 312 212 to 215 193	1-2 2 2 	1  2 2  3	2/3  2  1 2	2 2  1 2	224 231 232 231 246 246 232 231

FIRST YEAR

All undergraduate students of the first year, except those in the course of Architecture, who at the close of the first term have failed to obtain an average of 33 per cent. in the following five subjects, viz: mechanics, geometry, algebra, physics and descriptive geometry, will be required to withdraw from the Faculty.

In the case of students in the course of Architecture the same rule applies, the five subjects, however, being mechanics, geometry, algebra, physics and architectural drawing.

Any other student of the first, or any subsequent year, whose record is found to be unsatisfactory, may at any time be required to withdraw from the Faculty.

All students of the First Year, except those in the Department of Architecture, who have pursued their course of study without serious interference due to personal illness, domestic affliction or urgent affairs, and who fail in more than three subjects, at the end of the First Year, or in three subjects aggregating over 400 possible marks, shall be required to repeat all the work of the First Year, and while so doing shall be debarred from taking any more advanced work.

\* The lectures will be supplemented by individual conferences with the instructors.

## SECOND YEAR COURSE IN APPLIED SCIENCE

SUBJECT	Subject Number		tures week	Labor etc., p per v	For details see	
		First Term	Second Term	First Term	Second	page
Anal. Geometry. Calculus. General Chemistry. General Chem. Lab. Mapping. Descriptive Geometry and Perspective. Mechanics. Mech. of Machines. Physics. Physics Lab. Shop Methods. Surveying. Surveying Field Work. Summer Reading.	$     \begin{array}{r}       345 \\       83 \\       218 \\       315     \end{array} $	3 2 3  1 1 2  2 	4 3  1 1 2 1 2  1 2 	··· ·· 1 ·· <sup>2</sup> / <sub>3</sub> <sup>2</sup> / <sub>3</sub> ·· ·· 1 ·· ·· ··	··· ·· ·· ·· ·· ·· ·· ·· ·· ·· ·· ·· ··	231 231 215 215 247 219 225 219 233 246 246 246 233 246 243 247 247 205

#### SECOND YEAR

Nore-Surveying field work, 4 weeks, beginning May 2nd, 1921. See pages 247 and 248.

For other summer work, see pages 204 to 207.

### I. ARCHITECTURE.

The course for the degree of Bachelor of Architecture extends over five years. Full information is given in the Announcement of the Department, which will be sent to interested persons upon request to the Registrar of the University.

The work of the first year is similar in most respects to that of the first year in other Departments in Applied Science, but special instruction is given in Drawing and Architectural Geometry.

The object of this curriculum is to impart such general culture, scientific knowledge and skill of hand as will prepare the student to profit by the work of the succeeding years, under the heads of :--

(a) Design;
(b) Aesthetic;
(c) Archæology;
(d) Science;
(e) Construction;
(f) Professional Practice;
(g) Drawing.

An essay on an historical or theoretical subject is required in each term from all students following the historical or theoretical courses.

In all courses studio work goes hand in hand with oral teaching, with a view to the practical application of the theory, while at the

### FACULTY OF APPLIED SCIENCE

same time affording opportunity for the acquisition of power in draughtsmanship and practice in design.

An arrangement has been concluded between McGill University and the Province of Quebec Association of Architects, whereby holders of the Bachelor of Architecture degree are admitted to practice in the Province after spending one year in the office of a member of the Association, and passing an examination in design, instead of having to take the regular prescribed entrance examinations. The office experience may be gained by working in the summer vacations.

	· · · · · · · · · · · · · · · · · · ·	1 Bill		1.	(The second	- Contraction
SUBJECT	Subject Number		tures week	Drau Roon other per	For details see	
		First Term	Second Term	First Term	Second Term	page
General History English Algebra. Geometry. Trigonometry. Mechanics. Physics Lab. Elements of Architecture Architectural Geometry. Architectural Drawing Freehand Drawing.	Arts (13) 131 192 191 193 194 Arts (42) Arts (43) 5 18 31 36	2 2 5 3  2 2 2  1 1 	• 2 2 5  2 2  1 1 	··· ··· ··· ··· ··· ··· ··· ··· ··· ··	··· ··· ··· ··· ··· ··· ··· ··· ··· ··	138 2 7 231 231 231 231 150 150 150 209 213 213 213
	SECOND	YEAR			No.	
Design 1. Elements of Composition Building Construction. Building Details. Structural Engineering I. Struct. Eng. (Draughting) I. History of Classic Architecture Graphical Statics. Surveying. Mapping. Architectural Drawing. Freehand Drawing. Summer Work. Surveying Field Work. Architectural Essay.	$1 \\ 6 \\ 24 \\ 25 \\ 26 \\ 27 \\ 14 \\ 83 \\ 346 \\ 348 \\ 32 \\ 37 \\ 48 \\ 347 \\ 44$	··· 1 1 ··· 2 ··· 2 ··· ·· ·· ··· ··	 1 1  2 1 2   	2  2  1  1 1 2  1 1 2 	2 2 1 1 1 2 1 1 2 	209 209 212 212 212 212 211 219 247 247 213 213 213 214 247 214

FIRST YEAR

#### COURSE IN ARCHITECTURE

SUBJECT	Subject	Lectures per week		Draug Roor other p per v	For details see	
	Number	First Term	Second Term	First Term	Second Term	page
Design 2	27	i	i.	3	3	209 210
Theory of Design* Structural Engineering, II	1	1	1			212
Struct. Eng. (Draughting) II History of Mediaeval or Re-	29			2	2	212
naissance Archt. †	15 or 16	2	2			211
Ornament and Decoration <sup>‡</sup>	9 and 10 or 11 and 12	1	1	1	1	210
Perspective	19	1		1	i	214
Freehand Drawing	38	4.7		1	1	213
Architectural Drawing	33		1.	1	1	213
Summer Work	48					214
Architectural Essay	45	1		1	1	214

#### THIRD YEAR

Design 3 Theory of Planning*	3 8	i. 1	i. i	5	5	209 210
History of Mediaeval or Re- naissance Architecture Ornament and Decoration	15 or 16 9 and 10	2	2	1.1.		211
Offiament and Decoration	or 11 and 12	1	1	1	1	210 212
Hygiene Heating and Ventilation Architectural Drawing	$\begin{array}{c} 22\\ 23\\ 34 \end{array}$	2	i	i	1 1	212 212 213
Freehand Drawing Modelling	39 40	3.5		1 1	1 1	213 213 214
Architectural Essay						214 214

#### FIFTH YEAR

The second second second		1.28		C. Arrain	Silver of	Charles and the
Design 4	4		19	8	8	209
Modern Architecture	17	2	2		· · · · · ·	211
Professional Practice	30	2	2		and i	212
Engineering Law	175	- 1	1	the dealer	VIII	230
Historical Drawing.	35	1.1.1		1	1	213
Modelling	41	1	1 K	1	- 1	214
Architectural Essay	47	1 the			182 × 1. 5	214
Summer Work	48	1. 1. 1. 1.	Press, in	an Cont	18-24-2 B	214

†The courses on Mediaeval and Renaissance Architectural History, numbers 15 and 16, are given in alternate years. During the Session 1920-21, the History of Mediaeval Architecture will

be given. <sup>†</sup>Ornament and Decoration courses, numbers 9 and 10, and 11 and 12, are given in alternate years. During the Session 1920-21, numbers 11 and 12 will be given.

For summer reading see page 205. \*The courses on Theory of Design and Theory of Planning, numbers 7 and 8, will be given in alternate years.

## FACULTY OF APPLIED SCIENCE

### CHEMISTRY.

The course in Chemistry has been discontinued, except that undergraduates in good standing in the course during the session of 1919-20 will be permitted to complete the requirements for the degree in accordance with the following schedule.

### THIRD YEAR

#### (1920-21 only)

SUBJECT	Subject Number	Lectures per week		Labor etc., p per	For details see	
		First Term	Second Term	First Term	Second Term	page
Economics. Geology, General. Inorganic Quant. Anal. Inorganic Quant. Anal. Lab. Gen. Elementary Metallurgy. Mineralogy, Determinative. Organic Chemistry. Organic Chemistry. Physical Chemistry. Summer School Fire Assaying and Metallography. Summer Essay or Reading.	$171 \\ 141 \\ 61 \\ 76 \\ 261 \\ 142 \\ 143 \\ 56 \\ 57 \\ 58 \\ 263 & 264 \\ 133 \\ 171 \\ 100$	2 1 2 2 3  2	2 2 2  2  2 	··· ½ 6 ··· 2 ··· 2 ··· ··	··· ··· ··· ··· ··· ···	230 228 216 218 238 228 228 210 216 216 216 239 206

### FOURTH YEAR

### (1921-22 only)

Applied Electro-chemistry Crystallography (opt.)* Engineering Law. Industrial Chemistry, Inorg Industrial Chemistry, Organic Physical Chemistry and Lab. Adv. Inorg. Chemistry and Lab. Ore Deposits (opt.) Ore Deposits (opt.) Advanced Organic Chemistry Organic Chem. Lab. (alt.) Food Chemistry (alt.) History of Chemistry Summer Essay	$     151 \\     175 \\     68 \\     69   $	2 2 1 2 *1(a)  2 *1. (a)  2     	··· 1 2222 222 *1(b) 1	1 (opt)  2 6(a)  5(b)  	··· ·· ·· ·· ·· ·· ·· ·· ·· ·· ·· ·· ··	218 2%9 230 218 217 218 217 218 229 217 217 217 217 216 218 206
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\*Students who elect to take this subject will be allowed some relief from Chemical Laboratory.

### COURSE IN CHEMICAL ENGINEERING

### **II. CHEMICAL ENGINEERING.\***

The aim of this course is to prepare students for positions demanding a knowledge of both chemistry and engineering. The duties of a chemical engineer require him to be conversant with chemical processes, the installation of chemical units, and to understand the construction of buildings, the installation and operation of machinery, etc. Accordingly the course of study combines a considerable amount of engineering with the maximum of chemical training which can be attained without overpressure.

Between the second and third years students taking this course must attend a summer session of four weeks in the chemical laboratories.

In the third year specialization commences, the time being about equally divided between chemical and engineering studies, and in the vacation between the third and fourth years all students must give at least six weeks to work in some chemical industry or to equivalent laboratory work satisfactory to the Professor of Chemistry.

In the fourth year the engineering studies are completed and the chemical studies which predominate are arranged in two alternative courses to meet the requirements of the students who cannot possibly study more than a few of the very varied chemical industries. These alternative courses fall broadly under one or other of two headings:— (a) inorganic, (b) organic, as indicated in the table below, and one or other of which the student will select. Should a student desire to prepare for an industry which requires more engineering knowledge than is provided in the regular course he may substitute additional engineering subjects for some of the chemical work. Details will be arranged on application to the Faculty through the Professor of Chemistry.

While every effort will be made to supply detailed information as to methods and plan of many of the important industries, and to provide facilities for experimentally carrying out the processes involved, the main aim will be devoted to the study of the principles which underlie economical production.

#### FIRST AND SECOND YEARS.

As in other Engineering Courses. For details, see pages 186 and 187.

\* No student shall be permitted to proceed to the third year of this course until he has secured at least second class standing in the subjects of General Chemistry (51) and Chemistry Laboratory (52).

# FACULTY OF APPLIED SCIENCE

SUBJECT	Subject Number	Lectures per week		Laboratory, etc., periods per week		For details see	
		First Term	Second Term	First Term	Second Term	page	
Economics General Elem. Metall Inorg. Quant. Analysis Lab. Mech. Eng. and Lab. Mineral. Deter *Ore Dressing (opt.) Organic Chemistry Organic Chemistry Physical Chemistry Strength of Materials Strength of Materials	62	··· 2 1 ··· 2 2 3 ··· 2 2 3 ··· 2 2 ··· 2 3 ··· 2 ···	2  2 2 2  2 2  2  1 	······································	······································	230 218 216 216 234 228 228 228 241 216 216 216 216 220 220 220 221 215 206	

### THIRD YEAR

#### FOURTH YEAR

THE A THE TO A	
Elements of Elec. Eng. 111 2 2	
Elect Eng Lob	225
Elest. Eng. Lab 112	226
Engineering Economics 172 2 1 1	230
TEngineering Law (alt.) 175 1 1	
Invaraulies 101 1	230
Industrial Inorg. Chemistry 68 2	223
Industrial Organia Change and	218
Phys. Chem. and Lab. 2	218
	217
	239
TMIIItary Science (alt) 400 o 100 100	239
Applied Electro-Chem 70 2	· · · - ·
	218
	241
Fire Assess	241
	239
Auv. Inorg. Unemistry $79$ $9(a)$ $9(b)$	218
Inorganic Laboratory 67 1(a)	
Advanced Org. Chem. $64$ $2(h)$ $2(h)$ $3(h)$	217
Org Chem Lab	217
	217
Food Chemistry. $73$ $1$ (b) $2$ (b)History of Chemistry. $74$ $2$ (b)	216
	218
	206

Military Science (400) is alternative with Engineering Law (175) and Hydraulics (101). (a) Inorganic alternative. (b) Organic alternative. \*Students registering for any optional course must complete the course and take the qualifying examination. Students taking subject No. 295 may withdraw from this work at the concusion of the first term.

#### COURSE IN CIVIL ENGINEERING

### III. CIVIL ENGINEERING.

The courses of study are designed to emphasize the fundamental principles embodied in the study of mechanics, strength of materials, and hydraulics, while at the same time affording an opportunity of applying these principles to practical problems ranging over as wide a portion as possible of the field covered by the practice of civil engineers. A broad and sound foundation is thus laid for future specialization, either in graduate courses or in actual practice. The outlock of the student is further broadened by courses in Mechanical ard Electrical Engineering. In the designing courses special attention is given to the interpretation and critical discussion of specifications as well as to the economical principles involved. Students are recommended to obtain as much practical experience as possible during the summer vacations, and are specially recommended to spend at least one season in a drafting office before the final year.

### FIRST AND SECOND YEARS.

As in other Engineering Courses. For details, see pages 186 ard 187.

### FACULTY OF APPLIED SCIENCE

SUBJECT	Subject Number	Lectures per week		Laboratory, etc., periods per week		For details see		
		First Term	Second Term	First Term	Second Term	page		
Economics. Foundations. Geology, General. Hydraulics. Hydraulic Laboratory. Map Projections. Mechanical Engineering. Mech. Eng. Lab. Mechanics. Railway Engineering. Railway Engineering. Strength of Mats. and Lab. Structural Design Surveying. *Surveying Fieldwork. Summer Reading or Essay	$\begin{array}{c} 171\\ 89\\ 141\\ 97\\ 98\\ 351\\ 226\\ 228\\ 86\\ 92\\ 93\\ 87, 88\\ 90\\ 353\\ 354\\ 133\\ \end{array}$	··· 2 2 ···· 2 ···· 2 ···· 2 ···· 2 ···· 2 ···· 2 ····· 2 ····· 2 ····· 2 ······	2 1 2	··· //s ··· 1 1 ··· 1 ··· 2 ··· ·· ·· ··	··· ··· ··· ··· ··· ··· ··· ···	230 220 228 221 230 247 233 233 233 219 221 221 220 221 220 221 247 247 247 247		

#### THIRD YEAR

#### FOURTH YEAR

Bridge Design	96	2	2	2	2	222
Elements of Elect. Eng	111	2	2		1	225
Electrical Eng. Lab	112			1	1	226
Engineering Economics	172	2		1.50	1. 2. 24	228
†Engineering Law (alt.)	175	1	1	Prest.		230
Geodesy	359	2	100.00	1.1	1.1	248
Geodetic Laboratory	360			1		248
*Geodetic Fieldwork	361	122.19				248
Hydraulic Mach. (alt.)	99		2	al to 1		222
Military Science (alt.)	400	2	2		1	
Municipal Eng.	100	2	2	3.4.14	1	223
Strength of Materials	95	2	1		1	222
Theory of Structures	94	1	2	1	2	-221
Summer Essay	134	19.00	Sall Star			206

†Military Science (400) is alternative with Engineering Law (175) and Hydraulic Machines (99). \*For Surveying Fieldwork (354) and Geodetic Fieldwork (361), see details of Summer Schools, pages 247 and 248.

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### COURSE IN ELECTRICAL ENGINEERING

### IV. ELECTRICAL ENGINEERING.

The electrical studies of the third year embrace a consideration of current flow; the principles of electro-magnetism; electrical measurements; the design and performance of electrical machinery.

The fourth year is devoted principally to electrical work, and includes lectures and laboratory work on variable and alternating current phenomena, the principles of action and the design of electrical machinery, electric lighting and systems of power distribution, central station design and operation, urban and interurban railways, hydroelectric power development, electro-chemistry, electro-metallurgy and wireless telegraphy.

Occasional visits are made to electrical works and power plants.

## FIRST AND SECOND YEARS.

As in other Engineering Courses. For details, see pages 186 and 187.

### FACULTY OF APPLIED SCIENCE

SUBJECT	Subject	Lectures per week		Laboratory, etc., periods per week		For details see	
		First Term	Second Term	First Term	Second Term	page	
Economics. Electrical Engineering Calculus. Machine Design. Mechanical Drawing. Mech. Eng. and Lab. Mech. of Machines. Thermodynamics. Strength of Mats. and Lab. Sum. Reading or Essay.	$171 \\ 113 \\ 114 \\ 201 \\ 225 \\ 232 \\ 223, 226 \\ 86 \\ 224 \\ 229 \\ 87, 88 \\ 133 \\ 133 \\$	3 1 1 2 2 2 2 2 2 2	2 3 1 2 ··· 2 2 2 2 2 2	··· 2 % ··· 1 2  3% ···	··· 2 3/8 ··· 1 1 ··· 2/8 ··· 1 ···	230 225 225 232 234 235 234 219 233 235 220 206	

### THIRD YEAR.

### FOURTH YEAR.

Applied Elec. Chem	70	2				218
Electrical Photometry and Il-		and the second second			REAL OF	
lumination	124	2			1 4 4 1 4 4 A	227
Applications of Electricity	123		2	1.1.1		227
Electro-Metallurgy	275	1	2			241
†Electrical Designing	122	2	2	1	1	227
Electrical Engineering	117	23	3	A BAR	14.15	226
Elec. Eng. Lab	118	a trans	In	3	3	226
Elect. Light and Power Dist.	120	2				226
Electric Traction	121		2	Ser Ser		226
Engineering Economics	172	2		Cert in P		230
†Engineering Law (alt.)	175	Ĩ	1			230
Hydraulics	97	2	-	ESTERES		221
Hydraulics Lab	98	4		i	12000000	221
Machine Design	243	2		-		236
Machine Design	400				1	and and a second
†Military Science (alt.)		2	2 2		1. 4.1.1	010
Physics	320	Z	2 -			246
Physics Lab	321			2	2	246
Summer Essay	134					206

†Military Science (400) is alternative with Engineering Law (175) and one lecture hour per week of Electrical Design (122). For summer schools, see page 204.

#### COURSE IN MECHANICAL ENGINEERING

### V. MECHANICAL ENGINEERING.

The subjects of instruction in this Department are of interest to students who are likely to take up work connected with—

(a) The constructive or manufacturing side of mechanical engineering, including industrial or production engineering; (b) steam engineering; (c) gas engine and producer work; (d) power plant engineering; (e) heating and ventilation of buildings and factories; (f) aeronautics and aerodynamics.

Courses are given during the third and fourth years in mechanical engineering as applied to questions connected with power installations and prime movers. The earlier portion of this work is supplementary to the instruction given in thermodynamics, mechanics of machines and machine design, and leads up to the more advanced or technical subjects of power plant design, industrial plant design and works organization.

Students in the Department of Mechanical Engineering take systematic work in electrical engineering during the third year.

Instruction in workshop practice is given in each of the four years. This work is of a systematic nature, and is intended to prepare for, but by no means to replace, that practical experience of manufacturing operations on a commercial basis which every mechanical engineer must obtain for himself.

The course in thermodynamics deals more particularly with the theory of heat engines, and time is assigned for additional graphical and experimental work in connection with the subject.

Arrangements are made for occasional visits to power plants and manufactories of importance.

#### FIRST AND SECOND YEARS.

As in other Engineering Courses (see pages 186 and 187), with additional course in September for second year (page 204).

SUBJECT	Subject Number	Lectures per week		Labor etc., p per	For details see	
	Sobolici Humor		Second Term	First Term	Second Tern	page
Economics. Elements of Elect. Eng. Elect. Eng. Lab. Machine Design. Mechanical Drawing. Mechanical Eng. and Lab. Mechanics of Machines. Shopwork. Shop Processes and Manage- ment. Structural Design. Thermodynamics. Sum. Sch. Shopwork. Sum. Reading or Essay.	$171 \\ 111 \\ 112 \\ 225 \\ 231 \\ 227, 228 \\ 86 \\ 224 \\ 235, 236 \\ 235, 236 \\ 237 \\ 87, 88 \\ 90 \\ 229 \\ 233, 234 \\ 133 \\ 133 \\ 111 \\ 111 \\ 112 \\ 125 \\ 111 \\ 111 \\ 112 \\ 125 \\ 111 \\ 111 \\ 112 \\ 111 \\ 111 \\ 112 \\ 111 \\ 111 \\ 112 \\ 111 \\ 111 \\ 112 \\ 111 \\ 111 \\ 112 \\ 111 \\ 111 \\ 112 \\ 111 \\ 111 \\ 112 \\ 111 \\ 111 \\ 112 \\ 111 \\ 111 \\ 112 \\ 111 \\ 111 \\ 112 \\ 111 \\ 111 \\ 111 \\ 112 \\ 111 \\ 111 \\ 111 \\ 111 \\ 111 \\ 111 \\ 112 \\ 111 \\ 1$	2 2 3 2 2  1 2  2 	2 2 2  2  2  2  2  1 2 1 2  	··· 1 ·· 2 1 ·· 2 1 ·· 2 1 ·· 2 ·· 3 ·· 4 ·· 4	··· 1 1 1 1 1 1 ··· 1 1 ··· 1 ··· · ·· ·· ·· ·· ·· ·· ·· ·· ·· ·· ··	230 225 226 236 233 234 219 233 235 236 220 221 235 235 206

THIRD YEAR.

#### FOURTH YEAR.

Designing	241	- Starten			1	235
Engineering Economics		2	1.	1	a starter	230
†Engineering Law (alt.)		Ĩ	1		1200	230
Experimental Eng.		Î	i	1-1-1-		237
Hydraulics and Lab	97.98	2	-	1	2 7 6	221
**/Hydraulic Mach. (alt.)	99	No. Contraction	2	The start	3	222
(Man. Plant Des. (alt.)		1.5.	2		1	238
Machine Design		2	5		-	235
Power Plant Design	244	1	1	i	1	237
Heat. and Vent. of Buildings		1	1		1	237
Mech. Eng. Lab	249	10 the set	374	31/3	31	237
		i. I			0%	
Mech. of Mach	240	2	2	1/3	, *	236
†Military Science (alt.)	400	2	2		1	× · · · ·
Works Organization and Ac-		the second				
counting	254	1	1			238
Shopwork	252			1	1	237
Thermodynamics	251	2	2	1.		237
Summer Essay	134	1				206

\*\*One of the subjects, 253 or 99, must be taken unless Military Scence (400)

is chosen. †Military Science (400) is alternative with Engineering Law (175) and Hydraulic Machinery (99) or Man. Plant Design (253).

#### COURSE IN METALLURGICAL ENGINEERING

## VI. METALLURGICAL ENGINEERING.

This course is designed for students intending to enter metallurgical works, such as iron or steel works or smelters. It includes instruction in the engineering, chemical, metallurgical and ore-dressing studies required by practising metallurgists.

A certain amount of mining is included in the third year curriculum in order to show the relation between mining and metallurgy; but the course is not intended for students wishing to become mining engineers.

In the third year instruction is given in chemistry, assaying, geology, mineralogy, metallurgy, mining, ore-dressing, and mechanical and structural engineering.

After the third year there is a summer school in metallurgical works.

In the fourth year instruction is given in chemistry, electrical engineering, law, hydraulics, metallurgy and ore-dressing. Metallurgical designing and laboratory work form important parts of the course.

#### FIRST AND SECOND YEARS.

As in other Engineering Courses. For details, see pages 186 and 187.

Between the second and third years there is a four weeks' summer school in qualitative analysis in the chemical laboratory, beginning about the first of September.

		and the state	1 1 1 1 1 1	and the second	Contraction of the	and the sale	
SUBJECT	Subject Number	Lectures per week		etc., p	Laboratory, etc., periods per week		
		First Term	Second Term	First Term	Second Term	page	
Economics. Fire Assaying. Geology, General Gen. Element. Metall. Inorg. Quant. Anal. and Lab Meth. Eng. and Lab. Metall. Calculations. Metallurgical Lab. Mineralogy and Lab. Mining Engineering. Ore Dressing and Lab Structural Design. Summer School Inorg. Qual.	$\begin{array}{c} 171\\ 263\\ 141\\ 261\\ 61, 62\\ 226, 228\\ 265\\ 266\\ 262\\ 142, 143\\ 291\\ 292\\ 87, 88\\ 90\\ \end{array}$	1 2 2 1 2 1 1  2 2  2 2  2 2 	2  2 1  2 2 2 2 2 2 2 2 1	2 3/3  1  2   2 	$\frac{1}{\frac{1}{2}}$	230 239 228 238 216 234 239 240 239 228 241 241 220 221	
Anal. and Lab Sum. Reading or Essay	54, 55 133		1	· · · ·	•••	215 206	

#### THIRD YEAR.

#### FOURTH YEAR.

Elem. Elect. Eng. and Lab	111, 112	2	2	1	1	225
Electro-Metal. and Lab	275, 276		2		1	241
Engineering Economics	172	2 -			-	230
†Engineering Law (alt.)	175	Ĩ	T	1992	1. 1. 1. 1.	230
General Metallurgy	271	2	2	1916		230
Hydraulics	101	ĩ	1000	1/2		223
Industrial Chemistry, Inorg		2	1. 1.	72	1. · · ·	223
Inorganic Quant. Anal	67	1		4	1	
†Metallurgy	272	2	3	Carlos Carlos		217
Metallurgy Colloquium	277	1000	1		1.1.1.1	240
†Metall. Lab	274		1	12		241
Metall. Mach. and Design	278	1000	1.	1/2	3	240
†Military Science (alt.)				and the second	2	241
Ore Dressing and Lab	200 200	2	2	1. 1. 1. 1.	1	
Ore Deposite	299, 300	4		1		242
Ore Deposits.		1	4	A		229
*Sum. Sch. Metal. Works	267	and and				240
Summer Essay	134			ter		206

†Military Science (400) is alternative with Engineering Law (175) and one hour per week in Metallurgy (272) and one period second term Metal. Lab. (274). \*Metallurgical summer school (267) is taken at the end of the third year. For summer schools, see page 204.

# COURSE IN METALLURGY

### METALLURGY.

This course has been discontinued, except that undergraduates in good standing in the course during the session of 1919-20 will be permitted to complete the requirements for the degree in accordance with the following schedule.

## FOURTH YEAR

#### (1920-21 only)

	Subject Number	Lectures per week		Laboratory, etc., periods per week		For details see	
		First Term	Second Term	First Term	Second Term	page	
Electro-Chemistry Electro-Metall. and Lab. Engineering Economics. †Engineering Law (alt.) General Metallurgy Industrial Chemistry, Inorg †Inorg. Chemistry (alt.) †Inorg. Chemistry (alt.) Metallurgy Metallurgy Colloquium Metall. Lab Metall. Lab. Metall. Mach. and Design. †Military Science (alt.) Ore Dressing and Lab. †Ore Deposits and Economic Geology (alt.) †Petrog. and Lab. (alt.) *Sum. Sch. Metal Works Summer Essay	70 275, 276 172 175 271 68 72 67 272 277 274 278 400 2\$9, 300 148 146 267 134	2  2 2 2 2 2  2  2 2 2 1 1 1 	··· 2 ··· 1 2 ··· 2 1 3 1 ··· 2 ··· 2 1 3 1 ··· 2 ··· 1 2 ··· 1 2 ··· 2 ··· 1 2 ··· 2 ··· 2 ···· 2 ··· 2 ···· 2 ··· 2 ····· 2 ··· 2 ··· 2 ···· 2 ··· 2 ··· 2 ···· 2 ··· 2 ··· 2 ··· 2 ···· 2 ···· 2 ···· 2 ···· 2 ···· 2 ···· 2 ···· 2 ···· 2 ····· 2 ····· 2 ····· 2 ······ 2 ····· 2 ········	··· ··· ·· ·· ·· ·· ·· ·· ·· ·· ·· ·· ·	  2  2 2 1  1 	218 241 230 230 240 218 218 218 217 240 241 240 241 242 229 228 240 226	

†Students taking Military Science (400) need not take any of the other alternative subjects 72, 146, 148 and 175. • Other students will take Engineering Law (175) and one of the subjects 72, 146 and 148, but the lectures given will be so arranged as to give these courses equal weight. \*Metallurgical summer school (267) is taken at the end of the third year.

#### VII. MINING ENGINEERING.

Specialization does not begin until the third year, when an elementary course in metallurgy is given and the professional courses in mining, ore-dressing and fire-assaying are begun, but the chief work is still in such fundamental science subjects as applied mechanics, chemistry, geology, mineralogy, and mechanical engineering.

The fourth year, on the other hand, is very largely given up to technical work in mining, ore-dressing, economic geology, metallurgy, and electrical engineering, and two elective alternative lines of study are offered, both including the essential subjects of the Mining Course and leading to the degree, but each permitting of a considerable amount of specialization, the first (a) in advanced petrography and geology, the second (b) in mining and ore-dressing machinery.

In both cases the fourth year work includes the equivalent of at least two full days per week in the laboratories and drafting room of the mining department, and in the second term each student is required to prepare a thesis giving the result of an extended individual experimental investigation.

A field school in mining, ore-dressing and geology is held between the third and fourth years, the work ordinarily beginning immediately after the close of the April examinations. From four to six weeks are spent in travel, during which a number of mines and concentrators are visited and critically studied under the direction of the departmental staff.

Facilities are also afforded in the department to graduate students who wish to do advanced work in mining or ore-dressing.

# FIRST AND SECOND YEARS.

As in other Engineering Courses. For details, see pages 186 and 187.

#### COURSE IN MINING ENGINEERING

SUBJECT	Subject Number		tures week	Labor etc., p per '	For details see	
		First Term	Second Term	First Term	Second Term	page
Economics. Geology, General. Inorg, Qual. Anal. and Lab Mine Mapping. Mech. Eng. and Lab. Gen. Element. Metall. Mineralogy. Mineralogy, Determinative. Mining Engineering. Ore Dressing and Lab. Strength of Mats. and Lab. Struct. Design. Surveying. Surveying Field Work. Sum. Reading or Essay	$\begin{array}{c} 171\\ 263\\ 141\\ 59,\ 60\\ 293\\ 226,\ 228\\ 261\\ 142\\ 143\\ 291\\ 292\\ 87,\ 88\\ 90\\ 352\\ 354\\ 133\\ \end{array}$	1 2 1  2 2 2  2 2  2  2 	2  2  2  2 2 2 2 1 	2 3/3 1 1  2   	··· <sup>1</sup> /4 2 ·· 1 <sup>1</sup> /2 ·· ·· ·· ·· ··	230 238 242 234 234 238 228 241 241 220 221 247 247 247 206

#### FOURTH YEAR

$\begin{array}{c} 111, 112 \\ 175 \\ 149 \\ 152 \\ 101 \\ 271 \\ 400 \\ 71 \\ 297 \\ 298 \\ 302 \\ 148 \\ 299 \\ 300 \\ 301 \end{array}$	$\begin{array}{c} 2\\ 2\\ 1\\ 1\\ 1\\ 2\\ 2\\ 1\\ \\ \\ \\ \\ \\ \\ \\ \\$	$\begin{array}{c} & & & & \\ & & & & \\ & & & & \\ & & & & $	$\begin{array}{c} \vdots \\ 1 \\ \vdots \\ 3 \\ 2 \\ \vdots \\ 4 \\ \vdots \\ 4 \\ \vdots \\ 1 \\ 1 \\ 2 \\ 1 \\ 2 \\ 1 \\ 2 \\ 1 \\ 2 \\ 2$	1\$  1*  1†  2   3	230 225 230 229 229 223 240  218 242 242 242 242 242 242 242 242 242
301 146 147 294 154			11285  1* 	1. 25 2.	Contraction in
	$\begin{array}{c} 111, 112 \\ 175 \\ 149 \\ 152 \\ 101 \\ 271 \\ 400 \\ 71 \\ 297 \\ 298 \\ 302 \\ 148 \\ 299 \\ 300 \\ 301 \\ 146 \\ 147 \\ 154 \\ \end{array}$	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$\begin{array}{c ccccccccccccccccccccccccccccccccccc$	$ \begin{array}{c ccccccccccccccccccccccccccccccccccc$

†Students taking Military Science omit the whole of Engineering Law (175)
and 12 lectures each in Mining Machinery (298) and Ore Deposits (148).
\*For students taking the Mining Geology Alternative Course.
§For Students taking the Mining Engineering Alternative Course.
Note:-Mining Field work at end of third year. See page 244.
Surveying Field Work, between the second and third years. See page

247. Geological Field Work, between the third and fourth years. See page 22)

## SUMMER SCHOOLS.

Undergraduates are required to attend Summer Sessions as specified below. The work is set forth in detail under the subject numbers referred to.

Except as noted Classes will begin on May 2nd, and will close on May 28th, 1921.

COURSE	Students entering Second Year		Stud ente Third	ring	Students entering Fourth Year	
	Subject No.	Page	Subject No.	Page	Subject No.	Page
Architecture. Chemistry. Chemical Engineering. Civil Engineering. Elect. Engineering.	347 347 347 347 347	247 247 247 247 247	*263, 264 54, 55 354	239 215 247	*361	··· 248
Mechanical Engineering	347	247.	233 234	$235 \\ 235$		•••
Metallurgical Eng	347	247	54, 55	215	267 267	240 240
Mining Engineering (alt.)a Mining Engineering (alt.)b	347 347	247 247	354	247 247		$230 \\ 244 \\ 244$

\*These schools are held during the month of September. †This school is held in the ten days immediately preceding the beginning of the first term.

# SUMMER ESSAYS AND SUMMER READING

# **SESSION 1920-21**

# 1. For Students entering the Second Year.

All students entering the second year, except those in the course in Architecture (see below), will be required to read not less than three books from Group "A" and one book from Group "B" in the following list:—

# "A"

Macaulay—Essays on Hampden, Walpole, Pitt, Chatham and Hastings. No. 225, Everyman's Library, J. M. Dent & Sons, Limited. Withers—''Poverty and Waste." E. P. Dutton & Company. Ferrand—''The Development of the United States." Houghton Mifflin Company. Parkman—''Montcalm and Wolfe." Little Brown Company. Goldwin Smith—''Reminiscences." Macmillans, London and Toronto.

"B"

Thackeray—"Vanity Fair." No. 298, Everyman's Library, J. M. Dent & Sons, Limited. George Eliot—"Mill on the Floss." No. 325, Everyman's Library, J. M. Dent & Sons, Limited. Stevenson—"Kidnapped." Cassells, London; Burt, New York.

Students in the course in Architecture must read the following books:-

Sturgis, Russel-"How to Judge Architecture."

Lytton, Lord-"Last Days of Pompeii."

Students in the course in Architecture must also either spend five weeks in the office of an architect or contractor, or prepare thirty-five reasonably large freehand sketches in any desired medium.

All students will be required to pass an examination in the summer reading at the opening of the session. A maximum of 100 marks will be allowed for this reading.

# 2. For Students entering the Third Year.

Students entering the third year, except those in the course in Architecture (see below), must either

- (a) Follow a course of summer reading, or
- (b) Prepare an essay.

(a) The summer reading required is Shadwell's Industrial Efficiency (Longmans, Green & Co., 1913), on which an examination will be held at the opening of the session. The same number of marks are allotted for this reading as for the essay.

(b) The essay must in all respects follow the specifications laid down for essays submitted by students entering the fourth year, except that it may be shorter. All rules and regulations governing the fourth year essays, as set forth below, also apply to the third year essays. (See section 3.)

Students in Electrical Engineering or Mechanical Engineering electing to write an essay and who are not engaged during the summer on any engineering, scientific or industrial work which would afford a subject for an essay, may write on one of the following subjects:—

(Electrical Engineering students.)

- (1) The application of Electric Power to Industrial Establishments.
- Relation between Fundamental, Electrical and Mechanical Units.

(Mechanical Engineering students.)

- (1) Oil Fuel under Boilers.
- (2) Industrial Safety.
- (3) Shop Jigs and Gauges.

Students in Mining Engineering who are for any reason unable to write on some engineering work of which they have personal knowledge will be required to take the summer reading (a).

> Lethaby—"Mediaeval Art, 1912." (Everyman's Library, Dent.) De Joinville's "Chronicles of the Crusades." (Everyman's Library, Dent.)

Students in the course in Architecture must either spend five weeks in the office of an architect or contractor, or prepare thirty-five reasonably large freehand sketches in any desired medium.

# 3. For Students entering the Fourth and Fifth Years.

Students entering the fourth year, except those in the course in Architecture (see below), are required to prepare an essay during the summer,

# SUMMER ESSAYS AND SUMMER READING

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to be handed in at the Dean's Office not later than 5 p.m. on Monday, October 11th. A maximum of 100 marks, or nearly 10% of the total marks for the year, is given for these essays.

The essays should be from 2,000 to 5,000 words in length. They should be illustrated by drawings, sketches, and (when desirable) by photographs, specimens, etc.

No essay compiled from books alone will be accepted unless the student has obtained in advance the permission of the head of his department to prepare such an essay.

The most acceptable subject for an essay is a critical description of the work on which the student is engaged during the summer, but a description of any engineering, scientific, or industrial work with which he is familiar will be accepted.

Students in Electrical Engineering, or Mechanical Engineering, who are not directly connected with any such work, may write on one of the following subjects:—

# (Electrical Engineering students.)

- (1) Long Distance Power Transmission.
- (2) Variable Speed Drives for Machine Tools.
- (3) The Substitution of Electricity for Steam on Railroads.

## (Mechanical Engineering students.)

- (1) Heavy-oil Engines.
- (2) Central Station Heating.
- (3) Engineering Ethics.
- (4) Industrial Relations between Capital and Labor.

The essays must be well expressed, and written in precise, well chosen, grammatical English. Advantage may be taken of any source of information in the preparation of the essays, but due acknowledgment must always be made of all the authorities and books which have been consulted. In judging of the value of the essays, account will be taken not only of the subject matter, but also of style and literary construction.

All essays when handed in will become the property of the department concerned and will be filed for reference. Students may submit duplicate copies of their essays in competition for the students' prizes of the Engineering Institute of Canada, or of the Canadian Mining Institute.

The essays must be written on paper of substantial quality and of a size approximately  $8\frac{1}{2} \times 11$  inches.

Students in the course in Architecture are not permitted to submit an essay, but must read the following books:—

# (Fourth Year)

Lethaby. "Mediaeval Art." (Everyman's Library, Dent.) De Joinville's "Chronicles of the Crusades." (Everyman's Library, Dent.)

# (Fifth Year)

Morris, W. "Lectures on Art." Santayana, G. "The Sense of Beauty." N.Y. 1896.

They will be required to pass an examination on this reading at the opening of the session. A maximum of 100 marks will be allowed for the work.

In addition to this reading, students in the course in Architecture must either spend five weeks in the office of an architect or contractor, or prepare thirty-five reasonably large freehand sketches in any desired medium.

# SUBJECTS OF INSTRUCTION.

The following courses are subject to such modifications during the year as the Faculty may deem advisable,

#### DEPARTMENT OF ARCHITECTURE.

# A.-Design.

Students register for second, third, fourth or fifth year Design according to their year in the University. They are graded for purposes of instruction into grades A, B, C and D, and are promoted in these grades according to ability. All students before receiving the degree must pass fifth year Design and qualify in grade D.

I. GRADE A. Simple problems in composition of a monumental nature, not involving difficulties of plan.

2. GRADE B. The Design of domestic and small public buildings involving simple plans and the grouping of elements.

3. GRADE C. The design of public buildings.

4. GRADE. D. A series of problems involving the plan, structure and lay-out of complex buildings and groups of buildings. The diploma design for graduation is done in the second term of the final year.—Mr. Nobbs.

# B.—Aesthetic.

The theoretical courses that follow are intended to develop a sense of critical judgment in the student, and to emphasize the fundamental principles of composition and design.

5. THE ELEMENTS OF ARCHITECTURE (24 lectures).

The five orders of Vignola, pedestals, pediments, intercolumniation and superposition of orders, arches, vaults, domes, roofs, openings, walls, and stairs. Mr. Carless.

6. THE ELEMENTS OF COMPOSITION (24 lectures).

Analogies in the arts, proportion, scale, expression, decoration, massing, unity, symmetric and asymmetric grouping, individuality,

horizontality and verticality. General rules of composition in plan; architectural acoustics and the æsthetic properties of materials.

Reference Book:-Eléments et théorie de l'Architecture. Gaudet

7. THEORY OF DESIGN (24 lectures).

(a) Aesthetic Practice:—Pure design; the function of ornament; the moral logic of ornamental motif; the material logic of ornamental treatment; evolution of form; the placing of ornament; classification of significant ornament; (b) Aesthetic Theory:—The history of æsthetic enquiry; the phenomena of perception, pleasure, pain, and expression; the art impulse, and the relation of beauty to the arts; subject, emotional content and medium in works of art; the criteria of excellence. Prof. Nobbs.

Books:-The Mistress Art, Bloomfield; The Fine Arts, Baldwin Brown.

8. THEORY OF PLANNING (24 lectures).

(a) Elements of Planning:—The relation of planning to external compositions, dimensions and arrangements, scale, aspect and prospect; (b) Domestic Buildings:—Residential architecture of all types, stables, garages, etc.; (c) Ecclesiastical Art:—Church plans in relation to the service; (d) Special Types:—Fire stations, baths, hospitals, schools, factories, libraries, etc.; (e) Public Buildings:—Town halls, municipal buildings, court houses, Parliament buildings, large halls. Prof. Nobbs.

Text-books :- The Principles of Planning Buildings, Marks.

ORNAMENT AND DECORATION (48 lectures and 48 drafting periods), 9, 10, 11 and 12.

9. DECORATIVE HERALDRY. The place of heraldry in the arts; the laws of heraldry, heraldic art of different periods; modern practice and tendencies; symbolism and significant ornament. Prof. Traquair.

*Text-book*:—Decorative Heraldry, Eve. *Reference*:—The Art of Heraldry, Fox-Davies.

IO. ORNAMENT IN FORM. Plaster work, terra cotta, stone carving, architectural sculpture, wood carving and furniture design are dealt with from the point of view of the evolution of form in distinctive materials, influenced incidentally by the prevailing taste of different periods. Prof. Traquair.

Reference Books:-Plastering, Plain and Decorative, Millar; The Art of the Plasterer, Bankart; Mediæval Figure Sculpture in England, Prior.

II. METAL WORK. Wrought iron, cast iron and bronze, beaten work in copper, brass and silver are dealt with technically and historically. Prof. Traquair.

Reference Books:-English and Scottish Wrought Iron Work, Murphy; Ironwork, Starkie Gardner; Leadwork, Lethaby.

#### ARCHITECTURE

12. COLOUR DECORATION. Stained glass, mosaic of various kinds, inlays, the use of coloured materials in external and internal design, mural decoration, and the analysis and construction of pattern. Prof. Traquair.

Reference Books :-- Vitraux, Merson; Windows, Day.

# C.-Archæology.

13. GENERAL HISTORY. Mediæval and Modern Europe (50 lectures).

For particulars of the course, which constitutes the second year history course in the Faculty of Arts, see page 138. Prof. Fryer.

14. ANCIENT AND CLASSIC ARCHITECTURE (48 lectures).

The architecture of the ancient Egyptians, Chaldæans, Assyrians and Persians; the Minoan civilization; architecture of the Dorian and Ionian Greeks, with special attention to the refinement of form in Hellenic art; the architecture of Rome and Byzantium to the fall of the Byzantine Empire. Prof. Traquair.

*Text-books*:—Banister Fletcher's History of Architecture; Anderson and Spier's Architecture of Greece and Rome.

15. MEDIAEVAL ARCHITECTURE (48 lectures).

The rise of the Romanesque schools, from the decline of the Western Roman Empire to the XI century; the evolution of ecclesiastical architecture in France and England to 1500 A.D.; the Gothic schools of Europe and the evolution of military and civil architecture. Prof. Traquair.

Text-book :- Power's Mediæval Architecture.

16. RENAISSANCE ARCHITECTURE (48 lectures).

The beginning of the Renaissance in Italy and its influence on architecture from 1400 A.D. to 1600 A.D.; the Renaissance in France from Francis I to the Revolution; the earlier and later phases of the Renaissance in England and English architecture during the XVIII century. Prof. Traquair.

Text-books:—Anderson's Italian Renaissance Architecture; W. H. Ward's French Renaissance Architecture; R. Bloomfield's Short History of Renaissance Architecture in England.

17. MODERN ARCHITECTURE (48 lectures).

The Gothic revival in England; the influence of Pugin, Ruskin and Morris and the Preraphaelites; the Arts and Crafts movement; the Eclectic schools; Shaw and the Free-Classicists; taste in Europe during the XIX century; the classic schools and the official school; the national revivals in Russia and Germany; the Secession and the "Art Nouveau"; the colonial traditions of New England and the Spanish and French districts; the Beaux Arts influence; the English influences; the Modern School; city planning in Europe and America; the Historic Architecture of Quebec and Canada. Prof. Traquair.

### D.-Science.

MATHEMATICS 192, 193, 194, Algebra (ior the first term only), Trigonometry and Mechanics. For full paticulars, see page 231.

42 and 43. PHYSICS AND PHYSICS LABORATORY (48 lectures and 24 periods).

The instruction includes a fully illustratid course of experimental lectures on the general principles of physic, embracing the laws of energy, heat, light, electricity and sound. Prof. Eve.

346, 347 and 348. SURVEYING. (Full course: 4 weeks field school, 48 lectures and 24 draughting periods, see lage 247.)-

22 and 23. HYGIENE OF BUILDINGS. (2. lectures in first term, I2lectures and working out of one graphical poblem in second term.)

22. Light and air, water, sanitary plumbing, sewage disposal. First term. Dr. Starkey.

23. The heating and ventilation of buildings. Second term. Prof. McKergow.

# E.-Construction.

The second year work covers the ordnary building trades and detailing where calculations of a complicated kind are not involved. The third year work deals with structural problems involving calculation, while in the fourth year problems in structural design are worked out.

24 and 25. BUILDING CONSTRUCTION AND BUILDING DETAIL (24 lectures, 48 draughting periods).

Building materials, brickwork, masonry carpentry, roofing, etc.; joinery of doors, windows, etc., and the finishing trades, such as plastering, painting and plumbing; underpinning, shoring, centering and forms. General working drawings ar prepared, and building works in progress are visited. Mr. Turner.

26 and 27. STRUCTURAL ENGINEERING AND STRUCTURAL ENGI-NEERING (Draughting) I (48 lectures and 24 draughting periods). Graphical methods of calculating and the trength of materials employed in construction. Mr. Thomson.

28 and 29. STRUCTURAL ENGINEERING I AND STRUCTURAL ENGINEERING (Draughting) II (24 lectures and 48 draughting periods).

Theory of masonry arches and domes, stel construction in trusses and mill-building columns, girders, wind-)racing and fire-proofing. Specifications for and inspection of structural steel work. Mr. Thomson.

30 and 31. STRUCTURAL ENGINEERING II AND STRUCTURAL ENGI-NEERING (Draughting) III (24 lectures and 48 draughting periods).

Theory and practice of reinforced concete; foundations and retaining walls. Mr. Thomson.

#### ARCHITECTURE

Structural Engineering II, and Structural Engineering III, with the draughting periods allotted to each, are taken by the third and fourth years together, and are given in alternate years.

## F.—Architectural Practice.

131. ENGLISH COMPOSITION (24 lectures with exercises).

Instruction is provided with the Applied Science first year classes. (See page 227). Mr. Latham.

31. PROFESSIONAL PRACTICE (24 lectures with exercises).

Structure of specifications and general clauses; specifications for all trades; conditions of contract; agreements; building by-law; estimates, reports, professional ethics. Mr. Turner.

175. ENGINEERING LAW (24 lectures).

Instruction is provided with the Applied Science fourth year classes (see page 230).

#### G.-Drawing.

32, 33, 34 and 35. ARCHITECTURAL DRAWING (84 periods of three and four hours).

The work in this course is in direct connection with the lectures in archæology.

32. Drawings of the Classic orders are prepared direct from the large models in the museum, and arch, vault, dome and roof diagrams are also prepared from documents.

33. Drawings of the Greek orders are prepared with special reference to their structural development and design. Restorations of classic buildings are prepared from the documents in the reference room.

34. Examples of mediæval architecture are studied; sketch plans and elevations of important works are set up, and detail drawings are prepared from documents.

35. A special study is made during the first term of Italian Renaissance examples; the XVI century architecture of France and England and late examples of French or English fully developed Classic are studied. Mr. Carless.

36. HISTORICAL DRAWING. The advanced study of one or more buildings of an historical style by means of large scale drawings.

37, 38, 39, 40. FREEHAND DRAWING (48 periods).

Drawing in pencil or charcoal from casts of architectural ornament, architectural fragments and parts of the figure. Mr. Dyonnet.

18. ARCHITECTURAL GEOMETRY I. (24 lectures and 24 periods).

Geometrical drawing and descriptive geometry, shades and shadows in their application to architectural forms and the intersections of geometrical solids. Mr. Carless.

19. ARCHITECTURAL GEOMETRY II (24 periods with occasional explanatory lectures).

A continuation of (18) to include perspective and elementary rendering. Mr. Carless.

41 and 42. MODELLING (one period a week of two hours, extended over the fourth and fifth years).

The student first studies form directly from nature, and later on conventionalizes the forms with which he has become familiar for decorative purposes. The Architectural museum affords many examples from different periods of the adaptation and abstraction of natural motifs in ornament. They are used to show the spirit in which to work out ornament, and are not copied directly. Models of design on which the students are engaged are also prepared, and casting is taught. Mr. Dyonnet.

44, 45, 46, 47. An essay on an historical or theoretical subject is required from all students excepting those of the first year. This essay is to be prepared during the session.

48. SUMMER WORK.

During the vacation following the close of the first, second and third years, the students in Architecture are required to read and be prepared to pass an examination on a selected theoretical, æsthetical, or historical architectural work, and in addition to this, to spend at least five weeks in the office of some architect or contractor; the period of such employment to be certified by a letter from the employer. For the students who for any reason find it impracticable to do office work, the substitution of thirty-five reasonably large freehand sketches, rendered in any desired medium, will be considered an equivalent.

For summer reading, see page 205.

### CHEMISTRY

## DEPARTMENT OF CHEMISTRY.

PROFESSOR :R	. F. RUTTAN.
Associate Professors :	NEVIL NORTON EVANS. F. M. G. JOHNSON. V. J. HARDING.
	∫V. K. Krieble. Otto Maass.
Demonstrators :— ·	G. S. WHITBY. C. GREAVES. W. McG. MITCHELL. C. A. WRIGHT. J. F. LOGAN. G. M. FOWLER. L. AMDUR. W. F. EMMONS.

#### Second Year Lectures.

51. (See also 75.) GENERAL CHEMISTRY. The course includes the history, properties, methods of preparation of the most important elements and compounds, with their industrial applications; classification; general laws and principles; and the fundamental theories of the science. Three hours a week for all students in Engineering. Professor Evans.

Text-book :- Macpherson and Henderson, General Chemistry.

54. INORGANIC QUALITATIVE ANALYSIS. A course dealing with the principles of analytical chemistry—nature of solutions, precipitation, etc., explanatory of the work done in the laboratory (course 55). One lecture a week in the second term, or five lectures a week for the first three weeks of the summer session. Professor Evans and Mr. Amdur.

Text-book :-- W. A. Noyes' Qualitative Analysis. Reference :-- Stieglitz, Qualitative Chemical Analysis.

# Second Year Laboratory.

52. GENERAL CHEMISTRY LABORATORY. Practical work designed to accompany and illustrate the lectures of course 51. The course includes the construction and use of ordinary apparatus, the preparation and study of important elements and compounds, qualitative analysis, and simple quantitative determinations, both gravimetric and volumetric, including combining weights, standardisation of solutions, hardness of water, etc., one period for all students of Engineering. Professor Evans and Messrs. Mitchell and Fowler.

55. INORGANIC QUALITATIVE ANALYSIS LABORATORY. An extended course. Four periods a week in the second term, for students of the Chemistry and Metallurgy Courses; or equivalent time in the Summer

School for students of the Chemical and Metallurgical Engineering Courses. Professor Evans and Mr. Amdur.

Text-books :- W. A. Noyes' Qualitative Analysis.

# Third Year Lectures.

56. ORGANIC CHEMISTRY. A course in general elementary organic chemistry. Three lectures a week during the first term and two during the second term. Drs. Ruttan and Krieble.

Text-books:-Perkin and Kippirg's or Remsen's Organic Chemistry.

58. PHYSICAL CHEMISTRY. An ntroductory course following the development of chemical theory, including vapour densities, molecular weights, the mass law and the phase rule.

Two lectures a week during the first term. Dr. Maass.

Text-book :- Theoretical and Physical Chemistry, Bigelow.

59. INORGANIC QUALITATIVE ANALYSIS. A course explanatory of the work done in the laboratory. One lecture a week in the second term for Mining Engineers only. Professor Evans.

Text-book :-- W. A. Noyes' Qualitative Chemical Analysis.

61. INORGANIC QUANTITATIVE ANALYSIS. A course on the general principles involved in quantitative analysis. One lecture a week during the first term of the third year. Dr. Johnson.

Text-book:-Cumming and Kay. For Reference:-Treadwell's Quantitative Analysis.

### Third Year Laboratory.

57. ORGANIC CHEMISTRY. A course on the preparation, detection and analysis of the commoner organic compounds. Two periods a week in the second term. Dr. McLean and Mr. Whitby.

Text-book :- Gattermann's Orgaric Preparations.

60. INORGANIC QUALITATIVE ANALYSIS. A course adapted to the requirements of Mining Engineers. Two periods a week in the second term. Professor Evans and Mr. Amdur.

62. (See also 76.) INORGANIC QUANTITATIVE ANALYSIS. An extensive course on gravimetric and vclumetric method. Three periods per week for Chemical Engineers (Course III.) Dr. Johnson and Mr. Greaves.

Text-book :- Cunningham and Kay, Quantitative Analysis.

# Fourth Year Lectures and Laboratory.

73. ORGANIC AND FOOD CHEMISTIV. A course on the constitution and analysis of proteins, carbohydrates, fats and allied substances. The course also includes the estimation of food values, enzyme action and colloidal chemistry. A course of cne lecture per week and three

#### CHEMISTRY

laboratory periods during the second term. Dr. Ruttan, Dr. Krieble and Mr. Whitby.

Text-book :-- Leach, Food Inspection and Analysis.

64. ADVANCED ORGANIC CREMISTRY. During the autumn term the course comprises the development of general theoretical organic chemistry, and a series of specal lectures on the carbohydrates and the terpenes.

The winter term is devoted to the organic chemistry of nitrogen, including the proteins, purins, akaloids, etc. Drs. Ruttan and Harding.

Text-book:-Perkin and Kipping's Organic Chemistry. For reference:-Recent Advances in Organic Chemistry, Stewart; Advanced Organic Chemistry, Cohen; Organic Chemistry of Nitrogen, Sidgewick.

65. ADVANCED ORGANIC LABORATORY. This course includes the application of the important general organic reactions, quantitative organic determinations, a study of the improvement in conditions of reaction and the preparation of some typical organic dyes and synthetic drugs. Drs. Krieble, MacLean and Mr. Whitby.

The student is required during this course to take a complete course in gas analysis under Dr. Johnson.

66. PHYSICAL CHEMISTRY. Two lectures a week on general physical chemistry, including the kinetic theory, thermo-chemistry, electron theory in chemistry, chemistry of radioactive substances, etc.

Students will be required to work problems dealing with the subject matter of the lectures.

Two laboratory periods a veek in the first term are devoted to typical physico-chemical measurements. One laboratory period a week during the second term is devoted to physical chemical methods of analysis. Dr. Maass.

Text-books:--Nernsts' Thecretical Chemistry; Findlay's Physico Chemical Measurements.

For Reference :- Ramsay's Text-books of Physical Chemistry.

67. (See also 77.) INORGANIC LABORATORY. The lectures deal with the special methods of analysis of iron and steel, alloys, gas and water. One lecture and four periods a week in the first term and five • periods in the second. For Chemical Engineering students. Dr. Johnson and Mr. Greaves.

The laboratory work is a continuation of courses 61 and 62 and is adapted both in extent and in subject matter to the needs of individual students, various other courses being allowed as partial alternatives.

For reference:—Lord and Demorest, Quantitative Analysis; Treadwell's Quantitative Analysis; Blair, Chemical Analysis of Iron; Brearley and Ibboson, Analysis of Steel Works Materials.

68. INDUSTRIA. CHEMISTRY, INORGANIC. A course, both theoretical and descriptive, on the more important inorganic chemical industries. Special lectures are given by chemical engineers from outside the University during the first term, and visits to works are made during the session. Dr. Johnson.

69. INDUSTRIA. CHEMISTRY, ORGANIC. This course is given during the second half of the session, and includes the chemistry of paper and pulp, sugar, starch and glucose, soap and fats, distillation of wood and the purification of the products, etc. This course is given by Dr. Ruttan, with special lectures by several chemical engineers from the city and district who are specialists in one or other of the industries.

70. APPLIED ELECTRO-CHEMISTRY. The laws of electrolysis and of solutions are studied from the standpoint of the osmotic theory. Primary and secondary batteries, electro-plating, polarisation and the preparation and electro-chemical behaviour of the rarer elements used in incandescent lanps are discussed. The more important technical processes are studied and typical substances prepared in the laboratory. Two lectures in the first term. Dr. Maass.

For reference:-Le Blanc, Elements of Electro-chemistry; Blount, Practical Electro-clemistry.

71. MINERAL ANALYSIS. A laboratory course specially designed for Mining Engineers. Four periods a week in the first term. Dr. Johnson and Mr. Greaves.

Text-book :- Lord and Demorest, Quantitative Analysis. For reference :- Olsen's Quantitative Analysis.

72. ADVANCED INORGANIC CHEMISTRY. A course of lectures on inorganic chemistry, discussing the elements and their compounds in accordance with the general principles of physical chemistry.

Two lectures a week throughout the session. Dr. Johnson.

74. HISTORY & CHEMISTRY. A short course dealing with the development of chanistry from the historical standpoint. One lecture a week in the second term. Dr. Maass.

76. INORGANIC QUANTITATIVE ANALYSIS. This course is similar to course 62, but is more extended. Six periods per week for chemists. Dr. Johnson.

77. INORGANIC LABORATORY. This course is similar to course 67, but is extended to include special preparations. One lecture and six periods in the first term and seven periods in the second for chemists. Dr. Johnson.

#### CIVIL ENGINEERING

#### DEPARTMENT OF CIVIL ENGINEERING AND APPLIED MECHANICS.

R. E. JAMIESON.

ASSISTANT IN CHARGE OF TESTING LABORATORY:-S. D. MACNAB.

DEMONSTRATORS :-- {-

# Second Year.

81. MATERIALS OF CONSTRUCTION. Manufacture and properties of cast iron, wrought iron, crucible, bessemer and open hearth steel; principal alloys; considerations governing selections of materials; manufacture and properties of Portland and natural cements; limes; concrete; stone and brick masonry; principal kinds of timber used for engineering purposes; preservation of timber; discussion of standard specifications.

Required of all engineering students. One hour per week. Prof. MacKay.

83. MECHANICS. The general principles of statics and of the dynamics of a particle are developed in the lectures, and numerous examples illustrating the application of mechanics to engineering problems are worked out.

The course includes the following:—*Statics* (analytical and graphical) comprising equilibrium of forces; funicular and force polygons; centre of gravity; bending moment and shear; forces in framed structures; friction; hydrostatics. *Dynamics* comprising work, power, energy; relative velocity; impact of jets; variable motion, both straight line and curvilinear (with graphic methods); curved track, conical pendulum, balancing; motion under variable force; simple harmonic motion (pendulums and oscillation of springs); velocity and acceleration in machines, inertia forces, crank effort diagrams; moment of inertia, fly-wheels, etc.

The mathematical courses in calculus are taken concurrently, and calculus methods are used freely. Four hours per week. Prof. Brown, Dr. Batho, Mr. Lamb and Mr. Jamieson.

Text-book :-- Morley, Mechanics for Engineers.

## Third Year.

86. MECHANICS. The work of the second year course in mechanics is extended, and the dynamical equations for the motion of a rigid body in two dimensions are deduced. Numerous examples

are worked in detail, including problems on fly-wheels, kinetic energy of bodies having translation and rotation, oscillation of a rigid body about a fixed axis, impulse, etc. The elementary principles of the gyroscope are considered. Two lectures per week, first term. Prof. Brown and Dr. Batho.

Text-book :-- Morley, Mechanics for Engineers.

87. STRENGTH OF MATERIALS. This course deals with the fundamental principles of the strength of materials. It includes the following:—Stress, strain, resilience, and the elastic properties of materials used in construction; bending moment and shearing force diagrams; strength, curvature, and deflection of beams; continuous beams; cantilever beams and the like; simple problems on rolling loads; reinforced concrete beams; the strength of shafting; spiral springs; columns; bending combined with tension or compression; elementary consideration of compound stresses; distribution of shearing stress on various sections, etc.

Required of all engineering students. Two lectures per week during session. Prof. Brown, Dr. Batho and Mr. Lamb.

Text-book :- Morley, Strength of Materials.

88. STRENGTH OF MATERIALS LABORATORY. The work is arranged to illustrate the principles of the lecture course in strength of materials (87), and includes the following :- Tension tests of various materials in 100-ton and 30-ton testing machines; determination of stress-strain diagrams by automatic recorders and by extensometers and scales; deflection of beams, wood and metal; torsion of shafts; deflection and vibration of spiral springs and torsional oscillations of wires; the moment of inertia of fly-wheels by oscillation and falling weight tests; determination of Young's modulus for various materials; complete tests of Portland cement; efficiency of chain blocks, experiments on tension and twisting of wires; bending combined with torsion as in shafting; together with demonstrations on the large testing machines of tensile tests of various materials, the breaking of timber and reinforced concrete beams and small columns, the compressive strength of concrete, bricks, mortars, etc. Three hours per week, second term. Prof. Brown, Dr. Batho, Mr. French.

89. FOUNDATIONS AND MASONRY. Borings; bearing power of soils; piles and pile driving; concrete piles; footings; grillages; underpinning; foundations under water; cofferdam, open dredging, pneumatic and freezing processes; estimation of quantities from drawings; estimates of costs.

Required of Civil Engineering students. Four hours per week, second term. Prof. MacKay, Mr. Dodd.

*Text-book*:—Foundations of Bridges and Buildings, Jacoby and Davis.

## CIVIL ENGINEERING

90. STRUCTURAL DESIGN. Problems in the design of beams, plate girders, columns, roof trusses, knee bracing, etc.; working drawings; reinforced concrete; estimates of quantities; estimates of cost. Required of Students in Courses III, IV, VI, VII and IX. Four hours per week, second term. Mr. Lamb and Mr. Jamieson.

Reference Books:--Ketchum's Structural Engineer's Handbook; Morris, Structural Design; Cambria Steel.

92. RAILWAY ENGINEERING. The locomotive and its work; locomotive and grade problems; effect of distance, rise-and-fall and curvature on train mile costs; estimate of probable receipts and expenditures; economics of location, reconnaissance, preliminary, and location surveys; turnouts, yards and terminals; details of construction; materials of construction. Required of Civil Engineering students: Two hours per week. Mr. Lamb.

93. RAILWAY ENGINEERING. The paper location of a railway, map, profile, earthwork, mass diagram, overhaul, velocity profile, bill of material and cost estimate of same; the design of a freight yard, detailing of switches and complicated lay-outs and bill of track material. Required of Civil Engineering students. Six hours per week. Mr. Lamb.

97. HYDRAULICS. The fundamental principles of hydraulics are considered and applied to problems on the discharge of orifices, notches, weirs, pipes and open channels under varying conditions. The theory of impact of jets and its application to turbines is also dealt with. Required of Civil Engineering students in the third year and of Mechanical and Electrical Engineering students of the fourth year. Two hours per week, first term. Prof. Brown.

Text-Book :- Hydraulics and its Applications, Gibson.

98. HYDRAULIC LABORATORY. The course is illustrative of the principles considered in course 97, and is taken concurrently. The work includes the following experiments:—Measurement of discharge from orifices, notches and pipes, both straight and bent, to determine hydraulic coefficients; pressure of jets impinging on vanes; tests of Venturi meter, hydraulic ram, Pelton wheel, Girard impulse turbine, etc. Three hours per week, first term. Prof. Brown, Dr. Batho, Mr. French.

#### Fourth Year.

94. THEORY OF STRUCTURES. The analysis of statically determinate framed structures under fixed and moving loads; distortion of framed structures; swing spans; braced arches and arched ribs with two and three hinges; hingeless arches in concrete and reinforced concrete; frames with redundant members.

Required of Civil Engineering students. Four hours per week, first term; eight hours per week, second term. Prof. MacKay, Mr. Jamieson.

Reference Books:-Johnson, Bryan and Turneaure's Modern Framed Structures; Marburg, Stresses in Structures.

95. STRENGTH OF MATERIALS. The course includes the following:—The bending and deflection of beams loaded in any manner; beams continuous over several supports at the same or different levels; distribution of shear and deflection due to shear; principle of work applied to deflection of beams, trussed beams and some statically indeterminate problems; bending of curved bars, and of unsymmetrical sections such as single angles, etc.; elastic strains; relation between elastic constants; strength of thick shells; earthwork theories; suspension cables; the design of floor and column systems for reinforced concrete buildings (including a critical study of standard specifications); retaining walls, etc.

Required of Civil Engineering students. Two lectures per week during the first term, and one per week during second term, with the equivalent of one-half laboratory period per week throughout the session at times appropriate to the progress of the course. Prof. Brown.

*Text-books*:—Strength of Materials, Morley; Reinforced Concrete, Taylor and Thompson, or Reinforced Concrete Construction, Vols. II and III, Hool, or Reinforced Concrete Handbook, Hool and Johnson.

96. BRIBGE DESIGN. The reason governing the selection of a particular type of bridge; discussion of the loads to which the bridge will be subjected; calculation of the stress in the several members; determination of the sectional areas and forms of the members; design of the connections; preparation of complete drawings.

Required of students in Civil Engineering. Eight hours per week. Prof. MacKay, Mr. Dodd.

Reference books:-Kirkham's Structural Engineering; Ketchum's Structural Engineer's Handbook; Waddell's Bridge Engineering.

99. HYDRAULIC MACHINES. The course includes the application of the principles of hydraulics to the determination of formulæ for the design of turbines and centrifugal pumps. Examples are worked showing the methods of finding the leading dimensions of different types of such machines. Representative machines and methods of regulation, etc., are considered in detail. The transmission of power by hydraulic pressure is also considered, and the functions of the accumulator are dealt with, along with the influence of inertia forces in the operation of such machines as reciprocating motors, pumps, riveters, etc. Two hours per week, second term. Prof. Brown.

#### CIVIL ENGINEERING

#### Text-book:-Hydraulics and Its Application, Gibson.

IOI. HYDRAULICS AND LABORATORY. A short course embodying the hydraulic principles outlined under courses 97 and 98 will be given in the first term. There will be one lecture per week, and six or more laboratory periods at hours to be arranged. Required of Mining, Metallurgical and Chemical Engineering students of the fourth year. Dr. Batho.

Text-book :- Slocum, Elements of Hydraulics.

100. MUNICIPAL ENGINEERING. (a) Sewerage. General methods and economic considerations; quantity of sewage; storm water runoff; design of sewers and appurtenances; manholes; flush tanks, catch basins, overflows, outlets, siphons, etc.; construction methods, materials and costs; estimates; maintenance and management; problems in design and estimating. (b) Sewage Disposal. Physical, chemical, biological and economic aspects of sewage treatment; disposal by dilution; screening, sedimentation, filtration, disinfection, etc.; maintenance, and management. (c) Water Supply. Quantity, quality and pressure required; rainfall and evaporation; pumping machinery; storage; aqueducts, pipe lines and distribution systems; appurtenances -valves, hydrants, etc.; purification systems; fire service; construction methods; materials and costs; estimates; problems in design and estimating. (d) Roads and Pavements. Highway economics; surveys and location; grades; cross sections; paving materials, bituminous, stone, brick, wood, concrete, etc.; construction methods; street cleaning and repairs; estimates; problems in design and estimating. (e) Waste Disposal. Composition and quantity of city wastes, ashes, garbage, rubbish, etc.; collection; disposal, dumping, land treatment, incineration, reduction, feeding to swine, etc.; costs and returns.

Required of Civil Engineering students in the fourth year. Two hours per week, first term, and five hours per week, second term. Mr. French.

Text-books:---Turneaure & Russell, "Public Water Supplies"; Metcalf & Eddy, "American Sewerage Practice," Vols. 1 and 3.

References:—Folwell, "Sewerage"; Flinn, Weston and Bogert, "Water Works Engineers' Handbook"; Blanchard and Drowne, "Highway Engineering."

105. TECHNICAL ELASTICITY. The application of Castigliano's Theorem and the Method of Least Work to rectangular frames; beams on elastic supports; reinforced concrete structures, etc.; the theory of riveted joints; Bryan's theorem with applications to the calculation by successive approximations of columns with various types of loading, lateral loads and intermediate supports; comparison with other methods; elastic stability; the vibration of structures; the general equations of elasticity with various applications, special attention being paid to approximate numerical solutions; the strength of

flat plates, etc.; the torsion of thin tubes and prisms of non-circular cross-section; the determination of stress distribution by means of polarized light. For graduates. Dr. Batho.

106. THEORY OF STRUCTURES. Secondary stresses due to rigidity of joints, eccentric connections, deflection of floor beams, etc.; frames with redundant members; influence lines for arches and other statically indeterminate structures; critical discussion of specifications for built up members in the light of tests. For graduates. Professor MacKay.

# DEPARTMENT OF DESCRIPTIVE GEOMETRY AND FREEHAND DRAWING.

This Department provides a general course in drafting office methods and a training in the ground-work necessary to prepare the student for the work required in the Engineering courses of the third and fourth years. The accurate use of drawing instruments is practised and study is made of the various projection methods commonly employed. The problems in Descriptive Geometry are especially designed to develop the power of mentally picturing unseen objects and grasping groups of details.

# First Year.

341. DESCRIPTIVE GEOMETRY. Geometrical methods; plane figures; areas; paths of points moving in planes, etc.; projections of points, lines, plane figures and solid objects; shadows, etc.

Three hours per week. Professor Armstrong.

Text-books:-Geometrical Drawing by H. F. Armstrong; Descriptive Geometry by H. F. Armstrong.

342. FREEHAND DRAWING. The object of this course is to train the eye to observe and the hand to record the essential characteristics and proportions of objects by means of sketches and diagrams of machines, etc., and to prepare dimensioned sketches from which to make scale drawings.

One hour and a half per week. Professor Armstrong.

343. LETTERING. Types and titles such as are chiefly in use in draughting offices, including single-line, block and Roman lettering, and stencils.

One hour and a half per week. Professor Armstrong.

#### ELECTRICAL ENGINEERING

# Second Year.

345. DESCRIPTIVE GEOMETRY AND PERSPECTIVE. Intersections of surfaces; intersecting planes; tangent planes; axometric, including isometric, projections; perspective projection.

Three hours per week. Professor Armstrong. Text-book:-Descriptive Geometry, Henry F. Armstrong.

# DEPARTMENT OF ELECTRICAL ENGINEERING.

PROFESSOR:-L. A. HERDT. ASSOCIATE PROFESSOR:-C. V. CHRISTIE. ASSISTANT PROFESSOR:-E. G. BURR. LECTURER:-G. A. WALLACE. DEMONSTRATORS:- {J. W. BAIN.

## Third Year.

113. ELECTRICAL ENGINEERING. The theoretical consideration of current flow in circuits; the laws of electro-magnetism and of the magnetic circuit; the theory and operating characteristics of direct current machinery; the principles of alternating current machinery. Required of students in Electrical Engineering. Three hours per week Professor Christie.

Text-book :- Christie's Electrical Engineering.

114. ELECTRICAL ENGINEERING LABORATORY. Preparation of reports; construction, handling and protection of electrical apparatus; use of instruments and precision of measurements; predetermination of the characteristics of electrical machinery; special and shop testing.

Tests are made in the Laboratory on :--Current flow in circuits; metering and controlling devices, generators, motors, boosters, balancers and motor generator sets; arc and incandescent lamps; reflectors. These tests are intended to illustrate the principles of action and the limits of the proper use of the apparatus. Students are furnished with special laboratory notes. Required of students in Electrical Engincering. Laboratory, six hours per week. Problems, two hours per week.

III. ELEMENTS OF ELECTRICAL ENGINEERING, for third year students in Mechanical Engineering and fourth year students in Civil and Mining Engineering.

A general course in electrical engineering, treating of the laws of electro-magnetism; continuous and alternating current flow in various circuits; characteristics of direct and alternating current machinery; the fundamental principles of electric lighting, power distribution and electric traction. Two hours per week. Mr. Burr. First and second terms.

Text-book:-Gray's Principles and Practice of Electrical Engineering.

112. ELECTRICAL ENGINEERING LABORATORY, for third year students in Mechanical Engineering and fourth year students in Civil and Mining Engineering.

Includes tests of direct current metering and controlling devices, dynamos, motors, boosters, motor generators and constant current machines; experiments of variable current flow in circuits; tests of alternators, synchronous motors and converters, induction motors and transformers, etc. Three hours per week. First and second terms.

# Fourth Year.

117. ELECTRICAL ENGINEERING. The treatment of alternating current circuits by vector diagrams and vector equations; the theory and operating characteristics of alternating current machinery. Required of students in Electrical Engineering. Three hours per week. Professor Christie.

Text-book :- Christie's Electrical Engineering.

118. ELECTRICAL ENGINEERING LABORATORY. Tests are made in the laboratory on alternators, synchronous motors and converters, compensators, induction motors, transformers, frequency and phase changing apparatus, potential regulators, rectifiers, etc. Students are furnished with special laboratory notes. Required of students in Electrical Engineering. Laboratory, nine hours per week.

120. ELECTRIC LIGHTING AND POWER DISTRIBUTION. The design and operation of power plants and substations. Transmission and distribution systems are taken up under the following heads:—Selection of generators, transformers, switches and auxiliary apparatus with a study of their characteristics and limitations; wiring diagrams and switchboard design; line design and construction, selection of towers, insulators and conductors, calculation of sags and spans; high voltage and transient phenomena; the protection of overhead lines, cable systems and station apparatus; industrial applications of electrical apparatus; financial considerations. This subject is required of students in Electrical Engineering. Two hours per week, first term. Dr, Herdt.

Text-book :- Standard Handbook for Electrical Engineers.

121. ELECTRIC TRACTION. Urban, inter-urban and main line electrification is taken up under the following heads:—Choice of system and apparatus; calculation of motor rating and car equipment; overhead and track construction; methods of control braking and regeneration; storage batteries and boosters; financial considerations.

This subject is required of students in Electrical Engineering./ Two hours per week, second term. Dr. Herdt.

Text-book :- Standard Handbook for Electrical Engineers.

#### ENGLISH

122. ELECTRICAL DESIGN. The electrical design of direct and alternating current machinery. Special attention is paid to the limitations of the different types of machines and to the preparations of specifications. Required of students in Electrical Engineering. Lectures, two hours per week. Problem work, three hours per week. Professor Christie.

Text-book :- Gray's Electrical Machine Design.

123. APPLICATIONS OF ELECTRICITY. Lectures on industrial and general applications of electric power, the electrical supply systems for industrial power and lighting; special problems of plant design; special problems of lighting in electrical systems; special problems of electrical transmission; electrolysis mitigation for electric railways. Lectures, two hours per week. Second term. Draughting room, two hours per week. Mr. Burr.

124. ELECTRICAL PHOTOMETRY AND ILLUMINATION. Electric light production; photometry; illumination; principles of interior and street illumination. First term. Lectures, two hours per week: Draughting room, two hours per week. Mr. Burr.

#### ENGLISH.

# ASSISTANT PROFESSOR :---G. W. LATHAM.

131. ENGLISH COMPOSITION. In view of the importance of accuracy of expression in the case of those engaged in scientific or professional work, a course on English composition is prescribed for all undergraduates of the first year. Students will be assigned to a section which will meet semi-weekly for practice and instruction in composition, and in addition will be called upon from time to time, in hours especially reserved for the purpose, for individual conferences with the instructor, in which such advice and assistance will be given as may seem advisable.

Students coming to McGill from schools or colleges where an equivalent amount of English instruction is given may apply for exemption from the above course. Applications for such exemption should be addressed to the Dean of the Faculty of Applied Science, not later than September 15th, and should be accompanied by certificates of standing and a certified syllabus of the courses taken. Students who consider themselves qualified for exemption but cannot produce satisfactory certificates as above, may come up for a special exemption examination to be held on Saturday, October 2nd, at 11 a.m. Candidates who present themselves for this examination in 1920 should be thoroughly prepared on Aydelotte's "English and Engineering", Sections VII to XVII inclusive.

In connection with this course the following text-books will be used:—Carpenter's "Rhetoric and English Composition" (Macmillan); Aydelotte's "English and Engineering" (McGraw-Hill Publishing Co.).

132. SUMMER READING. Second Year. (See page 205.)

133. SUMMER READING OR ESSAY. Third Year. (See page 206).

134. SUMMER ESSAY. Fourth Year. (See page 206.)

### DEPARTMENT OF GEOLOGY AND MINERALOGY.

Sessional Lecturer;—John A. Dresser. Demonstrator:—E. Ardley.

# Third Year.

141. GENERAL GEOLOGY. The lectures will embrace a general survey of the whole field of geology and will be introduced by a short course on mineralogy. Especial attention will be devoted to dynamical geology and to historical geology, including a description of the fauna and flora of the earth during the successive periods of its past history, as well as to the economic aspects of the subject.

The lectures will be illustrated by the extensive collections in the Peter Redpath Museum, as well as by models, maps, sections and lantern slides. In addition to the lectures there will be a demonstration each week. Dr. Adams.

Text-book :- Scott, An Introduction to Geology.

142. MINERALOGY. The lectures and demonstrations, illustrated by specimens and models, deal mainly with the description and means of identification of species, special attention being paid to the ores and economic minerals and to those which are important as rock constituents. The earlier lectures are devoted to a brief discussion of the geometrical and physical properties of minerals; their chemical composition; calculation of formulæ, etc.; and the principles of classification. Mr. Graham.

143. DETERMINATIVE MINERALOGY. Laboratory practice in blowpipe analysis and its application to the determination of mineral species. Mr. Graham.

# Fourth Year.

146. PETROGRAPHY. The modern methods of study employed in petrography are first described, and the classification and description of rocks is then taken up.

#### GEOLOGY AND MINERALOGY

In addition to the lectures, one afternoon a week during the second term will be devoted to practical work in the petrographical laboratory. Dr. Bancroft and Mr. Graham.

147. ADVANCED PETROGRAPHY. This is a more advanced course than 146. In addition to the lectures, an afternoon throughout the year will be devoted to practical work in the petrographical laboratory. Dr. Bancroft.

### Text-book :- Harker's Petrology for Students.

The petrographical laboratory is open to fourth year Mining students.

148. ORE DEPOSITS AND ECONOMIC GEOLOGY. The nature, mode of occurrence and classification of ore deposits will first be taken up. A series of typical occurrences will then be described and their origin discussed. The more important non-metallic materials, *e.g.*, fuels, clays, building stones, etc., will be similarly treated, as well as questions of water supply, artesian wells, etc. The structure of the earth's crust, more especially with reference to folding, faulting and igneous intrusion in their bearing upon mining, will then be considered, and the course will close with a discussion of the methods employed in carrying out geological and magnetic surveys and in the construction and interpretation of geological maps and sections.

Dr. Bancroft will lecture on economic geology in the first term, and Dr. Adams on ore deposits in the second term.

*Text-books*:—Geikie, Outlines of Field Geology; Kemp, Ore Deposits of the United States and Canada; Lindgren, Mineral Deposits; Beck and Weed, The Origin and Nature of Ore Deposits.

Books of Reference:-The Reports of the Geological Survey of Canada, and the Publications of the U.S. Geological Survey.

149. GEOLOGY OF CANADA. A general description of the geology and mineral resources of the Dominion. Dr. Bancroft.

151. CRYSTALLOGRAPHY. A short course of lectures for students in chemistry, with laboratory practice in the measurement and drawing of crystals; calculation of axial ratios, etc.; use of the polarising microscope, axial angle apparatus, etc. Mr. Graham.

152. HISTORICAL GEOLOGY. This is a continuation of course 141, and will consist of lectures, colloquia and museum work extending throughout the session. Dr. Bancroft.

153. FIELD WORK. The students in mining will receive a course of instruction in geological mapping and field work—extending over one week—in connection with the summer school of mining. Dr. Bancroft and Mr. Graham.

154. FIELD WORK. During the ten days immediately preceding the opening of the fall term, a special course in the field methods employed in a geological survey will be given for those students who elect the geological option in the fourth year of the Mining course. Dr. Bancroft and Mr. Graham.

Note.—Students of the Mining and Chemistry courses take all the mineralogy of the third year. Chemistry students, in addition to the geology of the third year, may take the mineralogy of the fourth year.

#### LAW AND ECONOMICS.

Professor of Law:--R. W. Lee. Professor of Economics:--Stephen Leacock. Lecturers on Economics:--{Frederick B. Brown. B. K. Sandwell.

171. ECONOMICS. This course is intended to give a general survey of the economic functions of society as they will present themselves to the engineer. The lectures will deal with the production and distribution of wealth; the means by which these processes are effected; the means by which they are controlled and regulated by the state or the community; the various theories concerning their operation and regulation; their effect on society; labor and capital; theories of money and credit; prices; public finance and taxation. Two hours per week in the second term of the third year. Mr. Sandwell.

Text-book :- Walker's Political Economy.

172. ENGINEERING ECONOMICS. This course is intended to familiarize the engineering student with the business aspect of his profession. With this in view, lectures will be given on the subjects of property and its transfer; money and credit; stocks and bonds; partnerships and corporations; the banking system; clearing house and trust companies; the formation, organization and financing of companies; operating costs and fixed charges; depreciation and obsolescence; analysis of balance sheet and of profit and loss accounts; valuations; estimates; specifications and contracts. Two hours per week in the first term of the fourth year. Mr. Brown and Mr. Sandwell.

175. LAW FOR ENGINEERS. This course is intended to present such an outline of the law as will be useful to engineers and business men. One hour per week in the fourth year. Dean Lee.

#### MATHEMATICS

## DEPARTMENT OF MATHEMATICS.

## First Year.

191. GEOMETRY. Exercises in plane geometry, elements of solid geometry and of geometrical conic sections. First term. Dr. Sullivan, Mr. Dodd and Mr. Jamieson.

Text-book:-Hall and Stevens' School Geometry, Parts I-VI (Macmillan).

192. ALGEBRA. Miscellaneous theorems and exercises, exponential and other series, properties and solution of higher equations, complex numbers, graphical algebra with an introduction to analytic geometry, indeterminate forms, limits, derivatives, slopes of curves. First and second terms. Dr. Murray, Dr. Sullivan and Mr. Dodd.

Textbooks:—Rietz and Crathorne's College Algebra (Holt & Co.); Tanner and Allen's Analytic Geometry (American Book Co.) (Macmillan).

193. TRIGONOMETRY. Plane and spherical. Second term. Dr. Sullivan, Mr. Dodd and Mr. Jamieson.

Textbook:--Murray's Plane and Spherical Trigonometry, with tables (Longmans).

194. MECHANICS. An elementary course in dynamics, statics, and hydrostatics. First and second terms. Dr. Sullivan, Dr. Batho, and Mr. Dodd.

Text-book:-Loney's Mechanics and Hydrostatics for Beginners (Cambridge University Press).

#### Second Year.

197. ANALYTIC GEOMETRY. The point, straight line, circle, parabola, ellipse and hyperbola, elements of geometry of three dimensions. First year (latter part of second term), and second year (first term). The second year work begins with the circle. Dr. Murray and Dr. Sullivan.

Text-book:-Tanner and Allen's Analytic Geometry (American Book Co.).

198. CALCULUS. Differentiation of functions of one or more variables, successive differentiation, tangents, etc., curvature, maxima and minima, integration, with application to areas, volumes, moments of inertia etc. First and second terms. Dr. Murray and Dr. Sullivan.

Textbook:--Murray's Differential and Integral Calculus (Longmans).

## Third Year.

201. CALCULUS. Elementary differential equations. Prescribed for Electrical Engineering students of the third year; optional for al others. First and second terms. Dr. Murray.

#### DEPARTMENT OF MECHANICAL ENGINEERING.

Associate Professors :	{C. M. McKergow. A. R. Roberts.
Lecturers :	{ J. A. Coote. J. M. Fraser.
Demonstrators :	M. L. WALKER. H. A. CATER. G. F. Alberga.
Shop Instructors:	G. Wooley. J. Stewart. H. Lane. W. Gatehouse.

# First Year.

211. MECHANICAL DRAWING. Instruction in the use of drawing instruments and materials, dimensioning, conventions and standards preparation of working drawings and tracings of machine details and the detailing of assembly drawings. Required of all students, except architects. Six hours per week. Professor Roberts and assistants.

212. CARPENTRY AND WOOD-TURNING. Sharpening and care of wood-working tools; sawing, planing and paring to size; preparation of flat surfaces, parallel strips, and rectangular blocks; construction of the principal joints employed in carpentry and joiner work, such as end and middle lap joints, end and middle mortise and tenon joints mitres, dado and sash joints; dovetailing; scarfing; joints used in roof and girder work; wood-turning; use of wood-turning tools. Required of all students, except architects. Three hours per week, sixteen weeks. Mr. Wooley.

213. SMITH-WORK. The forge and its tools; use and care of smiths' tools; management of fire; use of anvil and swage-block; drawing taper, square and parallel work; bending, upsetting, twisting, punching, and cutting; welding and scarfing. Required of all students, except architects. Three hours per week for eight weeks. Mr. Stewart.

214. FOUNDRY WORK. Moulders' tools and materials used in foundry work; the cupola; the brass furnace; preparations of moulding sand; boxes and flasks; core-making; use of core-irons; bench moulding; blackening, coring and finishing moulds; vents, gates and risers; floor moulding; open sand work; melting and pouring metal;

#### MECHANICAL ENGINEERING

mixtures for iron and brass casting, Required of all students, except architects. Three hours per week for eight weeks. Mr. Lane.

215. SHOP METHODS. Brief study of woods and of hand and machine tools used in wood-working; manufacture and working of iron and steel; forge and forge tools; welding; stock calculations; steam hammer work; drop forgings; cupola practice; moulders' tools; elementary moulding and core-making. Required of all students, except architects. One half-hour per week. Mr. Fraser.

220. MACHINE-SHOP WORK. Exercises in chipping; preparation of flat surfaces; filing to straight edge and surface plate, scraping, screwing and tapping; use of scribing block and surface gauge; marking off work for lathes and other machines; turning and boring cylindrical work to gauge; surfacing; screw-cutting and preparation of screw-cutting tools; machining flat and curved surfaces on the planing and shaping machines; drilling and boring; cutting \*angles and speeds; dressing and grinding tools. Required of all Engineering students. Three hours per week for sixteen weeks. Mr. Gatehouse.

## Second Year.

218. MECHANICS OF MACHINES. (Second term). Kinematics of machines.—Constrained motion; kinematic pairing; velocity and acceleration in mechanisms; centrodes; analysis and classification of simple mechanisms, including the quadric crank chain, the slider crank chain and various wheel trains; design of involute and of cycloidal wheel-teeth. Professor McKergow.

Text-book :- Durley's Kinematics of Machines (Wiley).

221. SHOP METHODS. Tools; tool steels; forging, hardening and empering; case hardening; grinding and abrasives; brazing and solleting; modern welding processes; fits and fitting; interchangeable processes of manufacture; lathe construction, adjustments and pracice. Required of all Engineering students. One hour per week. Mr. Fraser.

Text-book :- Elements of Machine Work, R. H. Smith.

#### Third Year.

224. MECHANICS OF MACHINES. Relative motion and displacenent; crank effort diagrams, fly-wheels and inertia forces; the nechanism of the simple slide valve and of expansion valves; solution of valve setting problems; the function and dynamics of governors; elements of engine balancing; friction and lubrication. Required of students in Mechanical and Electrical Engineering. Three hours per week. Mr. Coote.

Text-books:-Durley's Kinematics of Machines (Wiley); Ewing's Steam Engine (Camb. Univ. Press).

225. MACHINE DESIGN. Principles of the strength of materials as applied to the design of the part of machines; fastenings used in machine construction, bolts, screws, keys, cotters, rivets, and riveted joints; journals and bearings; shafts and couplings. Required of students in Mechanical and Electrical Engineering. Two hours per week. Professor Roberts.

Text-book:--Unwin's Machine Design, Part I (Longmans). Book of Reference:--Spooner's Machine Design (Longmans).

226. MECHANICAL ENGINEERING. General course in Mechanical Engineering of Power Plants and Prime Movers.

Fuel and combustion, steam boilers and steam production; corrosion and defects of boilers; boiler plants and accessories, principles of selection and arrangement; the steam engine; estimation of power developed; economy of steam machinery; the indicator; condensers, pumps and accessories; steam turbines; principles of design in steam plants; gas engines and gas producer plants, their selection, economy and arrangement; general conditions governing location and design of power installations. Required of all Engineering students, except those in Mechanical Engineering. Two hours per week. Professor Mc-Kergow.

Text-books:--Meyer, Steam Power Plants (McGraw); Duncan, Steam and other Engines (Macmillan).

227. MECHANICAL ENGINEERING. Fuel and combustion; steam boilers and steam production; boiler installation and operation; the indicator; the steam engine, steam distribution and economy; steam turbines; condensers and auxiliary machinery in steam plants; gas engines and gas producer plants; compressed air and refrigerating machinery. Required of students in Mechanical Engineering. Three hours per week. Professor McKergow.

Reference books:-Ripper, Heat Engines (Longmans); Neilson, Steam Boilers.

228. MECHANICAL ENGINEERING LABORATORY. Testing and calibration of indicators, brakes and other measuring instruments; investigation of the operation of brakes, dynamometers, and governors; test to determine the efficiency of belt and other transmission gearing; the properties of lubricants; the economy and performance of a steam engine and boiler, of a gas engine, of an air compressor, and of a pump. Required of all Engineering students, except those taking the Electrical Engineering course. Three hours per week. Professor McKergow and assistants.

Reference book :- Carpenter, Experimental Engineering.

223. MECHANICAL ENGINEERING LABORATORY.

First term, course same as 228; second term, experimental work on the relative value of throttling and expansion governors; effect on the economy of steam engine of changing from simple to compound,

#### MECHANICAL ENGINEERING

triple, or quadruple expansion; the testing of steam boilers, producer gas engines, air compressors, steam turbines, and a complete steam power plant test. Required of students in Electrical Engineering. Six hours per week in first term and three hours per week in second term. Professor McKergow and assistants.

Reference book :- Carpenter, Experimental Engineering.

229. THERMODYNAMICS. Fundamental laws and equations of thermodynamics; their application to gases and to saturated superheated vapours; efficiency of ideal heat engines; properties of steam, and elementary theory of the steam engine; elementary theory of gas and hot air engines. Required of third year students in Mechanical and Electrical Engineering. Two hours per week. Professor Roberts.

*Text-books*:—Ewing, The Steam Engine and other Heat Engines (Camb. Univ. Press); Marks and Davis, Steam Tables. *Reference book*:—Ennis, Thermodynamics Applied to Engineering.

230. MECHANICAL DRAWING. Exercises in making sketches of machine parts and in preparing working drawings and tracings from them. This work may be required of Mechanical Engineering students. One week during summer term, between the second and third years. Mr. Coote.

231. MECHANICAL DRAWING. This course is supplementary to the course in machine design and consists of exercises in design and draughting of fastenings, machine parts and simple machines. Required of Mechanical Engineering students. Six hours per week for the first term and three hours per week for second term. Mr. Coote.

232. MECHANICAL DRAWING. A course similar to 231, but less extended. Required of Electrical Engineering students. Three hours per week.

233. SMITH WORK. Tool forging and tempering, using carbon and high speed steels; making lathe and planer tools; taps, dies, drills, and tools for the forge; special welding. One week during the summer term, prior to work in third year session. Required of Mechanical Engineering students. Mr. Stewart.

234. FOUNDRY WORK. Moulds requiring a higher degree of skill and judgment than elementary course; special methods of strengthening the mould; coating for smooth surfaces on castings; methods of avoiding defects; cupola charging and operating; core mixtures and core making; coring moulds. For same period as 233. Required of Mechanical Engineering students. Mr. Lane.

235. PATTERN MAKING. Use of pattern-makers' tools; elements of pattern-making; allowances to be made for draught and for contraction in moulding and casting; use of contraction rule; preparation of prints and plain core-boxes; exercises in paring and turning; construction of patterns and core-boxes for pipes, flanges, elbows, tees and valves; more difficult exercises in pattern-making, including built-

up patterns and face-plate work; gear and wheel patterns. Required of students in Mechanical Engineering. One week during summer\_ term. Mr. Wooley.

236. MACHINE SHOP. Lathe work; marking off; centering; turning and boring; radial facing; filing; grinding and polishing; internal and external screw cutting; change gear calculations; taper turning and bench work. Required of students in Mechanical Engineering. Three hours per week for one term. Mr. Gatehouse.

237. SHOP PROCESSES AND MANAGEMENT. Materials used and methods adopted in the manufacture of patterns; factors involved in determining cutting speeds and feeds in lathe work, design of standard tools, experimental investigation; theory of grinding and grinding machines, polishing and lapping; breaching and breaching machines; different systems of generating gear teeth; precision methods and tools. Required of students in Mechanical Engineering. One hour per week. Mr. Coote.

#### Fourth Year.

240. MECHANICS OF MACHINES. (a) Valve gears and governors. Gyrostatic action in machines; further treatment of engine governors; knocking and shocks in reciprocating machinery; valve gears.

(b) Aeronautics and Aerodynamics. The principles underlying the stability and weight-supporting power of curved and plane surfaces driven through the air at high velocities, together with the power required to maintain these velocities are studied, and the designs of such machines used for purpose of illustration. Required of students in Mechanical Engineering. Three hours per week. Professor McKergow and Dr. Batho.

Reference-books:-Dalby's Balancing of Engines; Spangler's Valve Gears.

241. DESIGNING. The complete design of an engine, a pump, or a machine tool, is worked out, and the requisite working drawings and tracings are prepared. Required of students in Mechanical Engineering. Three hours per week. Professor Roberts.

242. MACHINE DESIGN. (a). Design of power transmission gearing, including belts, ropes, friction, chain and toothed gearing, fits and fitting. (b). Engine details, including cylinders, piston rods, connecting rods, shafts, fly-wheels and machine frames. Required of Mechanical Engineering students. Two hours per week. Professor Roberts.

Text-book:-Unwin's Machine Design, Parts I and II (Longmans). Reference book:-Spooner's Machine Design (Longmans).

243. MACHINE DESIGN. Course same as 242 (a). Two hours per week during the first term. Required of Electrical Engineering students. Professor Roberts.

#### MECHANICAL ENGINEERING

244. POWER PLANT DESIGN. The arrangement, design and operation of power plants worked by steam and gas engines; effects of requirements for lighting, heating and power distribution. One lecture hour and one drafting room period per week. Required of students in Mechanical Engineering. Professor McKergow.

Text-book :---Gebhardt, Steam Power Plant Engineering.

247. HEATING AND VENTILATION OF BUILDINGS. Loss of heat from buildings; radiation surfaces; design and operation of heating systems; principles of ventilation; fans and blowers; design and duct systems; temperature and humidity control. One hour per week. Professor McKergow.

*Text-book*:—Carpenter, Heating and Ventilating Buildings (Wiley).

249. MECHANICAL ENGINEERING LABORATORY. Experimental investigation of :--engine balancing and vibration; action of governors; performance of fans and blowers; efficiency of hoisting machinery; performance of steam boilers; steam engines, steam turbines, refrigeration machines, condensers, gas engines and producers; efficiency of air compressing and pumping machinery; tests of a complete steam power plant, gas power plant, and a heating and ventilating system. Ten hours per week. Required of students in Mechanical Engineering. *Reference book*:--Carpenter, Experimental Engineering. Professor McKergow.

257. EXPERIMENTAL ENGINEERING. Theory of errors; calibration and use of instruments; measurement of power; methods of testing power-plant apparatus and the tabulation of results. Required of students in Mechanical Engineering. One hour per week.

Text-book :- Carpenter, Experimental Engineering.

251. THERMODYNAMICS. Efficiency of the piston steam-engine, behaviour of steam in the cylinder, influence of size, speed, rate of expansion, compounding, superheating and steam-jacketing; flow of gases and vapours through orifices and nozzles and applications to the design of steam-turbines; theory and analysis of performance of internal-combustion engines; refrigerating-machine cycles. Required of students in Mechanical Engineering. Two hours per week. Professor Roberts.

Text-books:—Ewing's Steam Engine (Cambridge Univ. Press); Moyer, Steam Turbines (Wiley); Marks and Davis, Steam Tables and Diagrams (Longmans).

Books of Reference:-Stodola, The Steam Turbine (trans. Lowenstein) (Van Nostrand); Clerk, The Gas Petrol and Oil Engine, Part I.

252. MACHINE SHOP. Experimental work and studies for the minimum time required for production, involving a consideration of the best available machine tool speeds, necessary power of belting,

most efficient tool angles, quality of metal and the kind of tool steel used. The course includes work in connection with the lathe, the planer, slotter, shaper, miller and turret lathe; and instruction in gear cutting and cutter grinding. Required of students in Mechanical Engineering. Three hours per week. Mr. Gatehouse.

253. MANUFACTURING PLANT DESIGN. Methods adopted in designing a plant for manufacture of a specified product; lay-out of shops; construction of buildings; equipment requirements for power, heat and light; fire protection, general system of operation and cost determination as affecting design of plant. (Optional with Course 90 [Hydraulic Machines] for students in Mechanical Engineering.) Two lecture hours and one drafting room period per week, second term. Mr. Coote,

Text-book :- Day, Industrial Plants (Engineering Magazine).

254. WORKS, ORGANIZATION AND ACCOUNTING. Analysis of costs of production and establishment charges; elements of factory accounting; factory record systems; depreciation; organization of staff; functions of departments; purchasing systems; methods of remunerating labour; shop organization and equipment as affecting efficiency of production. Work done as far as possible in connection with course 253. Required of students in Mechanical Engineering. One hour per week. Mr. Coote.

Reference book:-Carpenter, Profit-making Management (Engineering Magazine).

#### DEPARTMENT OF METALLURGICAL ENGINEERING.

PROFESSOR :--- ALFRED STANSFIELD. LECTURER :--- GORDON SPROULE. RESEARCH ASSISTANT :----------

#### Third Year.

261. GENERAL ELEMENTARY METALLURGY. An introductory course in general metallurgy, including metals and alloys, fuels, furnaces, refractory materials, pyrometry and calorimetry, and a short account of the metallurgy of copper, lead, iron and steel.

The instruction consists of lectures during the first term and a short laboratory course in which the following metallurgical exercises will be carried out, as far as time will permit:—(a) Roasting a sulphide or arsenical ore on a small scale and also in the large roasting furnace; (b) formation and properties of copper or lead mattes and slags; (c) smelting a copper or lead ore in the water-jacketed blast-furnace; (d) melting and casting certain metals and alloys; (e) the use of the electric furnace; (f) leaching a copper or silver ore; (g) elementary exercises in some of the following: pyrometry, calorimetry, tests of refractory materials, microscopic examination of

#### METALLURGICAL ENGINEERING

metals, heat-treatment of iron or steel, and some simple mechanical testing methods.

Two lectures a week during the first term and one laboratory period during half of the second term. Dr. Stansfield and Mr. Sproule.

262. METALLURGICAL LABORATORY. The course covers in a more thorough manner the laboratory work mentioned in 261, particular attention being devoted to instruction in pyrometry, calorimetry, the microscopic examination of metals and the heat treatment of iron and steel. One and a half periods in the second term for Metallurgical students.

METALLOGRAPHY. A shorter course of one period a week in the second term is provided for Chemical Engineering students taking the inorganic option in their fourth year. This course consists mainly of the microscopic examination of metals.

263. FIRE-ASSAVING. The lectures and instruction sheets give an account of the furnaces, balances and other appliances used in assaying; the sampling and preparation of ores; fluxes and reagents, and the methods used in assaying gold, silver and lead ores, copper and copper ores and mattes; gold and silver bullion and base bullion; cyanide precipitates and solutions.

In the laboratory the students learn as many of these methods as is possible in the time allotted to this course. Care is taken that a student shall be able to make such assays as would be required at a mine, and with a fair degree of accuracy. Metallurgical and mining students usually have an opportunity of doing additional fire-assaying in their fourth year.

One lecture and two afternoon laboratory periods a week during the first term, for Metallurgical, Mining and Chemical Engineering students. Mr. Sproule.

This course is also given in September before the third year for students in Chemistry II.

Reference book:--E. A. Smith, "Sampling and Assay of the Precious Metals."

264. METALLOGRAPHY (SUMMER SCHOOL). A course of laboratory instruction in the methods of Metallography and its uses for controlling the heat-treatment of steel and other metals, and for detecting and explaining the nature of defective metallic materials.

This course is given in September before the third year for students in Chemistry II. Mr. Sproule.

Text-book:--A. Sauveur, "The Metallography and Heat-Treatment of Iron and Steel."

265. METALLURGICAL CALCULATIONS. This is an introductory course on the application of exact chemical and physical laws to metallurgical operations, such as the combustion of fuel, the smelting of ores

and the construction and heating of furnaces. One lecture a week for Metallurgical students. Dr. Stansfield.

Text-book :- J. W. Richards, "Metallurgical Calculations," Vol. I.

266. COLLOQUIUM. Metallurgical students are required to read current metallurgical periodicals and to give an account of their reading at the colloquium which is held once a week during the first term. Dr. Stansfield.

267. SUMMER SCHOOL (METALLURGICAL WORKS). Metallurgical students are required to attend the summer school which is held at the end of the third year. In this school visits are paid to metallurgical works both in Montreal and at à distance.

In addition to this, excursions may be made by the class from time to time during the term to such metallurgical works as are within reach.

#### Fourth Year.

271. METALLURGY (GENERAL).

(a) The metallurgy of copper, lead, gold, silver, zinc and nickel.(b) The metallurgy of iron and steel.

*Text-books*:--W. Gowland, "The Metallurgy of the non-ferrous Metals"; Bradley Stoughton, "The Metallurgy of Iron and Steel."

Two lectures' a week during the session and a few laboratory demonstrations. Dr. Stansfield.

272. METALLURGY. (a) A more detailed account of the metals mentioned in 271.

*Reference books*:—Hofman, "Metallurgy of Copper"; Collins, "Metallurgy of Lead"; Ingalls, "Metallurgy of Zinc"; Collins. "Metallurgy of Silver"; Stoughton, "The Metallurgy of Iron and Steel"; Forsythe, "The Blast Furnace and the Manufacture of Pig Iron."

(b) General advanced metallurgy.

Text-books:-Fulton, "Principles of Metallurgy"; Hofman, "General Metallurgy."

(c) Metallurgical construction and design, and costs of metallurgical plant and operations.

Required of Metallurgical students. Two hours a week during the first term and three hours a week during the second term. Dr. Stansfield.

274. METALLURGICAL LABORATORY, THESIS WORK. This time is devoted to the serious study of some metallurgical problem. Usually two students work together and present a thesis containing an account of an important published work bearing on their subject, as well as the result of their own experimental researches. Required of Metallurgical students. One half-period in the first term and three periods a week during the second term.

#### MINING ENGINEERING

275. ELECTRO-METALLURGY. This course of lectures is devoted mainly to a consideration of the principles and construction of electric furnaces, and their uses for smelting and refining metals. The refining of metals and the recovery of metals from their ores by electrolysis of aqueous solutions is also considered. Two lectures a week during the second term and demonstrations in the laboratory for Metallurgical, Electrical and Chemical students. Dr. Stansfield.

Text-book :- Stansfield, "The Electric Furnace."

276. ELECTRO-METALLURGY LABORATORY. The work is arranged to illustrate the lectures. Groups of students operate each of the main types of electric furnace and become familiar with some of the principles of electric furnace construction and design. One period a week during the second term.

277. COLLOQUIUM. One hour a week during the second term is given to informal discussion of research and other work being done in the department, and to other topics of metallurgical interest. Dr. Stansfield.

278. METALLURGICAL MACHINERY AND DESIGN. Two periods a week, during the second term, are devoted to drafting and designing metallurgical furnaces and plants. The course includes lectures on metallurgical machinery and design, which are included in 272.

#### DEPARTMENT OF MINING ENGINEERING.

PROFESSOR:—JOHN BONSALL PORTER. Associate Professor:—John W. Bell. Dawson Research Fellow:—Gordon Maxwell M. Edwards. Douglas Research Fellow:—Willi Erlenborn. Harrington Research Fellow:—

#### Third Year.

291. MINING ENGINEERING. The principles and practice of mining.—Introductory, simple mining methods, excavation, explosives and blasting, rock drills, coal cutters, gold washing and dredging, hydraulic mining, quarrying, etc. Two lectures per week in the second term. This course is continued in the fourth year. (See 297.) Dr. Porter.

292 and 295. ORE DRESSING. The theory and practice of ore dressing and coal washing.—The forms in which ores occur and the effect of mixture, impurity, etc.; the theoretical considerations affecting mineral separations; the mechanical operations involved; crushing, sizing and dressing machinery—breakers, stamps, rolls, screens, jigs, vanners, tables, flotation apparatus, washers, magnetic separators, etc. Two lectures per week and laboratory. This course is continued in the fourth year. (See 299.) Dr. Porter.

ORE DRESSING LABORATORY. Simple tests of ores, sands and gravels, by means of pan, classifier, jig, table, etc. One afternoon per week in the second term. Further laboratory work in the fourth year. (See 300 and 301.) Professor Bell.

293. MINE MAPPING. The calculations and plotting of mine surveys. One afternoon per week in the first term. Professor Bell.

*Text-books*:—H. C. Hoover, Principles of Mining, D. W. Brunton's Safety in Tunnelling, and R. H. Richard's Text-book of Ore Dressing.

## Fourth Year.

297. MINING ENGINEERING. The principles and practice of mining.—Prospecting, deep wells, diamond drilling, open cut mining, shaft sinking, drifting, underground development and methods of mining, timbering, hauling, hoisting, pumping, lighting, ventilating, etc.; mine accidents and their prevention; general arrangement of plant, stores and dwellings; administration; examination and valuation of mines and mine reports. Three lectures a week. Dr. Porter.

298. MINING AND ORE-DRESSING MACHINERY AND DESIGN. The application of mechanical and electrical engineering to mining, oredressing and metallurgy.—Machinery for haulage, hoisting, pumping, ventilating, etc.; mine power plants, power transmission, tramways, cableways, compressors, blowing engines, conveyors, cranes, etc.; mine and mill building, head frames, ore bins, lay-out of plant, etc. One lecture a week, and two drafting room periods in the second term for all students in course and one or two additional lectures per week for students taking certain alternatives. Dr. Porter and Professor Bell.

299. ORE-DRESSING AND MILLING. Continuation of the ore-dressing course of the third year. Gold and silver milling, amalgamation, cyaniding, flotation, etc., concentration plants, coal breakers and washers, general conclusions regarding plant design and lay-out. Two lectures a week in the first term. Dr. Porter.

302. MINING COLLOQUIUM. One hour a week is given to the presentation and discussion of papers on the work being done in the department and to other matters relating to mining and ore-dressing. Students are required to take a leading part in these exercises.

300. ORE-DRESSING LABORATORY. Two mornings per week in the first term are given to the ore-dressing and hydraulic laboratories. This time is chiefly assigned to ore-dressing, and certain typical operations are carried out. The exercises in ore-dressing are a continuation of the third year laboratory work, but are arranged as far as possible for individuals rather than groups of students. They comprise experiments in crushing, classifying, jigging, slime treatment, magnetic separation, cyanidation and amalgamation, coal washing, etc.

#### MINING ENGINEERING

(Students taking the geological alternative give one morning per week in the first term to petrographical laboratory and only one to ore-dressing and hydraulics, as above.)

301. ORE-DRESSING LABORATORY AND THESIS WORK. In the second term one whole day and one additional morning per week are given to individual work in the laboratory and to the preparation of a thesis to be filed in the departmental library, and, when suitable, published.

The subjects available for thesis work are very numerous, and range from purely theoretical investigations in crushing, screening, classification, concentration, flotation, etc., to the experimental determination of the best methods for the treatment of particular ores and coals. A large number of different lots of ore are available in sufficient quantities for work on a comparatively large scale. New ores are constantly being secured.

Text-books:-In addition to the text-books already specified for the third year, students are required to provide themselves with Peele's Miners Engineers Handbook and the Handbook of Mining Details or the Design of Mine Structures, published by McGraw-Hill Co. In addition to using these formal text-books, students are required to look up a large number of special references and also to make frequent use of the works named below, those marked with a \* being so freely used that they should, if possible, be purchased by each member of the class: Sir C. Le Neve Foster's Ore and Stone Mining; Mining; \*Donaldson's Practical Shaft Sinking; \*Brinsmade's Mining Without Timber; Crane's Ore Mining Methods; \*Ketchum's Design of Mine Structures; Mayer's Mining Methods in Europe; \*Hughes' Text-book of Coal Mining; Galloway's Lectures on Mining; Boulton's Coal Mining; \*McCulloch and Futers Winding Engines; Behr's Winding Plants for Great Depths; Sanders' Mine Timbering; \*Storms' Timbering and Mining; Peele's Compressed Air Plant; Richard's Ore-Dressing; Wiard's Theory and Practice of Ore-Dressing; Rickard's Stamp Milling of Gold Ores, Economics of Mining and \*Sampling and Estimation of Ore in a Mine; Del Mar's Tube Milling and Stamp Milling; \*Thompson's Stamp Milling and Cyaniding; \*Julian and Smart's Cyaniding Gold and Silver Ores; Von Bernewitz Cyanide Practice; \*Meagraw's Details of Cyanide Practice; \*Hoover's Concentrating Ores by Flotation; Rickard's Flotation; \*Handbook of Milling Details; \*The Coal and Metal Miners' Pocket-book; Textbook of Rand Metallurgical Practice, Vols. 1 and 2.

#### Research Fellowships and Advanced Courses.

Special courses of instruction are offered to graduate students in mining and ore-dressing. These courses include lectures, colloquia and individual work in the laboratories and drafting room. There are

three endowed Research Fellowships in the gift of the Mining Department. These are assigned to graduates of the department who show particular aptitude for advanced work.

#### LABORATORIES.

The specific laboratory instruction in mining subjects proper begins in the third year, with courses in assaying, elementary metallurgy and ore-dressing. In the fourth year this work is elaborated, the general method of instruction being first to conduct a limited number of important typical operations, and then to assign to each student certain methods which he must study out in detail, and upon which he must experiment and make a written report. In this work he is guided by the professors and fellows, and assisted by the other students, whom he must in turn assist when practicable. In this way every student acquires detailed knowledge of certain typical operations and makes at least one original investigation and at the same time gains a fair general experience of many of the important methods in use.

#### ILLUSTRATIONS, MUSEUMS, SOCIETIES, ETC.

In addition to a large series of lantern slides, the department owns a collection of over four thousand photographs and other illustrations, and a large and representative library including selected trade catalogues, etc. These collections are constantly being enlarged.

The museums of the building contain suites of ores, concentrates, fuels, and metallurgical materials, models of mines and furnaces, and collections of finished products.

The McGill University Mining Society and the Mining Society Camera Club meet at stated periods to read and discuss papers by graduate and student members, and occasionally to hear lectures by gentlemen eminent in the profession. The Society has been made a students' section of the Canadian Mining Institute, and its undergraduate members are therefore student members of the Institute, and receive all its publications. Papers read before the Mining Society may be entered in competition for all students' prizes offered by the Canadian Mining Institute, or the Engineering Institute of Canada.

#### FIELD SCHOOL IN MINING.

294. The summer vacation field class, instituted in 1898, is now a fixed part of the course. All students of Mining in regular course are required to attend this class at the end of the third year.

The school lasts from four and one-half to six weeks, depending on where it is held. Of this period about one-sixth is given to field work in geology, one-half or more to mining work proper, and the remainder to an examination of ore-dressing and milling plants and

#### PHYSICS

metallurgical establishments. The Professor or the Associate Professor of Mining and other members of the staff go with the party and hold daily demonstrations or classes. The students take notes and sketches on the ground, and afterwards are required to work up these notes and to submit a formal report.

During the last twenty years these field parties have visited British Columbia nine times, Nova Scotia six times, Newfoundland, Pennsylvania and Michigan twice each. Numerous visits have also been made to Sudbury, Cobalt and other Ontario localities, while *en route* to more distant points.

The instruction given during this field course is free to all Mining students, the only expense to them being the cost of board, lodging and railway fares. These expenses are kept as low as is practicable and are in part met by the income of a fund provided by the late Sir William Macdonald, from which deserving students who require aid can also have money advanced them by applying to the Professor of Mining.

At the close of the regular work of the field school arrangements are made with the managers of the mines visited and others, to give the members of the party individual employment for the remainder of the summer. All students are earnestly advised to engage in such work, and it is probable that it will be made obligatory at an early date in the future.

#### DEPARTMENT OF PHYSICS.

PROFESSOR :-	-A. S. Eve.
The local and a second second second	L. V. KING.
Associate Professors : <	J. A. GRAY.
	A. N. SHAW.
ASSISTANT PROFESSORS :	N. E. WHEELER. H. E. REILLEY.
	E. S. BIELER.
	G. H. HENDERSON.
Demonstrators :	R. J. Clark.
DEMONSTRATIONS.	V. HENRY.
	L. A. SMITH.
	L. H. NICHOLS.

The instruction includes a fully illustrated course of experimental lectures on the general principles of physics, embracing in the first year:—*The Laws of Energy, Heat, Light and Sound;* in the second year, *Electricity and Magnetism,* accompanied by courses of practical work in the laboratory, in which the students will perform for themselves experiments, chiefly quantitative, illustrating the subjects treated in the lectures. Opportunity will be given to acquire experience with

all the principal instruments used in exact physical and practical measurements.

#### First Year.

311. HEAT, SOUND AND LIGHT. Two hours per week. Tuesday and Thursday mornings. Dr. Shaw.

Text-book:-Duncan & Starling's Heat, Light and Sound (Macmillan's).

312. LABORATORY COURSE. Two hours per week, spent in practical measurements in the Macdonald Physical Laboratory in conjunction with the lecture courses. See time-table of sections.

*Text-books*:-Laboratory Manuscripts, Barnes & Wheeler (Renouf Pub. Co.)

#### Second Year.

315. ELECTRICITY AND MAGNETISM. Two hours per week, Monday and Friday mornings. Dr. Gray.

316. LABORATORY COURSE. Two hours per week. (a) Magnetism - and Electricity.—Measurements of pole strength and moment of a magnet; the magnetic field; methods of deflection and oscillation; comparison of moments and determination of the elements of the earth's magnetism. (b) Current Electricity.—A complete course of measurements of current strength, resistance, and electromotive force; calibration of galvanometers.

Text-books:-Duncan and Starling, Electricity and Magnetism, (Macmillan's). Laboratory Manuscripts (Renouf Publishing Co.).

#### Fourth Year.

320-321. LABORATORY COURSE. Students of Electrical Engineering will continue their work in the Physical Laboratory in the fourth year. The following is a brief outline of the course:—

Magnetic elements and measurements; testing magnetic qualities of iron; theory and practice of absolute measurements; comparison and use of electrical standards of resistance, E. M. F., self and mutualinduction, and capacity; testing and calibration of ammeters and voltmeters; insulation and capacity tests; electric light photometry; electrical properties of thermionic valves.

Wednesday morning at 9. Laboratory, Wednesday morning and afternoon. Dr. King.

322. ELECTRICAL THEORY. Optional course of lectures for third year students of Electrical Engineering.

#### SURVEYING AND GEODESY

325 to 329. ADVANCED COURSES AND RESEARCH. For advanced courses of lectures, see under honour courses in Arts. There are special facilities offered for those desiring to take up research work in heat, optics, sound, electricity and magnetism, and radioactivity.

## DEPARTMENT OF SURVEYING AND GEODESY.

# Assistant Professors :- $\begin{cases} A. J. Kelly. \\ JAMES WEIR. \end{cases}$

This course is designed to give the student a theoretical and practical training in the methods of plane and geodetic surveying, in the field work of engineering operations, and in practical astronomy in its application to geodesy. The course is divided as follows:—

#### Second Year.

346. SURVEYING. Chain and angular surveying; the construction, adjustment, use and limitations of the transit, level, micrometer, compass and minor field and office instruments; railway circular curves; planimeter and pantograph; general topography; levelling; contour surveying; stadia surveying; photographic surveying; land systems of the Dominion and provinces. Mr. Kelly.

347. FIELD WORK. (I) A farm survey, using chain and compass; (2) a compass and micrometer survey; (3) a detail survey, using chain and offset; (4) differential and profile levelling; (5) transit work.

348. MAPPING. Drafting from field notes of chain and angular surveys, and the plotting of topographical features. The tinting of maps with water-colours is also included in this course.

#### Third Year.

351. MAP PROJECTIONS. Graphical determination of spherical triangles; spherical projections, and the construction of maps. Mr. Weir.

352. SURVEYING. Theory and use of instruments; hydrographic surveying; the use of the plane table; mining surveying; barometric and trigonometric levelling; elements of practical astronomy. Mr. Kelly.

353. SURVEYING. Theory and use of instruments; the use of the plane table; mining surveying; magnetic surveying; hydrographic surveying; barometric and trigonometric levelling; theory and settingout of transition curves; elements of geodetic surveying; elements of practical astronomy. Mr. Weir.

354. FIELD WORK. (1) Level and transit practice, including the adjustments of the instruments; (2) the preliminary, topographic and location surveys for a railway, including simple, compound, transition and vertical curves, profile levelling, cross-sectioning for construction,

and plotting of field notes; (3) a topographic survey with the stadia transit and the plane table; (4) a hydrographic survey of a river channel, including measurement of discharge; (5) a survey at night illustrating underground methods; (6) astronomical observations with sextant and engineer's transit.

### Fourth Year.

359. GEODESY. The determination of time, latitude, longitude and azimuth; figure of the earth, measurements of base lines and triangulation systems; adjustment and reduction of observations. Mr. Weir.

361. FIELD WORK. (I) Determination of latitude, (a) by transit and sextant observations of Polaris, (b) by zenith telescope, (c) by noon observations with transit and sextant. (2) Determination of azim.th, (a) by equal altitude observations of the sun, (b) by observations of elongation of Polaris, (c) by observation of a circumpolar star with engineer's transit, (d) by means of solar attachments and solar compass. (3) Determination of time, (a) by equal altitude observations of the sun with sextant and transit, (b) by observations of the meridian passage of stars with astronomical transit. (4) Determination of longitude by clock comparisons. (5) Base line measurements. (6) Precision levelling. (7) Measurement of angles by geodetic methods. (8) Plane table surveys.

360. GEODETIC LABORATORY.

The following determinations of the constants and errors of surveying instruments are made in the geodetic laboratory by the fourth year students in the Civil Engineering course :- (1) Measurement of mignifying power; (2) errors of graduation; (3) measurement of eccentricity of circles; (4) determination of errors of run of theodolite microscopes; (5) investigation of the errors of the graduation of a standard bar; (6) graduating scales with the dividing engine, and comparison thereof on the comparator; (7) investigation of the errors of graduation of circles on the circular comparator; (8) determination of the constants of steel tapes; (9) investigation of the graduation errors of steel tapes on the fifty-foot comparator; (10) determination of the scale value of level vials; (11) investigation of the accuracy of barometers; (12) determination of the collimation error of an astronomical transit by fixed collimators and by nadir method; (13) measurement of inclination error in an astronomical transit by nadir observations.

The determination of gravity by means of the reversible pendulum is experimentally investigated.

Equipment of the surveying department comprises the following, in addition to the apparatus of the observatory and geodetic laboratory:---

Fourteen six-in. transit theodolites with micrometer microscope

#### SURVEYING AND GEODESY

attachments; seven portable meridian transits; two zenith telescopes; forty-seven transit theodolites by various makers with mining, gralienter, stadia, and solar attachments; a photo-theodolite; two 8-in. altazimuths; thirty-three dumpy and fourteen wye levels; two gradienttelemeter levels; hand levels and clinometers; four precision lerels; seventeen surveyors' compasses; one miner's dial; prismatic compasses; pocket compasses; twenty-one marine sextants and artificial horizons; box sextants; two reflecting circles; seven plane tables; five current meters; Rochon micrometers; double image micrometers; heliotope; barometers; one 100-ft. Invar tape; 300-ft. and 500-ft. steel tipes, suitable for base measurements; steel chains and steel bands; inen and metallic tapes; sounding lines; pickets; levelling rods; mcrometer targets; station pointer; pantograph, planimeters; slide rules and other minor appliances.

#### FIELD WORK.

Field work is required of all students entering the second year, of students of the third year in the courses of Civil and Mining Engineering, and of the fourth year in the Civil Engineering course. The work will begin in 1921 on May 2nd, and will continue for four weeks.\*

All students are required to keep complete field notes, and to prepare maps, sections and estimates from their own surveys. This office work is principally done during the regular summer school sesson.

EXAMINATION FOR LAND SURVEYORS :- Any graduate in the Faulty of Applied Science in the Department of Civil Engineering and Iand Surveying may have his term of apprenticeship shortened to one year for the profession of land surveying.

Text-books and books of reference:-Johnson and Smith's Theory and Practice of Surveying, Greene's Practical and Spherical Astronomy, Hosmer's Practical Astronomy, American Ephemeris and Nautical Almanac, Baker's Engineering Surveying Instruments, Breed and Hosmer's Principles and Practice of Surveying, Turnbull's Underground Surveying, Durham's Mine Surveying, Reports of the Cinadian and United States Geodetic Surveys.

<sup>\*</sup> The Faculty may decide to hold the fourth year field class in September, 1921, instead of in May with the second and third rear classes.

#### **REGULATIONS CONCERNING PREREQUISITE SUBJECTS.**

#### REGISTRATION, STANDING AND PROMOTION.

(1) Students proceeding to a degree shall be classed as Undergraduates or Conditioned Undergraduates. Undergraduates are those who, having passed all entrance requirements, have also at the close of any session passed the examinations in all the subjects of their course, or who at the opening of the following session have removed all conditions by passing supplemental examinations in the subjects in which they failed. Conditioned Undergraduates are those who have failed to remove their conditions as above.

(2) No student proceeding to a degree shall be allowed to take any subject, unless he has previously passed, or secured exemption in all prerequisite subjects.\*

(3) No Conditioned Undergraduate shall be permitted to take any second year subject until he has passed, or secured exemption in all matriculation requirements, and similarly, no third or fourth year work may be undertaken until all first or second year subjects respectively shall have been passed.

The Faculty may, however, waive this rule in special cases on recommendation of the Committee on Registration, Standing and Promotion.

(4) Conditioned Undergraduates proceeding to a degree must follow a course of study approved by the Faculty on the recommendation of the Committee on Registration, Standing and Promotion. They may be required to repeat subjects in which they have passed, but in which their standing has been low.

(5) Partial students are those who are not proceeding to a degree. Such students may be admitted to classes without regard to the prerequisite rule, provided that they have obtained the permission of the head of each department concerned, and have also had their courses approved by the Committee on Registration, Standing and Promotion.

<sup>\*</sup> Prerequisite subjects are those which, in the opinion of the Faculty, must be mastered before the subjects to which they are prerequisite can be intelligently studied.

Concurrent subjects are related subjects which should be studied in the same session.

## PREREQUISITE SUBJECTS IN APPLIED SCIENCE

(6) If a partial student wishes to obtain undergraduate standing in order to proceed to a degree, he shall not be given credit for subjects taken in contravention of the prerequisite rule until he has also passed examinations or secured exemptions in such prerequisites as may be demanded by the Committee on Registration, Standing and Promotion, and, on the recommendation of this Committee, has had his case approved by a unanimous vote of the Faculty.

No student who has failed to remove all his conditions by the beginning of the second term of the fourth year shall be permitted to graduate with his class.

List of subjects in the Faculty of Applied Science with the numbers of subjects which are prerequisite and concurrent.

No.	YEAR	SUBJECT	Prerequisite	Con- cur- rent
1 2 3 4	II III IV V	Arch. Design I <i>a</i> III. <i>a</i> III. Arch. Design IV.	1	6 7 or 8 7 or 8
5 6 7 8	I II IV	Elements of Architecture Elements of Composition Theory of Design Theory of Planning	1	
$9 \\ 10 \\ 11 \\ 12 \\ 13$	III or IV III or IV III or IV III or IV III or IV	Ornament and Decoration	32, 37 32, 37 32, 37	
13     14     15     16     17	II III or IV III or IV V	General History (Arts II). History of Arch. (Classic). " " (Mediaeval) " " (Renaissance) " " (Modern)	13 13	32 33 34
18 19 22 23	I III IV IV	Architectural Geometry. Perspective. Hygiene of Buildings. Heating and Ventilation.	42, 43	
$24 \\ 25 \\ 26 \\ 27$	II II II II	Building Construction. Building Details. Structural Engineering I Structural Eng. (Draughting).		24 26
28 29 30 31	III III V I	Structural Engineering II. Structural Eng. (Draughting) Professional Practice Architectural Drawing	24	28 5
32 33 34 35 36	II III IV V I	" " Historical Drawing		
37 38 39 40	II III IV IV	Freehand Drawing " " " " " " " " Modelling	36 37 38	
41 42 43 44	V I I II	Physics (Arts) Physics Lab. (Arts). Architectural Essay	40	
45 46 47 48	III IV V II, III, IV,	а а а а а		
51 52 54	V & V II III III	Summer Work General Chemistry . Gen. Chem. Lab. (Eng. Students) . Inorg. Qual. Anal.—Summer School		52 51
55	III	(Chem., Eng. and Met. Eng. Stu- dents). Inorg. Qual. Anal. Lab.—Summer School (Chem. Eng. and Met. Eng. Students).		55 54

## PREREQUISITE SUBJECTS IN APPLIED SCIENCE 253

No.	YEAR	SUBJECT	Prerequisite	Con- Cur- RENT
56	III	Organic Chemistry	51, 52	57
57	III	" " Lab		56
58	III	Physical Chemistry	51. 52	
59	III	Inorg. Qual. Anal	51, 52	60
60	III	" " Lab		59
61	III	Quant	51	62 or 67
62	III	Lab. (Onem. Eng.	William Trans	01
04	TT	Students)		61
64 65	IV IV	Advanced Organ. Chem	56, 57 56, 57	65 64
66 66	IV	Organic Chem. Lab.		04
67	IV	Physical Chem. and Lab Inorg. Lab. (Chem. Eng. Students)	58	
68	IV	Industrial Chemistry, Inorganic	61, 62 or 76	
69	IV	Industrial Chemistry, Organic	61, 62 or 76	
70	ĪV	Applied Electro-Chem. and Lab	51, 52	
71	ÎV	Mineral Anal. (Min'g Students)	59, 60	
72	ÎV	Adv. Inorg. Chemistry	58	
73	ÎV	Food Chemistry	58 56, 57	66
74	ĪV	History of Chemistry	51, 56	
76	III	History of Chemistry Inorg. Quant. Anal. Lab. (Chem.		
		Students)		61
77	IV	Students) Inorg. Lab. (Chem. Students)	61, 62	
81	II	Materials of Construction		
83	II	Mechanics	194	198
86	III	Mechanics	83, 198	1115
87	III	Mechanics. Strength of Materials """Lab	83, 198	~
88	III	" " " Lab		87
89	III	Foundations and Masonry		87
90	III	Structural Design	02 940 947 940	87
92 93	III	Railway Eng.	83, 346, 347, 348	92
93 94	IV	" " Theory of Structures	86, 87	94
95	ÎV	Strength of Materials.	86, 87	
96	ÎV	Bridge Design	90	94
97	III & IV	Hydraulies	83	01
98	III & IV	Hydraulics. "Lab		97
99	ĪV	" Machines	86	97
100	IV	Municipal Engineering		97
101	IV	Hydraulics and Lab. (Short Course)	83	1.
111	III & IV	Elements of Elec. Eng	83. 198, 315, 316	
112	III & IV	Elec. Eng. Lab. (Elementary)		111
113	III	Electrical Engineering	198	
114	III	Elec. Eng. Lab. Electrical Engineering. Elec. Eng. Lab. (Elec. Eng. Students)	113, 114, 201	113
117	IV	Electrical Engineering.	113, 114, 201	320, 32
118	IV	Elec. Eng. Lab. (Elec. Eng. Students)	113	117
120	IV IV	Elec. Light and Power Distrib		117, 11
$121 \\ 122$		Electric Traction	232	117, 11 117, 11
$122 \\ 123$	IV	Electrical Designing. Applications of Electricity.	494	117, 11 117
123	IV	Elec. Photometry and Illumination.	113 113	117
131	I	English Composition	110	111
131	II	English Composition Summer Reading Summer Reading or Essay		1 80
133	III	Summer Reading or Essay		- 1- bis
134	IV	Summer Essay		T Pla
141	Î	Geology, General		in the
142	III	Mineralogy	51	170
143	III	Mineralogy. Mineralogy, Determinative	51	100 100
146	IV	Petrography and Lab	141	a second second

No. YEAR		SUBJECT	Prerequisite	Con- CUR- RENT	
147	IV	Petrography (Advanced)	141 140 149		
148	ÎV	Ore Deposits and Economic Geol.	141, 142, 143	1	
149	ÎV	Geology of Canada	141		
151	ÎV	Crystallography.	141	and and	
152	ÎV	Geology, Historical.	142 141, 142, 143	1 1 1	
153	ÎV	Geology Fieldwork (with 294)	141, 142, 143	1 1 1	
154	ÎV	" " (alt a)	141, 142, 145	1 1 1	
171	1 iii	Economics		1 Sills	
172	IV	Engineering Economics.		1	
175	İİV	Engineering Leononnies	171	Page 1	
191	I I	Engineering Law		1 1 2	
192	Î	Geometry.			
193	İ	Algebra.	hereiter	1	
194	1 I	Trigonometry			
197	II II	Mechanics. Analytic Geometry.		1 and the second	
198	11 II	Calculus	192	1	
201	III	Calculus	192	11 1	
211		Calculus.	198		
212		Miechanical Drawing		Line in	
213	I	Mechanical Drawing. Carpentry and Wood Turning Smith Work		1. 21.2	
	ĮĮ			1 24 54	
214	Ī	Foundry Work	The second second second second second second second second second second second second second second second se	1997	
215	I	Shop Methods. Mechanics of Machines.		1 h	
218	II	Mechanics of Machines	191, 192, 194	198	
220	II	1 Machine Shop Work	and the second sec	1 1 1	
221	II	Shop Methods		1.1.2	
223	III	Mech. Eng. Laboratory	Endonetik i det	226	
224	III	Mechanics of Machines	83, 218	220	
225	III	Machine Design		87. 23	
	La Davis	A THE DRIVENESS AND AND AND AND AND AND AND AND AND AND	Frank A State -	or 2:	
226	III	Mech. Eng. (General Course)	51	228	
227	III	" " (Mech Eng Students)	51	228	
228	III	" " Lab		226, 22	
	and a second second	and the design of the second se		OF 37	
229	III	Thermodynamics	51, 198,	01. 91	
231	III	Mech. Drawing (Mech. Eng. Stud.).		00*	
232	III	" (Elec. Eng. Stud.).		225	
233	ÎII	Smith Work (Summer School)	213	225	
234	III	Foundry Work (Summer School)	213		
235	ÎÎÎ	Pattern Making	214		
236	ÎÎÎ	Machine Shop Work	212		
237	III	Shop Processes and Management	220		
240	IV	Mechanics of Machines			
241	IV	Designing	234. 225, 231	210	
242	IV	Designing Mach. Design (Mech. Students)	220, 231	242	
243	IV	Mach Design (Flee Students)	220		
244	IV	Mach. Design (Elec. Students)	225		
245	IV	Power Plant Design	227		
246	IV	Locomotive Engineering	227	244	
240		Marine Engineering	221	244	
249	IV	meating and vent n of Buildings	227	244	
	IV	Mech. Eng. Lab	227. 227, 228. 228, 229.		
251	IV	Thermodynamics.	228, 229		
52	IV	Machine Shop Work	236		
53	IV	Mig. Plant Design.			
54	IV	Works Org. and Accounting	237 227, 228	252	
57	IV	Exp. Engineering	227, 228	249	
61	III	General Elem. Metallurgy	51	1 121	
62	III & IV			261 in	
	the state of the state of the			-01 111	

## PREREQUISITE SUBJECTS IN APPLIED SCIENCE 255

	YEAR	SUBJECT	Prerequisite	CON- CUR- RENT
263	III	Fire Assaying	51 or 52 (or 75).	
264	III	Metallography (Summer School)	01 01 02 (01 10).	
265	III	Metall. Calculations		261
266	III	Metall. Colloquium		261
267	IV	Summer Sch. (Metall. Works)		201
271	ÎV	Metallurgy (General)	261	
272	IV	" (Metall. Students)	261	271
274	IV	Metall. Lab. Thesis	262	271
275	IV	Electro-Metallurgy	51	
276	IV IV	" Lab		275
	IV	Metall. Colloquium	261	271
277	IV	Metall. Machinery and Design	261	271
			201	211
291		Mining Engineering. Ore Dressing and Lab	51	
292			346, 348	
293		Mine Mapping	141	
294		Mining Field School		
295	III	Ore Dressing (Chem.Eng. Students).	51	
297	IV	Mining Engineering	291	297
298	IV	Mining Machinery and Design	81, 226, 299	291
299	IV	Ore Dressing and Milling	292	299
300	IV	LaD	292	299
301	IV	" " Thesis Work	263, 300	007 0
302	IV	Mining Colloquium		297, 29
311	I	Physics		311
312	I	Physical Lab		911
315	II	Physics.		315
316	II	Physical Lab.		315
320	IV	Physics (Elec. Eng.)	315, 316	200
321	IV	Phys. Lab. (Elec. Eng.)		320
341	I	Desc. Geometry		The Sale
342	I	Freehand Drawing		1.52.78
343	I	Lettering.		
345	II	Descriptive Geo. and Perspective	341	Small R
346	II	Surveying	191, 193	
347	II	Surveying Fieldwork		
348	II	Mapping	342, 343	100 19
351	III	Map Projections	341, 345	10 81.25
352	III	Surveying (Miners)	346, 347	1
353	III	Surveying (Civils)	346, 347	1
354	III	Surveying (Fieldwork)	349, 347	
359	IV	Geodesy	351	
360	IV	Geodetic Lab		
361	IV	Geodetic Fieldwork	353, 354	
400	IV	Military Science		

# EXAMINATION TIME TABLES-FACULTY OF APPLIED SCIENCE.

## (Subject to Revision)

## I.-SUPPLEMENTAL EXAMINATIONS.

Supplemental examinations for all subjects of the First, Second and Third Years Applied Science are held in August or September. A schedule of these examinations may be obtained from the Dean.

## II.-SESSIONAL EXAMINATIONS.

Note.—The following numbers correspond with the subjects in the prerequisite list and the departmental descriptions. () indicates that the examination will be held in the first year drafting room. [] indicates that the examination will be held in one of the drafting rooms or laboratories of the department concerned.

Bold-faced type shows that the examination will be held in the Molson Hall with the Arts classes. Examinations begin at Nine A.M. and Two P.M., and normally last three hours.

Date		FIRST YEAR	SECOND YEAR	THIRD YEAR	FOURTH YEAR
January 19th	A.M.			11-261-351	68-243-299-359
" "	P.M.	HE			
anuary 20th	A.M.		1	58-86-263	124-149-263
ш ц	P.M.	13			70
anuary 21st	A.M.	deletter terreter er	197	97-295-352	97-101
"	P.M.	191			172
anuary 22nd	A.M.			61	71–120
и и	P.M.	RARAE STREET			

TIME TABLE, FIRST TERM EXAMINATIONS (Subject to Revision).

DATE	SC Te	FIRST YEAR	SECOND YEAR	THIRD YEAR	FOURTH YEAR
April 19th	A.M. P.M.	42 341	345		
April 20th	A.M. P.M.		51-75 6	$\begin{array}{r} 265 - 19 \\ 113 - 237 - 292 - 353 \end{array}$	64–146–244–272 147–151
April 21st	A.M. P.M.	5-311	315 26	12–226–227 89	100-117-251-271 17-72
April 22nd	A.M. P.M.		82 52	28-229 88	69-95-229-254 148-262
April 23rd	A.M. P.M.	192 13	346	16–87 56	16-94-123 240
April 25th	A.M. P.M.	131	24-83	141 111–141	30-73-241 111-121
April 26th	A.M. P.M.	31–194	14-188	23-291 15-171-320	$\begin{array}{c} \hline 122-278-298 \\ 66-96-242 \end{array}$
April 27th	A.M. P.M.	215	218	90 223–228	67–297 99–253–275
April 28th	A.M. P.M.	193	54 81	59–201 92–224	245-246-247 175
April 29th "	A.M. P.M.	18		142-225	74–257 152–249

SECOND TERM TIME TABLE EXAMINATIONS (Subject to Revision)

## III.-TIME TABLES FOR LECTURES

Complete time tables for all lectures and laboratory work are bulletined in the Engineering Building, and copies of these time tables may be obtained from the Dean of the Faculty of Applied Science.

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## FACULTY OF LAW.

Lectures in this Faculty for the Session 1920-1921 Will commence on Monday, October 4th, 1920.

Students may register at any time during the week preceding the commencement of lectures.

#### MATRICULATION.

Particulars regarding the Matriculation Examination are given on pages 52 to 63.

The attention of students who intend to practise law in the Province of Quebec, or to be admitted to the notarial profession, is called to the statutory requirements for admission to study. These will be found on page 269. A certificate of admission to study, granted after examination by the General Council of the Bar, or by the Board of Notaries, is accepted in place of the Matriculation Examination.

#### PRIZES AND MEDALS.

See page 93.

#### FEES.

See page 101.

#### GENERAL INFORMATION.

Students have the free use of the Law Library of the Faculty, to which large additions are continually being made. The principal reports and legal periodicals are taken. A special room for Law students is provided in the University Library. The room is open during the day, and in the evenings from 7.30 to 10.30 o'clock.

There is a lending library of Law-books. The use of text-books may be obtained for the session on payment of an ad valorem fee.

Moot courts are held from time to time during the session in order to afford practice in the presentation of legal arguments.

#### DEGREES IN LAW.

The degrees in the Faculty of Law are the LL.B., B.C.L., LL.M. and D.C.L. The two last are placed under the supervision of the Committee on Graduate Studies. Particulars will be found on pages 302 and 303.

#### THE DEGREE OF LL.B.

The LL.B. degree is designed to supply a wide and sound education in Law, both for those who do not intend to follow the profession of

#### COURSE FOR LL.B. DEGREE

the Law, and for those who do. To the first class it offers as part of a general education a training in the methods of legal thinking, and affords the opportunity of studying legal science in relation to social and commercial life.

Those who have followed it will not be qualified to practise Law —this is not intended—but they will acquire a knowledge of law from the inside which will enable them to control their professional advisers and to approach any simple legal problem with a justified confidence in their ability to handle it. It is anticipated that the course will prove particularly attractive to students who are looking forward to a career in business, journalism or public life.

For the second class of students—those who intend to practise Law —the LL.B. curriculum provides a valuable course of preliminary study.

The course of study for the LL.B. degree extends over two years, preceded by two years in the Faculty of Arts. In the Faculty of Law the subjects studied are as follows:---

FIRST YEAR.

Roman Law. Constitutional Law. Obligations. Agency and Partnership.

and

Corporations or Private International Law. Insurance or Sales. Shipping and Carriers or Bills and Notes. Public International Law or Evidence.

#### SECOND YEAR.

Jurisprudence. English Law.

#### and

Private International Law or Corporations. Sales or Insurance. Bills and Notes or Shipping and Carriers. Evidence or Public International Law.

Candidates for the LL.B. degree who previously to entering upon their studies for the degree have qualified for a degree in Applied Science or Medicine, are admitted to the first year of the LL.B. course withcut having taken the preliminary years in the Faculty of Arts.

#### FACULTY OF LAW

#### THE DEGREE OF B.C.L.

For the B.C.L. degree the Faculty provides three courses of study. Two of these (Courses A and B) extend over three years, and one (Course C) extends over four years.

#### Three-year Courses for the Degree of B.C.L.

COURSE A is primarily designed for students who intend to practise at the Bar of the Province of Quebec or as notaries in the Province. This course is open to students who have previously graduated in other Faculties and to returned soldiers.

COURSE B is designed to meet the needs of students who intend to practise law in a common law jurisdiction, whether in the other Provinces of Canada, the British West Indies, the United States of America or elsewhere. This course is open to students who have satisfied the requirements of the Matriculation Board.

The two courses are to a large extent identical. They include the study of Roman Law, the Constitutional Law and History of Canada and of the Empire, Public and Private International Law, all the principal branches of Commercial Law, Criminal Law and Procedure and the Law of Evidence. COURSE A includes further a thorough study of the Civil Law and Civil Procedure of the Province of Quebec. COURSE B substitutes for this, the study of the principles of Common Law and of Equity and of the related procedure.

Lectures are delivered, or tuition is given, on all the subjects included in both courses.

The subjects studied in the different years are as follows :--

#### FIRST YEAR.

#### Courses A and B.

Roman Law. Constitutional and Administrative Law. Obligations. Jurisprudence. Agency and Partnership.

Course A.

Legal History (Quebec). Real Property (Quebec). Law of Persons. Civil Procedure.

#### COURSE FOR B.C.L. DEGREE

#### Course B.

Contracts. Torts. Real Property. Legal History.

#### SECOND AND THIRD YEARS.

Courses A and B.

Roman Law (special subjects). Criminal Law and Procedure. Municipal Law. Public International Law. Private International Law. Bills of Exchange and Banking. Commercial Sales. Corporations and Companies. Insurance. Merchant Shipping and Carriers. Evidence.

#### Course A.

Real Rights and Registration. Lease. Prescription. Marriage Covenants. Minor Contracts. Successions and Gifts. Wills, Substitutions and Trusts. Civil Procedure.

Course B.

Common Law. Equity. Procedure.

The Faculty desires to impress upon English students who intend to practise law in the Province of Quebec, the great importance of obtaining a familiar knowledge of French. In this Province it is indispensable that a lawyer should be able to write and speak the French language.

#### Four-year Course for the Degree of B.C.L. (Course C.)

This Course may be taken by all candidates for the B.C.L. degree (not being *Course B.* students), and *must* be taken by all such candidates (not being *Course B.* students) who are not graduates or returned

#### FACULTY OF LAW

soldiers. Before admission to this Course, students must have satisfied the requirements of the Matriculation Board. The first two years of the course cover the same ground as the two legal years of the Course for the LL.B. degree (p. 259), with the addition of Legal History (Quebec) and Property Law (Quebec), which are taken in the first year, and of Civil Procedure (Quebec) and the Law of Persons (Quebec), which are taken in the second year. The third and fourth years of the Course cover the same ground as the second and third years for the B.C.L. Degree, *Course A.* (page 260), with the omission of subjects already studied in the first and second years.

#### Combined Course for the Degrees of LL.B. and B.C.L.

Students who have followed the course and taken the examination qualifying them for the Degree of LL.B. and who have in addition attended lectures and passed examinations in Legal History (Quebec), Property Law (Quebec), Civil Procedure (Quebec) and Law of Persons (Quebec), may proceed to the B.C.L. Degree in two years after pursuing the studies of the third and fourth years of the fouryear course (*Course C.*).

Except as above provided, no student will be allowed to pursue the Course for the LL.B. concurrently with the Course for the B.C.L.

#### CERTIFICATES OF PROFICIENCY IN LAW.

The Faculty is prepared to admit a limited number of persons to the lectures of the first year of the LL.B. course without having passed the matriculation examination. Persons so admitted will pursue the regular course of study for the LL.B. degree, or such other course as the Faculty may direct. Having completed the prescribed course and having passed a satisfactory examination in the prescribed subjects, they will be entitled to receive a certificate of proficiency in law.

## GENERAL REGULATIONS.

I. Undergraduates shall be known as of the first, second, third or fourth year, and shall be so graded by the Faculty. In each year, students shall take the studies fixed for that year, and those only, unless by special permission of the Faculty.

2. At the end of each college year there shall be a general examination of all the classes, called the sessional examination, under the superintendence of the professors, and of such other examiners as may be appointed by the Corporation. The examination shall be conducted by means of printed questions, answered by the students in writing.

3. At the end of the last year of the course there shall be an examination, called the final examination, of those students who have

#### EXAMINATIONS IN LAW

completed the curriculum. The examination shall be conducted by written papers, which may be supplemented by an oral examination. It shall cover all the subjects upon which lectures have been delivered during the whole course for the degree. Those students who satisfy the examiners shall be entitled, after making the necessary declaration and payment of the graduation fee, to proceed to the degree of LL.B. or of B.C.L., as the case may be. There shall be no sessional examination of students who are candidates in the final examination.

4. No student shall be considered as having kept a session unless he shall have attended regularly all the courses of lectures, and shall have passed the sessional examinations to the satisfaction of the Faculty in the classes of his year.

5. The Faculty shall have the power, upon special and sufficient cause shown, to grant a dispensation to any student from attendance on any particular course or courses of lectures, but no distinction shall in consequence be made between the examinations of such students and those of the students regularly attending lectures.

6. On the following days, when they fall within the session, no lectures will be delivered, *viz.*: Ash Wednesday, Good Friday, Easter Monday and Thanksgiving Day. On the following days the morning lectures will be omitted, *viz.*: All Saints' Day (Nov. 1st), and Conception Day (Dec. 8th).

#### EXAMINATION RULES.

I. In each examination the pass mark is 50 per cent.

2. In the final examination the maximum in Roman Law and Civil Procedure is 200 marks, and in all other subjects 100 marks. In the first year the maximum in Roman Law is 200 marks

3. No student who fails in more than one subject in any sessional examination shall be allowed the year; provided that a student who has failed in not more than two subjects and has obtained 50 per cent. of the aggregate total of marks may make good his standing by passing a supplementary examination before the beginning of the following session.

4. In the final examination no student who fails in any one subject will be held to have passed unless he obtains 60 per cent. of the aggregate total; and no student who fails in any two subjects will be held to have passed unless he obtains 65 per cent. of the aggregate total; provided that a student who has failed in not more than two subjects, but has obtained 50 per cent. of the aggregate total, may make good his standing by passing a supplementary examination at the beginning of the following session or at such later time as the Faculty may appoint.

#### FACULTY OF LAW

5. A fee of \$5 must be paid for the supplementary examination in each subject.

## EXAMINATIONS FOR THE LL.B. DEGREE.

The standard of attainment for the degree of LL.B. will be such as may from time to time be determined by the Faculty of Law.

The award of the LL.B. degree and of Honours and Prizes in connection therewith will be determined by the results of :--

I. A written examination at the end of the first year in the subjects prescribed for that year;

2. A written examination at the end of the second year in the subjects prescribed for that year;

3. An oral examination at the end of the second year in the subjects prescribed for the first and second years.

#### COURSES OF LECTURES.

#### ROMAN LAW.

#### PROFESSOR :- R. W. LEE.

The course on this subject is intended to accompany the study of the Institutes of Justinian, with the text of which students are expected to become acquainted.

*Text-books*:—For the historical part, Walton's Historical Introduction to the Roman Law (3rd ed.); and for the Institutes, Sandars' Institutes of Justinian.

Books of Reference:—Sohm's Institutes of Roman Law, translated by Ledlie (3rd ed.); Girard, Manuel élémentaire de Droit Romain; Poste's Institutes of Gaius; Buckland, Elementary Principles of the Roman Private Law; Maine's Ancient Law.

ROMAN LAW (SPECIAL TOPICS).

#### PROFESSOR :- R. W. LEE.

Lectures will be given to the second and third (third and fourth) years, on a selected title of Justinian's Digest. The title for the session 1920-1921 will be Dig. 1X. 2 (de lege Aquilia).

#### CONSTITUTIONAL AND ADMINISTRATIVE LAW.

#### PROFESSOR :- R. W. LEE.

The object of this course is to explain the fundamental principles of Parliamentary government and of the Rule of Law in the British Constitution. Particular attention is paid to the organization of the

#### OBLIGATIONS, AGENCY AND PARTNERSHIP

Empire. In the second part of the course the B. N. A. Acts are commented upon, and the leading cases discussed which illustrate the respective powers of the Federal and Provincial Legislatures.

Students are expected to read Dicey, Law of the Constitution (8th edition, 1915), and Sidney Low, The Governance of England (1914). Reference may also be made to Anson, Law and Custom of the Constitution; Taswell-Langmead, English Constitutional History (8th ed.); Keith, Responsible Government in the Dominions, and Imperial Unity and the Dominions; Houston, Constitutional Documents of Canada; Kennedy, Documents of the Canadian Constitution; Lefroy, Canada's Federal System; Lefroy, Constitutional Law of Canada.

Students should supply themselves with copies of Lefroy, Leading Cases in Canadian Constitutional Law.

#### OBLIGATIONS.

#### PROFESSOR :- HON. MR. JUSTICE HOWARD.

A course of fifty lectures, dealing with the main principles of the law of obligations, including contracts, quasi-contracts, offences and quasi-offences, the effect, the various kinds, and the extinction of obligations.

#### LEGAL HISTORY AND BIBLIOGRAPHY.

## LECTURER :- WALTER S. JOHNSON.

This course comprises an outline of the history of the law in force in the Province of Quebec, including Constitutional History up to Confederation.

#### AGENCY AND PARTNERSHIP.

## Lecturer :--- Walter S. Johnson.

This course explains the principles of the law of Mandate and Partnership, as laid down in the Civil Code of Lower Canada, and also treats of commercial agency.

#### MUNICIPAL LAW.

#### LECTURER :- THIBAUDEAU RINFRET.

This course includes an outline of the general principles of municipal law and deals particularly with the Municipal Code of 1916 and the Government of Cities and Towns in the Province of Quebec.

#### FACULTY OF LAW

LAW OF CORPORATIONS AND OF JOINT STOCK COMPANIES.

#### PROFESSOR :---HON. MR. JUSTICE MARTIN.

General course on organization of companies under the Dominion and Quebec Companies' Acts; nature of various securities; rights and powers of directors and shareholders; amalgamation and reorganization of companies; winding-up proceedings.

#### PERSONS.

#### PROFESSOR :---HON. MR. JUSTICE SURVEYER.

This course covers the law of acts of civil status, absentees, marriage, separation, divorce, filiation, minority and interdiction.

#### CRIMINAL LAW.

#### PROFESSOR:-HON. MR. JUSTICE GREENSHIELDS.

This course includes a history of the criminal law and criminal procedure of England, and of their introduction into and development throughout Canada; discussion of the Criminal Code and other statutes enacting criminal offences; of the rules of evidence in criminal cases; of the Fugitive Offenders' Act; of extradition; and, generally, of the principal features belonging to the criminal law of the Dominion.

#### COMMERCIAL LAW, I.

### LECTURER :- A. S. TYNDALE.

The subjects dealt with include commercial sales and the law of insurance. The latter subject will be taken up in the Session 1920-21.

The course on commercial sales includes the fifth title of the Civil Code, in so far as applicable to sales of moveables, and a comparison of the common law rules and remedies.

#### COMMERCIAL LAW, II.

#### LECTURER :- S. L. DALE HARRIS.

This course is divided into two parts of twenty-five lectures each, which are taken up in alternate years.

Part I covers bills of exchange, promissory notes and other negotiable instruments, banking and stock exchange transactions.

Part II covers merchant shipping, including the jurisdiction of and procedure in the Court of Admiralty, carriers of goods and carriers of passengers.

During the session 1920-1921, Part II will be taken up.

#### CIVIL PROCEDURE

#### CIVIL PROCEDURE, I.

## PROFESSOR :---HON. MR. JUSTICE SURVEYER.

This course of lectures, for the first year, deals with the articles of the Code (I to 214 inclusive) which refer to ordinary pleadings, exclusive of incidents. The course deals also with judgments by default to appear or to plead and judgments upon confession (C. P. 418 to 420 and 527 and 548), amendments to pleadings (513 to 526), procedure in summary matters (1150 to 1162), before the Superior and Circuit courts (1120 to 1149), the Commissioners' Court and the District Magistrate's Court (1253 to 1291). It includes the schedules and rules of practice referring to the above-mentioned articles and the forms of the most common kinds of pleadings.

#### CIVIL PROCEDURE, II.

## PROFESSOR :- HON. MR. JUSTICE SURVEYER.

The advanced course for the second and third years covers all matters of procedure not dealt with in the first year course, and includes trial, provisional remedies, such as capias, attachment before judgment, injunction, etc., and special proceedings, such as proceedings relating to corporations and public offices, mandamus, etc., as well as the rules of pleading in the more complicated classes of action. It is divided into two parts, taken in alternate years.

## SUCCESSIONS, GIFTS, WILLS, SUBSTITUTIONS AND TRUSTS.

#### LECTURER :- PIERRE BEULLAC.

Two titles of the Civil Code, that of Successions, and that of Gifts *inter vivos* and by Will are here explained. The order of the Code is followed, so that the whole subject is divided into two courses given in alternate years.

First Course:-Successions and Gifts. Second Course:-Wills, Substitutions and Trusts.

## MARRIAGE COVENANTS AND MINOR CONTRACTS; LEASE AND HIRE, PRESCRIPTION.

#### LECTURER :--- W. F. CHIPMAN.

Two courses-in alternate years.

During the session 1920-1921 the subjects dealt with will be Lease and Hire and Prescription.

#### FACULTY OF LAW

#### REAL PROPERTY LAW.

## PROFESSOR :--- W. DE M. MARLER.

## FIRST YEAR COURSE :---

Distinction of things; ownerships, usufruct (Civil Code, 374-498), modes of acquisition of property (Civil Code, 583-595).

SECOND AND THIRD YEAR COURSES :- 50 lectures in alternate courses.

First Course: -- Modes and acquisition of immoveables :---25 lectures. Second Course :--Privileges on immoveables and hypothecs; servitudes :---25 lectures.

## PUBLIC INTERNATIONAL LAW.

#### LECTURER :- -

Sovereignty and equality of independent states; recognition of belligerency and independence; justifiable grounds of intervention; modes of territorial acquisition; territorial boundaries; doctrine of exterritoriality; treaties and arbitrations; laws of war; neutrality of states and individuals; laws of blockade; contraband; confiscation; prize-courts and their jurisprudence.

The students' attention will be specially directed to treaties, diplomatic relations, and international arbitrations, in which Canada is directly concerned.

## PRIVATE INTERNATIONAL LAW.

#### PROFESSOR :---G. W. MACDOUGALL.

Distinction between the *a priori* and positive methods; sources of the positive law of Quebec on the subject; application and illustrations of the rules for solving conflicts of law; comparison between our jurisprudence and that of England, France and the United States.

#### EVIDENCE.

#### LECTURER :- ARNOLD WAINWRIGHT.

This course consists of an explanation of the main principles and rules of evidence in the civil and commercial matters governed by the provisions of the Civil Code.

In the course of the lectures articles 1203 to 1244 of the Civil Code, and such articles of the Code of Civil Procedure as relate to the subject of Evidence, will be commented upon and explained.

#### JURISPRUDENCE.

#### PROFESSOR :--- H. A. SMITH.

The object of this course is to explain the nature of fundamental legal ideas and the general relation of law to human society. Atten-

#### ENGLISH LAW

tion is drawn to the chief points of comparison between the legal systems of Quebec and of the rest of Canada. The following books are recommended:—Salmond, Jurisprudence; Gray, Nature and Sources of the Law; Vinogradoff, Common Sense in Law (Home University Library). The books recommended in connection with the lectures on Roman Law and Constitutional Law should also be studied in connection with this course.

#### LECTURES SPECIAL TO THE B COURSE.

#### ENGLISH LAW.

#### PROFESSOR :--- H. A. SMITH.

Under this head the student is given courses of lectures upon the leading principles of the law governing Contract, Tort and Real Property. He is not expected to master the details of modern English statutes which are not applicable to Canada. The books recommended are:—Geldart, Elements of English Law (Home University Library); Anson, Law of Contract; Caporn, Select Cases on the Law of Contract; Underhill, Law of Torts (Canadian edition); Radcliffe and Miles, Select Cases on the Law of Torts, or Kenny, Cases on the Law of Tort; Strahan, Law of Property (1916).

Reference may also be made to:-Holmes, The Common Law; Maitland, Equity; Pollock, Torts; Salmond, Torts.

Particulars with regard to other subjects special to this course may be obtained from the Dean of the Faculty. Instruction will be largely conveyed by means of small classes, conducted upon the tutorial system.

#### APPENDIX.

The attention of intending students is called to the following provisions of the Revised Statutes of Quebec and amendments, as bearing on the requirements for the study and practice of law in the Province.

#### I. REGULATIONS APPLICABLE TO THOSE WHO INTEND TO BECOME MEMBERS OF THE BAR.

# N.B.-The articles are here abridged.

Article 4522 R.S.Q.—Examinations for admission to study and to practise law in the Province of Quebec are held at the time and place determined by the General Council.

The examinations are held alternately in Montreal and Quebec every six months; namely, at Montreal, on the second Tuesday of each January, and at Quebec, on the first Tuesday of each July.

All information concerning these examinations can be obtained from the Secretary-Treasurer of the General Council. The present General Secretary is Mr. Victor Martineau, K.C., 66 St. James Street, Montreal.

#### FACULTY OF LAW

Article 4524.—Candidates must give notice, as prescribed by this article, at least one month before the time fixed for the examination, to the Secretary of the section in which he has his domicile or in which he has resided for the past six months.

Article 4475.—This article provides that candidates holding the degree of Bachelor of Arts, Bachelor of Science, or Bachelor of Letters, from any Canadian or British University are dispensed from the examination for admission to study. Such candidates are required to give the notice mentioned above.

Article 4526 R.S.Q. (as altered by by-law of the General Council). —On giving the notice prescribed by Article 4524, the candidate pays the Secretary a fee of \$2.00, and makes a deposit of \$125.00 for a complete certificate of admission to study; of \$70.00 for a partial certificate of admission to study; and of \$200.00 for admission to practice, which deposit, less \$30.00, is returned in case of his not being admitted.

Article 4531.—To be admitted to practice, the student must be a British subject and must have studied regularly and without interruption during ordinary office hours, under indentures entered into before a notary, as clerk or student with a practising advocate during four years, dating from the registration of the certificate of admission to study. This term is reduced to three years in the case of a student who has followed a regular law course in a university or college in this Province and taken a degree in law therein.

The By-laws passed by the General Council of the Bar of the Province of Quebec provide as follows:— Article 51.—A course of lectures on law given and followed at a

Article 51.—A course of lectures on law given and followed at a university or law school of this Province, and the diploma or law degree conferred on students by such university or law school, shall count with reference to the Bar Act, only if the course of study hereinafter outlined has been effectively followed by the university or law school and by the holder of the diploma. (R.S.Q., ss. 1483 \$4531.)

Article 52.—A regular law course in a university or law school of this Province consists of seven hundred and eighty-five lectures of one hour each. These lectures are given on the various subjects in the following proportions:

ROMAN LAW:—103 lectures:—This course comprises an introduction to the study of law, with explanatory remarks and comments on the Institutes of Justinian and on the principal Roman jurisconsults.

CIVIL, COMMERCIAL AND MARITIME LAW:-413 lectures.-The course on these subjects must cover a period of at least three years. It comprises the history of French and Canadian law, explanatory remarks and comments on the Civil Code and on the statutes respecting commerce and shipping.

CIVIL PROCEDURE:—103 lectures:—This course must extend over at least two years. It comprises explanatory remarks and comments on the Code of Civil Procedure and of its statutory amendments, a study of the organization of the civil courts of this Province and the history of the different judicial systems of the country; also the special modes of procedure provided by the statutes and by the by-laws in general, as well as the Bar Act and the By-laws regarding the discipline of the Bar.

PUBLIC AND PRIVATE INTERNATIONAL LAW:-21 lectures:-This course comprises an historical outline, the sources of this law and of its subject matter, its objects (primary and secondary rights of sovereign states), rules of war, commercial and extradition treaties, etc.,

#### QUEBEC BAR REGULATIONS

in force in Canada, as well as the rights and obligations of the citizens of the Province of Quebec and of Canada, and of aliens in the event of conflict of laws.

CRIMINAL LAW: ---69 lectures: ---This course comprises the history of Canadian criminal law, the organization of the criminal courts, criminal procedure, comments on the criminal law of the country, a comparative study of English and Canadian criminal law. The lectures shall extend over two years.

CONSTITUTIONAL AND ADMINISTRATIVE LAW:-41 lectures:-This course comprises an enquiry into the different constitutional enactments and public institutions of the country, the powers, the organization, the procedure of the Federal Parliament and of the Provincial Legislatures, the laws on Education, and the Municipal Code. COMPARATIVE LAW:-30 lectures:-This course comprises a concise

COMPARATIVE LAW:—30 lectures:—This course comprises a concise enquiry into the English common law, and a general knowledge of the main principles underlying the civil and commercial laws of the other Provinces of Canada.

Article 53.—The candidate for admission to practice who has obtained a law degree from a university or law school of this Province, must file, together with this notice, a certificate from the principal or head of such university or law school establishing that he has followed a law course in such university or law school during at least three years in conformity with the Bar Act, and moreover specifying the number of lectures he has actually attended in each subject comprised in the foregoing curriculum during each of the three years and during the three years as a whole.

Article 54.—The examiners must refuse to accept such degree as valid under the provisions of the Bar Act, if they are of the opinion that the course of study hereinabove outlined has not been effectually followed by the candidate.

# II. REGULATIONS APPLICABLE TO THOSE WHO INTEND TO BECOME NOTARIES.

For the regulations applicable to candidates for the notarial profession, see Revised Statutes of Quebec, Articles 4774-4807.

# TIME TABLE OF LECTURES FOR THE B.C.L. DEGREE.

(Three years course-Course A. and Course B.)

#### SESSION 1920-1921.

FIRST YEAR (First Term)

Monday, October 4th, 1920, to Friday, January 14th, 1921 (14 weeks).

Roman Law	9.30 a.m.	M., W., Fr.
Constitutional Law	4.00 p.m.	T., Th.
Obligations Prof. Howard	8.30 a.m.	T., Th.
Jurisprudence Prof. Smith	9.30 a.m.	T., Th.
*Legal History (P.Q.) Mr. Johnson	8.30 a.m.	M., W., Fr.
*Property LawProf. Marler	4.00 p.m.	M., W., Fr.
*Civil Procedure Prof. Surveyer	5.00 p.m.	T., Th.
*Law of PersonsProf. Surveyer	8.30 a.m.	Sat.
†English Law Prof. Smith	4.00 p.m.	M., W., Fr.
*Legal History (P.Q.)Mr. Johnson *Property LawProf. Marler *Civil ProcedureProf. Surveyer *Law of PersonsProf. Surveyer †English LawProf. Smith	4.00 p.m. 5.00 p.m. 8.30 a.m.	M., W., Fr. T., Th. Sat.

### FIRST YEAR (Second Term)

Monday, January 24th, 1921, to Thursday, April 14th, 1921 (12 weeks).

Roman Law	9.30 a.m.	M., W., Fr.
Constitutional Law	4.00 p.m.	T., Th.
Obligations Prof. Howard	5.00 p.m.	T., Th.
Jurisprudence	9.30 a.m.	T. Th.
Agency and Partnership. Mr. Johnson	8.30 a.m.	T., Th.
*Civil Procedure Prof. Surveyer	8.30 a.m.	M., W., Fr.
*Law of Persons	8.30 a.m.	Sat.
†English Law Prof. Smith	4.00 p.m.	Μ.

#### SECOND AND THIRD YEARS

Monday, October 4th, 1920, to Friday, January 14th, 1921 (14 weeks).

Successions, Gifts	Mr. Beullac	8.30 a.m.	M., W.
Real Property	Prof. Marler	4.00 p.m.	T., Th.
Corporations	Prof. Martin	5.00 p.m.	M., W.
Civil Procedure	Prof. Surveyer	8.30 a.m.	T., Fr.
Criminal Law	Prof. Greenshields	5.00 p.m.	T., Th.
Lease, Hire, Prescription	Mr. Chipman	8.30 a.m.	Th., Sat.
Public International Law	· · · · · · · · · · · · · · · · · · ·	5.00 p.m.	Fr.
Roman Law		4.00 p.m.	M.

\*Course A students only.

<sup>†</sup>Course B students only.

# TIME TABLE OF LECTURES FOR THE LL.B. AND B.C.L. COURSES.

## SESSION 1920-1921.

This time table applies to students who are taking (1) the LL.B. course alone; or (2) the combined course for LL.B. and B.C.L.; or (3), the four years course for the B.C.L. The courses of lectures printed in italics are included in (2) and (3), but not in (1).

FIRST AND SECOND	YEARS (	(First Term).
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8.30	9.30	4.00	5.00
Mon., Legal History (Quebec)	.Roman Law	Property Law* . C	Corporations.
TuesObligations	••••••	Constitutional.*C	ivil Procedure.†
WedLegal History (Quebec)	.Roman Law	Property Law* . C	Corporations.
Thurs. Obligations		Constitutional*.C	ivil Procedure.†
FriLegal History (Quebec)	.Roman Law	Property Law* . P	ublic I.L.

# FIRST AND SECOND YEARS (Second Term).

8.	30	9.30	4.00	5.00
Mon Civil Pro	ocedure†	.Roman Law.		. Insurance.
Tues Agency a Partne	and ership*		.Constitutional*	*.Obligations.
WedCivil Pro	ocedure†	.Roman Law	Shipping and Carriers	. Insurance.
Thurs. Agency a Partne	and ership*		Constitutional*	.Obligations.
FriCivil Pro	ocedure†	. Roman Law	Shipping and Carriers	. Public I.L.

\*First year only. †Second year only.

# TIME TABLE OF LECTURES FOR THE B.C.L. AND LL.B. COURSES.\*

# (Applicable to any Session commencing with 1921-1922.)

This time table applies to students who are taking (1) the LL.B. course alone; or (2) the combined course for the LL.B. and B.C.L.; or (3) the four year course for the B.C.L. The courses of lectures printed in italics are included in (2) and (3) but not in (1).

## FIRST YEAR (First Term).

8.30	9.30	4.00	5.00
MonLegal History (Quebec)	Roman Law.	Property Law	Private I.L. or Corporations.
Tues. Obligations		. Constitutional	
WedLegal History (Quebec)	Roman Law.	Property Law	Private I.L. or Corporations.
Thurs. Obligations		. Constitutional	
FriLegal History (Çuebec)	Roman Law.	Property Law	Evidence or Public I.L.

FIRST YEAR (Second Term)

	The second stand as a second stand where			
	8.30	9.30	4.00	5.00
Mon		Roman Law		.Sales or Insurance.
TuesA	gency and Partner- ship		Constitutiona	ll.Obligations.
Wed		Roman Law		.Sales or Insur- ance.
Thurs. A	gency and Partner- ship	C	onstitutional.	Obligations.
Fri		Roman Law		Evidence or .Public I.L.

\*Subject to alteration.

# SECOND YEAR (First Term).

	8.30	9.30	4.00	5.00
Mon			English Law.	. Corporations or Private I.L.
Tues		Jurisprudence.		. Civil Procedure.
Wed	•••••	····· <u>·</u> ······························	English Law.	.Corporations or Private I.L.
Thurs		Jurisprudence.		. Civil Procedure.
Fri		· · · · · · · · · · · · · · · · · · ·	English Law.	
SatLaw of P (Queb	ersons ec)			Evidence.

SECOND YEAR (Second Term).

the second second second second second second second second second second second second second second second s	and the second se			
	8.30	9.30	4.00	5.00
MonCivil Pr	rocedure		English Law	. Insurance or Sales.
Tues		. Jurisprudence.		
			Carriers or	Insurance or Sales
Thurs		Jurisprudence		
FriCivil Pr	ocedure		Carriers or Bills	
SatLaw of . (Quebo	Persons ec)		F	Public I L. or Evidence.

# FACULTY OF MEDICINE.

The Eighty-ninth session of the Faculty of Medicine will be opened on Friday, October 1st, 1920. The regular lectures in all subjects will begin on Monday, October 4th, at the hours specified in the time tables, and will continue until a date in May to be fixed by the Faculty.

## FOUNDATION AND EARLY HISTORY.

The Faculty of Medicine of McGill University is the direct outcome and continuance of a teaching body known as the Montreal Medical Institution, which was organized as a medical school in the year 1823 by Drs. Wm. Robertson, Wm. Caldwell, A. F. Holmes, John Stephenson and H. P. Loedel. These men constituted the first medical staff of the Montreal General Hospital, itself established in 1819. The first session of the Montreal Medical Institution opened in November, 1824, with 25 students, and the lectures were given at the house of the Institution, No. 20 St. James Street, a building situated on the north side of St. James Street, at or near Place d'Armes.

In the year 1829, the Montreal Medical Institution became, by the formal act of the Governors of the Royal Institution for the Advancement of Learning, the Medical Faculty of McGill University. It is thus the oldest Faculty of the University. The first session of the McGill Medical Faculty took place in the winter of 1829-30, and the first university degree, a medical one, was conferred four years later, in 1833.

There were no sessions held during the political troubles of 1836 to 1839, and it is owing to this fact that this is the eighty-eighth instead of the ninety-first session of the Faculty, dating from its incorporation with the University in the year 1829.

The work of the Faculty was carried on in the central part of the city until 1872, when a building was provided by the Governors on the University grounds. This building met the demands of the steadily increasing number of students until 1885, when an addition was found to be necessary.

In 1893, and again in 1898, further extensions and alterations were made, funds for the purpose having been provided by generous friends of the Faculty.

On the 16th of April, 1907, a part of these new buildings, together with the original medical building, was destroyed by fire. The wing

# REQUIREMENTS FOR MEDICAL LICENSE

containing the principal laboratories and lecture rooms was saved, however, and is now used by the Departments of Physiology and Medical Chemistry.

The erection of a new building was at once begun on a new site, at the corner of Pine Avenue and University St., and in 1910 the greater part of it was ready for occupation. In 1911 it was wholly available for the work of the Faculty which can now boast of one of the most modern and well-equipped medical buildings on this Continent.

#### MATRICULATION.

For particulars see pages 52 to 63.

#### PHYSICAL EXAMINATION.

For information see page 66.

REGISTRATION.

See page 71.

BOARD AND RESIDENCE.

See page 72.

#### FEES.

See page 99.

#### REQUIREMENTS FOR LICENCE TO PRACTISE.

Intending students are reminded that a University degree in Medicine does not always give a right to practise the profession of medicine. It is necessary to conform with the medical laws of the country or province in which it is proposed to begin practice. Each province in Canada at present has its special requirements for licence, and in most provinces a special standard of general education is insisted upon before beginning the study of Medicine. Students who intend practising in Canada are warned that in certain of the provinces it is necessary to be registered five years before obtaining a licence to practise. It follows that entrance qualifications must be registered in the province in which the student intends to practise at the beginning of his course in Medicine.

For the convenience of students, a list of names and addresses of the Registrars of the Medical Councils in the several provinces is here given. They should comply with the requirements for registration in one or other of the provinces, before entering on their course in the Faculty of Medicine.

#### FACULTY OF MEDICINE

QUEBEC.-Dr. J. Gauvreau, Dandurand Bldg., corner of St. Catherine and St. Denis Streets, Montreal.

ONTARIO.—Dr. H. Wilberforce Aikins, 170 University Avenue, Toronto.

NEW BRUYSWICK .- Dr. Stewart Skinner, St. John.

Nova Scotia.-Dr. W. H. Hattie, Halifax.

PRINCE EDWARD ISLAND.—Dr. James Warburton, Charlottetown. Newfoundland. Dr. H. Rendell, St. John's.

MANITOBA.-Dr. J. E. Coulter, Winnipeg.

ALBERTA.—C. E. Race, Esq., B.A., Registrar University of Alberta, Edmonton.

SASKATCHEWAN.-Dr. G. A. Charlton, Regina.

BRITISH COLUMBIA.-Dr. A. P. Proctor, Vancouver.

#### DOMINION REGISTRATION.

In order to take the examinations of the Medical Council of Canada a candidate must have the licence of a Canadian province or he must present a certificate from the Registrar of a Provincial Medical Council that he holds a medical degree accepted and approved of by the Medical Council of said province.

Full information may be obtained by writing to the Registrar, Dr. R. W. Powell, 180 Cooper Street, Ottawa, Ontario.

#### GENERAL COUNCIL OF MEDICAL EDUCATION AND ENREGISTRA-TION OF GREAT BRITAIN.

The Matriculation Examination in Medicine of this University is accepted by the General Medical Council of Great Britain. Graduates of this University who desire to register in England are exempted from any examination in preliminary education on production of the McGill Matriculation certificate. Certificates of this University for attendance on lectures, practical work and clinics are also accepted by the various examining boards in Great Britain. To obtain a licence from the General Council it is necessary to pass one of the examining boards of Great Britain in both primary and final subjects.

Detailed information may be obtained from one of the three registrars: Henry E. Allen, B.A., 299 Oxford Street, London; James Robertson, 54 George Street, Edinburgh; Richard J. E. Roe, 35 Dowson Street, Dublin.

#### RECIPROCITY WITH GREAT BRITAIN.

The General Council of Medical Education and Enregistration of Great Britain has entered into reciprocal relations with the Medical Councils of the Provinces of Quebec, Ontario, Nova Scotia, Prince Edward Island, Saskatchewan, Manitoba and New Brunswick, A

# COURSE FOR THE DEGREE OF M.D., C.M.

holder of a degree in Medicine of McGill University who has obtained the licence of the Province of Quebec, may register with the Medical Council of Great Britain. He will thus be eligible for competitive examination for the Army, Navy and Civil Service, and will be allowed to practise in Great Britain, South Africa, Australia, India and the West India Islands without further examination.

# COURSE OF STUDY FOR THE DEGREE OF M.D., C.M.\*

The undergraduate course in Medicine extends over six years.

#### FIRST YEAR.

(Of the six year course.)

Biology (General Biology and Zoology). Chemistry. Physics. English and another cultural subject.

The subjects to be studied in the second year of the six-year course will be stated in the Medical Calendar.

The requirements for the second, third, fourth and fifth years of the five year course are as follows :---

SECOND YEAR.

Anatomy. Chemistry (Biological and Organic). Physiology. Histology.

THIRD YEAR.

Pharmacy. Anatomy (Neurology). Physiology. Pathology (General). Bacteriology. Chemistry (Physiological and Clinical). Parasitology. Pharmacology. Medicine (Clinical). Surgery (Clinical). Microscopy (Clinical).

<sup>\*</sup> It is possible that important changes will be made in the requirements for this degree. If so, announcement of the fact will be made in the Medical Calendar.

#### FACULTY OF MEDICINE

In this year the students visit the hospitals for the first time and receive instruction in small groups in the elements of clinical medicine and surgery.

FOURTH YEAR.

Anatomy (Medical and Surgical). Hygiene. Medical Jurisprudence. Pharmacology and Therapeutics. Medicine and Clinical Medicine. Surgery and Clinical Surgery. Obstetrics. Gynæcology. Mental Diseases. Ophthalmology. Oto-Laryngology. Pediatrics. Pathology.

In this year two medical and two surgical theatre clinics are given weekly in the Montreal General and Royal Victoria hospitals. Outpatient clinics are given to groups of students twice weekly in gynæcology and once weekly in ophthalmology and oto-laryngology. In addition, on four days of the week instruction is given to groups at the bedside, in the laboratories, and in the medical and surgical outpatient departments. The work in hygiene consists of lectures, demonstrations and laboratory work.

FIFTH YEAR.

Medicine and Clinical Medicine. Surgery and Clinical Surgery. Obstetrics. Gynæcology. Ophthalmology. Oto-Laryngology. Pathology. Dermatology.

In this year most of the students' time is spent in the hospitals. Theatre clinics are given twice weekly in each hospital in medicine and surgery. There are also daily ward classes to groups of students in these branches. In the out-patient departments of both hospitals clinics are given to groups of students in the various special branches of gynæcology, ophthalmology, oto-laryngology, dermatology, neurology, orthopædics, pediatrics and genito-urinary diseases. Clinics,

#### EXAMINATIONS IN MEDICINE

ward classes and demonstrations in obstetrics are given in the new Maternity Hospital. Students of the fourth and fifth years attend the Alexandra Hospital in groups for instruction in infectious diseases. The clinical instruction in mental diseases is given in the wards of the Protestant Hospital for the Insane at Verdun.

#### MEDALS, PRIZES AND FELLOWSHIPS.

See pages 91 and 92.

#### QUALIFICATIONS FOR THE DEGREE.\*

I. No one will be admitted to the degree of Doctor of Medicine and Master of Surgery who shall not have attended lectures for a period of six eight-month sessions in this University, or some other university, college or school of medicine, approved by this University (except in the case of those who have already completed the work of the First Year). Students of other universities, so approved, who may be admitted on production of certificates to a like standing in this University shall be required to pass an examination in primary subjects, and all examinations in the final subjects in the same manner as students of this University.

2. Candidates for the final examination shall furnish testimonials of attendance on the following branches of medical education; provided, however, that testimonials equivalent to, though not precisely the same as those stated, may be presented and accepted :--

Biology, General Chemistry, Practical Chemistry, Physics, Histology, Embryology, Anatomy and Practical Anatomy, Physiology and Practical Physiology, Organic Chemistry, Biological Chemistry, Physiological Chemistry, Pharmacy, General Pathology, Bacteriology, Clinical Microscopy, Pharmacology, Therapeutics, Medical Jurisprudence, Hygiene and Public Health, Medical and Surgical Anatomy, Operative Surgery, Special Pathology, Morbid Anatomy, Clinical Chemistry, Principles and Practice of Surgery, Clinical Surgery, Theory and Practice of Medicine, Clinical Medicine, Obstetrics and Diseases of Infants, Gynæcology, Pediatrics, Mental Diseases, Ophthalmology, Oto-Laryngology.

He must also produce certificates of having assisted at six autopsies, of having dispensed medicine for a period of three months, of

<sup>\*</sup> It should be understood that the programme and regulations regarding courses of study and examination contained in this calendar hold good for this calendar year only, and that the Faculty of Medicine, while fully sensible of its obligations towards the students, does not hold itself bound to adhere absolutely, for the whole of a student's course, to the conditions here laid down.

#### FACULTY OF MEDICINE

having assisted at twenty vaccinations, and of having, under the direction of a properly qualified anæsthetist, administered an anæsthetic at least six times.

Courses of less length than the above will only be received for the time over which they have extended.

3. No one will be permitted to become a candidate for the degree who shall not have attended at least one full session at this University.

4. Every candidate must give proof of having attended during at least twenty-four months the practice of the Montreal General Hospital or the Royal Victoria Hospital, or of some other hospital of not fewer than 100 beds, approved by this University.

5. He must give proof of having acted as clinical clerk for six months in medicine and six months in surgery in the wards of a general hospital recognized by the Faculty, and of having reported at least ten medical and ten surgical cases.

6. He must also give proof of having attended for at least nine months the practice of the Montreal Maternity or other lying-in hospital approved by the University, and of having acted as assistant for at least twenty cases.

7. Every candidate for the degree must, on or before the 20th day of April, present to the Registrar of the Medical Faculty testimonials of his qualifications, entitling him to an examination, and must at the same time deliver to the Registrar of the Faculty an affirmation or affidavit that he has attained the age of twenty-one years.

8. The examinations to be undergone by the candidate shall be in the subjects mentioned on page 281.

9. The following oath or affirmation will be exacted from the candidate before receiving his degree :---

Ego, A \_\_\_\_\_\_ B \_\_\_\_\_, Doctoratus in Arte Medica titulo jam donandus, Sancto coram Deo cordium scrutatore, spondeo:--me in omnibus grati animi officiis erga hanc Universitatem ad extremum vitæ halitum persevaturum; tum porro artem medicam caute, caste et probe exercitaturum; et, quod in me est, 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 spondenti adsit Numen.

#### EXAMINATIONS.

Frequent oral examinations are held to test the progress of the student, and occasional written examinations are given throughout the session.

#### EXAMINATIONS IN MEDICINE

Class examinations are held during the session in each of the first year subjects, the marks obtained being added to the total marks obtained at the final examinations.

If the standing obtained by any student in the class examinations is not satisfactory, he shall not be permitted to take the final examinations.

I. A minimum of 50 per cent. in each subject is required to pass and 75 per cent. for honours.

2. The work of one session must be completed and all examinations passed before a student is permitted to advance to the next.

3. Students who fail at the regular examinations in not more than three subjects of the first or second year and in not more than two subjects of the third and fourth years, may, at the discretion of the Faculty, be allowed to take the supplementary examinations before the beginning of the following session. These examinations will be held during the week preceding the regular opening of the session.

Those who fail in more subjects than are above specified are not eligible for supplemental examinations.

4. Students who fail to pass in a subject in which practical work is required may, at the discretion of the examiner, be required to repeat the course and furnish a certificate of attendance thereon.

5. Students who fail in one subject only of the final year may, at the discretion of the Faculty, be allowed a supplemental examination in that subject. Should the subject be one in which practical or clinical work is required, the student must furnish a certificate of additional hospital attendance or laboratory work before presenting himself for examination.

6. Students who fail at the examination held at Christmas may, at the discretion of the examiners, be granted supplemental examinations at a period not less than three months after the regular examinations.

7. A student who, after being registered in the first, second, third or fourth years for three successive sessions, fails to qualify for advancement, or who, after being registered in the final year for three successive sessions, fails to qualify for the degree, shall not be permitted to register again as a student of Medicine in the University.

8. Applications for supplemental examinations must be in the hands of the Registrar at least three days before the date set for the beginning of the examination, and they must be accompanied by a fee of \$5.00 for each subject.

#### MICROSCOPES AND HAEMOCYTOMETERS.

Each student is required to provide himself, on beginning his studies, with a first-class microscope for laboratory and private study throughout his course. The Faculty will supply the instruments neces-

#### FACULTY OF MEDICINE

sary for demonstrations, etc. The microscope must be of substantial construction and be provided, as a minimum, with the following accessories:  $\frac{-2}{3} \frac{1}{6}$  and  $\frac{1}{12}$  oil immersion, and a substage condenser. Such an instrument will last a life-time and is an essential part of the equipment of a practitioner in medicine.

Should the students entering the Faculty of Medicine not be provided with such microscopes, they may purchase new guaranteed instruments through the Bursar's Office of the University for the sum of \$90.00 each.

Each student of the third year is required to have a hæmocytometer, and, in order that an instrument of uniform value and accuracy may be in the hands of all students, the University has purchased a supply, which will be sold at cost price.

#### DOUBLE COURSES.

See pages 118 and 123.

#### COURSES OF LECTURES.

Details of the work done in the several subjects of the course for the M.D. degree will be found in the special calendar issued by the Faculty.

# DEPARTMENT OF PHARMACY.

#### GENERAL ANNOUNCEMENT.

The Fourth Session of the Department of Pharmacy will be opened on Friday, October 1st, 1920.

The Montreal College of Pharmacy, organized as a teaching body in 1867, for fifty years successfully carried on the work of instrucing pharmaceutical students, and for many years it was the only institution in the Province of Quebec offering such instruction.

As a result of negotiations carried on during the summer of 1916, the College of Pharmacy was taken over by the University, and a Department of Pharmacy was instituted in connection with the Faculty of Medicine. Instruction is, therefore, now given in the class rooms and laboratories of the University, and the students of Pharmacy have access to its splendid equipment.

The work of the Department embraces courses in Botany, Physics, Chemistry and Practical Chemistry, Theoretical and Practical Pharmacy, Dispensing, Materia Medica and Toxicology.

Examinations in each subject are held at the close of the course. All students must take these examinations, and those who pass in all subjects of the curriculum, as required by the Pharmaceutical Association of the Province of Quebec, will receive the University Diploma of Pharmacy. A minimum of 60 per cent. in each subject is required to pass, and 80 per cent. for honours. The examination requirements of the Pharmaceutical Association of the Province of Quebec for licence to practise pharmacy in the Province will be found in the special announcement of the Department, which will be sent on application.

#### MATRICULATION.

For entrance into the Department of Pharmacy the University accepts the preliminary examination of the Pharmaceutical Association of the Province of Quebec, particulars of which can be obtained from the Secretary of the Association, 249 St. Catherine Street East, Montreal. Students may also enter by passing the matriculation examination prescribed for the Faculty of Medicine. (See pages 52 to 63.)

# FACULTY OF DENTISTRY.

#### GENERAL ANNOUNCEMENT.

In the autumn of 1903, the Dental Association of the Province of Quebec approached the University, asking that a dental department be instituted in connection with the Medical Faculty, and, as a result of negotiations continuing through the session of 1903-04, the University established such a department. This department was not independent, but was a section of the Medical Faculty.

During the Session 1919-20, the University created a separate faculty, to be known as the Faculty of Dentistry; this will, in consequence, be the first session of Dentistry as a Faculty.

Students may register in the Faculty of Dentistry after passing the matriculation required in McGill University, but those wishing to practise in the Province of Quebec, except those who hold a degree in Arts from a recognized British or Canadian University, must pass the matriculation examination of the College of Dental Surgeons of the Province of Quebec.

In all four years the students in dentistry will take their lectures and practical work in those departments of the University specially qualified and equipped to teach the various subjects.

By arrangement with the Montreal General Hospital, the clinical work of the third and fourth years will be taken at that Institution, where the dental clinic forms a part of the Out-Patient Department.

#### REQUIREMENTS FOR THE DEGREE.

The degree of Doctor of Dental Surgery (D.D.S.) will be conferred by McGill University on any student who has fulfilled the following requirements:—

- I. Has attained the age of 2I years.
- 2. Is of good moral character.
- 3. Has passed all required examinations.
- 4. Has completed the full term of four years.
- 5. Has paid all fees.

For full particulars of the Faculty of Dentistry, consult the special catalogue of the Faculty, a copy of which will be sent on application to the Dean, Dr. A. W. Thornton.

# FACULTY OF MUSIC.

#### LOCAL EXAMINATIONS.

Public local examinations are held yearly at various centres throughout the Dominion by examiners sent out by the University.

These examinations may be looked upon as preparatory to the examinations for diplomas and degrees in Music granted by the University. There are in most of the subjects five grades, and certificates gained in the higher grades will exempt the candidate from certain portions of the examinations for a diploma or degree.

### DIPLOMA OF LICENTIATE IN MUSIC.

Candidates for this diploma may elect to be examined in one of the following :---

Theoretical subjects and composition	(Class I)
Practical subjects as performers	(Class II)
Both theory and practice as teachers	(Class III)

The candidate must pass three examinations:

#### First Examination :--

- (a) Rudiments of music, including sight reading and ear tests.
- (b) Harmony in four parts up to, and including, dominant 9th.
  - (A practical test will be substituted for performers.)
- (c) Counterpoint in two parts. (Practical test substituted for performers.)
- (d) Chief subject of study.

The possession of the Highest Grade certificate of the local theoretical examinations will exempt candidates in Class I from this examination. In Class II, exemption may be claimed if the candidate has passed the Highest Grade (practical) and the Senior or the Intermediate Grade (theoretical) of the local examinations.

In Class III candidates must hold the Senior Grade (theoreticai) and the Highest Grade (practical) certificates in order to claim exemption.

In the Second and Third examinations, between which a year must elapse, the requirements for Classes I and III are, on general lines, similar to those for the first and second Mus. Bac. examinations respectively. In the case of Class II, practical tests are substituted for many of the theoretical tests. Candidates in Class III will, in the final examination, have to pass in "The Art of Teaching Music," which will be partly viva voce and partly paper work.

#### FACULTY OF MUSIC

In Loth the Licentiate and Mus. Bac. examinations, considerable latitude is allowed in the choice of a second practical study. Total exemption from examination in it will be allowed if the candidate possesses recent certificates gained in the higher grades of the local examinations in that subject.

Those holding the diploma of L. Mus. can at any time during the five years immediately following their passing that examination enter for the Mus. Bac. final examination, but they must pass the matriculation examination.

# REQUIREMENTS FOR THE DEGREE OF BACHELOR OF MUSIC.

Candidates for the degree must have passed the following examinations:-

I. The Matriculation Examination. (See page 53.)

2. The First Examination in Music, at the end of the first year.

3. The Second Examination in Music, at the end of the second year.

4. The Final Examination.

The particulars of the work for each of the above examinations are as follows:--

# First Examination in Music :-

- (a) Advanced rudiments.
- (b) Harmony in 3 and 4 parts.
- (c) Counterpoint up to 3 parts.
- (d) Form and analysis. Questions will be given on accent, cadence, metre, rhythm, phrasing, etc., and on form, shown in the work of the early classicists (Scarlatti, Bach, Mozart and Haydn).
- (e) General outlines of musical history.
- (f) Chief and second practical study, or, instead of one of these, the composition of a song (or songs) or a miniature suite for piano (or violin and piano or any other combination).

#### Second Examination in Music :--

- (a). Harmony in not more than 4 parts.
- (b) Counterpoint in not more than 4 parts.
- (c) Canon in 2 parts and fugal exposition up to 4 parts.
- (d) History of music from the 16th century to the present day.
- (e) Form and analysis. The candidate must show an intimate knowledge of a few compositions, the names of which will be supplied on application, at least three months before the date of examination.

#### FACULTY OF MUSIC

- (f) Elementary knowledge of acoustics, or physiology of voice.
- (g) Chief and second practical study, or, instead of one of these, the composition of :--(1) A movement in sonata form for pianoforte (or piano and violin, or any other combination), or (2) chorus with independent accompaniment, or (3). suite for strings.

#### Final Examination in Music :--

- (a) Harmony up to 5 parts.
- (b) Counterpoint up to 5 parts.
- (c) Double counterpoint in 8ve., 10th, and 12th.
- (d) Canon and fugue in 4 parts.
- (e) History of music from the earliest to the present time.
- (f) Form and analysis. A knowledge will be required of such works as the following:-Bach's 48 Preludes and Fugues, Beethoven's Sonatas, Schubert, Schumann and Brahms' Songs, Mendelssohn's Psalms and such Oratorios as Elijah and St. Paul. (The candidate should send in a list of works, in which he or she is prepared to be examined, a few weeks before the day of examination.)
- (g) Instrumentation—a knowledge of the compass and capabilities of all instruments in the mocern orchestra, and the scoring of a given passage in a given time, also the reading at sight of a short excerpt from an easy score of an early work by Mozart or Beethoven.
- (h) Chief and second practical study (or n lieu of both of these a composition can be sent in by the candidate containing 4-part chorus, a solo or duet, an unaccompanied quartette and a 4-part fugue—the whole scored for stringed instruments with independent accompaniment).

Graduates (those holding the degree of Bachelor of Music) of other Universities can be admitted to an *ad eurdem* degree of Bachelor of Music at this University if they are proceeding to the McGill degree of Mus. Doc. and have satisfied the University authorities in all requirements and paid the necessary fees for the same.

# REQUIREMENTS FOR THE DEGREE OF DOCTOR OF MUSIC.

Bachelors of Music of McGill University after the lapse of a period of three years from the time of taking the degree of Bachelor of Music, may proceed to the degree of Doctor of Music, the requirement for which is a composition in extended form, such as an oratorio, opera or cantata. This exercise must have as its first number an introductory orchestral movement in the usual concert-

#### FACULTY OF MUSIC.

overture form, and must contain eight-part writing and fugal treatment. It must be scored for a full orchestra. This original and unaided composition, if approved of, may be publicly performed by the candidate in the University or some other fit and proper place, at the discretion of the University. In addition, an examination in the higher forms of composition shall be necessary, together with a critical knowledge of the full scores of certain prescribed works.

Full particulars with regard to degrees and diplomas in Music, as well as those relating to local examinations not included in the above, will be found in the special Music Syllabus obtainable on application to the Secretary of the McGill University Conservatorium of Music.

FOR MEN.

DIRECTOR, DEPARTMENT OF PHYSICAL EDUCATION :- ARTHUR S. LAMB, B.P.E., M.D.

UNIVERSITY MEDICAL OFFICER :- F. W. HARVEY, B.A., M.D.

All students, on entering the University, are required to pass a physical examination (see page 66). By such an examination any physical defect or weakness may be discovered early, and the student will be advised in regard to treatment. For those defects amenable to treatment by exercise or other hygienic measures, individual attention will be given, and the students will be advised as to what forms of exercise will be likely to prove beneficial or harmful.

#### I. GENERAL.

The aim of the University requirements in physical training is the maintenance and improvement of the physical well-being of the student body, and the production of graduates who are physically as well as mentally fitted for their life-work.

As voluntary exercise is of greater value' than is compulsory, great latitude is given the individual student in his choice of the form which his physical training will take.

The chief factors limiting this choice are :--

1. The suitability of the exercise as a means of physical training.

2. The physical fitness of the individual student to take the form of exercise chosen.

3. The possibility of effective supervision.

4. The practicability of ensuring regular participation.

The aim is not to replace the existing forms of University athletics, but to assist in developing an interest in these by every legitimate means,

#### II. REGISTRATION.

1. At the time of registration every male student of the first three years in the Faculties of Arts, Medicine, Dentistry and Science, and of the first two years in the Faculty of Law shall be given a printed announcement of the University requirements in physical training.\* This announcement shall include a list of the recognized

\* Note:—For the session 1920-21 and until further notice, this regulation will only apply to students of the first two years in the Faculties of Arts, Science, Medicine and Dentistry.

forms of physical activities in which a student may take part in fulfilment of the requirements, and a statement that at the time of his medical examination he will be expected to indicate his choice of the particular forms which he wishes to follow.

2. At the time of his medical examination, each student shall be required to fill in a card indicating his choice, as outlined in paragraph B. I. The Director shall then decide as to his physical fitness for the forms chosen and shall inform the student of his decision and note the same on his card, which shall be filed for reference.

3. Every student shall be categorized by the University Medical Officer as either:-

(A) Fit for all forms of physical exercise.

(B) Fit for a limited number of forms.

(C) Fit for gymnasium work only.

(D) Fit for remedial gymnastics, or temporarily unfit.

(E) Unfit for any forms of physical exercise.

#### III. EQUIVALENTS.

I. The following activities are recognized as fulfilling the requirements:-

University Rugby Football Team.

University Track Team.

University Hockey Team.

University Basketball Team.

University Boxing, Wrestling and Fencing Teams.

University Swimming and Polo Teams.

University Harrier Team.

University Ski Team.

Gymnasium Classes.

McGill Contingent, C.O.T.C.

And such other activities as shall be decided upon from time to time by the Committee on Physical Education.

2. Subject to the approval of the Director, as laid down in paragraph B. 2, any student who desires to participate in competitive athletics, as mentioned in paragraph C. I, may be excused from other forms of exercise during the season of training, providing that this is performed to the satisfaction of the Director.

3. If successful in making a place on the team, he shall be excused from any other forms of exercise for the season of play, and *may* be excused for the remainder of the term at the discretion of the Director.

4. Any student who has been placed in Categories A, B, C or D at his University medical examination, and who does not voluntarily take part in any of the other recognized forms of exercise as provided above, shall be required to attend the regular gymnasium classes appropriate to his category.

#### IV. ATTENDANCE.

I. The amount of time required to be devoted to physical exercise by each student shall be two hours per week throughout the session. Until such time as the University is in possession of its own gymnasium, however, this amount of time may be reduced by the Committee on Physical Education to meet the exigencies of gymnasium accommodation.

2. A record will be kept of the attendance of every student as far as his required physical training is concerned.

3. Unexcused absences up to one-eighth of the required number of periods shall be allowed. Unexcused absences exceeding oneeighth, but not exceeding one-quarter, may be allowed if at the end of the session the student passes a special examination and satisfies the Physical Director that he has made sufficient progress. Unexcused absences exceeding one-fourth shall disqualify a student. Such students shall be required to take extra gymnasium class work to the satisfaction of the Director.

4. At regular intervals during each session and also at the end of each session, the Director of Physical Education shall furnish the Dean of each Faculty with a list of students who have failed to meet the attendance requirements as laid down in the ordinary curriculum, or who have proved unsatisfactory in other respects, and such cases shall be dealt with by the respective Faculties.

No student in default shall be allowed to proceed to the next year of his course without the approval of his Faculty.

Not less than one month before the conferring of degrees in each Session the Director shall furnish to the Registrar of the University, for transmission to Corporation and the Faculties concerned, a list of all students, being candidates for degrees at the forthcoming Convocation, who have failed to satisfy the requirements of the Committee on Physical Education, and no Diploma for a degree shall be issued to any such candidate unless by the express direction of Corporation.

#### V. EXEMPTIONS.

Claims for exemption from the above requirements shall be made in the first instance to the Director, who shall refer them to a sub-

committee on exemptions appointed by the Committee on Physical Education.

#### MEDALS.

The Wicksteed silver and bronze medals for physical education (the gift of the late Dr. R. J. Wicksteed) are offered for competition to students of the graduating class and to students who have had instruction in the gymnasium for two sessions; the silver medal to the former, the bronze medal to the latter. The award of these medals is made by judges appointed by the Corporation of the University. Every competitor for the silver medal is required to ledge with the judges, before the examination, a certificate of good standing in the graduating class, signed by the Dean or Registrar of the Faculty to which he belongs, and the medal will not be awarded to any student who may fail in his examination for the degree.

#### STRATHCONA CERTIFICATE COURSE.

The Departments of Education (see page 158) and Physical Education offer the following courses:---

## FOR MEN UNDERGRADUATES OF THE FOURTH YEAR.

A course of 20 lessons of  $1\frac{1}{2}$  hours each on the principles and practice of physical education. The courses will cover elementary anatomy, physiology and hygiene, the theory of gymnastics and class teaching.

Students who satisfactorily complete this course are entitled to certificate "B" of the Strathcona Trust, and their work is included in the requirements of the First Class Academy Diploma of the Province of Quebec.

#### FOR WOMEN.

#### (ROYAL VICTORIA COLLEGE.)

DIRECTOR OF THE DEPARTMENT:-A. S. LAMB, B.P.E., M.D.

UNIVERSITY MEDICAL OFFICER :- F. W. HARVEY, B.A., M.D.

PHYSICAL DIRECTOR FOR WOMEN :---MISS ETHEL M. CARTWRIGHT.

ASST. PHYSICAL DIRECTOR FOR WOMEN :-- MISS GEORGINA M. WOOD.

Classes in educational gymnastics for all undergraduates of the College and for resident students of music are conducted in the gymnasium of the Royal Victoria College (see page 312). All students on entering the University are required to pass a physical examination (see regulation on page 66) and are also required to pass satisfactory physical tests before taking part in any of the outdoor or indoor physical exercises organized by the Physical Department, whether educational, remedial or recreational.

Work in the Physical Education Department throughout the four-year course (amounting to 140 hours in all) is required of all undergraduate students.\* These periods will be used for instruction in personal hygiene and for educational, remedial and recreative gymnastics, according to the physical requirements of the individual. No student will be asked to do work unsuited to her physique, and students debarred from exercise of any kind will be dealt with separately and carefully advised.

Partial students are admitted to the classes in educational and recreative gymnastics on payment of a fee of \$50.00 (see page 103).

Reports of attendance in physical education will be regularly sent to the Faculty.

Strathcona Prizes.—Three first prizes of \$8, \$10 and \$12, and three second prizes of \$5, \$6, \$9, are open to students for competition in the second, third and fourth years respectively. Two prizes of \$5 are offered for competition to the students of the first year; one for students who have taken part in educational gymnastics at school, and the other for students who have had no previous physical training.

All competitions will be held under the following regulations :--

I. Competitors will be awarded 50 per cent. of the marks on the work of the session,

2. No prize shall be awarded unless the judges consider the work up to the standard of 75 per cent.

3. The prizes shall not be awarded in the second, third and fourth years should the winner fail to obtain her full academic standing. The prizes in the first year shall not be awarded if the winners fail in more than one subject at the sessional examinations.

4. Competitors will be judged on the work taught in the Physical Education Department during the session, the Physical Director for Women arranging all details concerning the competition. A programme of the competitions will be posted not later than March 1st.

-5. Judges for these competitions shall be appointed yearly by the Committee on Physical Education.

#### STRATHCONA CERTIFICATE COURSE.

A course similar to that announced on page 294 is given for the women undergraduates of the fourth year.

<sup>\*</sup> In all cases of absence the student is required to report to the Physical Director for Women. The ordinary interpretation of the one-eighth rule concerning absences does not apply in this Department. Every student is required to wear the costume recommended by the Department.

# MCGILL SCHOOL OF PHYSICAL EDUCATION

# McGILL SCHOOL OF PHYSICAL EDUCATION.

This school was founded under the Teachers' Training Committee in June, 1912, to train teachers of physical education for school work, recreational and social work.

In 1914 a course was added in massage and remedial gymnastics to meet the growing demand for trained masseuses, especially in view of the urgent needs of returned wounded soldiers.

In 1919 the School was placed under the control of the University. The courses provide a thorough all round training extending over two years, but they are independent, and for the present either may be taken separately.

# COURSE I .- EDUCATIONAL COURSE.

*Practice in Teaching.*—Great stress is laid on the practice of teaching. Owing to exceptional facilities, every student will be given the opportunity to conduct classes, games and dances, with helpful supervision from expert teachers.

Entrance Requirements.—It is highly desirable that the teachers of Physical Education shall have reached a good standard of general culture, hence the following will be required for entrance to the course:—High School Leaving Certificate, or Matriculation, or the Model Diploma of the Province of Quebec, or equivalent qualification, at the discretion of the Committee.

Medical Examination.—All students will be required to pass a satisfactory physical examination before proceeding with the course.

Diploma.—Examinations will be held in all regular subjects and certificates will be granted at the end of each year for work done. Fifty per cent. required to pass; 60 per cent. for second class; 75 per cent. for first class; but in all cases at least 60 per cent. must be made on teaching. The Diploma, granted on successful completion of the course, is recognized by the Protestant Board of School Commissioners of Montreal as qualifying for the salary of specialist in public schools.

#### COURSE II .- MASSAGE AND REMEDIAL GYMNASTICS.

#### (For Hospital and Private Work.)

Course II—offered Session 1914-1915 for the first time—is intended to meet the growing demand for experts in this important branch of physical work. The knowledge of massage, remedial gymnastics and the various forms of physical therapy is more and more recognized as necessary in medical and educational practice. It has proved of the utmost value in the treatment of convalescent soldiers.

#### MCGILL SCHOOL OF PHYSICAL EDUCATION

The Course will be of special value to graduate nurses who wish to obtain additional qualifications, and to those engaged in physical education.

The treatment of postural and other defects of school children cannot be effectively carried out in large gymnastic classes, but should be supplied by experts who can give individual attention to such cases.

#### SUBJECTS.

# Courses I. and II.

# Anatomy (general and applied) Physiology Physiology of Exercise Hygiene (personal, school and public) Class Management and Teaching Theory of Movement Anthropometry Physical Diagnosis First Aid Heredity and Evolution

Educational Gymnastics Games Dancing and Folk Dancing Remedial Gymnastics History of Physical Education Educational Psychology. Psychology of Play Swimming and Life-saving

Course I. only.

#### Course II. only

Theory and Practice of Massage and Medical Gymnastics Electro-therapy, Mechano-therapy, Photo-therapy, Hydro-therapy Elementary Educational Gymnastics

#### PLAYGROUND SUPERVISION.

No special course is offered, but graduates of Course I who have taken handwork and kindergarten in addition to their courses are fully equipped to undertake the supervision of playgrounds.

For full particulars of all courses, see syllabus, to be obtained from the Secretary, School of Physical Education, McGill University.

# MILITARY TRAINING.

In view of the fact that the Federal Government has not as yet adopted any general policy with regard to military training no instruction in military science will be given at McGill University during the session 1920-21, except perhaps in the Faculty of Applied Science, where an alternative may be allowed in the fourth year between Field Engineering, Map Reading and Field Sketching and Military Administration and Organization on the one hand and certain selected subjects in the several courses, as shown on pages 192 to 203.

#### CANADIAN OFFICERS' TRAINING CORPS.

#### (McGill University Contingent.)

In order to provide undergraduates with practical military training, a contingent of the Canadian Officers' Training Corps was organized at McGill University two years before the war began, and is still being maintained. Students are thus afforded an opportunity of preparing themselves for service as officers in the Canadian Militia. The contingent is a unit of the active militia, being governed by special regulations, under which it cannot be called out for active service as a unit.

The training is intended to bring the largest possible number of students up to the standard required for the two certificates (A and B) of proficiency. The value of these certificates lies in their being a guarantee of consecutive training for two or more years, of a nature calculated to produce good officers. If a member, who is in possession of a certificate, is recommended for a commission in the Active Militia, this certificate entitles him to rank as an officer without any further qualification, and also to certain other advantages.

To obtain a Certificate (A or B) a member must complete two years *efficient* service in the corps, and pass the written and oral examinations prescribed for the respective certificates. To be efficient in a given year (1st August to 31st July), a member must have attended 40 parades if in his first year of service, or 25 parades if in a subsequent year, and must have completed the prescribed course of musketry. The time required is about two hours per week each 'session.

Each member, upon joining the contingent, will be required to deposit the sum of \$5.00 with the Adjutant; for which a receipt will be given. This money will be refunded if the member becomes efficient; otherwise it will go into the funds of the contingent.

The training in the corps is of such a nature that all students are recommended to join. Enlistment is, however, purely voluntary.

In the Graduate School are enrolled all the graduate students in the University who are following advanced courses of study in subjects which in the undergraduate work fall within the scope of the Faculties of Arts, Law, and Applied Science.

The Faculty of the Graduate School consists of the professors of the Faculties of Arts, Law, and Applied Science, but the initiative and administration of the School is placed in the hands of a Committee selected mainly from these Faculties and known as the Committee on Graduate Studies. The Chairman of this Committee is the official head of the Graduate School. The advanced courses of study offered in the Graduate School lead to the degrees of Master of Arts, Master of Science, Master of Laws, and Doctor of Philosophy.

Instruction for students of the Graduate School is provided in the following departments of study which at present rank as "Subjects":

Philosophy, including Psychology. History. Economics and Political Science. Greek Language and Literature (including Grecian History). Latin Language and Literature (including Roman History). French Language and Literature. German Language and Literature. English Language and Literature. Semitic Studies. Archæology. Comparative Philology. Education. Mathematics. Physics.

Chemistry. Botany. Zoology. Geology and Mineralogy. Thermodynamics and Theory of Heat Engines. Theory of Elasticity, Strength of Materials and Theory of Structures. Hydrodynamics and Hydraulics. Applied Electricity. Theory of Machines and Machine Design. Metallurgy. Mining. Law.

The requirements for the several degrees in course are as follows:

#### DEGREE OF MASTER OF ARTS.

I. Candidates must hold the degree of B.A. or B.Sc. (in Arts) from McGill University, or its equivalent.

2. Candidates must have taken:

- (a) One year of resident graduate study at McGill University; or
- (b) If graduates of McGill University, two or more years of private work; the amount of such work required may be stated to be the equivalent of one year of academic study.
- 3. One, two or three subjects may be taken.

4. One of these subjects shall be designated as the major subject and special attention shall be devoted to it. It must be a subject which the student has already studied in his undergraduate course, and the work required in it will represent an attainment in knowledge far in advance of that required for the B.A. degree. The minor subject, or subjects, may be selected from those of the undergraduate course of the third or fourth year which have not already been taken by the candidate. Not more than one-third of the candidate's time for the year shall be devoted to these subjects. The student shall pass an examination in each of the subjects of his course.

In the case of students of first rank honour standing in mathematics and physics, if the major work is to be in physics, exemption may be granted from part of the required attendance on lecture courses, on the recommendation of the Head of the Department in physics and subject to the approval of the Committee on Graduate Studies.

Candidates holding the ordinary B.A. degree must have taken all the ordinary undergraduate courses, or their equivalents, in the subjects which they select as their major.

5. The student shall also present a thesis on some topic connected with his major subject. The title of his thesis must have been previously submitted to the Committee on Graduate Studies and the Head of the Department concerned for their approval. The thesis must show evidence of distinct ability in dealing with the subject selected, and must also display good literary style.

6. Graduates possessing a Bachelor's degree, who act as demonstrators or tutors in the University for the entire session, may proceed to the degree of M.A., and, in so doing, may, at the discretion of the Department with which they are connected, and the Committee on Graduate Studies, omit a portion of the course of study. They shall, however, be called upon to pass an examination on the course of study which they have followed, and shall in all cases submit the thesis prescribed for that degree. If, however, they desire this year's work to count as one of the three years of study required for the Ph.D degree, they must make their course of study conform to the Ph.D requirements.

N.B.—The first year's course of study for the Ph.D. degree will cover the requirements of the M.A. course; but if such a course of study be followed, a thesis must be submitted and approved before the degree of M.A. is conferred. If, however, the student continues his course of study and takes the degree of Ph.D., the degree of M.A. will be conferred with the degree of Ph.D., in which case no special thesis will be required for the former.

# DEGREE OF MASTER OF SCIENCE.

I. Candidates must hold the degree of B.A. or B.Sc. from McGill University, or its equivalent.

- 2. Candidates must have taken
  - (a) One year of resident graduate study at McGill University; or
  - (b) If graduates of McGill University, two or more years of private work; the amount of such work required may be stated to be the equivalent of one year of academic study.

3. The course of study followed by the candidate shall be of an advanced character, being the equivalent of that required for the degree of M.A., and shall lie in the domain of pure or applied science. It shall be selected from *one* of the last thirteen subjects in the list given above. Geodesy and ore dressing also constitute subjects in the case of this degree. This course of study must have been previously submitted to the Head of the Department and to the Committee on Graduate Studies and have received their approval.

In the case of students of first rank honour standing in mathematics and physics, if the major work is to be in physics, exemption may be granted from part of the required attendance on lecture courses, on the recommendation of the Head of the Department in physics and subject to the approval of the Committee on Graduate Studies.

4. The candidate shall also present a thesis on some subject connected with his course of study. The title of this thesis must have been previously submitted to the Head of the Department and to the Committee on Graduate Studies and have received their approval. This thesis must show evidence of distinct ability in dealing with the subjects selected and must also display good literary style. It may deal with some special topic, but the course of study followed by the student must cover a much wider field.

5. Graduates possessing a Bachelor's degree who act as demonstrators or tutors in the University for at least one entire session, may proceed to the degree of M.Sc., and, on so doing, may, at the discretion of the Committee on Graduate Studies, omit a portion of the course

of study usually required. They shall, however, be called upon to pass an examination on the course of study which they have followed, and shall in all cases submit the thesis prescribed for the degree.

## DEGREE OF MASTER OF LAWS (LL.M.)

Candidates must (1) hold the degree of B.C.L. or LL.B., from McGill University, or its equivalent, or be graduates of an approved law school; (2) have pursued for one year a course of resident study at McGill University and must have submitted a thesis of conspicuous merit upon a subject previously approved by the Faculty of Law and by the Committee on Graduate Studies, and must have passed such examination as may be prescribed.

Applications to be admitted to study under this section must be made to the Committee on Graduate Studies, with particulars of the proposed thesis, not later than the 1st of February of the year in which the candidate proposes to enter upon his course of study. A printed or typewritten copy of the thesis must be delivered to the Dean of the Faculty of Law for transmission to the Committee on Graduate Studies not later than the 1st of April of the year in which the candidate proposes to proceed to the degree.

# DEGREE OF DOCTOR OF PHILOSOPHY.

I. The candidate for the degree of Doctor of Philosophy must hold the degree of B.A. or B.Sc. from McGill University, or its equivalent.

2. He must have followed a course of at least three years' resident graduate study.

3. He must select one major subject and one minor subject. The minor subject selected must be related to his chief line of work. This minor subject shall have devoted to it about one-quarter of the instruction given during the entire course.

4. The candidate must satisfy the Committee that he has a reading knowledge of both French and German before he will be permitted to enter upon the course of the second year.

5. The examination on the major subjects shall cover not merely the formal courses of instruction which have been taken, but the candidate must show that he possesses a good general knowledge of the whole science or branch of learning which he has selected as his major subject. A similar general, though less detailed, knowledge shall be required in the case of the minor subject.

6. The candidate must also prepare a thesis which must display original scholarship or show marked ability to conduct research. If the thesis be accepted, two hundred printed copies of it must be

deposited with the University Librarian before the candidate will receive his diploma.

The University exacts a very high standard in the case of this degree, and at least three years of study are therefore demanded.

A three years' course leading to the degree of Doctor of Philosophy is offered in the following subjects taken as majors:—

Botany. French. Philosophy. Physics. Chemistry. Semitic Studies.

Students desiring to proceed to the degree of Doctor of Philosophy in subjects other than those mentioned above may communicate with the Chairman of the Committee on Graduate Studies, to whom also applications should be made by all students desiring to follow courses of study in the Graduate School.

# DEGREE OF DOCTOR OF CIVIL LAW.

Any person who has graduated as B.C.L. or as LL.M. from McGill University may after five years from such graduation proceed to the degree of Doctor of Civil Law, provided that he shall have written a thesis on a subject previously approved by the Faculty of Law and by the Committee on Graduate Studies, and that such thesis shall have been adjudged by the Faculty of Law and by the Committee on Graduate Studies to be a valuable contribution to legal science. The candidate may, instead of a thesis, submit to the Committee on Graduate Studies a published book or books dealing in a scientific way with some branch or branches of law, and in that case no previous approval is required. Three printed or type-written copies of the thesis or three copies of the book or books, as the case may be, must be delivered to the Dean of the Faculty of Law for transmission to the Committee on Graduate Studies not later than the 1st of February of the year in which the candidate proposes to proceed to the degree.

#### THESES.

Owing to the fact that in future all theses submitted by successful candidates for higher degrees will be bound and placed in the Redpath Library, candidates for such degrees are advised that the Committee on Graduate Studies will henceforth require all theses to be prepared in a uniform manner and in accordance with the following specifications:

Ist.—The paper is to be of uniform size, about  $8\frac{1}{4} \times 10$  inches, and of substantial quality.

2nd.—The left-hand margin is to have a uniform width of about  $1\frac{1}{2}$  inches.

3rd.-All theses should be typewritten, if possible.

4th.—No binding is to be employed, but the loose sheets will be placed in a manilla envelope in the order of their pagination.

All theses for 1920-21 must be in the hands of the Chairman of the Committee on Graduate Studies on or before April 1st, 1921, except in the case of theses involving experimental work, when the time will be extended to April 16th. No thesis received after these dates will be accepted.

#### REGISTRATION.

Application forms, with an outline of the course to be followed, must be filed with the Secretary, for the approval of the Committee, before the roth of October of each year.

Students whose course extends over more than one year must register at the commencement of each year of their course.

Application forms and registration cards may be obtained from the Secretary of the Committee.

# THE UNIVERSITY LIBRARY.

# G. R. LOMER, M.A., PH.D., Librarian.

The University Library is under the general management of a Committee of Corporation, consisting of the Principal, Chairman; the Librarian, Secretary; two members of the Board of Governors, one Representative Fellow, appointed by Corporation; two representatives of the Faculty of Arts, elected by the Faculty; one representative of each of the Faculties of Applied Science, Law and Medicine, elected by their respective Faculties; and four other members appointed by Corporation.

The several libraries of the University now contain 165,657 volumes, over 25,000 pamphlets, considerable collections of maps and photographs, and a number of the rarer and more costly monographs and serials which are indispensable for purposes of research. There are now on the shelves over 300 complete files of periodicals and publications of various literary and scientific societies.

Among the special collections possessed by the Library may be mentioned the Mendelssohn Choir Memorial Collection of Works on Music, the T. D. King Collection of Shakespeariana, the Redpath Historical Collection, and the Collection of Canadiana. The nucleus of the latter is formed by the choice library of the late Mr. Frederick Griffin, which he bequeathed to the University about forty years ago. It has been growing ever since, and includes, at the present time, besides numerous manuscripts, an interesting collection of Canadian portraits and autographs. The Canadiana have been further enriched by the recent gift of over 270 volumes and 50 pamphlets from the library of the late Mr. William McLennan, presented in his memory by his children.

The Redpath Historical Collection was begun by the late Mr. Peter Redpath soon after he became a Governor of the University. It received substantial yearly additions from him up to the year of his death, after which it was steadily augmented during the remainder of her life by his widow. It is now large and valuable, and affords excellent opportunities for the study of history. Its most striking feature—a series of political, religious and social tracts, for which the first selections were made by the late Professor Henry Morley was greatly enriched by the late Mrs. Redpath, and at present comprises about 10,000 brochures, dating from 1600 A.D. to the end of the nineteenth century.

A special Architectural collection, to be known as the "Gordon Home Blackader Memorial Library," has been established in honour

#### THE UNIVERSITY LIBRARY

of Captain Gordon Home Blackader, B.Arch. (McGill), who was wounded near Ypres on June 2nd, 1916, and died in London on August 20th of the same year.

"The Emma Shearer Wood Library of Ornithology" is being presented by Colonel Casey A. Wood, M.D., as a special research collection for use by all who are interested in birds.

The Medical Library, directly controlled by the Faculty of Medicine, is the largest of the departmental libraries, and is one of the most complete collections of its kind in the Dominion.

Current periodicals, with Transactions and other Society publications to the number of about 400 in the aggregate, are regularly received by the Library.

Founded in 1900, as a memorial to the late Mr. Hugh McLennan from his children, the Travelling Libraries of McGill University were endowed in 1911, by their founders. These libraries contain, each, from thirty to forty carefully selected volumes; and are sent, on application, and on payment of a nominal fee of \$4.00, to schools, to country libraries, to reading clubs, and to small communities which possess no public library. Regulations and full particulars may be obtained from the Librarian of the University.

Although the Library is maintained primarily for members of the University, the Corporation has provided for admission, upon certain conditions, of such persons as may be approved by the Library Committee. It is the desire of the Committee to make the Library as useful to the entire community as is consistent with the safety of the books and the general interests of the University.

## EXTRACTS FROM THE LIBRARY REGULATIONS.

I. The Library is closed on Sundays, and on certain other holidays, as noted in the *Calendar of Meetings*. With a few exceptions, which are posted in the Library at the appropriate time, the Library is open as follows:—

(a) During the session, from 9 a.m. till 6.30 p.m. and from 7.30 till 10.30 p.m. On Saturdays from 9 a.m. till 5 p.m., except on the first Saturday of each month, when it is closed at 1 p.m. for cleaning.

(b) During vacation, from 9 a.m. till 5 pm.. On Saturdays, from 9 a.m. till 1 p.m.

2. Students in the Faculties of Arts, Law, and Applied Science are entitled to read in the Library, and may borrow books (subject to the regulations) to the number of three volumes at one time.

3. Students in the Faculty of Medicine, who have paid the Library fee to the Bursar, may read in the Library, and on depositing the sum of \$5 with the Bursar, may borrow books on the same conditions as students in other faculties.

### THE UNIVERSITY LIBRARY

4. Graduates in any of the faculties, on making a deposit of \$5, are entitled to the use of the Library, subject to the same rules and conditions as students in Arts, Law, or Applied Science.

5. Books may be taken from the Library only after they have been charged at the delivery desk; borrowers who cannot attend personally must sign and date an order, giving the titles of the books desired.

6. Books shelved in the reading-rooms or seminary-rooms must not be taken from the rooms to which they have been assigned; and, after they have been used, they must be returned promptly by readers to their proper places upon the shelves.

7. Before leaving the Library, readers must return to the attendant at the delivery desk books which they have drawn from the stack for use in the reading-room.

8. All persons using books remain responsible for them so long as the books are charged to them, and borrowers returning books must see that their receipt is properly cancelled.

9. Writing or making any mark upon any book belonging to the Library is unconditionally forbidden. Any person found guilty of wilfully damaging any book in any way shall be excluded from the Library, and shall be debarred from the use thereof for such time as the Library Committee may determine.

10. Damage to or loss of any books, maps, or plates, and injury of library fixtures, must be made good to the satisfaction of the Librarian and the Library Committee.

Damage, loss or injury, when the responsibility cannot be traced, will be made good out of the caution money deposited by the students with the Bursar.

II. Should any borrower fail to return a book upon the date when its return is due, he may be notified by postal card, and requested to return the book. If the time has not been extended, or the book returned, after a further delay of at most three days, the book may be sent for by special messenger, at the borrower's expense. or may be replaced, and paid for, in the case of a student, out of the caution monies of such student; in the case of graduates or other borrowers, out of their library deposits.

12. Before the close of each session, students must return uninjured, or replace to the satisfaction of the Librarian, all books which they have borrowed.

13. Silence must be strictly observed in the Library.

14. Infringement of any of the rules of the Library will subject the offender to a suspension of his privileges, or to such other penalty as the nature of the case may require.

# Founded and Endowed by the late Rt. Hon. Baron Strathcona and Mount Royal.

### FOUNDATION AND HISTORY.

The College was opened September 4th, 1899.

It is the outgrowth of plans conceived during the early years of his Principalship by the late Sir William Dawson, which resulted in the establishment of the Ladies' Educational Association. Under the auspices of the Association, courses of lectures, delivered chiefly by Professors of McGill University, were offered to women from 1870 until 1884, thus placing within their reach, to some extent at least, the advantages of a Collegiate and University education.

In 1884, during the principalship of the late Sir William Dawson, the late Lord Strathcona, then Mr. Donald A. Smith, gave a sum of \$50,000, and, in 1887, a further sum of \$70,000, to found the Donalda Endowment for the higher education of women, such education to be conducted in the buildings of McGill College, as a distinct course in the Faculty of Arts, with the understanding that as soon as practicable the classes were to be created into a separate college of McGill University, with a building separate from that of McGill College. Under the terms of the Donalda Endowment it was provided that degrees in the Faculty of Arts should be granted to women practically on the same conditions as to men, and that the examinations for such degrees, for classing, honours, prizes and medals should be identical with those for men.

As a result of this generous gift and in accordance with the conditions attached, courses of instruction, identical in subject and in standard with those of the Faculty of Arts, were established for women in 1884. These courses were given in the Arts Building, some of the work of the third and fourth years and of the Honour Courses being conducted in joint classes.

The first graduating class of eight women was presented for the degree of Bachelor of Arts in 1888.

The ultimate object of Lord Strathcona had been the provision of a residential college, and this was realized when the Royal Victoria College was opened in 1899, and formally inaugurated by their Majesties the King and Queen (then Duke and Duchess of York) in 1901.

The College building, surrounded by garden and tennis courts, was erected at a cost of about \$400,000 at the head of Union Avenue, upon land adjacent to the University Campus. Its beautiful and dignified exterior was designed in consistency with a careful and generous internal provision of a comfortable and gracious place of study and dwelling for students and for staff. A Warden and Resident Staff were appointed. With these new and great advantages the instruction provided by the original endowment has been maintained as hitherto, except that the separate classes are held mainly in the College building. Women have continued to prepare for degrees in Arts, including pure science. Through the wisdom of Lord Strathcona, provision was also made for the study of music. Since, however, the establishment of music as a separate department of the University in the Conservatorium of Music, independent instruction in music in the College has ceased, but it still maintains a resident lecturer in this subject, who is also Vice-Director of the Conservatorium. The interest of College students in music is thereby served and provided for. Women students resident in the Royal Victoria College may take degree courses in music at the Conservatorium.

## THE COLLEGE BUILDING.

The building provides an academic, administrative and recreational centre for resident and non-resident students. It is situated on Sherbrooke Street, in close proximity to the University buildings, and within easy reach of Mount Royal Park. The building is fireproof, and much thought and artistic care have been given to furnishing and decoration.

On the ground floor are the offices of the Administration, including the rooms of the Warden and Secretary, the faculty room, the students' common room, a spacious dining hall, and three lecture rooms. On the first floor are other lecture rooms, the library, reading room, and a handsome assembly hall, which is used for convocation, Conservatorium concerts, and other University purposes. This hall is sometimes lent for purposes that are in harmony with the objects of the College. The gallery, which is reserved exclusively for the use of College students on such occasions, affords the latter many opportunities of educational value. The second and third floors and a small part of the first floor are occupied by the rooms of the Resident Staff and students. Each student has a separate study-bedroom. If accommodation permits, a student may be assigned two rooms, a study and a bedroom. The rooms are completely furnished, and no article of furniture need be brought by the students.

A large gymnasium is provided, fully-equipped with modern requirements. In connection with the gymnasium are bath-rooms and dressing-rooms.

Resident students of music have the use of pianos in two practising rooms and at certain hours in other parts of the building.

The lawn behind the College building provides lawn tennis courts in the summer and a skating rink in the winter. Subject to regulations, the students have the privilege of using the University grounds. Each student paying the Grounds Fee receives a ticket giving admission to the Campus skating rink during certain afternoon hours daily except Saturdays.

# ADMISSION AND INSTRUCTION.

The College being a college of McGill University and its students being registered in the Faculty of Arts, they are required to comply with the regulations concerning discipline and instruction, made by the University and Faculty, and, in addition, with such regulations as may be made for the Royal Victoria College.

Undergraduates are required to pass the Matriculation Examination of the University, or an equivalent examination (see pages 45 to 63) and can proceed to the degrees of B.A. and B.Sc. They are required to wear academic dress. Partial students, in order to obtain admission, must pass the matriculation examination in the subject, or subjects, which they wish to take, or, failing this, must be able to satisfy the Head of the Department concerned that they are qualified to proceed with the course.

Students are required to enter on the roll book of the College their names, home addresses, and addresses in Montreal. All students entering the University for the first time are required, according to municipal regulations, to present a certificate or other satisfactory evidence of successful vaccination. No student who has an infectious illness or who comes from a house in which there has been an infectious illness within a month, shall enter or return to the College without giving notice and obtaining the consent of the Warden. The health of the resident students is in charge of a competent physician, practising in Montreal, who may be consulted, free of charge, by arrangement with the Warden. Every student applying for admission to residence is required to fill in an entrance form and to forward a medical certificate on a form provided by the College.

Instruction is given by professors and lecturers of the University and lecturers and tutors of the Royal Victoria College, who are also members of the various teaching departments of the Faculty of Arts. Graduate students can proceed to the degree of M.A., M.Sc. and Ph.D.

Lectures are given in the College or in the University buildings, practical instruction in science being given in the University laboratories. Students are assisted in their studies by the resident staff.

Students of the College have the use of the University Library containing 165,657 volumes. There is also a College Library comprising works of general literature and the chief stated books required for the University curricula, the Department of Modern Languages being especially well represented. The College Library and Reading Room are open to resident students from 9 a.m. to 11 p.m. and to nonresident students from 9 a.m. to 6 p.m. (on Saturdays from 9 a.m. to 1 p.m.).

The Peter Redpath Museum, containing large collections in mineralogy, palæontology, zoology, botany, archæology, and ethnology, is open to students of the College.

The Warden's business hours are 10 a.m. to 1 p.m.; at other times, by special appointment. She will be glad to meet all students before the opening of the session and to discuss their plan of work then or at any other time during the session.

Applications for admission or for further particulars should be addressed to the Warden, Royal Victoria College, Montreal.

## EXHIBITIONS AND SCHOLARSHIPS.

For a statement of the exhibitions and scholarships open to women students of the University, see page 77.

In addition to these, and further to encourage residence within the College walls of students who might otherwise arrange to board in the city, the Warden and Staff are empowered to make nominations in any of the four college years to not more than three additional exhibitions of the value of \$100.00 each.

## TUITION FEES.

Students (graduate, undergraduate or partial, resident and nonresident) pay the same fees as are charged in the Faculty of Arts. For undergraduate students the fee is \$100 (this includes fees for library, gymnasium and graduation). For further information, see page 95. Every student pays an Athletics or Grounds fee of \$3.00, and undergraduate students, the Royal Victoria College Undergraduates Society fee of \$2.50. All fees are payable to the Bursar, McGill University, on or before October 10th.

#### BOARD AND RESIDENCE.

Residence in the College is open to graduate students, undergraduates, conditioned undergraduates, and, in exceptional circumstances, to partial students. *Application for residence should be made early, as accommodation in the College is limited.* The charge for board and residence, in addition to the sessional fee for tuition, is \$340 (\$140 for room, \$200 for board). This may be paid in two

equal instalments of \$170 each, in October and January. An additional charge, varying from \$50 to \$100, is made for the use of a private sitting-room. Room rent includes all expenses of heat and light (not other electrical attachments, for which fees will be charged). These charges cover the University session from about September 28th to the day after Convocation.

Students of music or others who remain in College until a later date for purposes of instruction, school practice, or examination, are charged an additional fee of \$1.50 a day. No additional fee is charged to students returning earlier than September 28th for scholarship, supplemental, or matriculation examinations. With the permission of the Warden, students may remain in residence during the Christmas vacation. They will be required to pay a fee of \$1.50 per diem for board and residence.

The charges for tuition and room rent are not subject to remission or reduction under any circumstances. In case of prolonged illness and absence from College for a period of six weeks or more, a proportionate reduction, however, is made in the charge for board.

All fees are payable to the Bursar, McGill University, on or before October 10th. Notice of withdrawal should be given at the close of the session, or not later than September 1st.

### PHYSICAL EDUCATION.

Physical Director:—A. S. Lamb, B.P.E., M.D. University Medical Officer:—F. W. Harvey, B.A., M.D. Physical Director for Women:—Miss Ethel M. Cartwright, Chelsea College of Physical Education. Assistant:—Miss Georgina M. Wood, Chelsea College of Physical Education.

Every student on entering the College is required to pass a physical examination.

The physical education offered to undergraduate students includes educational, remedial and recreative gymnastics.

The educational gymnastics are based on anatomical and physiological laws; the exercises aim at producing the highest degree of health in each individual, and thus contribute to mental as well as to physical efficiency. The course of exercise, which is progressive throughout each session, encourages the harmonious development of the nervous and muscular system, and provides a remedy for incorrect habits of sitting, standing and walking. Special attention is given to the development of the chest, since a good lung capacity is the foundation of a really healthy constitution. A remedial gymnastic course is

prescribed for undergraduate students who are physically unfit for ordinary class work.

Work in the Physical Education Department, amounting to 140 hours during the four years' course, is required of all undergraduate students. The periods are used for instruction in personal hygiene and for educational, remedial and recreative gymnastics, according to the physical requirements of the individual. Attention is given in the senior years to the subject of health problems. No student is asked to do work unsuited to her physique and students debarred from exercise of any kind are dealt with separately and carefully advised. Reports of attendance in physical education are regularly sent to the Faculty.\*

The Physical Director for Women arranges all regulations regarding necessary attendance and the substituting of recreative for educational gymnastics.

Recreative gymnastics, in the form of basketball, tennis, icehockey, fancy skating and athletic sports, are organized by the Athletic Association, under the supervision of the Department of Physical Education. All students are examined by the Medical Officer and the Physical Director for Women, and are required to pass satisfactory physical tests before taking part in any of these activities.

Students of Music in residence are also required to attend educational gymnastic classes. Educational and recreative gymnastics are open to all partial students on payment of a fee of \$5.00 for a class of two periods a week.

Strathcona Prizes are offered in this Department under the conditions mentioned on page 294.

A course of instruction, theoretical and practical, is offered to undergraduates of the fourth year, who are preparing for the Academy Diploma, attendance being required by the Department of Education as follows (see page 158):—

A course of 20 lessons of  $1\frac{1}{2}$  hours each on the principles and practice of physical education. The course will cover elementary anatomy, physiology and hygiene, the theory of gymnastics and class teaching.

\* In all cases of absence the student is required to report to the Physical Director for Women. The ordinary interpretation of the one-eighth rule concerning absences does not apply in this Department. Every student is required to wear the costume recommended by the Department.

Students who satisfactorily complete this course are entitled to certificate "B" of the Strathcona Trust, and their work is included in the requirements for the First Class Academy Diploma of the Province of Quebec.

### MUSIC.

Students taking courses in music leading to the degree or diploma are eligible for residence in the College.

Instruction in music is offered at the McGill Conservatorium of Music—Director, Dr. H. C. Perrin; Vice-Director, Miss Clara Lichtenstein, Resident Lecturer in the Royal Victoria College. Students may prepare for the degree examinations in music of the University, or for the Diploma of Licentiate in Music.

For information regarding courses in music, see page 287, and also the separate syllabus issued by the Conservatorium of Music.

### COLLEGE SOCIETIES.

The students maintain the following societies:—The Undergraduates'/Society, the Athletic Society, the Delta Sigma Literary and Debating Society, La Société Française, the Young Women's Christian Society.

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## FOUNDATION AND PURPOSE.

Macdonald College, which is incorporated with McGill University, was founded, erected, equipped and endowed by the late Sir William C. Macdonald for the following among other purposes:—

(1) The advancement of education; the carrying on of research work and investigation and the dissemination of knowledge; all with particular regard to the interests and needs of the population in rural districts.

(2) To provide suitable and effective training for teachers, and especially for those whose work will directly affect education in schools in rural districts.

## SITUATION AND EXTENT.

The College occupies a beautiful site, overlooking the Ottawa River at Ste. Anne de Bellevue, P.Q., twenty miles west of Montreal. The main lines of the Grand Trunk and the Canadian Pacific railways pass through the property, and the stations of both railways are within its boundaries.

The College property comprises 786 acres, and has been arranged into four main areas, viz.: (1) the campus, with lawn, school garden, and recreation fields for men and women; (2) experimental grounds, with plots for illustration and research in grains, grasses, and other farm crops; (3) the horticultural and poultry departments; and (4) the stock farm.

# THE GENERAL ORGANIZATION.

The College is divided into three schools.

(1) The School of Agriculture, which aims to provide a theoretical and practical training in the several branches of agriculture.

(2) The School for Teachers, which offers a comprehensive and thoroughly practical training in the art and science of teaching.

(3) The School of Household Science, in which young women receive training which will make for the improvement and greater enjoyment of home life and instructs them in professional work in household and institute superintendence and management.

#### ENTRANCE REQUIREMENTS.

# School of Agriculture.

All candidates for admission :--

I. Must have passed their seventeenth birthday;

2. Must produce satisfactory evidence as to moral character, also medical certificate of physical health, *including successful vaccination within the six years preceding date of entrance*; and

3. Must produce evidence of having worked for a season (including seed time and harvest) on a farm, affording a practical knowledge of ordinary farm operations. This knowledge will be tested by a practical examination at entrance or at a subsequent date.

All candidates for the winter course will be required to read and write the English language acceptably and to be proficient in the use of elementary mathematics.

All candidates for admission to the four-year course leading to a degree, beginning with the session of 1920-21, or subsequently, are required :----

I. To produce certificates as follows:-

(a) A school leaving certificate of the Province of Quebec.

(b) Of having passed the junior matriculation examination for entrance to the Faculty of Agriculture, which is held in June and September at McGill University and at the local centres provided. All inquiries relating to such examination should be addressed to the Registrar, McGill University, Montreal, P.Q. Subjects of examination:—(I) English (two papers), (2) History (one paper), (3) Latin or French or German (two papers), French preferred, (4) Elementary mathematics [algebra (one paper), and geometry (one paper)], (5) Any one of the following:—Botany, chemistry, physics, zoology (one paper).

For requirements in each subject of such examination please refer to the McGill University Annual Calendar.

(c) A matriculation certificate for entrance to any other faculty of the university will also be accepted.

(d) A model school diploma of the Province of Quebec.

(e) Other certificates of having passed examinations the same or equivalent to those required for the matriculation examinations of McGill University. For a list of such certificates see entrance requirements, the Calendar, McGill University.

II. To pass, at Macdonald College, at the time provided at the opening of the session, the junior matriculation examination set forth at paragraph I. (b). This examination, at Macdonald College, is

intended only for those who are without the opportunity of qualifying by any of the methods indicated above. Arrangements for this examination at Macdonald College should be made with the Principal, Macdonald College, P.Q.

Candidates for admission to the Faculty of Agriculture who have failed to complete the matriculation requirements will be allowed to enter the first year as conditioned undergraduates, provided (a) that they have not failed in more than two papers (which cannot both be in the mathematical section, nor in two languages), and (b) that they have obtained at least 25 per cent. in the subjects in which they have failed and 50 per cent. of the aggregate. This regulation applies also to candidates who seek to satisfy the matriculation requirements by means of certificates granted by other recognized examining bodies. This condition must be removed before the student can be admitted to the second year.

## School for Teachers.

Teachers to be trained for the schools under the control of the Protestant Committee of the Council of Public Instruction for the Province of Quebec will be admitted under conditions prescribed by that body, particulars concerning which are given in detail in the Announcement of Macdonald College.

## School of Household Science.

All candidates for admission :---

- (a) To the homemaker course, must have entered their eighteenth year and completed grade X. of the Province of Quebec, or its equivalent.
  - (b) To the institution administration course, must have entered their twenty-third year, completed grade XI. (school leaving) of the Province of Quebec, or its equivalent, and have had some previous experience in housekeeping (e.g. assisting with the housekeeping in their own homes).
  - (c) To the short courses, must have entered their eighteenth year, be able to read and write the English language acceptably and be proficient in the use of elementary mathematics.

2. Must produce satisfactory evidence as to moral character; also medical certificate of health, including successful vaccination within the six years preceding date of entrance.

### LIVING EXPENSES.

# The charges for board and lodging are as follows :----

For each occupant of a double room with single beds,

per week ..... \$7.00

The above charges must be paid strictly in advance, and may be for the whole term, or for four weeks at a time.

Caution Money.—Every student must also, at the time of entrance, make a cash deposit of \$5.00 with the Bursar of the College, to cover fines, breakages, etc.; and as soon as any student's deposit is exhausted he or she will be required forthwith to make an additional deposit of the same amount.

#### FEES.

In the School for Teachers, tuition is free to residents of Quebec. In the School of Agriculture, tuition is free to sons, daughters, etc., of farmers of the Province of Quebec in the first two years. For other residents of Canada the fee is \$50.00, and for students outside of Canada \$100.00.

In the School of Household Science, tuition is free for daughters, etc., of farmers of the Province of Quebec in the one and two-year courses; for other residents of Canada the fee is \$100.00 and for students outside of Canada \$125.00 per session.

# PAYMENTS AT ENTRANCE

	Tuition per Session	Labora- tory Fee	Caution Money Deposit	Board in	Doctor's	Laundry Fee	Student Activities	Total
SCHOOL OF AGRICULTURE:         First and Second Years:         Sons, daughters, etc., of farmers of the         Province of Quebec         Other residents of Canada         Students from outside of Canada         Third and Fourth Years:         Sons, daughters, etc., of farmers of the         Province of Quebec         Other residents of Canada         Students from outside of Canada         Students from outside of Canada         Other residents of Canada         Students from outside of Canada	Free \$50.00 100.00	\$10.00 10.00 10.00 15.00 15.00 15.00	\$5.00 5.00 5.00 5.00 5.00 5.00 5.00	\$28.00 28.00 28.00 28.00 28.00 28.00 28.00	\$3.00 3.00 3.00 3.00 3.00 3.00 3.00		\$8.00 (b) 8.00 (b) 8.00 (b) 8.00 (b) 8.00 (b) 8.00 (b) 8.00 (b)	104.00 154.00 109.00 109.00
SCHOOL FOR TEACHERS:— Model School and Kindergarten Classes Elementary Classes	Free Free	5.00	5.00	28.00 28.00	3.00	\$1.00 1.00	4.25 (c) (d)	
SCHOOL OF HOUSEHOLD SCIENCE:— Homemaker and Institution Administration Courses: Daughters, etc., of farmers of the Prov- ince of Quebec Other residents of Canada Students from outside of Canada Short Courses (per course): Daughters, etc., of farmers of the Prov- ince of Quebec	Free 100.00 125.00	10.00 10.00 10.00	5.00 5.00 5.00	28.00 28.00 28.00 28.00	3.00 3.00 3.00 2.00	1.00 1.00 1.00	4.25 4.25 4.25 4.25	51.25 151.25 176.25
Other residents of Canada Students from outside of Canada	35.00 50.00	5.00	5.00 5.00 5.00	28.00 28.00 28.00	2.00 2.00 2.00	$1.00 \\ 1.00 \\ 1.00$	(e)	(f)41.00 (f)76.00 (f)91.00

(a) Occupants of single rooms are charged \$1.00 extra per week. Students in Agriculture from the Province of Quebec receive a grant from the Provincial Government of \$7.00 per month of attendance on account of board. See page 320.
(b) Women students in the School of Agriculture pay the same for student activities as those in the School for Teachers (model class).
(c) Men students of the School of Teachers (model class) pay the same for student activities as men students of the School of Agriculture.
(d) Students of the elementary class pay for student activities—first term, men, \$3.27; women, \$1.50; second term, men, \$4.00; women, \$2.25.
(e) Short course student activities—autumn and spring courses, 75c; winter course, \$1.50.

### THE B.S.A. DEGREE.

Students who shall have completed the regular course of study in Agriculture, as laid down in the Announcement of the College, shall have passed the prescribed examinations for graduation, and shall have performed such exercises as may be prescribed to that end—the whole to the satisfaction of the Faculty of Agriculture—shall be entitled to the degree of Bachelor of Science in Agriculture, and the degree, when abbreviated, shall be designated by the letters B.S.A.

## DEGREE IN HOUSEHOLD SCIENCE.

Students who shall have completed the regular course of study of the first two years in the Faculty of Arts, and shall have passed the prescribed examinations during the course, and thereafter shall have completed a special course of study for two years at Macdonald College, shall have passed the prescribed examinations during the said course and also the special examinations for graduation; and shall have performed such exercises as may be appointed to that end, the whole to the satisfaction of the Teaching Staff of Macdonald College, and also of any other examiners whom the Corporation may associate with the said staff, shall be entitled to the Degree of Bachelor of Household Science.

# PROVINCIAL GOVERNMENT GRANTS TO STUDENTS FROM THE. PROVINCE OF QUEBEC.

# (I) School of Agriculture.

The Department of Agriculture of the Province of Quebec grants to each student who belongs to the Province of Quebec \$7.00 per month of attendance employed in studying according to the time tables in the School of Agriculture, Macdonald College. This amount will be placed to the credit of such students by the College Bursar and will be applied on account of board and lodging.

## (2) School of Household Science.

The Provincial Government grants bursaries of \$20.00 to \$50.00 each to Quebec students from the farming community in the junior and senior years of the School of Household Science.

## COLLEGE ANNOUNCEMENT.

Full details as to the courses, etc., will be found in the Announcement of Macdonald College, which will be sent, on application to the Principal, Macdonald College, Que.

# THE UNIVERSITY BUILDINGS.

The Centre Building.—This is the oldest building of the group. It contains the lecture rooms of the Faculty of Arts, as well as the botanical and zoological laboratories and the offices of the administration.

The Conservatorium of Music is situated at the corner of University and Sherbrooke Streets, adjoining the University grounds. On the ground floor are the offices of the Director and of the Secretary, the library and a concert hall where recitals by the staff and students are given during the session and where orchestral and choral practices are held (the more important concerts take place in the large assembly hall of the Royal Victoria College). The second and third floors contain a number of studios, where lessons are given by the various members of the staff, as well as a room for lectures in theory and history of music, sight-singing, etc. In the basement are several practice rooms.

The New Medical Building .- This building, erected at a cost of over \$600,000, stands at the corner of Pine Avenue and University Street. Of the central part of the building, the greater portion is set aside for the accommodation of the library, the whole of the front of the second and third floors and a portion of the ground floor being so used. On the third floor is a large students' reading room, 76 x 24 feet, exceptionally well lighted and capable of accommodating 100 readers. On this floor also is the staff journal room and the private offices of the librarian. The second floor is occupied by the stack room, with accommodation for sixty thousand volumes, also by individual research and reading rooms. A portion of the ground floor is set aside for storage. Besides the library, the central portion of the building contains also three lecture rooms, the private museum and offices of the professor of anatomy and the administration office, research and preparation rooms of the museum staffs. To the rear of the central building is the museum, probably the most complete structure of its kind in connection with a medical school on this continent. It is built in the form of a cross, three storeys high, splendidly lighted by ample window space on three sides and by a large central light well. Each floor is furnished with free stacks and wall cases made of steel and plate glass thoroughly dust-proof. The anatomical collections are placed on the third floor, while the first and second floors are devoted to pathology. In both the anatomical and pathological sections of the 'museum the specimens have been prepared and classified with a view to their being made use of

in the teaching of these important subjects. The east wing gives accommodation for the Departments of Anatomy, Pathology and Bacteriology, the Faculty of Dentistry, the Faculty rooms and administration offices, the mortuary and preparation room for dissecting material, as well as ample space for students' lockers and lavatories, and a large well-lighted students' reading and smoking room. On the ground floor of this wing will be found the mortuary, in which there is provision for the storage of 80 subjects, and leading from this is the preparation room. On this floor also is the large locker room, containing 400 steel lockers, the students' lavatory and the students' reading and smoking room, the latter being provided with newspapers and magazines and being under the control of the students themselves. On the first floor is the Faculty room and a series of rooms for administrative work. The northern half of this floor is occupied by the Faculty of Dentistry, comprising offices, lecture rooms, and modern, well-equipped laboratories. The second floor is wholly occupied by the Department of Pathology and Bacteriology. In the southern half is the Professor's private laboratory and office, four research and preparation rooms, a small demonstration theatre and an assistant's room. The northern half is occupied by the students' laboratory, a room 76 x 40 feet, splendidly lighted and equipped with all the necessary apparatus for modern laboratory instruction. The third floor is taken up wholly by the Department of Anatomy, and contains, besides private offices and research rooms for the Professor and staff, a large dissecting room, 88 x 40 feet, excellently lighted and fully equipped. There is also on this floor a large lavatory and students' locker room. Between the second and third floor is a mezzanine floor, which is devoted to the Department of Parasitology. Here, besides the private offices and research rooms of the Professor, there are four fully-equipped laboratories for advanced work. The west wing contains a large assembly hall. The remaining space is occupied by the Departments of Pharmacology and Hygiene.

The Old Medical Building.—The Laboratory or North Wing of the Old Medical Building contains the laboratories for medical chemistry and physiology. The ground floor is set apart for medical chemistry. On the eastern side of the hall is the students' laboratory, 45 by 80 feet, which is well equipped for 100 students. A research laboratory, with eight working places and adjoining professor's room, private balance room, etc., connect with the large laboratory. On the western side of the hall is the lecture room connected with two preparation rooms and store-rooms and a small biochemical museum. The students' balance room and a dark room for polariscopic and photographic work are opposite the main entrance to the chemical laboratory. Laboratory courses in general chemistry of the first year,

organic and biological of the second year, and the physiological and clinical chemistry of the third year are given in the large laboratory. All classes are taken in sections. The mezzanine floor contains the lecture room for physiology and a series of laboratories for advanced work in practical physiology. The top floor is devoted entirely to physiology, there being two large laboratories and several smaller research and preparation rooms.

The Macdonald Engineering Building .- This building is designed to provide accommodation for six hundred students. The Departments of Civil Engineering and Architecture are permanently provided for, while the Department of Electrical and Mechanical Engineering are given temporary accommodation until such time as independent buildings can be provided for the growing numbers in these departments. The ground floor is given up to the civil engineering, geodetic, electrical and mechanical engineering laboratories, and is for the most part 23 feet in height. Mechanical and electrical engineering laboratories and the workshops also occupy the three lower floors of the Workman Building. The centre portion of the second floor is used for purposes of administration (faculty rooms, offices, library, etc.). The front parts of the second and third floors are occupied by eight class rooms which contain 470 sittings, while the upper floors, both of the Engineering Building and the Workman Building, are devoted to drafting rooms, containing over 500 tables. The building throughout is of the most approved fire-proof construction, not only in the matter of materials, but in arrangement as well, the several floors being divided by fire walls and fire doors into separate sections. It was erected at a cost of about half a million dollars.

The Macdonald Chemistry and Mining Building.—In addition to the large lecture theatre, which seats about 250 students, there are here four lecture rooms for smaller classes and a number of offices. There are also three large general chemical laboratories (each with a floor space of about 2,400 square feet and accommodation for 200 students at a time), large laboratories for assaying, ore dressing and metallurgy, with a very complete equipment, and a number of smaller rooms and laboratories for special purposes, including research work. The reference library contains about 1,400 volumes.

The Macdonald Physics Building.—This building is five storeys in height, each floor having an area of 8,000 square feet. Besides a lecture theatre and its apparatus rooms, the building includes an elementary laboratory nearly 60 feet square, large special laboratories, a range of rooms for optical work and photography, separate rooms for private work, and two large laboratories arranged for research, provided with solid piers and the usual standard instruments. There

are also a lecture room for mathematical physics, a special physical library and convenient workshops. The equipment of the Physics Building is exceedingly valuable and complete.

The Redpath Museum.—The Museum occupies a commanding position at the upper end of the campus, and besides its central hall and other rooms devoted to the collection, it contains a large lecture theatre, class rooms and work rooms. The collections in botany, palæontology, geology and zoology are very fully and admirably arranged for teaching purposes.

The University Library.—This building is a fine example of the Romanesque style of architecture. The general reading room is 110 feet long, 44 wide and 34 high, and will seat 150 readers. The book stack, four and five storeys in height, has a working capacity of 250,000 volumes.

The Observatory is well equipped for instruction in the use of meteorological instruments and in astronomical work.

The Power Station.—The new Power Station supplies heat to the following, buildings: New Medical Building, Old Medical Building, Engineering and Workman Buildings, Chemistry and Mining Buildings, the Physics Building and the Arts Building. It also furnishes current for light and power to these buildings and to the Royal Victoria College, the Union and Strathcona Hall. The equipment of the station includes boilers of 1,000 H.P. nominal capacity, provision being made for future extension, and engines and generators of 600 kilowatt capacity. The coal bunkers hold 500 tons. The heating distribution is partly by tunnel and partly by underground conduit, the farthest building served being at a distance of 700 feet from the station. Electric cables are placed underground in vitrified clay conduits.

The Royal Victoria College.—This is a residential college for the women students of McGill University. It is situated on Sherbrooke Street, in close proximity to the University buildings and laboratories. On the ground floor are the offices of the administration, lecture rooms, students' common room, and a spacious dining hall. A gymnasium is fitted up in the basement. On the first floor are other lecture 'rooms, the library, reading room and a handsome assembly hall. The second and third floors are given up entirely to rooms for resident students. These rooms are handsomely furnished, as indeed is the whole building.

The McGill Union stands at the corner of Sherbrooke and Victoria Streets, within two minutes' walk of the College gates. The building measures 93 feet by 71 feet and consists of three storeys and a basement. On the main floor are the dining and luncheon rooms; on the second floor, billiard rooms, a news hall, a reading room and a

library, a study and a lounging gallery (88 ft. by 21 ft.). The large hall is situated in the top storey. It measures 88 ft. by 45 ft. and has a seating capacity of 400. There are also smaller rooms for society meetings, etc. In the basement are baths, locker rooms and an exercise room (24 ft. by 38 ft.). The Union is the social centre of the University, the common meeting ground for students of all faculties. It is intended to promote a broad and true university spirit.

Strathcona Hall is the home of the Young Men's Christian Association of the University. The building is 55 feet by 110 feet, and is five storeys in height. The three upper storeys are arranged to afford residential accommodation for about sixty students. On the ground floor are the secretary's office, sitting rooms, cloak rooms and a hall capable of seating 350 persons. The second floor contains a large reading room, a large game room, and five small rooms for the use of clubs and societies.

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# LABORATORIES, MUSEUMS AND WORKSHOPS.

### I. LABORATORIES.

# CEMENT LABORATORIES.

The laboratory is equipped for making complete tests on the strength and properties of cements, mortars, concrete, concrete beams, etc., and includes the following:—Tensile testing machines, hydraulic compression machine (50 ton), specific gravity apparatus, sieves for fineness tests, steaming apparatus, Vicat's and Gilmore's needles, metal moulds, mixers, rammers, balances, etc. Tanks are provided for the storage of briquettes and other test specimens, and the equipment is supplemented by that of the Strength of Materials Laboratory in making tests on large sized specimens.

All engineering students make the standard test on cements and mortars and also tests of concrete, plain and reinforced, as part of the instruction in strength of materials.

### CHEMICAL LABORATORIES.

### (In the Chemistry and Mining Building.)

The three principal laboratories have each a floor-space of about 2,400 square feet and together have accommodation for nearly two hundred students working at a time. They are lighted on three sides, have special ventilation, and have ample hood space. Laboratory A is planned for beginners, and the other two for more advanced work; B for quantitative analysis and C for organic preparations and qualitative analysis. In connection with each of the main laboratories is a balance-room equipped with balances by several of the best makers and an instruction room.

Physical chemistry is provided for in a special laboratory, nearly 30 by 40 feet, supplied with electricity, steam, vacuum pumps, etc. The equipment of this laboratory consists of the apparatus necessary for the determination of the specific gravities of solutions, of the depression of freezing point, of the rise of boiling point, and of densities of gases and vapours. There are constant-temperature baths for accurate measurement of solubilities, Kohlrausch's apparatus for determining the electrical conductivity of solutions, and the apparatus necessary for measuring the electromotive forces generated between metals and their solutions, and in voltaic cells generally. There are also calorimeters for measuring the heat effects produced in chemical reactions. On the same floor there is an optical room, devoted more

particularly to crystallographic work and furnished with goniometers, polarising microscopes, axial-angle apparatus, refractometers, etc.

Immediately adjoining the laboratory of physical chemistry is the photographic department, supplied with two dark rooms, arranged on the maze system, and provided with the necessary appliances for all ordinary photographic work, including an enlarging camera and apparatus for micro-photography.

The laboratory for gas analysis is fitted with a large tank to contain water at the temperature of the room, for use in obtaining a constant temperature in the measurement of gases. The tables are arranged for work with mercury, and the laboratory is supplied with the apparatus of Hempel, Dittmar, Orsat, Elliott and others. It contains also Fleuss, Boltwood, and Töpler pumps for producing high vacua.

The laboratory for electrolytic analysis is supplied with accumulators, thermopiles, platinum electrodes, rheostats, ammeters, voltmeters, etc.

Another room has lately been equipped with electric furnaces and other appliances for electro-chemical work.

The organic department comprises a laboratory for preparations and research, a combustion room for analysis, a dark room for polariscope and saccharimeter work, and a lecture room. The laboratory is fitted with all the necessary apparatus for organic research—special hoods for work with poisonous gases, regulating ovens for digesting and drying at various temperatures, filter presses for the extraction of raw materials, and various forms of apparatus for distillation in vacuo. The dark room is equipped with polariscopes and saccharimeters for sugar work. There is a large supply of the necessary organic chemicals, which are supplied free of charge to students engaged in routine or research work in this department.

The laboratory for industrial chemistry is especially ventilated and fireproofed. Here operations on a semi-commercial scale may be conducted, involving the use of explosive and other dangerous chemicals.

The Chemistry Building is well supplied with small research laboratories for graduate and other research students.

### ELECTRICAL LABORATORIES.

The experimental equipment of the electrical department is contained in the fourth year, third year, standardizing, high voltage, oscillograph and photometer laboratories. Power is supplied to these laboratories from the 220-volt, 3-wire, D.C. generators in the central power house. The voltage is maintained approximately constant on the two sides of the system by a balancer set located in the fourth

year laboratory, which is also equipped for supplying constant voltage circuits of 125 volts.

The Main Laboratory is equipped primarily for the study of alternating current phenomena and is equipped with: Motor-driven alternators of various types, giving a range of frequency of from 25 to 250 cycles per sec.; single and polyphase induction motors of the squirrel cage and wound rotor types; single phase series and repulsion motors; constant voltage and constant current transformers; mercury arc rectifier; rotary converters; potential regulators; meters for the measurement of current, voltage, power, frequency, power factor, and wave form; rheostats, circuit breakers, condensers, reactance coils, synchroscopes and other auxiliary apparatus. An electric travelling crane spans the laboratory and gives facilities for the rearrangement of the machines.

The Main Laboratory is also used by the third year electrical students for the study of current flow in circuits and of direct current machinery.

The Electrical Laboratory on the third floor of the Workman Building is used by the students of other departments who are taking an elementary electrical course, for the study of both direct and alternating current phenomena. The laboratory is equipped with: Shunt, compound and series wound direct current generators and motors of different types; constant current generators; arc and incandescent lamps; meters for the measurement of current, voltage and power; rheostats, circuit breakers, starters and other auxiliary apparatus. Several small alternators, transformers, rotary converters and induction motors along with the necessary instruments and control apparatus are provided for use by the students taking the general elementary course. A hand-operated travelling crane gives facility for the rearrangement of the machines.

The Standardizing Laboratory is equipped for the accurate measurement of direct currents to 1,000 amperes and voltages to 1,500 and of alternating currents to 200 amperes and voltages to 1,500. By the use of standard instrument transformers, alternating currents to 5,000 amperes and voltages to any reasonable value may be accurately measured. The equipment includes: Kelvin current and watt balancers; Weston laboratory standard ammeters, voltmeters and wattmeters; potentiometers; Wheatstone and conductivity bridges; galvanometers, standard resistances and cells and other special apparatus.

The power is obtained from two motor generator sets, from one of which direct current to 1,000 amperes may be obtained, and from the other alternating current may be obtained over a considerable range of frequency up to 1,500 amperes and at any phase relation to voltages up to 440.

The High Voltage Laboratory contains the following equipment: Four 200 to 50,000 volt transformers supplied with condenser bushings and insulated so as to operate up to 300,000 volts; one 200 to 2,000 volt insulating transformer; one 110 to 20,000 volt testing transformer; standard spark gaps for oil and air; cathode ray tubes, electrostatic voltmeters and other auxiliary equipment. The transformers are provided with auxiliary voltage coils for direct pressure measurement and for connection to the oscillograph. The connections to this laboratory are such that any machine in the department may be used as a source of power and controlled directly from the transformer room, so that a wide range of frequency and of wave form is available for experimental work.

The Photometer Laboratory contains a Reichaustahlt type precision photometer bar with a wide range of certified standard incandescent lamps, hand operated and power driven universal rotators, motor driven sector disk and a complete set of screens, also a Matthew's integrating photometer for incandescent lamps. A Sharp Millar portable photometer and standardizing set is also installed, with a full range of controlling rheostats and instruments provided with permanent wiring.

Oscillograph Laboratory.—This is equipped with a Blondel triple oscillograph, with both visual and photographic attachments, and is specially adapted for the study of transient phenomena. The department maintains a small machine shop for instrument and machine repair and for the construction of special experimental apparatus.

Wireless Telegraph Laboratory.—A permanent aerial, 350 feet in length, of the inverted "L" type, has been installed, with a natural wave length of 600 metres. Waves varying in length from 500 to 8,000 metres can be detected. A number of receiving sets have been loaned to the department and others are being constructed,

# FOREST PRODUCTS LABORATORIES OF CANADA.

The Forest Products Laboratories of Canada, established by the Canadian Government in 1913, under the Forestry Branch, Department of the Interior, are associated with McGill University, and are located at 700 University Street, Montreal. The primary function of the laboratories is experimental research in the utilization of forest products, as a means toward the improvement of present industrial methods and the extension of commercial opportunities in this field.

There are four operating divisions, for technical research in timber tests, timber physics, pulp and paper and wood preservation. Provision is made for the establishment of other research divisions, as opportunity develops.

The Division of Timber Tests is engaged in the investigation of the mechanical properties of Canadian woods, primarily for the collection of data on the relative strength values of various species, as a basis for classification of timber as structural material and for miscellaneous commercial uses. The testing work of this division is carried out in the Strength of Materials Laboratories of McGill University. By arrangement with the University, provision has been made for the joint use of the Wicksteed, Emery and Riehle testing machines included in the equipment of this University department. The Forest Products Laboratories have installed one 30,000-pound capacity Olsen Universal machine, fitted with attachments of special design to meet the requirements of various testing methods, and one Hatt-Turner impact machine. Accessory apparatus includes deflectometers, compressometers, planimeter and calculating machines for reduction of test result. A saw mill and wood working shop are maintained in connection with this division. Another timber testing laboratory has recently been established in co-operation with the University of British Columbia, Vancouver, B.C.

The work of the Division of Timber Physics includes the investigation of the physical properties of wood,—specific gravity, moisture content, rate of growth, etc.—for correlation with mechanical and other characteristics, the microscopic anatomy of wood and study of fibres, and photography. Drying racks, electric ovens and balances are in use for this work, while apparatus for microscopic study includes one Jung-Thoma microtome (Thomson modification), two microscopes, microscopic micrometers and accessory appliances for use in preparation of slides, fibre measurements and other microscopic determinations. The photographic department of the division is provided with a fully equipped dark-room and complete range of photographic apparatus, including special Bausch and Lomb horizontal photomicrographic outfit, cameras and projection lantern.

The Division of Pulp and Paper is engaged in the investigation of the paper-making possibilities of Canadian woods, the practical study of processes related to this field and research in fundamental problems of the chemistry of wood. A complete semi-commercial paper mill has been installed for investigation on a large experimental scale. This equipment includes one single Marx beater, one double Marx beater, one small Jordan engine for refining paper stock; one riffler, one Packer flat screen, and one complete Pusey and Jones paper machine (wire 25 feet by 33 inches). Other equipment includes one complete Erfurt sizing system for preparation of rosin size, two gas fired boilers, small digester and paper testing instruments. Larger digesters, corresponding in capacity to the larger experimental equipment, are planned for future installation. The chemical laboratory

of this department is provided with complete equipment for experimental research in the chemistry of wood.

The Division of Wood Preservation is concerned with the investigation of methods of preservative treatment for the protection of timber against decay and insect destruction. The experimental laboratory of this division is provided with equipment for impregnation of wood with preservatives under pressure. This equipment includes one horizontal retort, 2 feet in diameter and 12 feet long; operating tank of corresponding capacity; one small vertical retort and tank, all designed for high pressure; pumps, air compressor and dry vacuum pump, receivers and condenser. A chemical laboratory in this department is used for analysis of preservatives and examination of treated material. A small laboratory is equipped for experimental studies in wood pathology, which includes the development of cultures of wood destroying fungi, accelerated tests of durability and microscopic examinations.

#### GEODETIC LABORATORY.

The equipment of this laboratory consists of :--

(1) Linear instruments: a Rogers comparator and standard bar for investigating standards of length; a fifty-foot standard and comparator for standardizing steel bands, chains, tapes, rods, etc.; a Munro-Rogers linear dividing engine.

(2) Circular instruments: a Rogers circular comparator; four level triers.

(3) Time: an astronomical clock and clock circuit in connection with the observatory clocks; chronometers running on mean and sidereal time; chronograph.

(4) Gravity: a portable Bessel's reversible pendulum apparatus with special pendulum clock and telescopic apparatus for observing coincidence by beats.

(5) A water gauge apparatus for testing aneroid barometers.

The laboratory and clock rooms are constructed with double walls and enclosed air spaces, and their heating is controlled by special thermostats, so that the temperature within may be brought to, and held at, any desired degree.

# Astronomical 'Observatory.

The observatory equipment for the purpose of instruction in practical astronomy consists of: A Bamberg prismatic transit with zenith attachment; six astronomical transits for meridian observations; two Troughton & Simms zenith telescopes; sidereal and mean time clocks and chronometers, chronograph and electrical circuits by which observations and clock comparisons within or without the observatory may be made.

### HYDRAULIC LABORATORY.

In this laboratory the student studies experimentally the laws governing the flow of liquids through orifices, pipes, weirs, etc., and also carries out experiments on the efficiency of various forms of water motors running under different conditions as regards head and supply.

The equipment includes:—Apparatus for the measurement of the discharge of water from orifices, nozzles, weirs, etc., under varying conditions; arrangements for investigation of the loss of head by surface friction, and at curves and bends in pipes; Venturi meter for use at different discharges; a hydraulic ram working against different heads; various water motors, including Pelton wheels, Girard impulse turbine, Brotherhood three cylinder rotary engine, Thomson inward flow reaction turbine, American turbine; apparatus for measurement of pressure due to impact of jets on surfaces of different forms; gauge testing appliances; Hele Shaws's apparatus for study of the steam lines in a perfect fluid, illustrating the flow round obstructions in a channel, and numerous magnetic problems; numerous calibrated tanks, weighing appliances, and measuring apparatus in connection with the above.

### MECHANICAL ENGINEERING LABORATORIES.

These laboratories are used in connection with the courses in Mechanical Engineering subjects. The smaller apparatus belonging to the laboratories includes the necessary equipment of weighing machines, ordinary and water dynamometers, steam calorimeters, thermometers, gauges, pyrometers, coal, gas and oil calorimeters, indicators, planimeters, flue gas analysis, etc.

I. Mechanical Laboratory.

The equipment of this laboratory includes:—A belt testing machine capable of taking a six-inch belt at 15 feet centres (the machine has special hydraulic dynamometers and a friction brake and will absorb 15 H.P.); a Thurston railway pattern oil tester, fitted with water cooling and heating apparatus for varying the temperature of the brasses as desired; standard viscosimeters and other necessary apparatus for the physical testing of lubricants; a high speed horizontal engine having a cylinder 6 inches diameter, 9 inches stroke, and operated by compressed air; a gas-fired preheater for the above engine; two standard  $9\frac{1}{2}$ -inch Westinghouse airbrake pumps, fitted for testing and for supplying compressed air for experimental and other purposes; a non-rotative Blake steam pump, having steam and water cylinders  $4\frac{1}{2}$  and  $2\frac{3}{4}$  inches diameter and  $4\frac{1}{2}$  inches stroke; apparatus for measuring the heat loss from pipe coverings and from radiators; a specially designed hydraulic support and fittings, for car-

rying out experiments on the action of cutting tools in the lathe; apparatus for experiments on the efficiency of pulleys and hoisting appliances; on the efficiency of worm and other gearing, for governor testing; for testing fans and blowers; for studying problems connected with the balancing of reciprocating engines.

2. Steam Engine Laboratory.

This laboratory is furnished with an experimental steam engine of 120 I.H.P., specially desiged for investigating the behaviour of steam under various conditions. The cylinders are 61/2 inches, 9 inches, 13 inches and 18 inches in diameter, and the stroke of all the pistons is 15 inches. The cylinders can be so connected as to allow of working as a single, compound, triple, or quadruple expansion engine, either condensing or non-condensing, and with any desired rate of expansion. The jackets are so fitted as to permit of measuring independently the water condensed in the cover, barrel, or bottom jacket of each cylinder, and the engine can be worked with any desired initial pressure up to 200 lbs. per square inch. The measurements of heat are made by means of large tanks, which receive the cooling water and the condensed steam. There is an independent surface condenser and air pump. Two hydraulic absorption brakes and an alternative friction brake serve to measure the mechanical power developed. This laboratory also contains the following machinery :-- A Robb automatic cut-off engine, having a cylinder 101/2 inches in diameter by 12 inches stroke, which is specially fitted up for the measurement of cylinder temperatures, and can be run at speeds up to 300 revolutions per minute; an automatic high speed engine by Macintosh & Seymour, having a cylinder 12 inches in diameter by 121/2 inches stroke, in connection with which there is an automatic recording apparatus for registering the load on the brake; a Leonard horizontal engine, having a cylinder 8 inches diameter by 9 inches stroke, specially fitted for instructional work in valve setting and provided with an independent surface condenser; a two stage air compressor (built in the workshops of the Department) taking 40 H.P., and having cylinders 10 inches and 17 inches in diameter, by 15 inches stroke (the compressor delivers its air into reservoirs placed beneath the floor of the machine shop, and is provided with an intercooler whose capacity can be varied as desired); a 15 K.W. Curtis steam turbo-generator with independent surface condenser, air pump, and a bank of lamps for varying the load; two 12 H.P. high speed forced lubrication compound engines (built in the workshops of the Department), one of which is used to drive a Hall 1-ton Co 2 ice machine.

Steam is supplied to this laboratory by the boilers in the Workman Building. These consist of one 100 H.P. locomotive boiler, Belpaire type, fitted with Howden oil burning furnace, two Babcock and Wilcox

water tube boilers, each 60 H.P., and one Yarrow water-tube boiler, fitted in a closed stokehold, for working under forced draft, rated at 100 H.P. These boilers are fitted with the necessary tanks, weighing machines and apparatus for carrying out evaporative tests. For the study of superheated steam, there is a B. & W. separately fired superheater.

3. Gas Engine Laboratory.

This laboratory contains a horizontal gas engine by the National Gas Engine Company, having a cylinder 12 inches diameter by 20 inches stroke and developing 40 B.H.P.; a suction type producer for the above, with the necessary scrubbers and gas cleaning apparatus; a down draft producer designed for working with lignite and bituminous coal; a standard 4-inch gas meter, gasometer, and exhauster; a 10 B.H.P. Otto type gas engine (built in the workshops of the Department), having a cylinder  $8\frac{1}{2}$  inches diameter by 12 inches stroke; a 14 B.H.P. 2-cylinder 2-cycle Grey gasoline engine and a 4 H.P. Blackstone oil engine.

### METALLURGICAL AND ASSAYING LABORATORIES.

These consist of a large furnace room of 2,000 sq. feet, for metallurgical operations, a furnace room for assaying of 1,300 sq. feet, a balance room, small chemical laboratory, and parts of other rooms, which are utilized for pyrometric and photo-microscopic work. The furnace room is fitted with a water-jacket blast-furnace, 21 inches inside diameter, for smelting lead and copper ores; also a hand reverberatory furnace for roasting ores, having a hearth 14 ft. by 6 ft., and a Bruckner roasting furnace.

The furnace room adjoins the milling and ore-dressing room (see below), and ores which have been crushed and dressed can easily be conveyed into the furnace room for roasting, smelting or leaching treatments. In addition to this comparatively large scale plant, apparatus has been provided to enable the students to study in detail the more important metallurgical operations, using quantities of ore or metallurgical products of usually not more than a few pounds in weight. With such appliances, the work of the student can be of a more individual character than is generally possible with large-scale plants, and the reactions which occur can be more easily and exactly studied.

For the purpose of small-scale work there is a large crucible furnace which can be used with either natural or forced draught, an oil-fired crucible furnace, a large gas-furnace which can be used either as an oven-furnace or a muffle furnace, and a number of small muffle and crucible furnaces in the assaying laboratory. Several small dental furnaces have recently been added for the course of instruction in dental metallurgy.

Small blast-furnaces, lined with brick, have been constructed and used successfully for smelting small quantities of copper and cobalt ores. A Roots' blower has been provided for the blast furnaces, and connections for supplying forced draft have been made to the gas and reverberatory furnaces. Leaching operations on a small scale are conducted in stoppered bottles which can be agitated by machinery.

Provision has also been made for electric furnace work. The plant consists of a 50 H.P. motor and a 30 K.W. alternating current generator, together with transformers and measuring instruments. A Colby induction furnace and a Rennerfelt arc furnace have been installed for making steel electrically, and the smelting of ores and other electric furnace operations can be carried on satisfactorily with this plant. A low-voltage I H.P. direct-current generator is employed for electrolytic operations.

A powerful hydraulic press and a piece of apparatus for compressing gases by hydraulic power are available for experiments that have to be conducted under great pressure.

A small drop-testing machine, a Sankey metal bending tester, and a Brinell Hardness tester have been installed for investigating the mechanical properties of metals.

The assaying laboratory is equipped with a number of muffle and crucible furnaces fired with coke, a large gas muffle furnace and a small muffle furnace and crucible furnace fired by gasoline.

Adjoining the assaying laboratory is the balance room and a small laboratory for chemical work. In another room are a number of electrical and other pyrometers, and a micro-photographic outfit for recording the microscopic structure of metals and alloys. Polishing machines worked by power have been installed to prepare specimens for examination.

# MINING AND ORE-DRESSING LABORATORIES.

The Department of Mining Engineering has one large laboratory for ore-dressing, and a number of rooms of moderate size equipped for use as special laboratories, offices, lecture room, dark room, machine shop, etc. The effective floor space is about 8,500 square feet, in addition to which the departmental store rooms, ore bins, etc., have an area of 1,500 feet.

The ore-dressing laboratory proper is built in two storeys about a central well and has about 5,000 feet total floor space. The equipment comprises two classes of apparatus. First, a large number of pieces especially designed for individual work on a small scale. Many of these are for elementary investigation and demonstrations of a theoretical nature, others are working reproductions on a reduced scale of typical ore dressing and milling machines. Second, a complete plant of standard apparatus for ore crushing, sampling, milling,

concentrating and for coal washing. This apparatus has been chosen from the best designs in common use and whenever possible each important class of ore-dressing machinery is represented by two or more different types, in order that comparisons may be made. Each machine is so arranged that it may be used and tested independently, but, when expedient, a number of machines can be connected by conveyors, and thus complete plants of various kinds can be improvised, each of sufficient capacity to test large lots of material under approximately working conditions.

The chief pieces of apparatus in the main laboratory are rockbreakers of four kinds, Blake, Dodge, Gates, and Sturtevant, for coarse crushing; gravity stamp mills of 600 and 950 lbs., respectively, a small steam stamp and a 3-foot Huntington centrifugal roller mill, for crushing and amalgamating; high speed steel-tyred rolls for fine crushing; Sturtevant and Gates grinders for preparing samples, and ball mills, pebble mills and amalgamation pans for extremely fine grinding. Following these there are Bell, Jones and Brunton samplers; a Callow belt screen; a series of trommels and power shaking screens for sizing the crushed ores; two especially designed jigs of two and four compartments with adjustable eccentric, cam and slide mechanism, a pneumatic jig, a Richards pulsator jig, a Taylor vibrating jig and several small hand and power jigs for coarse and medium concentration; slime tables of several types, including a Frue vanner, a Wifley and Butchart riffled tables, with a series of Bell's feeders, etc., for separating valuable minerals contained in the fine sands and slimes; plates, pans and barrels for amalgamating gold and silver ores; agitators, vats, pressure and vacuum filters, and other apparatus for flotation, cyaniding and other extraction processes; spitzkasten, spitzlutte, magnetic separators, an electrostatic separator, coal washers, cones, and various other special pieces of ore-dressing apparatus.

An hydraulic lift and a number of belt and bucket and hydraulic jet elevators, feeders, samplers, steam-jacketed drying tables, etc., are provided for use in heavy continuous work. The power chiefly used is electricity, generated in the University power and light station and utilized through a number of independent electric motors aggregating 75 H.P. conveniently placed near the machines to be operated, but steam is used for some pieces of apparatus and others may be driven by a Pelton wheel. A motor-driven vacuum pump and air-compressot of  $7\frac{1}{2}$  H.P. provides an ample supply of compressed air. The department is equipped with suitable apparatus for electrical measurements, and is thus able to make continuous and accurate determination of the amount of power used by each machine.

In addition to the main laboratory, there are excellent facilities for advanced and research work—including a small but thoroughly equipped chemical and assay laboratory and photographic room. The

department possesses a number of cameras, microscopes, recording gauges and indicators, a good equipment of weighing and measuring devices, and a number of pieces of special apparatus for advanced theoretical investigation.

# PETROGRAPHICAL LABORATORIES.

The petrographical laboratory, containing the chief rock collections of the University, is situated in the Chemistry and Mining building. It is provided with a number of petrographical microscopes by Seibert, Crouch, and Fuess, as well as with models, sets of thin sections, electromagnets, heavy solutions, etc., for petrographical work.

A collection of typical rocks has been especially prepared for the use of students, and a complete equipment for cutting, grinding, and polishing rocks has been installed, which runs by electric power and gives excellent facilities for the preparation of thin sections for microscopic use.

For advanced work and petrographical investigation, Dr. Adams' extensive private collection of rocks and thin sections is available for purposes of study and comparison.

# THE PHYSICAL LABORATORIES.

The equipment of the Macdonald physical laboratories comprises: (1) apparatus for illustrating lectures; (2) simple forms of the principal instruments for use by students in practical work; (3) various types of all important instruments for exact measurements, to be used in connection with special work and research.

The magnetic laboratory contains magnetic instruments and variometers of different patterns, and also a duplicate of the B. A. Electrodynamometer. The laboratory on the opposite side of the basement contains a Lorenz apparatus for the absolute measurement of resistance, constructed under the supervision of Prof. Viriamu Jones.

There is a constant temperature room, surrounded by double walls, which is fitted for comparator work.

The first floor contains the main electrical laboratory, which is a room 60 feet by 40, and is fitted with a number of brick piers, which come up through the floor, and rest on independent foundations, in addition to the usual slate shelves around the walls. This room contains a large number of electrometers, galvanometers, potentiometers, and other testing instruments of various patterns, and adapted for different uses. Three small research laboratories adjoin the electrical laboratory. A well equipped workshop serves for the construction of research apparatus and repair work.

On the second floor of the building there is the heat laboratory, devoted to advanced work in thermometry, pyrometry and calorimetry and also to such electrical work as involves the use of thermostats and the measurement of the effects of temperature. This adjoins a private laboratory fitted for research work.

The third floor contains two small lecture rooms, a library and reading room for the staff and professors' rooms.

The fourth floor contains the large elementary laboratory, a room foo feet square, devoted to elementary practical work in heat, sound, light, electricity and magnetism. There is a demonstrators' room adjoining, and an optical annex devoted to experiments with lenses, galvanometers, etc., which require a darkened room. On the other side of the building there is a spectroscopic room, containing a sixinch Rowland grating, with mountings by Brashear, and other large spectrometers and polarimeters; also a series of smaller optical rooms, including a photometric room, especially fitted for arc photometry, and a dark room for photographic work.

### LABORATORY OF PHYSIOLOGY.

The physiological laboratory occupies part of the old Medical Building. It consists of a large general laboratory, with accommodation for 80 students working at one time.

### THE PSYCHOLOGICAL LABORATORY.

The psychological laboratory occupies two rooms in the Arts Building. It contains apparatus for the study and investigation of sensation, perception, ideas, memory, association, attention, volition, feelings, emotions and reaction. This equipment serves three purposes: First, it is adapted to research work in the various fields of experimental psychology, including physiological psychology, educational psychology, and applied psychology. Second, it is used to acquaint beginners with the methods of experimental psychology, both qualitative and quantitative. Third, it furnishes material for experimental demonstration in the elementary and advanced lecture courses.

### STRENGTH OF MATERIALS LABORATORIES.

These laboratories are equipped with apparatus for the determination of the physical properties of the materials of construction and for illustrating the fundamental laws of the strength of materials. The equipment includes:—

(a) Richle testing machine of 60,000 lbs. capacity, a Wicksteed 100-ton, a Wicksteed 50-ton, and an Emery 75-ton machine for testing the tensile, compressive and transverse strength of the several materials of construction. To the Wicksteed has been added a specially

designed arrangement, by which the transverse strength of girders and beams up to 26 ft. in length can be determined. Special holders have also been designed and made in the laboratory for investigating the tensile and shearing strength of timber, and for the testing of wire ropes, belts, etc. An Olsen machine of I0,000 lbs. capacity is used for testing wire.

(b) A Rondet-Schor Machine, with a capacity of 500 kilograms, for testing textile fabrics.

(c) A Torsion Machine with a specially designed angle measurer, by which the amount of the torsion can be measured with extreme accuracy.

(d) An accumulator, furnishing a pressure of 3,600 lbs. per square inch, which is transmitted to the several testing machines, and ensures a perfectly steady application of stress, an impossibility when any form of pump is substituted for an accumulator. An automatic electric motor has been designed in the laboratory and constructed for the purpose of actuating the accumulator.

(e) A Blake and Worthington steam pump and an electric pump, designed to work against a pressure of 3,600 lbs. per square inch. The accumulator may be actuated by any of the pumps, and, if at any time it is necessary to do so, any of the pumps may be employed to actuate the testing machine direct. When in operation, the work of the pump and the accumulator is automatic.

(f) Extensometers of the Bovey, Ewing, Unwin, Martens, Marshall and other types.

(g) Portable cathetometers, and also a large cathetometer specially designed and constructed for the determination of the extensions, compressions and deflections of the specimens under stress in the testing machines.

(h) Various electric motors for working the several machines.

(i) A drying oven for beams up to 26 feet in length. The hot air in this oven is kept in circulation by means of a fan driven by an electric motor.

(j) Numerous gauges, amongst which may be specially noticed an Emery pressure gauge, graduated in single lbs. up to 2,500 lbs. per square inch. All of the testing machines are on the same pressure circuit, and are connected with the Emery gauge and also other standard gauges, including recording gauges. This arrangement provides a practically perfect means of checking the accuracy of the testing.

(k) Special apparatus and recording gauge for the testing of hose, etc.

(1) Dynamometers for measuring the strength of textile fabrics, the holding power of nails, etc.

(m) Apparatus for determining the elasticity of long wires.

# MUSEUMS

(n) Apparatus for determining the hardness of materials of con struction, including Shore scleroscope.

(o) Zeiss and other microscopes.

(*p*) Delicate chemical and other balances. A very important part of the equipment is the Oertling balance, capable of indicating with extreme accuracy weights of from .00001 lb. up to 125 lbs.

(q) Apparatus for the microscopic study of metals and for microscopic photography.

(r) Micrometers of all kinds, including a 10 inch Howarl gauge.

(s) A transverse bending machine which is adapted for loads up to 3,000 lbs. and for beams of 10 ft. span, and a testing machine for applying bending and torsion simultaneously.

### ZOOLOGICAL LABORATORIES.

The Zoological Department occupies the whole of the uppermost floor of the east wing of the Arts Building and a large pertion of the floor immediately below.

It consists of :--

(a) A large laboratory affording accommodation for a class of 80 students.

(b) A smaller laboratory capable of seating about 18 students. (c) Three small laboratories fitted up for purposes of esearch.

## 2. MUSEUMS.

### ARCHITECTURAL MUSEUM.

The Museum of the Department of Architecture contains a representative collection of historic casts illustrating the development of architectural ornament and form, and the technique of architectural material. Many of the casts have been specially prepared for the Department. The group of English mediæval art is unique in any University on this continent. The collection of metal work includes examples of iron, brass, copper and jewellery, and is arranged so as to exhibit the technical possibilities of the material.

#### MUSEUM OF HYGIENE.

# DIRECTOR :- PROF. T. A. STARKEY.

The material in the museum has been rearranged with a view to exhibiting not only specimens of the best and most approved types of appliances in each particular branch of public health, but also examples of types which are to be avoided on hygienic principles.

In order to facilitate study and reference, the specimers have been classified upon a decimal system under the following sections:-

I. Disinfection.-Including disinfecting apparatus of al kinds, disinfectants and antiseptics.-

#### MUSEUMS

2. Lighting and Heating.—Showing contrivances used for these purpose.

3. Water.—Showing conditions connected with pollution of water upplies, whether derived from the surface or underground sources methods of purification on large and small scales; water pipes, ec., and the influence which these fittings may exert upon the water ontained therein.

4. Soils and Buildings.—Building sites, various kinds of soils; relation between soil and dampness; permeability of soils to gases and water; composition of soils; effects of ground moisture on dwellings; measures to be taken against dampness and foul air; and building materials of all kinds.

5. 4ir.—Including ventilation schemes and appliances; climate and meeorology, with apparatus illustrative of each class.

6. Foodstuffs.—Adulterations and sophistications practised; samples of unsound foodstuffs.

7. *Bacteriological and Pathological*.—Specimens of diseased meats; specimens and slides of all the common micro-organisms, pathogenic and non-pathogenic.

8. *Clothing.*—Specimens of all the materials utilized for the manufacure of clothing, showing the raw state and the various processes through which they pass until the finished product is reached; the hyginic value of these various articles.

Injuries and deformities which may directly result from the use of badly designed articles of clothing; history and evolution of clothing.

9. Drainage and Refuse Disposal.—This section includes every type of appliances used as sanitary fixtures in buildings; drainage schemes ultimate disposal of refuse both liquid and solid,—refuse destructors, and sewage disposal plants. The section also includes types of faulty methods and appliances which on principle ought to be avoid.

In addition to the regular museum exhibit, there is a collection of over 1,000 lantern slides illustrative of phases of hygiene. The slides have been so arranged as to be available for demonstrations as hand specimens.

A citalogue with text and full description of all the exhibits contained in the museum is issued by the University authorities, and may be jurchased at the general office.

#### MUSEUMS

#### PATHOLOGICAL MUSEUM.

DIRECTOR :-- PROFESSOR HORST OERTEL. CURATOR :-- MAUDE E. ABBOTT, B.A., M.D. ASSISTANT CURATOR :-- JOSEPH KAUFMANN, M.D. OSTEOLOGIST AND PREPARATOR :-- E. L. JUDAH.

The Pathological Museum of the University consists to date of about 3,200 mounted and catalogued specimens on shelves, and a considerable storage from which material is constantly being added. A descriptive catalogue is in process of preparation and the part on the Haemopoietic organs has been published by the Oxford Press. Other parts are available and are being made ready for print through the help of the Osler Catalogue and Cooper Funds. In addition the pathological collection of the Royal Victoria Hospital consists of 240 specimens mounted in colors, on shelves and catalogued, and much storage material for teaching purposes including an extensive set of microscopic slides and charts for pathological and clinical teaching.

#### THE PETER REDPATH MUSEUM.

# HONORARY CURATOR:—PROF. ARTHUR WILLEY. CURATOR:—E. ARDLEY.

The large and valuable collections in botany, zoology, mineralogy and geology are arranged in such a manner as to facilitate the work in these departments.

The general arrangement is as follows:-

I. The botanical room on the ground floor contains the herbarium, consisting of 50,000 specimens of Canadian and exotic plants and collections illustrating structural and economic botany.

2. In the corridor on the ground floor is exhibited the Todd Ethnographical Collection from West Africa.

3. The Lyman entomological room is also situated on the ground floor. Mr. A. F. Winn is the entomological curator under the Lyman Bequest.

4. On the first floor is a room over the entrance hall, in which are cases containing archæological and ethnological objects, including collections from the Queen Charlotte Islands, from Egypt, and from West Africa.

5. This room opens into the great museum hall, on each side of which are alcoves with upright and table cases containing the collection in palæontology arranged primarily to illustrate the successive geological systems, and subordinately to this, in the order of zoological and botanical classification, so as to enable the student to see the

#### MUSEUMS

general order of life in successive periods, and to trace any particular group through its geological history.

6. At the extreme end of the hall are placed the collections of minerals and rocks, arranged in such a manner as to facilitate their systematic study. In the centre of the hall are economic collections and large casts and models.

7. In the upper story or gallery of the great hall are placed the zoological collections; the invertebrate animals in table cases in regular series, beginning with the lower forms; the vertebrate animals in upright cases, in similar order. The PHILLIP CARPENTER COLLECTION of shells is especially noteworthy for its arrangement and completeness.

Papers and memoirs relating to certain type specimens in the collections can be obtained from the Assistant Curator. Classes of pupils from schools can be admitted on certain days under regulations which may be learned from the professors or from the Registrar of the University.

### THE MCCORD NATIONAL MUSEUM

This Museum is located in the old Joseph House, at the corner of Sherbrooke and McTavish Streets. The collection is a gift to the University from Mr. David Ross McCord of Temple Grove, a graduate in Arts of 1863, and in Law of 1867. The range of the collection is most extensive, comprising, as it does, mementoes of the great statesmen, warriors, writers, and spiritual leaders among the two principal races which are now represented in Canada, as well as of the great explorers of every part of the North American continent. The Arctic souvenirs are especially numerous and important, and in the department of Wolfiana, the Museum is probably unrivalled.

One of the most important departments is that treating of the North American Indian, the section relating to the Indians of the Eastern half of the continent being especially complete. Here are to be seen the arms and personal relics of Tecumseh and Brant, and most wonderful specimens of wampum and Indian silver. The great series of paintings illustrative of the campaigns and archæology of Canada are not only accurate, but artistic. There are separate departments for china, glass and historical furniture as well as one for the cradle industries of Canada. There is a special room for relics of the Founder of the University, and of its first great Principal, Sir Wm. Dawson, with his distinguished colleagues in Science at the time, Sir William Logan and Dr. Sterry Hunt.

A special aim of the Museum is to form a school of useful and ornamental art, based on types of native Indian industry, such as the manufacture of wall papers, works in metals of all kinds, and ceramic work, in the motifs for which the Museum is especially rich.

#### WORKSHOPS

#### 3. WORKSHOPS.

The workshops, erected on the Thomas Workman Endowment, have a floor area of more than 20,000 square feet.

*Equipment.*—The carpenter shop and the pattern shop contain thirty-eight carpenters' and pattern-makers' benches complete with the necessary sets of hand tools, twenty-two wood-turning lathes with their turning tools, a large pattern-maker's lathe for faceplate work, one circular-saw bench, a jig-saw, a band-saw, two wood-trimmers, a surface-planer, a thickness planer, a mortising machine, a sawsharpener, and one universal wood-working machine.

The smith shop is provided with twenty Sturtevant forges, which are power-driven and are connected with an exhaust fan. There is a power hammer, and the necessary equipment of anvils, swage blocks, sets, flatteners and other tools. Provision is made for instruction in soldering and brazing.

The foundry has benches, tools and apparatus for bench and floor moulding and core-making, and is able to accommodate twenty students. A gas-fired brass melting furnace, a cupola for melting iron, and the necessary core-ovens and core-benches give facilities for undertaking iron foundry work in green and dry sand, and for brass moulding. The stop is served by a hand travelling crane of one ton capacity.

The machine shop has twelve 18-inch engine lathes, one 18-inch turret lathe fitted for stud and screw making, one 27-inch engine lathe, one 72-inch surfacing lathe, one brass-finishing lathe, one 36-inch vertical drilling machine with compound table, one universal milling machine with vertical milling attachment and dividing headstock, one planer capable of taking work up to  $24 \times 24$  in. x 5 ft., one 9-inch slotting machine, one 16-inch shaper, one universal grinding machine, centering machine, a cutter grinder, a tool grinder, and an inch vertical drilling machine. There are vise benches for eighteen students, with the necessary hand-tools, and a marking-off table. The tool-room contains a full equipment of drills, reamers, milling cutters, and accessories, gauges, calipers, and other measuring instruments.

All the machinery in the workshops is driven electrically by motors taking power from the generating station in the Macdonald Building.

# SESSION 1919-1920 -----

# FACULTY OF ARTS

# FIRST YEAR

# (McGill College)

# NAME

# STREET ADDRESS CITY OR TOWN

	STREET ADDRESS	CITY OR TOWN
Addleman, William. Adney, Francis Glen (B.Sc. ( Allan, Warde Baunton		and the second
Adney Francis Clar (D.C.		Pembroke, Ont.
Allen Worde Pount	Jourse)	Woodstock, N.B.
Allan, Warde Baunton Amaron, Errol Calvin	602-13th Ave. West	Calgary Alto
Ballantyne, Charles Trenholr Beattie, James Robert	ne.678 Mountain St	Montreal O.
	309 Stanloy St	. Montreal, Que.
*Bergevin, Henry J Bernstein, Jacob Claronco		~
Bernstein, Jacob Claronao	E TT II I	Chateaugay, N.Y.
Bernstein, Jacob Clarence (B.Sc. Course)	Jara Hall Ave	Montreal, Que.
Bishon Cilbert		
(B.Sc. Course) Bishop, Gilbert (B.Sc. Course)	*********************************	Western Bay, Nfld
*Poular D 117		
*Boulanger, Donald Louis Boyd, David	47 Napoleon St.	Quebec Que
	122 George V. Ave	Laching Que.
(B.Sc. Course)		. Laonne, Que.
*Bradfield, Gordon Munro (Withdrew Nov 1919)	28 Rosemount Arro	Transmith
Bubroff, Isadore	1170 St Dominian Qu	M. I. I. C.
Burnett, James Frederick J Calder, James Carswell	242 Westmanud D	Montreal, Que.
Calder James Carswell		Westmount, Que.
Cantley, Donald Fraser (B.Sc. Course)		New Glasgow NS
(D.SC. Course)		
†Chisholm, Gavin William Clark, Hugh Stuart		Westmount Que
Collins, Stanley Ralph	Soo Deaconsticia Ave	Montreal, Que.
Cowan, David	142 Stoplan St	Ont.
Cowan, David Craik, Galen Howe Crestohl, Max Nathan	.145 Stamey St	Montreal, Que.
Crestohl, Max Nathan.	1655 Esplanade Ave	Montreal, Que.
<sup>†</sup> Davidson, Edward Leander Duval, Robert Herbert (B.Sc. Course)		Upper Melbourne, Que.
(B.Sc. Course)	.17 Victoria St	St. Johns, Q.e.
(D.Sc. Course)		
Edgecombe, Stanley		Carbonear NAd
Falconer, Keith. Fielding, Charles Rudolph (B.Sc. Course)	47 Arlington Arro	Wontreat, Que.
Fielding, Charles Rudolph	····	westmount, Que.
(B.Sc. Course)		Canso, N.S.
Fensom, Kenneth Gordon	202 Declars Ann	
Figler, Bernard	1120 Gt Daniel Ave	westmount, Que.
Figler, Bernard	. 1130 St. Dominique St]	Montreal, Que.
the second second second second second second second second second second second second second second second s		

\*Partial. †Double Course.

#### NAME

STREET ADDRESS

CITY OR TOWN Iontreal, Que.

 (B.Sc. Course)
 432 Frontenac St.
 Montreal, Que.

 Fraser, Douglas Anderson.
 Quesnel, B.C.

 Freeman, Harold
 1107 Clarke St.
 Montreal, Que.

 Fullerton, Charles Watson.
 320 Kensington Ave.
 Westmount, Que.

 Gault, Carroll Lever.
 305 Stanley St.
 Montreal, Que.

 Goldblatt, Aaron.
 841 Cadieux St.
 Montreal, Que.

 Woltherew Jan.
 84 Brock Avenue.
 Montreal Que.

 (B.Sc. Course) (B.Sc. Course) Hannan, Charles Scott . . . . . 19 Drummond St. . . . . Montreal, Que. (B.Sc. Course) (B.Sc. Course) Montreal, Que. \*MacFarlane, John Douglas B. Macdonald College ...... Ste. Anne de Bellevue (B.Sc. Course) (D.Sc. Course) Martin, Sydwell Alexander V...548 Gilmour St......Ottawa, Ont. Meikle, Stuart F......Morrisburg, Ont. (Withdrew early in session) Mendelssohn, Sam Leon......157 Rachel St. E.....Montreal, Que. (B.Sc. Course) Moore, Allan Frederick ......Billing's Bridge, Ont.

\*Partial.

†Double Course.

NAME	STREET ADDRESS	CITY OR TOWN
+Moore Emert N-1		CHILOW TOWN
†Moore, Ernest Nelson Mossman, Donald Davis (B.Sc. Course)		.St. Chrysostome. Que.
(B Sc Course)	288 McDougall Ave	.Outremont, Que.
(B.Sc. Course)		
Munro, William David		Westmount, Que.
Owens, Keith Beaumont *Plow, Herbert Allan Prudham William Morrill		.Lachute, Que.
Prudhom William Martin		.Westmount, Que.
Prudham, William Merrill Puddicombe, George Beverly †Pve, Martin James		.Wiarton, Ont.
<sup>†</sup> Pve Martin James		. Ottawa, Ont.
†Pye, Martin James (B.Sc. Course)	**********************************	.Windsor, Que.
Radmore, Arthur	27 35 11	.Aylmer, Que.
Readl Stanley Merritt E *Reid, Howard Edward Rosen Isidore		.Sherbrooke, Que.
Rosen Isidoro	070 34	.St. John, N.B.
*Ross, James Forsyth		. Quebec, Que.
Schwartzman, Jacob (B.Sc. Course)	St. Urbain St	. Montreal, Que.
*Shane Samuel I	ITHIN OL	
*Shane, Samuel J. *Shatford Reginald Alexander		Montreal, Que.
*Shatford, Reginald Alexander (B.Sc. Course)	r. 1287 Davie St	Vancouver, B.C.
Shillington John Tosoland	901 CH	A
Shillington, John Toseland	205 Manute in Gl	. Ottawa, Ont.
Simpson, Robert Geoffrey Smith Frederick McIver	55 Clandaharra American	Montreal, Que.
Smith, Frederick McIver	456 Foot 10th St	Westmount, Que.
Smith, Jewitt Rice Spector, Jack.	24 Lorrol Arro	Brooklyn, N.Y.
Stephenson, Heber James	P P No 9	Montreal, Que.
Stewart, Donald Laughlin		Monckland, Ont.
Strange, Arnold	70 T oforrotto Area	Dunvegan, Ont.
*Timmins, Noah A	07 Gordon Crossert	Montreal, Que.
(Withdrew Dec., 1919)	.57 Gordon Crescent	. westmount, Que.
(Withdrew Dec., 1919) Van Vliet, G. Lyman Wadsworth, Gordon Campbell Wall Gilbert		Levelle O
Wadsworth, Gordon Campbell	2036 Manco St	Montreel Ore
Way, Joseph Harold Gosling. *Webster, Robert Chilion Peter (Withdrew early in sossien)		Bonomisto Mild
*Webster, Robert Chilion Peter	r.196 Metcalfe St	Ottown Ont
(Withdrew early in session)		. Ottawa, Olit.
(Withdrew early in session) Wells, Herbert		Wesleyville NAd
†West, Alfred M	.674 Durocher Ave	Outremont Que
Willard, Eugene Wallace Wilson, William Hollister Wilson William Debat	.1441/2 Cyrille St.	Quebec, Que
Wilson, William Hollister	.150 Drummond St.	Montreal Que
Wilson, William Robert Winn, Albert Reginald		Athelstan Que
Winn, Albert Reginald	.32 Springfield Ave.	Westmount Que
(D.SC. COURSE)		
Winslow, Terence Hansard	.136 Middlegate	Winnipeg, Man.
Woodhouse, Douglas Hamilton	.74 Knox St	Montreal, Que.
	A CARACTER STREET	

# (Royal Victoria College)

Ball, Carolyn Muir	Westmount Que
Danantyne, Elizabeth Gordon, 124 Ballantyne Ave S	Montroal Wost One
Dannin, riorence Manala	Fast Anous Que
Beattie, Marion Tennant 518 St. Joseph St.	Lashing Oue
Beckwith, Grace Dean McLeod1423 Fernwood Rd	Victoria D.C.
*Bernstein, Ruth Gertrude5 Tara Hall Ave	. Victoria, B.C.
Bissett, Alice MacGowan	. Montreat, Que.
Brankley, Jean Wilkyn	. Lachine, Que.
*Brown, Marguerite Campbell	Chatham, N.B.
brown, marguerite Campbell	.Aver's Cliff. Que.

\*Partial.

†Double Course.

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# CITY OR TOWN STREET ADDRESS NAME Campbell, Edith Margaret..... 190 Bayswater Ave. ..... Ottawa, Ont. (B.Sc. Course) Freedman, Celia. 366 Kensington Ave. Westmount, Que. Freedman, Sadie. 366 Kensington Ave. Westmount, Que. (B.Sc. Course) (Withdrew Oct. 20, 1919) Freyvogel, Charlotte Rosalie. 162 Villeneuve W Montreal, Que. \*Fridmann, Liv. 4211 Dorchester St. Westmount, Que. \*Gaudet, Gilberte. 405 Beaubien St. Montreal, Que. Gilday, Lois. 59 Bruce Ave. Westmount, Que. (B.Sc. Course) 59 Bruce Ave. Westmount, Que. (B.Sc. Course) 72 Le Marchant Rl. St. John's, Nfld. Grigg, Mildred McIntire. co Jas. Coristine & Co. Montreal, Que. Hodge, Dorothy Evelyn. 459 Lansdowne Ave. Westmount, Que. (B.Sc. Course) To Jas. To Jas. To Jas. (B.Sc. Course) St. Laurent, Que. Hodge, Edith Alexandria. St. Laurent, Que. Jackson, Alma Theresa. 10 Brooke Ave. Westmount, Que. James, Kathleen. 92 Selby Ave. Westmount, Que. Janes, Kathleen. 92 Selby Ave. Westmount, Que. Janes, Kathleen. 92 Selby Ave. Westmount, Que. Johnston, Jean Laidlaw. 4474 St. CatherineSt. Westmount, Que. Kerr, Lorna Walson Kincaid. 256 Mountain St. Montreal, Que. Kert, Rebecca. 783 City Hall Ave. Montreal, Que. \*Klein, Anna Ethel 2171 Park Ave. Montreal, Que. \*Klein, Rose. 1405 St. Urbain St. Montreal, Que. Knowlton, Virginia Wallace. 626 Belmont Ave. Westmount, Que. (B.Sc. Course) Kydd, Mary Winnifred. 4277 Dorchester S: Westmount, Que. Kydd, w, Nancy Whitehill 179 Belgrave Ave. Montreal, Que. (Withdrew early in session) (B.Sc. Course) (B.Sc. Course) MacDonnell, Marjory Esther.....Wolseley, Sask. McEwen, Gladys Mary Elizabeth.....Maxville, Ont.

\*Partial.

†Double Course.

# STREET ADDRESS

# CITY OR TOWN

and the second second second second second second second second second second second second second second second	SIREET ADDRESS	CITY OR TOWN
*Maclean, Sarah Jean Eilleen.	233 Old Orchard Arro	Montreal One
McLellan, Annie Mildred	180 Villonouro St W	Montreal, Que.
McPhail, Mary Archibald	18 Bishop St	Montreal, Que.
Magee, Mabel Angela St. J	49 Wollangton Dem	Montreal, Que.
Matts Florence Violat	251 Olining ton Row	St. John, N.B.
Matts, Florence Violet	240 CUL I I CUL	Westmount, Que.
Mitchell, Janet I		Lachine, Que.
Montgomorry Loggie Alberte		
Montgomery, Jessie Alberta *Morphy, Margery Brunhild	HED CI 1	North Gower, Ont.
Munno Imagery Brunnild).		Montreal, Que.
Munro, Iveagh. (Withdrew Nov. 12, 1919)	*******************************	Pembroke, Ont.
(Withdrew Nov. 12, 1919)		
Murray, Margaret Agnes	.331 Elm Ave	Westmount, Que.
Palmer, Edna May Paxton, Dorothy Helen		Sherbrooke, Que.
Paxton, Dorothy Helen	.4854 St. Catherine St	Westmount, Que.
(D.DC. COULSE)		
Perry, Millicent Audrey	.271 Jeanne Mance St	. Montreal, Que.
FICK, Marjorie	617 Roslyn Ave	Wastmount Que
rate, margaret Enteen	.109 Selby St	Westmount Que
Rabinoviten, neta Svivia	103 Esplanade Ave	Montroal Quo
nees, Edythe Ann		Gananoque, Ont.
(Withdrew early in session		
Reilly, Emma Alberta	.29 Ballantyne Ave. S	Montreal West Que
(D.SC. Course)		
Reyner, Jean.	.4165 Western Ave.	Westmount Que
(D.H.S. Course)		
Rosen, Florence	270 Mance St	Montroal Que
Roy, Alice Rosslyn	61 Norwood Ave	Abuntsic Quo
Russell, Dorothy Margaret	425 Mount Pleasant Ave	Wostmount Que
Scovil, Leah Graham	471 Grosvenor Ave	Westmount, Que.
Shirriff, Lillian Clementine V		Huntingdon Our
Shlakman, Leanora	2281 St Urbain St	Montroal One
Slack, Zerada.	347 Konsington Area	Wostman, Que.
*Smart, Dorothy Maud	500 Roslam Arro	Westmount, Que.
Smith, Dorothy Frances		Ct Mastine N.D.
Stewart, Audrey Elizabeth		Clonelmo Out
Superior, Ethel.	1669 Dorle Arro	. Glenelm, Que.
Teed, Dorothy Isobel	110 Horan C4	. Montreal, Que.
Turner, Edythe Mary Scott.	70 Columbia And	.St. John, N.B.
*Wayland Esthor	1201 St Waters St W	. westmount, Que.
*Wayland, Esther	124 Albert Area St. W	. Montreal, Que.
Wighton, Lucy Jean Elizabeti.	The ADDOUT AVE.	. westmount, Que.
*Wilder, Eunice Ruth	795 Dorchester St. W	. Montreal, Que.
*Wilson, Barbara	725 Belmont Ave	. Westmount, Que.
Wood Logh Wothless Logi	752 St. Lawrence St	. Montreal, Que.
Wood-Legh, Kathleen Louise	.524 Ocean Ave	. Woofords, Me.
Young, Florence Emily	4847 Westmount Ave	. Westmount, Que.

# SECOND YEAR

# (McGill College)

Addy, Paul Herbert	Jordan Ont
Alexander, Benjamin	Montroal Que
(B.SC. Course)	
Anderson, Duncan Robinson100 Park Ave	Montreal Que
Avison, Henry R. C.	Now Donvor BC
Badger, Roland Ashley.	. Ivew Deliver, D.C.
*Barrá Charles Starislans V 1101 GUTT 1 . G	Ayer's Chiff, Ont.
*Barré, Charles Stanislaus V 1161 St. Hubert St	. Montreal, Que.
Barrett, Arthur William Reddy, 415 Metcalfe Ave	Westmount Que
Bourgoin, Henry Edmund 430 MacKay St	Montreal Que
Bullock, Theodore Lafleur	Porton Pond Que
	. noxion rond, Que.

\*Partial.

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# STREET ADDRESS

CITY OR TOWN

*Broult Maglaira Log	Cranbrook, B.C.
*Brault, Magloire Jos †Cahana, David	Montroal Que
TCanana, David	Montreat, Que.
Caldwell, William Stewart737 Shuter St	Montreal, Que.
*Chazeaud, Camille Armand	Pointe-aux-Trembles,
	Que.
*Cooder, Howard R201 Esplanade Ave	Montreal Que
Cooder, Howard R	
Copland, Edward Bruce	Westmount, Que.
Cousens, Henry	Bolton Centre, Que.
Davis, Charles Freeman. Elliot, Howard L	Freshwater, Nfld.
Elliot Howard I 406 Victoria Aria	Westmount Que
Emot, noward L	Montreal One
Fraser, Clarence Harrower	Montreal, Que.
Gaboury, Marcel	V. Montreal, Que.
Goubjila, Theodore	th.Bucharest, Roumania.
Gradinger, Carol Hyman106 Bourget St	Montreal Que.
Tru Delest	Commull Ont
Hall, Robert.	Cornwall, Ont.
Harris, Richard C	New Denver, B.C.
Hershon, Henry	Montreal, Que.
(B Sc (Course)	
*Hathanington Casil H	Prochangidge Que
*Hetherington, Cecil H. †Higinbotham, Norman Lindsay.620-12th St. South	Dieckennuge, Que.
<sup>†</sup> Higinbotham, Norman Lindsay. 620-12th St. South	Letnbridge, Alta.
*Jess, John Andrew, B.A.	Dromara, Co. Down,
(Withdrew Oct 14 1919)	Ireland.
(Withdrew Oct. 14, 1919) Johnson, Andrew Stuart	Thatford Mines West
Johnson, Andrew Stuart	
	Que.
Johnston, Charles Franklin 56 Bellevue Ave	Westmount, Que.
†Kanigsberg, Jacob Clarence431 Henri Julien Ave	Montreal. Que.
(P Sa Course)	
*Kelly, George Frederick	Cumbron Monmouth
"Kelly, George Frederick	
	shire, England
Kennedy, William Roland433 Mance St	Montreal. Que.
(B Sc Course)	
(B.Sc. Course)	
(B.Sc. Course) Kerr, Thomas McLean	Verdun, Que.
(B.Sc. Course) Kerr, Thomas McLean	Verdun, Que. Verdun, Que.
(B.Sc. Course) Kerr, Thomas McLean	Verdun, Que. Verdun, Que.
(B.Sc. Course) Kerr, Thomas McLean	Verdun, Que. Verdun, Que.
(B.Sc. Course) Kerr, Thomas McLean	Verdun, Que. Verdun, Que. Montreal, Que. Westmount, Que.
(B.Sc. Course) Kerr, Thomas McLean	Verdun, Que. Verdun, Que. Montreal, Que. Westmount, Que. Derby, England.
(B.Sc. Course) Kerr, Thomas McLean	Verdun, Que. Verdun, Que. Montreal, Que. Westmount, Que. Derby, England. Westmount, Que.
(B.Sc. Course) Kerr, Thomas McLean	Verdun, Que. Verdun, Que. Montreal, Que. Westmount, Que. Derby, England. Westmount, Que.
(B.Sc. Course) Kerr, Thomas McLean	Verdun, Que. Verdun, Que. Montreal, Que. Westmount, Que. Derby, England. Westmount, Que.
(B.Sc. Course) Kerr, Thomas McLean	Verdun, Que. Verdun, Que. Montreal, Que. Westmount, Que. Derby, England. Westmount, Que. Moose Jaw, Sask.
(B.Sc. Course) Kerr, Thomas McLean	Verdun, Que. Verdun, Que. Montreal, Que. Westmount, Que. Derby, England. Westmount, Que. Moose Jaw, Sask. Montreal, Que.
(B.Sc. Course) Kerr, Thomas McLean	Verdun, Que. Verdun, Que. Montreal, Que. Westmount, Que. Derby, England. Westmount, Que. Moose Jaw, Sask. Montreal, Que.
(B.Sc. Course) Kerr, Thomas McLean	Verdun, Que. Verdun, Que. Wostmount, Que. Derby, England. Westmount, Que. Moose Jaw, Sask. Montreal, Que. Aylmer, Que. Montreal, Que.
(B.Sc. Course) Kerr, Thomas McLean	Verdun, Que. Verdun, Que. Wostmount, Que. Derby, England. Westmount, Que. Moose Jaw, Sask. Montreal, Que. Aylmer, Que. Montreal, Que.
(B.Sc. Course) Kerr, Thomas McLean	Verdun, Que. Verdun, Que. Montreal, Que. Westmount, Que. Derby, England. Westmount, Que. Moose Jaw, Sask. Montreal, Que. Aylmer, Que Montreal, Que. Lachine, Que.
(B.Sc. Course) Kerr, Thomas McLean	Verdun, Que. Verdun, Que. Montreal, Que. Westmount, Que. Derby, England. Westmount, Que. Moose Jaw, Sask. Montreal, Que. Aylmer, Que Montreal, Que. Lachine, Que.
(B.Sc. Course) Kerr, Thomas McLean	Verdun, Que. Verdun, Que. Montreal, Que. Westmount, Que. Derby, England. Westmount, Que. Moose Jaw, Sask. Montreal, Que. Aylmer, Que Montreal, Que. Lachine, Que.
(B.Sc. Course) Kerr, Thomas McLean. 1280 Joseph St Kneeland, Clarence Russell	Verdun, Que.     Verdun, Que.     Montreal, Que.     Westmount, Que.     Derby, England.     Westmount, Que.     Moose Jaw, Sask.     Montreal, Que.     Montreal, Que.     Montreal, Que.     Lachine, Que.     Birmingham, England     Montreal, Que.
(B.Sc. Course) Kerr, Thomas McLean	Verdun, Que.     Verdun, Que.     Montreal, Que.     Westmount, Que.     Derby, England.     Westmount, Que.     Moose Jaw, Sask.     Moose Jaw, Sask.     Montreal, Que.     Aylmer, Que     Montreal, Que.     Lachine, Que.     Birmingham, England     Montreal, Que.     Aver's Cliff. Que.
(B.Sc. Course)         Kerr, Thomas McLean       1280 Joseph St.         Kneeland, Clarence Russell       320 First Ave.         tLeslie, Angus Ogilvy       824 Dorchester St. W.         Lidstone, Victor John       66 Bruce Ave.         *Litchfield, Arthur Vincent       12 Crewe St.         Lyall, William Thomas       515 Clarke Ave.         McCulloch, Frank Dudley       76 Hochelaga St. E.         (B.Sc. Course)       McDougall, Geoffrey Springle.         McDougall, James Malcolm       851 Lorne Crescent.         McLean, Duart Vercoe.       24 Forty-first St.         (B.Sc. Course)       *         *Marsh, Alfred Finnis.       112 St. Famille St.         Morore, Dale Hendry       754 Douglas Ave	Verdun, Que.     Verdun, Que.     Montreal, Que.     Derby, England.     Westmount, Que.     Moose Jaw, Sask.     Montreal, Que.     Montreal
(B.Sc. Course)         Kerr, Thomas McLean.       1280 Joseph St.         Kneeland, Clarence Russell.       320 First Ave.         tLeslie, Angus Ogilvy.       824 Dorchester St. W.         Lidstone, Victor John.       66 Bruce Ave.         *Litchfield, Arthur Vincent.       12 Crewe St.         Lyall, William Thomas       515 Clarke Ave.         McCulloch, Frank Dudley.       76 Hochelaga St. E.         (B.Sc. Course)       McDougall, Geoffrey Springle.         McDougall, James Malcolm.       851 Lorne Crescent.         Macklaier, William Fraser.       851 Lorne Crescent.         McLean, Duart Vercoe.       24 Forty-first St.         (B.Sc. Course)       *         *Marsh, Alfred Finnis.       112 St. Famille St.         Moore, Dale Hendry.       254 Douglas Ave.         O'Hagean Howard       1275 Pleasant Ave.	Verdun, Que. Verdun, Que. Westmount, Que. Derby, England. Westmount, Que. Moose Jaw, Sask. Montreal, Que. Aylmer, Que. Lachine, Que. Lachine, Que. Montreal, Que. Lachine, Que. Ayer's Cliff, Que. St. John, N. B. Victoria, B.C.
(B.Sc. Course)         Kerr, Thomas McLean.       1280 Joseph St.         Kneeland, Clarence Russell.       320 First Ave.         tLeslie, Angus Ogilvy.       824 Dorchester St. W.         Lidstone, Victor John.       66 Bruce Ave.         *Litchfield, Arthur Vincent.       12 Crewe St.         Lyall, William Thomas       515 Clarke Ave.         McCulloch, Frank Dudley.       76 Hochelaga St. E.         (B.Sc. Course)       McDougall, Geoffrey Springle.         McDougall, James Malcolm.       851 Lorne Crescent.         Macklaier, William Fraser.       851 Lorne Crescent.         McLean, Duart Vercoe.       24 Forty-first St.         (B.Sc. Course)       *         *Marsh, Alfred Finnis.       112 St. Famille St.         Moore, Dale Hendry.       254 Douglas Ave.         O'Hagean Howard       1275 Pleasant Ave.	Verdun, Que. Verdun, Que. Westmount, Que. Derby, England. Westmount, Que. Moose Jaw, Sask. Montreal, Que. Aylmer, Que. Lachine, Que. Lachine, Que. Montreal, Que. Lachine, Que. Ayer's Cliff, Que. St. John, N. B. Victoria, B.C.
(B.Sc. Course) Kerr, Thomas McLean	Verdun, Que.     Verdun, Que.     Montreal, Que.     Westmount, Que.     Derby, England.     Westmount, Que.     Moose Jaw, Sask.     Montreal, Que.     Aylmer, Que     Montreal, Que.     Lachine, Que.     Birmingham, England     Montreal, Que.     Ayyr's Cliff, Que.     St. John, N.B.     Victoria, B.C.     Smethwick, England.
(B.Sc. Course) Kerr, Thomas McLean	Verdun, Que.     Verdun, Que.     Montreal, Que.     Westmount, Que.     Derby, England.     Westmount, Que.     Moose Jaw, Sask.     Montreal, Que.     Aylmer, Que     Montreal, Que.     Lachine, Que.     Birmingham, England     Montreal, Que.     Ayyr's Cliff, Que.     St. John, N.B.     Victoria, B.C.     Smethwick, England.
(B.Sc. Course)         Kerr, Thomas McLean       1280 Joseph St.         Kneeland, Clarence Russell       320 First Ave.         tLeslie, Angus Ogilvy       824 Dorchester St. W.         Lidstone, Victor John       66 Bruce Ave.         *Litchfield, Arthur Vincent       12 Crewe St.         Lyall, William Thomas       515 Clarke Ave.         McCulloch, Frank Dudley       76 Hochelaga St. E.         (B.Sc. Course)       851 Lorne Crescent.         Macklaier, William Fraser       851 Lorne Crescent.         McLean, Duart Vercoe       24 Forty-first St.         (B.Sc. Course)       851 Lorne Crescent.         *Marsh, Alfred Finnis.       112 St. Famille St.         Moore, Dale Hendry.       1275 Pleasant Ave.         O'Hagan, Howard       1275 Pleasant Ave.         Oliver, Arthur Samuel.       *Parkes, Robert Henry.         *Paterson Erederick Olaf       2158 Mance St.	Verdun, Que.     Verdun, Que.     Montreal, Que.     Westmount, Que.     Derby, England.     Westmount, Que.     Moose Jaw, Sask.     Montreal, Que.     Montreal, Que.     Montreal, Que.     Montreal, Que.     Montreal, Que.     Striningham, England     Montreal, Que.     Ayer's Cliff, Que.     St. John, N.B.     Victoria, B.C.     Smethwick, England.     Montreal, Que.
(B.Sc. Course) Kerr, Thomas McLean. 1280 Joseph St Kneeland, Clarence Russell	Verdun, Que. Verdun, Que. Westmount, Que. Derby, England. Westmount, Que. Moose Jaw, Sask. Montreal, Que. Aylmer, Que. Lachine, Que. Lachine, Que. Hontreal, Que. Ayer's Cliff, Que. Synethwick, England. Victoria, B.C. Smethwick, England. Belfast, Ireland. Montreal, Que. Montreal, Que.
(B.Sc. Course) Kerr, Thomas McLean. 1280 Joseph St Kneeland, Clarence Russell	Verdun, Que. Verdun, Que. Westmount, Que. Derby, England. Westmount, Que. Moose Jaw, Sask. Montreal, Que. Aylmer, Que. Lachine, Que. Lachine, Que. Hontreal, Que. Ayer's Cliff, Que. Synethwick, England. Victoria, B.C. Smethwick, England. Belfast, Ireland. Montreal, Que. Montreal, Que.
(B.Sc. Course) Kerr, Thomas McLean. 1280 Joseph St Kneeland, Clarence Russell	Verdun, Que. Verdun, Que. Westmount, Que. Derby, England. Westmount, Que. Moose Jaw, Sask. Montreal, Que. Aylmer, Que. Lachine, Que. Lachine, Que. Hontreal, Que. Ayer's Cliff, Que. Synethwick, England. Victoria, B.C. Smethwick, England. Belfast, Ireland. Montreal, Que. Montreal, Que.
(B.Sc. Course)         Kerr, Thomas McLean       1280 Joseph St.         Kneeland, Clarence Russell       320 First Ave.         tLeslie, Angus Ogilvy       824 Dorchester St. W.         Lidstone, Victor John       66 Bruce Ave.         *Litchfield, Arthur Vincent       12 Crewe St.         Lyall, William Thomas       515 Clarke Ave.         McCulloch, Frank Dudley       76 Hochelaga St. E.         (B.Sc. Course)       McDougall, Geoffrey Springle.         McDougall, James Malcolm       851 Lorne Crescent.         McLean, Duart Vercoe.       24 Forty-first St.         (B.Sc. Course)       *Marsh, Alfred Finnis.         *Markhaer, William Fraser       851 Lorne Crescent.         McLean, Duart Vercoe.       24 Forty-first St.         (B.Sc. Course)       *Marsh, Alfred Finnis.         *Markhaewson, Clive       112 St. Famille St.         Moore, Dale Hendry.       Murray, Sidney Grosvenor       254 Douglas Ave.         Oliver, Arthur Samuel.       *Parkes, Robert Henry.       Peterson, Frederick Olaf.       2158 Mance St.         *Pierce, Sydney D.       724 Upper Belmont Ave.       *Pitt, Thomas J.       Haldon Ave.	<ul> <li>Verdun, Que.</li> <li>Verdun, Que.</li> <li>Montreal, Que.</li> <li>Derby, England.</li> <li>Westmount, Que.</li> <li>Derby, England.</li> <li>Westmount, Que.</li> <li>Moose Jaw, Sask.</li> <li>Montreal, Que.</li> <li>Montreal, Que.</li> <li>Lachine, Que.</li> <li>Birmingham, England</li> <li>Montreal, Que.</li> <li>Ayer's Cliff, Que.</li> <li>St. John, N.B.</li> <li>Victoria, B.C.</li> <li>Smethwick, England.</li> <li>Belfast, Ireland.</li> <li>Montreal, Que.</li> <li>Westmount, Que.</li> <li>Westmount, Que.</li> <li>Westmount, Que.</li> <li>Westmount, Que.</li> <li>Westmount, Que.</li> <li>Westmount, Rue.</li> <li>Teigmmouth, England.</li> <li>Maester, So. Wales.</li> </ul>
(B.Sc. Course) Kerr, Thomas McLean. 1280 Joseph St Kneeland, Clarence Russell	Verdun, Que. Verdun, Que. Westmount, Que. Derby, England. Westmount, Que. Moose Jaw, Sask. Montreal, Que. Aylmer, Que. Lachine, Que. Lachine, Que. Hontreal, Que. Ayer's Cliff, Que. St. John, N. B. Victoria, B. C. Smethwick, England. Belfast, Ireland. Montreal, Que. St. Montreal, Que. St. John, N. B. Victoria, B. C. Smethwick, England. Montreal, Que. Westmount, Que. Teignmouth, England. Maesteg, So. Wales. Montreal, Que.
(B.Sc. Course)         Kerr, Thomas McLean       1280 Joseph St.         Kneeland, Clarence Russell       320 First Ave.         tLeslie, Angus Ogilvy       824 Dorchester St. W.         Lidstone, Victor John       66 Bruce Ave.         *Litchfield, Arthur Vincent       12 Crewe St.         Lyall, William Thomas       515 Clarke Ave.         McCulloch, Frank Dudley       76 Hochelaga St. E.         (B.Sc. Course)       866 Sherbrooke St. W.         McDougall, James Malcolm       Mathewson, Estimation Stillorne Crescent.         McLean, Duart Vercoe.       24 Forty-first St.         (B.Sc. Course)       *Marah, Alfred Finnis.         Mathewson, Clive       112 St. Famille St.         Moore, Dale Hendry       1275 Pleasant Ave.         Oliver, Arthur Samuel       *Parkes, Robert Henry         Peterson, Frederick Olaf       2158 Mance St.         Pierce, Sydney D       724 Upper Belmont Are         *Pitt, Thomas J       Haldon Ave         *Richards, Archie L       Oakwood House.         Rohrlich, Louis       1297 Cadieux St.         Rozentein Murray       157 East St.	<ul> <li>Verdun, Que.</li> <li>Verdun, Que.</li> <li>Montreal, Que.</li> <li>Derby, England.</li> <li>Westmount, Que.</li> <li>Derby, England.</li> <li>Westmount, Que.</li> <li>Mooreal, Que.</li> <li>Montreal, Que.</li> <li>Montreal, Que.</li> <li>Lachine, Que.</li> <li>Birmingham, England</li> <li>Montreal, Que.</li> <li>St. John, N. B.</li> <li>Victoria, B. C.</li> <li>Smethwick, England.</li> <li>Belfast, Ireland.</li> <li>Montreal, Que.</li> <li>Teignmouth, England.</li> <li>Mesteg, So. Wales.</li> <li>Montreal, Que.</li> </ul>
(B.Sc. Course)         Kerr, Thomas McLean       1280 Joseph St.         Kneeland, Clarence Russell       320 First Ave.         tLeslie, Angus Ogilvy       824 Dorchester St. W.         Lidstone, Victor John       66 Bruce Ave.         *Litchfield, Arthur Vincent       12 Crewe St.         Lyall, William Thomas       515 Clarke Ave.         McCulloch, Frank Dudley       76 Hochelaga St. E.         (B.Sc. Course)       McDougall, Geoffrey Springle.         McDougall, James Malcolm       951 Lorne Crescent.         McLean, Duart Vercoe.       24 Forty-first St.         (B.Sc. Course)       *Marsh, Alfred Finnis.         *Marsh, Alfred Finnis.       112 St. Famille St.         Moore, Dale Hendry.       1275 Pleasant Ave.         Oliver, Arthur Samuel.       *Parkes, Robert Henry.         *Parkes, Robert Henry.       724 Upper Belmont Ave.         *Pitr, Thomas J.       Haldon Ave.         *Pitr, Thomas J.       Haldon Ave.         *Richards, Archie L.       Oakwood House.         Robrlich, Louis.       1297 Cadieux St.         Roberten, Svchave Louis.       255 Esplanade Ave.	Verdun, Que.     Verdun, Que.     Montreal, Que.     Westmount, Que.     Derby, England.     Westmount, Que.     Montreal, Que.     Montreal, Que.     Montreal, Que.     Montreal, Que.     Montreal, Que.     St. John, N.B.     Victoria, B.C.     Smethwick, England.     Montreal, Que.     Westmount, Que.     Selfast, Ireland.     Montreal, Que.     Westmount, Que.     Westmount, Que.     Montreal, Que.     Montreal, Que.     Montreal, Que.     Smethwick, England.     Montreal, Que.     Montreal, Qu
(B.Sc. Course)         Kerr, Thomas McLean       1280 Joseph St.         Kneeland, Clarence Russell       320 First Ave.         tLeslie, Angus Ogilvy       824 Dorchester St. W.         Lidstone, Victor John       66 Bruce Ave.         *Litchfield, Arthur Vincent       12 Crewe St.         Lyall, William Thomas       515 Clarke Ave.         McCulloch, Frank Dudley       76 Hochelaga St. E.         (B.Sc. Course)       McDougall, Geoffrey Springle.         McDougall, James Malcolm       951 Lorne Crescent.         McLean, Duart Vercoe.       24 Forty-first St.         (B.Sc. Course)       *Marsh, Alfred Finnis.         *Marsh, Alfred Finnis.       112 St. Famille St.         Moore, Dale Hendry.       1275 Pleasant Ave.         Oliver, Arthur Samuel.       *Parkes, Robert Henry.         *Parkes, Robert Henry.       724 Upper Belmont Ave.         *Pitr, Thomas J.       Haldon Ave.         *Pitr, Thomas J.       Haldon Ave.         *Richards, Archie L.       Oakwood House.         Robrlich, Louis.       1297 Cadieux St.         Roberten, Svchave Louis.       255 Esplanade Ave.	Verdun, Que.     Verdun, Que.     Montreal, Que.     Westmount, Que.     Derby, England.     Westmount, Que.     Montreal, Que.     Montreal, Que.     Montreal, Que.     Montreal, Que.     Montreal, Que.     St. John, N.B.     Victoria, B.C.     Smethwick, England.     Montreal, Que.     Westmount, Que.     Selfast, Ireland.     Montreal, Que.     Westmount, Que.     Westmount, Que.     Montreal, Que.     Montreal, Que.     Montreal, Que.     Smethwick, England.     Montreal, Que.     Montreal, Qu
(B.Sc. Course)         Kerr, Thomas McLean       1280 Joseph St.         Kneeland, Clarence Russell       320 First Ave.         tLeslie, Angus Ogilvy       824 Dorchester St. W.         Lidstone, Victor John       66 Bruce Ave.         *Litchfield, Arthur Vincent       12 Crewe St.         Lyall, William Thomas       515 Clarke Ave.         McCulloch, Frank Dudley       76 Hochelaga St. E.         (B.Sc. Course)       Mc Dougall, Geoffrey Springle.         Mc Dougall, James Malcolm       91         Macklaier, William Fraser       851 Lorne Crescent.         McLean, Duart Vercoe       24 Forty-first St.         (B.Sc. Course)       811 Lorne Crescent.         Mathewson, Clive       112 St. Famille St.         Moore, Dale Hendry.       1275 Pleasant Ave.         O'Hagan, Howard       1275 Pleasant Ave.         Oliver, Arthur Samuel       2158 Mance St.         *Parkes, Robert Henry.       724 Upper Belmont Ave.         *Pitt, Thomas J       Haldon Ave.         *Pitt, Thomas J       Haldon Ave.         Rohrlich, Louis       1297 Cadieux St.         Robrlich, Louis       2297 Cadieux St.         Rohrlich, Louis       255 Esplanade Ave.         Scheffer, Jsidore       83 Rivard St. <td>Verdun, Que.     Verdun, Que.     Montreal, Que.     Westmount, Que.     Derby, England.     Westmount, Que.     Montreal, Que.     Montreal, Que.     Montreal, Que.     Montreal, Que.     Montreal, Que.     St. John, N.B.     Victoria, B.C.     Smethwick, England.     Montreal, Que.     Westmount, Que.     Selfast, Ireland.     Montreal, Que.     Westmount, Que.     Westmount, Que.     Montreal, Que.     Montreal, Que.     Montreal, Que.     Smethwick, England.     Montreal, Que.     Montreal, Qu</td>	Verdun, Que.     Verdun, Que.     Montreal, Que.     Westmount, Que.     Derby, England.     Westmount, Que.     Montreal, Que.     Montreal, Que.     Montreal, Que.     Montreal, Que.     Montreal, Que.     St. John, N.B.     Victoria, B.C.     Smethwick, England.     Montreal, Que.     Westmount, Que.     Selfast, Ireland.     Montreal, Que.     Westmount, Que.     Westmount, Que.     Montreal, Que.     Montreal, Que.     Montreal, Que.     Smethwick, England.     Montreal, Que.     Montreal, Qu
(B.Sc. Course)         Kerr, Thomas McLean       1280 Joseph St.         Kneeland, Clarence Russell       320 First Ave.         tLeslie, Angus Ogilvy       824 Dorchester St. W.         Lidstone, Victor John       66 Bruce Ave.         *Litchfield, Arthur Vincent       12 Crewe St.         Lyall, William Thomas       515 Clarke Ave.         McCulloch, Frank Dudley       76 Hochelaga St. E.         (B.Sc. Course)       866 Sherbrooke St. W.         McDougall, James Malcolm       Matheir, William Fraser         Maklaier, William Fraser       851 Lorne Crescent.         McLean, Duart Vercoe.       24 Forty-first St.         (B.Sc. Course)       84 Moore, Dale Hendry         Murray, Sidney Grosvenor       254 Douglas Ave.         O'Hagan, Howard       1275 Pleasant Ave.         Oliver, Arthur Samuel       *1275 Pleasant Ave.         *Parkes, Robert Henry       Peterson, Frederick Olaf       2158 Mance St.         Pierce, Sydney D       724 Upper Belmont Are         *Pitt, Homas J       Haldon Ave.         *Richards, Archie L       Oakwood House.         Robrlich, Louis       1297 Cadieux St.         Rosenstein, Murray       157 East St.         Schafter, Sydney Louis       255 Esplanade Ave.	<ul> <li>Verdun, Que.</li> <li>Verdun, Que.</li> <li>Montreal, Que.</li> <li>Derby, England.</li> <li>Westmount, Que.</li> <li>Derby, England.</li> <li>Westmount, Que.</li> <li>Mooreal, Que.</li> <li>Montreal, Que.</li> <li>Montreal, Que.</li> <li>Lachine, Que.</li> <li>Birmingham, England</li> <li>Montreal, Que.</li> <li>St. John, N. B.</li> <li>Victoria, B. C.</li> <li>Smethwick, England.</li> <li>Belfast, Ireland.</li> <li>Montreal, Que.</li> <li>Teignmouth, England.</li> <li>Mesteg, So. Wales.</li> <li>Montreal, Que.</li> <li>Statket, Marie, Ont.</li> <li>Montreal, Que.</li> <li>Montreal, Que.</li> <li>Montreal, Que.</li> <li>Montreal, Que.</li> <li>Montreal, Que.</li> <li>Montreal, Que.</li> <li>Teignmouth, England.</li> <li>Maesteg, So. Wales.</li> <li>Montreal, Que.</li> <li>Sault Ste. Marie, Ont.</li> <li>Montreal, Que.</li> <li>Montreal, Que.</li> <li>Montreal, Que.</li> </ul>
(B.Sc. Course)         Kerr, Thomas McLean       1280 Joseph St.         Kneeland, Clarence Russell       320 First Ave.         tLeslie, Angus Ogilvy       824 Dorchester St. W.         Lidstone, Victor John       66 Bruce Ave.         *Litchfield, Arthur Vincent       12 Crewe St.         Lyall, William Thomas       515 Clarke Ave.         McCulloch, Frank Dudley       76 Hochelaga St. E.         (B.Sc. Course)       Mc Dougall, Geoffrey Springle.         Mc Dougall, James Malcolm       91         Macklaier, William Fraser       851 Lorne Crescent.         McLean, Duart Vercoe       24 Forty-first St.         (B.Sc. Course)       811 Lorne Crescent.         Mathewson, Clive       112 St. Famille St.         Moore, Dale Hendry.       1275 Pleasant Ave.         O'Hagan, Howard       1275 Pleasant Ave.         Oliver, Arthur Samuel       2158 Mance St.         *Parkes, Robert Henry.       724 Upper Belmont Ave.         *Pitt, Thomas J       Haldon Ave.         *Pitt, Thomas J       Haldon Ave.         Rohrlich, Louis       1297 Cadieux St.         Robrlich, Louis       2297 Cadieux St.         Rohrlich, Louis       255 Esplanade Ave.         Scheffer, Jsidore       83 Rivard St. <td><ul> <li>Verdun, Que.</li> <li>Verdun, Que.</li> <li>Montreal, Que.</li> <li>Derby, England.</li> <li>Westmount, Que.</li> <li>Derby, England.</li> <li>Westmount, Que.</li> <li>Mooreal, Que.</li> <li>Montreal, Que.</li> <li>Montreal, Que.</li> <li>Lachine, Que.</li> <li>Birmingham, England</li> <li>Montreal, Que.</li> <li>St. John, N. B.</li> <li>Victoria, B. C.</li> <li>Smethwick, England.</li> <li>Belfast, Ireland.</li> <li>Montreal, Que.</li> <li>Teignmouth, England.</li> <li>Mesteg, So. Wales.</li> <li>Montreal, Que.</li> <li>Statket, Marie, Ont.</li> <li>Montreal, Que.</li> <li>Montreal, Que.</li> <li>Montreal, Que.</li> <li>Montreal, Que.</li> <li>Montreal, Que.</li> <li>Montreal, Que.</li> <li>Teignmouth, England.</li> <li>Maesteg, So. Wales.</li> <li>Montreal, Que.</li> <li>Sault Ste. Marie, Ont.</li> <li>Montreal, Que.</li> <li>Montreal, Que.</li> <li>Montreal, Que.</li> </ul></td>	<ul> <li>Verdun, Que.</li> <li>Verdun, Que.</li> <li>Montreal, Que.</li> <li>Derby, England.</li> <li>Westmount, Que.</li> <li>Derby, England.</li> <li>Westmount, Que.</li> <li>Mooreal, Que.</li> <li>Montreal, Que.</li> <li>Montreal, Que.</li> <li>Lachine, Que.</li> <li>Birmingham, England</li> <li>Montreal, Que.</li> <li>St. John, N. B.</li> <li>Victoria, B. C.</li> <li>Smethwick, England.</li> <li>Belfast, Ireland.</li> <li>Montreal, Que.</li> <li>Teignmouth, England.</li> <li>Mesteg, So. Wales.</li> <li>Montreal, Que.</li> <li>Statket, Marie, Ont.</li> <li>Montreal, Que.</li> <li>Montreal, Que.</li> <li>Montreal, Que.</li> <li>Montreal, Que.</li> <li>Montreal, Que.</li> <li>Montreal, Que.</li> <li>Teignmouth, England.</li> <li>Maesteg, So. Wales.</li> <li>Montreal, Que.</li> <li>Sault Ste. Marie, Ont.</li> <li>Montreal, Que.</li> <li>Montreal, Que.</li> <li>Montreal, Que.</li> </ul>

# 350

NAME

\*Partial.

+Double Course.

# NAME

# STREET ADDRESS CITY OR TOWN

Stanway, Albert Edward	.14 Arlington Ave	.Westmount, Que.
Steine, Ben Zion.	.819 University St	Montreal Que
(D.SC. Course)		
Stewart, William Ranald	.219 Coburg St	Ottown Ont
Turrell, Thos	.71 Wood Lane	Handsworth England
Webster, Gordon M	478 Roslyn Ave	Westmount Oue
White, Harold.	.West Lane	Shipley Yorks Eng
Wolepor, Benjamin	68-7th Avenue	Laching Que
(B.SC. Course)		
Zuckerman, Joshua	.135 Rachel St. E	Montreal, Que.

(B.Sc. Course)

# (Royal Victoria College)

*Ayer, Ruth Claxton	343 Olivier Ave	Wortmount Our
*Aylon Donothes E		. Westmount, Que.
Aylen, Dorotnea E		.Ottawa, Ont.
*Aylen, Dorothea E *Aylen, Lois. *Bagley, Evelyn Mae	274 O'Connor St	Ottomo Ont
*Bagloy Frielin Moo	E00 (	. Ottawa, Ont.
Dagley, Everyn mae		. Westmount, Que.
Banfill, Mary Evelyn Sanh.		East Angus Que
Banfill, Mary Evelyn Sanh Birkett, Winifred Leightm	259 Mountain St	Mantanal Que.
Dasalas Minald		. montreal, Que.
Brooke, Minette		.Montreal. Que.
Brown, Frances Trapp	P.O. Box 168	Kamloons B.C.
*Comings Bortha France		. Rannoops, D.O.
*Comings, Bertha France		Eugene, Oregon.
Foley, Violet Elizabeth		.St. John, N.B.
rry, mary inez.	29 Bellevilo Avo	Wostmount Que
*Gault, Elizabeth Pentlaid	207 01	. Westincunt, Que.
Gault, Elizabeth Fentiald		. Montreal, Que.
Gillies, neien Mackeennib		Montreal Que
Goldman, Raya Edna	615 Bloomfold Arro	Outreast Our
Hondonson Last TI 1	Dio Dioommeta Ave	. Outremont, Que.
Henderson, Jean Tasker	. 575 Roslyn Ave	.Westmount. Que.
Hibbard, Gladys Evadn	460 Argyle Ave	Westmount Que
(B.Sc. Course)		. Hostmount, Que.
TT-11		
Holloway, Marjorie		Montreal, Que.
Holloway, Marjorie Howell, Muriel Jillard	212 Metcalfe Ave	Westmount Oue
Inwin Chlorig C	Col Trada in the	. Westimount, Que.
Irwin, Chloris C	.031 victoria Ave	. Westmount, Que.
(B.Sc. Course)		
James, Norah Gertrude	99 Durocher St	Montroal One
*Ichnston Norsh		. montreat, Que.
*Johnston, Norah	.280 Stanley St	. Montreal, Que.
Joseph, Rose	.236 Elm Ave	Westmount Que
Klineberg, Adele	017 St Donis St	Montreal One
*I orvingen Data II'lla		. montreat, Que.
*Levinson, Reba Hilda	.4181 Sherbrooke St. W	. Montreal, Que.
Levy, Lisa	.25 South Camp Road	Kingston Jamaica
(B.Sc. Course)	south outinp atout	. itingston, camaton.
+M-Devell A '' C '''		A CONTRACTOR OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE OWNER OF THE
†McDonald, Anita Cecilia	.201 Agnes St	. New Westminster.
		B.C
McGoun, Isabella Winifrel	27 TINNON Dollowing Area	Westward Out
M-D	.or Opper Denevue Ave	. Westmount, Que.
McPartlin, Elizabeth	.7 Woodstock Ave	. Montreal. Que.
Macrae, Dorothy	245 Melville Ave	Westmount Que
MacRae Shirlow Edith		. nostinount, Que.
MacRae, Shirley Edith	************************************	Cookshire, Que.
Mansfield, Eleanor	.546 Grosvenor Ave	Westmount, Que.
*Margolies, Jean	203 E Broadway	Now Vork City
Modbury Donother Durfa	200 CL . Droad way	New TOIR City.
Medbury, Dorothy Durfe	. 580 Sherbrooke St. W	Montreal, Que.
Newnnam, Kathleen	.Bishopsthorpe	Prince Albert, Sask.
Patton, Eunice Irene		Ormatown Quo
Roid Innot Lilian	*****************************	Ormstown, Que.
Reid, Janet Lilian	**********************************	Huntingdon, Que.
*Rickard, Edwina	.19 Highland Ave	Haverhill, Mass.
Riley, Margaret Louise	1302-8th Ave NW	Colgony Alto
Rohson Joan Harr	201 D	Oalgary, Alta.
Robson, Jean Hay	.321 Dromore Ave	Winnipeg, Man.
BOILT I DAIMA MATCATA	1926 Porte Arro	Montreel One
Sharples, Doris Kathleen	"Bircheoto "St Form D.J.	Ouches Ouc
Chatfand Dath M	. Direncote, St. Foye Rd	.Quebec, Que.
Sharples, Doris Kathleen Shatford, Ruth Marion	.097 St. Catherine St. W	Montreal, Que.
Smith, Alice Victoria		Phillipsburg Que
		a manthonare' dan.

\*Partial.

†Double Course.

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# NAMESTREET ADDRESSCITY OR TOWNSnyder, Evelyn Alice.632 Victoria Ave.St. Lambert, Que.\*Spence, Mrs. M.72 Regent Apts., Amesbury<br/>Ave.Montreal, Que.Stewart, Adela Isabel M.'' The Manse ''.Treherne, Man.Stuart, Beryl.41 Youville Place.Montreal, Que.(B.Sc. Course) (Wtihdrew Nov. 6, 1919)Sykes, Dorothy Louise.65 Park St.Canton, N.Y.Tait, Marjorie Jean32 St. Luke St.Montreal, Que.†Teggart, Dorothy May.32 St. Luke St.Montreal, Que.Tuffy, Magdalen Ellen.Cobden, Ont.Weibel, Louise Esther.35 Souvenir Ave.Montreal, Que.(B.Sc. Course)I88 King St. E.St. John, N.B.(B.Sc. Course)Zealand, Vivien Lewis.Houghton, Mich.

#### THIRD YEAR

#### (McGill College)

*Archibald, Francis Magoun *Armstrong, Paul Frederic Bagg, William Herbert Biltcliffe, Douglas Bolton Borden, Henry	.46 Victoria St. .1357 Clarke St. .638 Landsowne Ave.	Montreal, Que. Montreal, Que. Westmount, Que. Grand Pr'é, King's
†Boyce, J. Clifford †Breitman, Reuben Bunt, Lemuel Oscar fBustin, Howard Barlow Cameron, George Mansfield Common, Ernest Cameron *Crawford, Edwin M Curtis, Gilbert S	190 St. Timothee St.           R.M.D. No. 1           158 St. James St.           208 Wilson Ave           373 Prud 'homme Ave	Calgary, Alta. Montreal, Que. Thornloe, Ont. St. John, N.B. Adamsville, Que. Montreal, Que. Montreal, Que. Blackhead, B.D.V.,
Echenberg, Henry Lehrer Farthing, John Colborne Fife, Harry Moore Foran, Herbert Paul Ford, Ross Howitt Franklin, Michael H. †Freedman, Joseph	458 Union Ave.         12 Melrose St.         733 Outremont Ave.         81 Pine Ave.         2160 Waverley St.	Montreal, Que. Amherst, N.S. Outremont, Que. St. Lambert, Que. Montreal, Que.
(B.Sc. Course) Hebert, Charles Pierre, †Hooper, Willis Mathieu. *Hudon, Roger. †Kay, Edwin Kern, Louis Walter. Kern, Marshall James Laing, Alan. (Withdrew early in session)	2462 Park Ave. 637 St. André St. 63 Fairford St. E. 63 Fairford St. E.	Brownsburg, Que. Montreal, Que. Montreal, Que. Moose Jaw, Sask. Moose Jaw, Sask.
(Withdrew early in Session) McCall, George Ronald McGreer, Edger D'Arcy †McIntosh, Clarence Alexander †McKinnon, James Donald McMinn, Alexander Kirk *McVittie, Thomas Johnstone,	.831 Lorne Crescent .43 Park Ave.	Montreal, Que. Ottawa, Ont. Sudbury, Ont. Straid, Co. Antrim, Ireland
<ul> <li>†Mirsky, Samuel</li></ul>	.359 Cumberland St	England. Ottawa, Ont.

\*Partial.

†Double Course.

NAME	STREET ADDRESS	CITY OR TOWN
*Mullin Delevi D		CATT OIL TOWN
*Mullin, Robert D	.28 Devonshire Rd	Greenfield Park, Que.
Phillips, Otto Bernard (B.Sc. Course)	.281 whitney Ave	.Sydney, N.S.
Pratt, William Frederick White	300 Clarke Ave	Westmand
Rabinovitch, Boaz	213 Laval Ave	Montroal Que.
(B Sc. Course)	.213 Laval Ave	Montreal Que
Raphael, Max Isaac	.151 Drolet St	Montreal, Que.
LEIUIU. LEWIS FIFIC	300 Drummond St	Montreal On
nexiola, Orrin Bain	745 Inivorsitar St	Montreal O
†Richardson, Eric Carleton (B.Sc. Course)	.21 Pine St	Brockville, Ont.
Ross, Henry Taylor	303 Konsington Arto	Western
noy, arombald Edgar	1050 Mount Royal Ave	Montroal Que.
(D.DC. COUISE)		
†Schleifstein, Joseph Isaac	1049 St. Urbain St	Montreal, Que.
Dillin, Archie Ewart.	536 Louise Ave	Brandon Man
Dunth, RODert Mache.	246 Oxford St	Moore law Cash
Sperber, Lionel Albert.	1616 Hutchison St.	Montreal, Que.
Stevenson, Frederick Kirkland	.28 McTavish St	Montreal, Que.
*Sutherland, Angus Symonds, Victor Kingsley	660 Shorbrooks St W	Sutherland, Scotland.
L'elleidaum, Michael.	95 St. Elizaboth St	Montreel One
valuer, runtiten		CL T O
†Vineberg, Norman M	1518 Mance St.	Montreal Que
		and the start of t

# (Royal Victoria College)

*Baillie, Isobel Marjorie	122 Crossont St	N. I. I.O.
*Barnard, Beatrice Evelyn	596 Crescent St	. Montreal, Que.
Barnes Edith L	DO Des 44	. Westmount, Que.
Barnes, Edith L.	. F.O. Box 44	.St. John, N.B.
Barnes, Doris Scoullar.	.P.O. Box 44	.St. John, N.B.
Borden, Eunice Lothrop		. Grand Pré, N.S.
Cameron, Matharme Locke	ZD TTEL AVE	Montroal Que
Campbell, S. Doris.		Lachute, Que.
Cocalicity, fieldi held		I an Charlehair O
Contant, Repecca Amy	417 Esplanado Avo	Montroal One
Dart, J. DOMS	122 Hidigon Arin	Ct T 1 1 C
Davidson, winnifred Hazel	74X Decarie Bland	Montroal Que
Deery, M. Jean H.	·Xa Hutchison St	Montroal One
Ditemiera, Mary Elizabeth	640 Grosvenor Ave	Westmount Que
FIZSIMONS, Anna Florence	734 Rockland Ave	Outromont One
rord, Constance	Hidale Place	Pontnews Cto Our
Ford, Katherine McLaren	Edale Place	Portneul Sta., Que.
Foster, Mary Winnifred	620 Victoria Avo	Westweet Ota., Que.
Garrow, Muriel Wilma	200 Mountain Ct	westmount, Que.
Gillesnie Kate Mongios	164 All and St.	Montreal, Que.
Gillespie, Kate Menzies	.104 Albert St	London, Ont.
Godwin, Kathleen F		Ste. Anne de Bellevue,
Hackett, Aileen Alexandria		Que.
Harvoy Constants M.		Dorval Sta., Que.
Harvey, Constance Muriel	55 Chesterfield Ave	Westmount, Que.
Hemming, Clarissa		
Higginson, Helen Magee		D 1' 1 O
*Hodgson, Norah J	714 Ding Arro W	Buckingham, Que.
Holland Etholury Inmissor	otor W.	Montreal, Que.
Holland, Ethelwyn Jamieson	2195 waverley St	Montreal, Que.
rush, ruun JUY ristner.		Nyropton Quo
Larkin, Beatrice Jean	*******************************	Seaforth. Ont.

\*Partial.

†Double Course.

# STREET ADDRESS

CITY OR TOWN

		and the second second second second second second second second second second second second second second second
*Lathe, Mrs. Annie S., B.A		Sudbury, Ont.
Lewis, Esther Eileen	105-44th Avenue	Lachine, Que.
*McCaig, Jean Elizabeth	670 St Paul St W	Montreal, Que,
Macdiarmid, Margaret Lumso	lon 26 Chomedy St	Montreal Que.
MacIntosh, Hope	200 Hutchigon St	Montreel Que
MacIntosh, hope		Montroal Que
*McKean, Alice Lalar		Mantanal Worth One
McPherson, Anna Isobel	14 Fenwick Ave	Montreal west, Que.
Mathewson, Dorothy R	112 St. Famille St	Montreal, Que.
Mills, Gladys Alexandra		Ormstown, Que.
Moule, Dorothy		Ste. Anne de Bellevue,
		Que.
*Notman, Daintry		Westmount, Que.
Olding Maude Emma Mary.		New Glasgow, N.S.
*Prowse, Grace Emily	392 La Salle Rd	Verdun, Que.
Reid, Regina Victoria	104 Prud'homme Ave	Montreal, Que.
*Salomon, Fanny	170 Esplanado Avo	Montreal Que.
*Salomon, Ruth	170 Esplanado Avo	Montreal Que
Salomon, Ruth	795 Oltar Hall Aven	Montroal Que
Silverman, Malca		Montreal, Que.
*Simon, Beatrice Vina		Montreal, Que.
Spier, Jane Dickson	4015 Dorchester St	Westmount, Que.
*Symons, Jennie Laura		Waterloo East, Que.
Thornton, Jessie Muriel		Montreal, Que.
*Wechsler, Mrs. Ray Fleisig.	1967 Mance St	Montreal, Que.
Willson, Reta Ethel		

# FOURTH YEAR

# (McGill College)

*Adair, Cyril Harris	Westmount Que
Develop William Marlan 49 Lansdowle Ave	Montroal Que
†Bourke, William Manley42 Lorne Ave	Vistoria P.C.
Bunt, Heber	Victoria, B.C.
Caverhill, George Rutherford 84 Simpson St	Montreal, Que.
†Center, Ervin AlfredR.R. No. 2	Lachute, Que.
Coveler, Harry A	
*Curtis, René	es-
bury Ave	Montreal, Que.
Di Florio, Pasquale	S. Pietro in Fine, Italy
Di Florio, Pasquale	Outremont, Que.
Donald, Frederick Cecil70 Cedar Ave	Montreal, Que.
(B.Sc. Course)	
Duncan, William L 110 Notre Dame Ave	St. Lambert, Que.
†Ereaux, Lemuel Price	Westmount, Que.
(B.Sc. Course)	
†Evans, Otty Blair 40 Seely St	St. John, N.B.
†Everett, Herbert Stewart	St. Andrews. N.B.
Freedman, Lewis Kellert 86 Park Avenue	Montreal, Que,
†Freedman, Newman Barnett 86 Park Avenue	Montreal Que.
(B Sc Course)	
Galley, John Vessot	Pakenham, Ont.
(B Sc Course)	
Greaves, Edwin Mortimer 508 Victoria Ave	Westmount, Que.
Joseph, Alfred Hugh115 Grand Allée	Quebec, Que.
(P Sc Course)	
†Knowlton, Henry Corey	Guildford, Me.
Lalond George Francis	Riceville, Ont.
Latham, J. Arthur 196 Ash Ave	Montreal. Que.
+McClure James Carswell	Cowansville. Que.
*McGlaughlin, William Robert.22 Burton Ave	Westmount, Que
McClean, Angus H	Orangedale N.S.
McRae, Roderick Alexander295 Laval Ave	Montreal Que
McRae, Roderick Alexander295 Lavar Ave	

\*Partial.

# †Double Course.

# 354

NAME

NAME	STREET ADDRESS	CITY OR TOWN
Martin, Erle Crutchfield Mathers, Fred DesBrisay Maxwell, Gordon N tMurray, William Alexander		
†Murray, William Alexander. O'Brien, John Lewis. †Petersen, James Norman Peterson, Norman Edwin †Rubin, Saul (B.Sc. Course)		. Brownsburg, Que. . Westmount, Que.
(B.Sc. Course) (B.Sc. Course)	1022 Dorchester St	Montreal, Que.
†Silver, Philip George Smith, Clifford B Somerville, Wallace Bertram Taylor, Bobert Dorold	138 Hampton Ave	Montreal, Que.
Taylor, Robert Donald Townshend, Cecil Wray. †Vaughan, James M Wiseman, Solomon Wiser, John Philip		Wolfville, N.S. Mt. Vernon, N.Y.

# (Royal Victoria College)

Cameron, Sarah Symonds	.62 Charlotte St	Sydney CB NG
Unariton. Dorothy Nathleen	391 Wiseman Arro	Outrons and One
Davidson. Gertringe Hazel	bya Victorio Arro	Workers and De-
Douglas, Alle Vibert.	4193 Sherbrooke St	Wastmount Que
L'WILLE. UTWERTOUVE L'OFGOD	X4 Intro Stroot	GI TALA NT D
Goudard, Mapel Alice.	757 Bloomfield Ave	Autroment Ana
LIGHTY, EUTER F	fill Arlington Arro	Wortmount One
Hill, Eleanor Marguerite	768 St Cathorino Rd	Outromont, Que.
Imrie, Isabelle May	364 Olivier Ave	Westmannt, Que.
macquiald, brenda		Halifan M.C.
McDougall, Marguerite		Vistoria D.C.
McDougall, Marguerite MacKinnon, Flora Janet McMillan Hazel	*************************	. Victoria, B.C.
Macnaughton, Margaret Rose. Mawdsley, Mary Dorothy Meyer, Bertha. Moody, Mary Grace Holland	26 Burton Avo	Westmount, Que.
Mawdsley, Mary Dorothy		. westmount, Que.
Mever, Bertha	6 Hudson Arro	Utemens, Alta.
Moody, Mary Grace Holland	07 Ash St	. Westmount, Que.
Nichol, Helen R. H.	110 Columbia Arra	. Winnipeg, Man.
Nichol, Jean.	110 Columbia Ave	. Westmount, Que.
Novick, Fannie	1700 St Urbein St	. westmount, Que.
Reid, Jean.	Gronville Fermi	. Montreal, Que.
Rorke, E. Christine	1070 Hutchison St	. Nova Scotia.
Roston, Lucille.	AAA Shophpagha St	Montreal, Que.
(Withdrew Oct. 14, 1919)	. HIH DHEIDFOOKE St. W	Montreal, Que.
Savage, Queenie	20 Highland Area	Mart 10
Scott, Irene Elizabeth	20 mightanu Ave	Montreal, Que.
Tarshis, Anny.	197 Bloom foold Area	Lachute, Que.
Wall, Eileen Mary	529 Lo Sollo D.d	Outremont, Que.
Wilson, Alice Elizabeth	24 Dominion A	Verdun, Que.
	. 24 Dominion Ave	Sherbrooke, Que.

†Double Course.

#### SCHOOL OF COMMERCE

#### FIRST YEAR

#### STREET ADDRESS

CITY OR TOWN

Aaronson, Benjamin	.1489 St. Urbain St	Montreal, Que.
Bashaw, E. Taylor	.279 Marlowe Ave	Montreal, Que.
*Bates, Sidney Frank	.498 Argyle Ave	Westmount, Que.
Becker, Louis Julius		Sydney, N.S.
Benson, William Davenport	.15 Ontario Ave	Montreal, Que.
Benson, George Frothingham.	.15 Ontario Ave	Montreal, Que.
*Brownstone, Allan Moses		
Bulgin, James Douglas	.23 DeBary Apts., Wardlow	7

\*Brownstone, Samuel Louis.... 

 Caswell, Arnold Perley
 370 Durocher Ave
 Outremont, Que.

 Clarkson, Rowena Adeline
 25 Highland Ave
 Montreal, Que.

 Cockshutt, Eric Morton
 172 Chatham St
 Brantford, Ont.

 Cohen, Barnet J
 8-A Dorchester St. W.
 Montreal, Que.

 Creighton, Denton B. M.
 39 Cote St. Antoine Rd
 Westmount, Que.

 Dobell, Sidney Hope
 St. Louis Rd
 Quebec, Que.

 Durumond, Paul Crathern
 15 Macgregor St.
 Montreal, Que.

 Dustan, Stanley Gordon
 Bot 539
 Pictou, N.S.

 Elderkin, Clayton Foster
 1140 Redland Ave
 Moose Jaw, Sask.

 Ellin, Mitchel Irving.
 1117 Clarke St.
 Montreal, Que.

 Fralconer, W. Alex
 4447 St. Catherine St
 Westmount, Que.

 Finley, George Steele
 273 Bishop St.
 Montreal, Que.

 Fraser, Charles Douglas
 20 Delaware Ave
 Ottawa, Ont.

 Goodkowsky, Isabella May
 421 Mt. Pleasant Ave
 Westmount, Que.

 Hamilton, George Stratford
 Applecroft.
 Ste. Anne de Belle

 Goodkowsky, Isabella May
 421 Mt. Pleasant Ave
 Westmount, Que.

 Hamilton, George Stratford
 Applecroft
 Ste. Anne de Bellevue.

 Holland, George Allison
 219 Waverley St
 Montreal, Que.

 Hughes, John Robertson
 431 Gilmour St
 Ottawa, Ont.

 Jones, Gerald Ford
 1004 Dorchester St. W
 Montreal, Que.

 Kaplan, Harry Albert
 307 St. Joseph Blvd. W
 Outremont, Que.

 Kee, Charles Sinclair
 208 Pitt St
 St. John, N.B.

 Kellner, Solly
 458 Elm Ave
 Westmount, Que.

 Kersley, George Hubert
 135 Brock Ave
 Montreal, Que.

 Kirsch, Moses
 12 Laval Ave
 Montreal, Que.

 Laffoley, Eric John
 735 Upper Belmont Ave.
 Westmount, Que.

 Wediverin, Harold MacKintosh 361 Daly Ave
 Ottawa, Ont.
 (Withdrew Nov. 7. 1919)

 (Withdrew Nov. 7, 1919) MacKinnon, Alexander Henderson MacKinnon, Alexander Henderson. MacMahon, Hugh Babington A. 270 Huron St. Marks, Bernard. Meunier, J. R. S. Miller, Gordon McKenzie. Meunier, J. Cordon McKenzie. Miller, Gordon McKenzie. Miller, St. 

 Meunier, J. R. S.
 471 Durocher St.
 Outremont, Que.

 Miller, Gordon McKenzie.
 Napanee, Ont.

 \*Minty, R. F.
 .645 Grosvenor Ave.
 Westmount, Que.

 Morris, Victor W.
 Summerside, P.E.I.

 Mott, John Alwin
 .150 Florence St.
 Ottawa, Ont.

 Mullen, Louis Wilfred
 .58 Cumberland St.
 Charlottetown, P.E.I.

 Munro, James Esmond
 Pembroke, Ont.
 \*

 \*Murray, Alex, Durand
 Fort Frances, Ont.
 Nichol, Gordon Hart Grieve.

 Nichol, John Moore
 .1402 McRae Ave.
 Vancouver, B.C.

 O'Brien, Edward Francis.
 .319 Waverly St.
 Ottawa, Ont.

 Que.
 Que.
 Que.

St.....Winnipeg, Man.

...... Herbert, Sask.

Que.

\*Partial.

NAME

NAME

# STREET ADDRESS

 Simpson, James Ross.
 Dundas, Ont.

 Skelton, Hugh Miller
 Hotel Bretton Hall
 New York, N.Y.

 Small, Richard Macpherson B. 150 Laurier Ave. W.
 Ottawa, Ont.

 Smith, Edgar Donald
 Roseberry Flace.
 St. Thomas, Ont.

 Smith, Percy Guildford
 26 Seely St.
 St. John, N.B.

 Snyder, Clive
 St. Jacob's, Ont.'

 Stuart-Roussac, John Augustus Ivy Bank, Liberton.
 Midlothian, Scotland.

 Taylor, Samuel Robertson
 107 Cote St. Antoine Rd. Westmount, Que.

 Trenholme, Charles Berinald
 36 Simpson St.
 Montreal, Que.

 Simpson, James Ross..... Skelton, Hugh Miller....

 Tyler, Albert John.
 159 Vendome Ave.
 Montreal, Que.

 Usher, Peter.
 1509 Jeanne Mance St.
 Montreal, Que.

 Wallace, Norman Harold.
 610 Carleton Ave.
 Westmount, Que.

 Webster, John Clarence.
 Shediac, N.B.
 Westmount, Que.

 Webster, John CharenceShediac, N.B.Whittall, Albert Frank544 Roslyn AveWilson, Clifford ParnellSummit AveWilson, Donald GordonBox 96Wilson, Lawrence Maurice765 Sherbrocke St. W...Wilson, Lawrence Maurice657 Wellington Cres.Windatt, Richard Donaldson657 Wellington Cres.

## CITY OR TOWN

..... Dundas, Ont.

#### SECOND YEAR

 Blackman, Israel.
 7 Church St.
 Montreal, Que.

 Dougall, Greta Ethel.
 1098 Greene Ave.
 Westmount, Que.

 Friedman, Norman H
 802 Dorchester St. W
 Montreal, Que.

 Johnson, Arthur Wood
 P.O. Box 1182
 St. John's, Nfld.

 Kellnor, Barnard Louis.
 458 Elm Ave.
 Westmount, Que.

 Laffoley Paul Richard
 735 Upper Belmont Ave.
 Westmount, Que.

 Lefkowitz, Abe.
 773 City Hall Ave.
 Montreal, Que.

 O'Meara, Robert Stewart
 1621 Hutchisn St.
 Montreal, Que.

 Rutherford, John Bulmer.
 109 Cote St. Antoine Rd.
 Montreal, Que.

 Rutherford, William King.
 467 Mt. Pleasant Ave.
 Westmount, Que.

 Shapira, Joshua.
 780 Notre Dame St. W.
 Montreal, Que.

 Shaw, George Ffolliott W
 St. Andrew's East,
 Werry, Wilfrid Watson

 Werry, Wilfrid Watson
 650 Laval Ave.
 Montreal O

......St. Andrew's East, Que.

#### THIRD YEAR

Antliff, William Shaw		Montreal, Que.
Badian, Alan Maurice	2210 St. Urbain St.	Montreal Que
Burland, G. Harold	. 25 Linden Terrace	Ottawa Ont
Glickman, Bernard		Westmount Que
*Goulet, Donat.		St Georges Que
Levitt, Moses	. 149 Hutchison St	Montreal Que
McDonald, Findlay Murdoch.		Spring Hill Que.
Masson, Paul Alfred	. 29 Quinn Ave	Longueuil Que.
Shapira, William		Montreal Que.
Wetstein, Harris	.306 Grosvenor Ave	Westmount, Que.

\*Partial.

Antliff, Willia Badian, Alan Burland, G. 1 Glickman, Be

## DEPARTMENT OF MUSIC

PROCEEDING TO THE DEGREE OF MUS. BAC.

FIRST YEAR

Aylen, Dorothea Cameron, Elizabeth W. Macdonald, Flora M.

Aylen, Lois Durieux, André Shearwood, Grace

SECOND YEAR

MacKenzie, Lillian

THIRD YEAR

Campbell, Olive Walker, Mrs. Ella Katz, Eddie

# PROCEEDING TO THE DIPLOMA OF LICENTIATE

FIRST YEAR

Asner, Esther Graydon, Lillian Miller, Anna Stott, Doris Cox, Eleanor Huff, Marion Smith, Edna

SECOND YEAR

Black, Dora Leach, Hazel Mills, Evelyn Toker, Rebecca

Anderson, Harold Lord, Dorothy P Sauer, Ruth Fletcher, Marion McMartin, Edith Shapiro, Evelyn Young, Abigail

THIRD YEAR

Burrell, Irene Milston, Sophie Benoit, Viola

SENIOR PARTIAL STUDENTS

Abreu, Raphael C. Barrett, Loza Barwick, Ruth Bennett, Donald Bernard, Marguerite Birkett, Winifred L. Blachford, Marjorie A. Bramson, Sylvia Brewster, Conrad Buck, Ruth C. Clark, Esther Cliffe, Constance Cole, Matilda Delagneau, A. L. Dwyer, Madge Feigenbaum, Etta Foster, Eileen Frank, Esther Frank, Esther Frank, Esther Fredman, Leon Fulkerson, Mrs. Z. R. Gagnon, Irene Gardiner, Mrs. F. E. Gillham, Doreen Gittleson, Gertrude Goldsworth, Dorothy Goubjila, Theodore Grigg, Mildred Harris, Annie Hogg, Helen K. Howard, Marguerite Isard, Mrs. F. S. Jaillet, Mary A. Jameson, Natalie Johnson, Edith M. Keegan, Emily Klein, Rose Lamplough, Ethel Lane, Mabel Lutton, Dorothy

McDonald, Rose Mace, Ruth Mallison, Elizabeth Mann, Audrey Mann, Dorothy Marks, Annie Marks, Bernard Martin, Jessie Molson, C. J. Ogilvie, Marion Palmer, Adele Pena, Irene Percival, Lillian Percival, Lillian Percival, Muriel Perry, Evelyn Peterson, Helene Phelps, Roberta Pinsler, Etta Pitman, Mabel Pope, Marjorie Quint, Deborah Rabinovitch, Freda Read, Audrey Reichling, E. G. Roche, Harold Roche, Harold Rowland, Margaret Rose, Rosalie Rothschild, David Russel, C. M. Scane, Marjorie Sherrard, Edwin Shuffman, Louis Silcock, Marjorie Slack, Zerada Stuart, Eleanor Tarlton, Lillias Tarlton, Lillias Tait, Wilma Tremblay, Gertrude Watson, Nora

# FACULTY OF APPLIED SCIENCE

# FIRST YEAR

# NAME

STREET ADDRESS CITY OR TOWN

Abbott-Smith, Henry Bancroft	10 Bellevue Ave	Montreal, Que.
Adams, Albert Oliver	Box 50	Bowosville Ont
Allan Davida Haad	101 Declar Area	Westmenut Oue
Allan, Douglas Hood	421 Roslyn Ave	Westmount, Que.
Allan, John Maynes	P.O. Box 650	Halliax, N.S.
Ambridge, Douglas White	399 Clarke Ave	Westmount, Que.
Amos, Pierre Charles	592 Riverfront	Lachine, Que.
(Arch.)		and the second second second second second second second second second second second second second second second
Anderson, Robert B	4484 Western Ave	Westmount Que
Antliff, James Cooper	At C+ Monle C+	Montroal Que
Antini, James Cooper	41 DL. Mark DL	Montreal, Que.
Armstrong, Arnold Victor	.845 Oxenden Ave	Montreal, Que.
Baillie, Donald Arthur	513 Roslyn Ave	Westmount, Que.
Ball, Gordon Jerome Baxter, Warren Phelps		Magog, Que.
Baxter, Warren Phelps	1 Parkside St	Montreal West, Que.
Bernier, Lucien	1153 St. Hubert St	Montreal, Que,
Berry, Charles Frederick	35 Bly'd Gouin	Cartierville Que
Biolog Jacques Louis	08 Columbia Arro	Westmount Que
Bieler, Jacques Louis Binns, George Frederick	50 Continuita Ave	Westmount, Que.
binns, George Frederick	.542 Notre Dame de Grace	
	Ave	Montreal, Que.
Bishop, Eric Gordon	Greenspond	Bonavista Bay, Nfld.
Bishop, John Gordon		Cupids, Nfld.
Blackall, John Fenwick W		St. John's, Nfld.
Bishop, John Gordon Blackall, John Fenwick W Bleau, Alphonse Bloomfield, Jacob	133-1st Avenue	Maisorneuve Que
Bloomfield Inach	1160 Codiour St	Montroal Que
Diooninera, Jacob	1100 Gauleux 51	Depakies Out
Bouillon, Ernest Linden	****************************	Paspeolac, Que.
(Arch.)		and the second second
Bradley, John		Hamilton, Ont.
Bradley, John Bradshaw, Frederick Wykeham	nc/o Henry S. King & Co.,	
	9 Pall Mall	London, England.
Bradshaw, Gordon Rothwell	102 Silica St	Nelson, B.C.
Braithwaite, Ethan Edward	36 Quebee St	Sherbrooke Que
Broult Morleine Locoph		Crembrook, Que.
Brault, Magloire Joseph Brisbane, William Gordon	IFO CL 11	Urandrook, D.C.
Brisbane, william Gordon	452 Strathcona Ave	westmount, Que.
Brodeur, Jean Charles	229 Chapel St	Ottawa, Ont.
Brodeur, Joseph Paul Brough, Frank S	1097 St. Denis St	Montreal, Que.
Brough, Frank S	48 Windsor Ave	Westmount, Que.
Brumell, John Hunter		Buckingham, Que.
Buchan Huntly Henderson	32 Seymour Ave	Montreal Que
Buffam Basil Scott Whyte		Perth Ont
Buffam, Basil Scott Whyte Buller, Francis Hamilton	147 Bishon St	Montroal Que
Buraschi, Charles F	Por No. 1.007	Time Dory SA
Coldwall Charles F	DOX NO. 1,007	Lima, Feru, S.A.
Caldwell, Charles Edward Campbell, Arthur Tremaine Campbell, Donald H	Brigus	Conception Bay, NEd.
Campbell, Arthur Tremaine	Arthur St.	Truro, N.S.
Campbell, Donald H	371 Grosvenor Ave	Westmount, Que.
Carpenter, Thaver Robinson		Lachute Mills, Que.
Champion, Cecil Hugh		Chateauguay Basin.
Chisholm, Joseph Donald Clark, Howard Lingley		Antigonish N.S.
Clark Howard Lingley	95 Addiscombe Rd	Crowdon England
Clarke, T. Esmonde	007 Charles also Ct'	Mantanal Out
Clarke, 1. Esmonue	287 Sherbrooke St	Montreal, Que.
Clement, Alexandre	1129 St. Hubert St	Montreal, Que.
Cloutier, J. Narcisse	1248 Cote des Neiges	Montreal, Que.
(Withdrew early in Session)		
Cooney, George Edward	250 Cooper St	Ottawa, Ont.
Cooney, George Edward Cooper, Hugh Christopher D		Petherton, Truro, Eng.
(Arch.)		
Cooper, Paul Emerson	218 Eastern Promenade	Portland Me
Cope, Edward Selby	460 Wood Ave	Westmount Que
Cope, Edward Belby	100 11000 1100	Ambonet N.C.
Cornell, Clarence E. Corriveau, Harold Alphonse	1FIF ME-man Cld	Mantreal Oue
Corriveau, Harold Alphonse	1919 Mance St	montreat, Que.

#### NAME

#### STREET ADDRESS

Cox, Leonard Gordon305 First Ave.Ottawa, Ont.Craik, Oliver StanleyMelbourne, Que.Crain, George Edward285 Clemow Ave.Ottawa, Ont.Cregeen, Kenneth TSun Life Bldg.Montreal, Que.Cross, George Esplin369 Metcalfe Ave.Westmount, Que.Cupeper, Bernard Armel337 Durocher Ave.Outremont, Que.Currier, Joseph H.36 Cooper St.Ottawa, Ont.Cuttle, William Gordon769 Cote St. Antoine RdMontreal, Que.Davidson, Stanley Cecil Kerr.413 Metcalle Ave.Westmount, Que.Davidson, Stanley Cecil Kerr.413 Metcalle Ave.Westmount, Que.Davidson, Stanley Cecil Kerr.413 Metcalle Ave.Westmount, Que.Davidson, William MaCartney.708 Rosedale Crescent.Calgary, Alta.Davies, Clarence Bernard.203 St. Joseph Boulevard Hull, Que.Davis, William Wallace37 Arthur St.Ottawa, Ont.Desbarats, Harrisson Jean.757 University St.Montreal, Que.Dektikson, Albert Godfrey267 Peel St.Montreal, Que.Dickinson, Albert GodfreyDuncan, B.C.Durcan, B.C.Dormer, William John SmylieLennoxville, Que.Dewns, Henry William196 Elgin Street.Ottawa, Ont.Dupuis, René.1321 Wellington St.Ottawa, Ont.Ekhin, Edward M.196 Elgin Street.Ottawa, Ont.Elvidge, George Edward.Oak Park.Duncan, B.C.Dormer, Harold WilliamAdat Dorehester St.Westmount, Que. 

Harvey, Leitrim Eric Lester... Canadian Bank of Com-

Echlin, Edward M.196 Elgin Street.Ottawa, Ont.Elkington, Gerald Erlam.Oak Park.Dunean, B.C.Vankleek Hill, Ont.Vankleek Hill, Ont.Elvidge, George Edward.Yankleek Hill, Ont.Emo, Harold William4034 Dorchester St.Westmount, Que.Fagan, James Ulfrid.1899b St. Catherine St. E.Montreal, Que.Faith, Willard V.Winchester, Ont.Minchester, Ont.Finlayson, Harold Musgrave.2403 Hutchison St.Montreal, Que.Finley, Frederick Lovell273 Bishop St.Montreal, Que.Fitzsimons, Norton Thomas.148 Milton St.Montreal, Que.Foss, Lindsay Justin.660 Union Ave.Montreal, Que.Foss, Lindsay Justin.660 Union Ave.Montreal, Que.Foss, R. Frederick Lawton.19 Horsefield St.St. John, N.B.Gamble, Robert Bruce.315 Cooper St.Ottawa, Ont.Gauthier, Maurice.2412 Park Ave.Montreal, Que.Gegg, Richard Conrad."Fareham," BroadwoodMontreal, Que.Goldberg, Harry Julius.673 St. Lawrence Blvd.Montreal, Que.Goldstein, Hyrman.126 St. Urbain St.Montreal, Que.Goldberg, Harry Julius.673 St. Lawrence Blvd.Montreal, Que.Graham, George Patterson.P.O. Box 2New Clasgow, N.S.Graham, George Patterson.P.O. Box 2New Clasgow, N.S.Graham, George Patterson.P.O. Box 2New Clasgow, N.S.Graham, George Patterson.P.O. Box 2Montreal, Que.Withdrew Jan., 192084 Brock Ave.

CITY OR TOWN

\*Partial.

# STREET ADDRESS

# CITY OR TOWN

		CITY OR TOWN
NAME	STREET ADDRESS	CITY OR TOWN
Par at the second second second second	incon 1 D 1 CH	Montroal Que
Horsey, Richard Mountstepher	1729 De la Roche St	Johnwille Que
Horsey, Richard Mountstepher Hunten, Kenneth William Hutchison, Harold Bruce		Montroal Que
Hutchison, Harold Bruce	.35 Rushbrook St	Ottomo Ont
Jackson, Lawrence Wright	.447 Daly Ave	Mantanal Quo
Jackson, Lawrence Wright Jacobs, Solomon James, William Albert	.30 Lincoln Ave	Montreal, Que.
James, William Albert	.1620 De la Roche St	Montreal, Que.
James, William Albert Jerrom, Cyril Lewis Johnson, William James Katz, Morris		Cornwall, Ont.
Johnson William James	.100, 44th Ave	Lachine, Que.
Katz Morris	49 Duluth Ave. W	Montreal, Que.
Katz, Morris Kennedy, Neil	930. 1st Ave. West	. Owen Sound, Ont.
Kennedy, Neil. Kingan, Gordon Herron Kotsonas, Demetrius H	62 Park Ave	. Montreal, Que.
Kingan, Gordon Herron	1100 Ontario St. E.	Montreal, Que.
Laidley, Wendell Howard	1850 Park Ave	Montreal, Que.
Laidley, Wendell Howard	all Drud'homme Ave	Montreal, Que.
Laidley, Wendell Howard Larose, Marcel Jules Lawrence, Frederick S Layne, John Graham	202 Old Orchard Avo	Montreal Que.
Lawrence, Frederick S	.303 Old Orenard Ave	Barbados BWI.
Layne, John Graham	. Penrith, Christenurch	Vistorio PEI
Layne, John Graham Lea, Harry Windsor LeBaron, Karl Shurtliff. Legg, Roland Edward Leitch, Hugh J.		Charbeache Oue
LeBaron, Karl Shurtliff	.31 London St	. Snerbrooke, Que.
Legg. Roland Edward	.1330 Bond St	Victoria, B.C.
Leitch Hugh J	.476 Strathcona Ave	.Westmount, Que.
Leitch, Hugh J. Lemieux, Charles. Lewis, Joseph. Liersch, Edward Norman		. Henryville, Que.
Lowin Losoph	27 Augusta St.	.Ottawa, Ont.
Lewis, Joseph	531 Grosvenor Ave.	Westmount, Que.
Liersch, Edward Norman Livingstone, Arnold Clarence.	062 Tupper St	Montreal, Que.
Livingstone, Arnold Clarence. Macaulay, Kenneth Douglas.	Crow Ants Lincoln Av	e Montreal, Que.
Macaulay, Kenneth Douglas.	. Grove Apts., Lincoln 11.	Guelph Ont.
*Macaulay, Thomas James		. outorpart offer
(Arch.) MacCallum, Alexander Patric McCaw, John Blacklock McCracken, Elmer Gordon McDermott, David Edward. McDermotd, Savorada	A LEAST DE LA CARDE DE LA CARDE DE LA CARDE DE LA CARDE DE LA CARDE DE LA CARDE DE LA CARDE DE LA CARDE DE LA C	Deloro Ont
MacCallum, Alexander Patric.	K	Charbrooko Que
McCaw, John Blacklock	4 High St	Sherbrooke, Que.
McCracken, Elmer Gordon		Huntingdon, Que.
McDermott, David Edward.	R.M.D. No. 1	. Georgeville, Que.
McDonald, Somerled		. Outremont, Que.
McDonald, Somerled Macduff, Albert		Westmount, Que.
(Arch.)	in a second a part is a set of	and the second second
(Arch.) McEwen, Daniel Wallace McInnis, Joseph McKindsey, Arthur Abbott		Maxville, Ont.
MeInnia Joseph	405 West Hill Ave	Montreal, Que.
Mattindager Arthur Abbott		. Lennoxville, Que.
McKindsey, Arthur Abbott (Withdrew Oct. 14, 1920) McKindsey, Gordon McKyes, Carlos Benvenuti		
(Withdrew Oct. 14, 1920)		Lennoxville, Que.
McKindsey, Gordon	017 Ct IInhoin St	Montreal Que.
McKyes, Carlos Benvenuti		Westmount Que.
McLagan, I nomas Rougie		Duckingham Que
MacLaren, Albert Roy	·	Buckingham, Que
Maclaren, Alexander Barnet		Buckingham, Que
MacLaren, James Norman		Duckingham, Que.
MacLaren, Albert Roy MacLaren, Alexander Barnet MacLaren, James Norman MacLeod, Alexander Norman	P.O. Box 14	New wateriord, N.S.
(Arch.) MacLeod, David Sutherland.	7 Euston St	Charlottetown, P.E.I.
McMoons Lendrum Edmund.	40 Westgate	Winnipeg, Man.
MaNaughton Ronald Russel.	R.M.D. No. 4	Victoria, B.C.
Moonutt Erskine Keir		Malpeque, P.E.I.
Machargon Frank Bandolph	12 Arnold Road	Kingston, Jamaica.
Macpherson, Frank Itandorph	388 Wood Ave	Westmount, Que.
MacLeed, David Sutherland. McMeans, Lendrum Edmund. McNaughton, Ronald Russel. Macnutt, Erskine Keir. Macpherson, Frank Randolph Mallison, H. Douglas. Marcionelli, Pedro. Martin, Charles Kingdon Martin, Harold A. Mathueson Arthur Marshall.		Lima, Peru, S. Am.
Marcionelli, Pedro	70 Drugo Avo	Westmount, Que,
Martin, Charles Kingdon	970a Degent Ave	Montreal Que.
Martin, Harold A		Ottawa Ont
Martin, Harold A Matheson, Arthur Marshall	09 Russen Ave	Ouches Que
Mercier, Joseph Edward		Montroal Que
Matheson, Arthur Marshall Mercier, Joseph Edward Mignault, Bert.		
Mignault, Bert. Miller, Lloyd Lawrence Mills, Charles Perkins		Hudson, Que.
Mills Charles Perkins.	67 Fifth Ave	Ottawa, Ont.
many, Onterior a contract of the		

\*Partial.

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# NAME

#### STREET ADDRESS

#### CITY OR TOWN

Moore, Arthur Louis Wurtele.... Box 384..... 

 Morrin, J. James.
 85 Esplanade Ave.
 Montreal, Que.

 Moseley, Paul Vanhorn.
 St. Hyacinthe, Qu

 Mulkins, Reginald George.
 120 Lewis St.
 Ottawa, Ont.

 Mulligan, Claude Aylmer.
 Maniwaki, Que.

 Munn, Wilfred Lockerby.
 4273 Dorchester St.
 Westmount, Que.

 Munno, David John Best.
 2299a Hutchison St.
 Montreal, Que.

 Murno, Gordon Hugh.
 555 Roslyn Ave.
 Westmount, Que.

 \*Murphy, Edward Joseph O.
 45 Central Chambers.
 Saskatoon, Sask.

 Murphy, Martin Payne.
 4322 St. Catherine St. W. Westmount, Que.

 Murray, John William.
 331 Elm Ave.
 Westmount, Que.

 Nutting, Bruce Powell.
 318 Cooper St.
 Ottawa, Ont.

 O'Brien, Charles Leonard.
 319 Waverley St.
 Ottawa, Ont.

 Parker, John Bruce
 2066 Retallack St.
 Regina, Sask.

 Parker, John Bruce
 2066 Retallack St.
 Regina, Sask.

 (Left Oct. 7, 1919)
 Parrott, Maurice Francis
 Saltcoats, Sask.

 Parsons, Frederick Errol L.
 273 De l'Epée Ave
 Montreal, Que.

 Paterson, A. Pierce Jr.
 92 Leinster St.
 St. John, N.B.

 Patterson, Thomas Bilton
 Lumsden, Sask.

 Pattor, Hugh Bradford
 2017 Mance St.
 Montreal, Que.

 Pellotier, René A.
 122 St. Famille St.
 Montreal, Que.

 Peters, Arthur Wright
 50 Chesterfield Ave.
 Westmount, Que.

 Powell, Gordon Locklin
 523 Argyle Ave.
 Westmourt, Que.

 Powell, Allan Trew
 12 Allan Place
 Ottawa, Ont.

 Powell, Fraser Edwin
 52 Delaware Ave.
 Ottawa, Ont.

 Radiey, Percy Edward
 448 Riverdale Ave.
 Ottawa, Ont.

 Raginsky, Bernard
 446 St. Hubert St.
 Montreal, Que.

 Read, Douglas Ellery
 37 Melbourne St.
 Sherbrooke, Que.

 Reade, Douglas Ellery
 37 Melbourne St.
 Sherbrooke, Que.

 Reader, Clarence Paul
 1737 Esplanade Ave.
 Montreal, Que.

 Reid, Howard Edward
 64 Bruce Ave. St. John, N.B. Westmount, Que. 

 Rhind, John
 64 Bruce Ave.
 Westmount, Que.

 Robinson, Harold Forrest.
 422 Grosvenor Ave.
 Westmount, Que.

 Rochester, Bertram Cole.
 145 James St.
 Ottawa, Ont.

 Roquet, Leo Laurent.
 96 Chapel St.
 Ottawa, Ont.

 Rorke, Charles Burrell.
 1979 Hutchison St.
 Montreal, Que.

 Ross, Allan Evans.
 31 Bruce Ave.
 Westmount, Que.

 Roughsedge, John Haslam K.
 40 First Avenue.
 Ottawa, Ont.

 Ruel, James Rhodes.
 121 Westmount Blvd.
 Westmount, Que.

 (Withdrew Nov., 1919)
 Russell, Gordon Nelson.
 69 St. Matthew St.
 Montreal, Que.

 Scott, James McDonald.
 P.O. Box 14.
 Valleyfield, Que.
 Scott, Lewis John.
 Grand Falls, Nfd.

 Shabaz, Robert.
 1011 George St.
 North Battleford, (Withdrew Oct., 1920)
 Sat

\*Partial.

†Double Course.

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NAME	STREET ADDRESS	CITY OR TOWN
Shackell, Francis Ernest	.491 St. Denis St	Montreal, Que.
(Withdrew Jan., 1920) Shalinsky, Moses Hirsch		
(Withdrew Jan. 13th, 1920)	197 Classen on Arro	Westmount, Que.
Shier, Bruce Banks Simpson, James Catanach	.10 Oldfield Ave	Montreal, Que.
Simpson, Richard Landon	. 2001 Hutembon De	Westmount One
Simpson, Richard Landon Smallhorn, Edward Thomas	.4713 Western Ave	Abbotsford, Que.
Smeaton, William Charles V	536 Louise Ave.	Brandon, Man.
Smallhorn, Edward Thomas. Smeaton, William Charles V. Smith, Archie Ewart. Snyder, Earl. Start, Richard Peniston. Starker Corden Robert		St. Jacobs, Ont.
Starr, Richard Peniston	.51 Carleton St	St. John, N.B.
Starr, Richard Peniston Stephen, Gordon Robert	.198 Belgrave Ave	Westmount, Que.
Stethem, John Eric Holt	20 St Matthow St	Montreal, Que.
Storing, Laurie Broule		Magog, Que.
Store, Clarence E. Streadwick, Ralph Danell S	.Chesham, Half-Way Tree	.Jamaica, B.W.I.
Streadwick, Ralph Danell S Strong, Allan Bryson (Arch.)	.605 Roslyn Ave	Westmount, Que.
Strong, Allan Bryson (Arch.) Tallon, Joseph Andrew Taschereau, Rogers Harwood. Taylor, Allan Frater	241 C Konniston Ants	Gieneim, Que.
Taschereau, Rogers Harwood.	Elgin Street	Ottawa, Ont.
Texlor Allen Frater	62 St. Clair Ave. W,	Toronto, Ont.
Taylor, Clarence Wesley		Carberry, Man.
Taylor, Allan Frater. Taylor, Clarence Wesley Taylor, Morrison Barns	.54 Sussex Ave	Toronto, Unt.
Timmins, Leo Henry. *Timmins, Noah A.	99 Gordon Crescent	Westmount, Que.
	416 West 122nd St	New York, N.Y.
Timmis, Harold Gordon Tomlinson, Horace Otto Toole, Francis James		. west Calgary, Alta.
Toole, Francis James	Lane	Highgate, London,
	_Lane	N. 19, England.
Torrance, James Ferrier		.Westmount, Que.
Turnbull, Andrew Rutherford Turnbull, Kenneth Hatheway.		Welland, Ont.
Turnbull, Kenneth Hatheway.	and Baker Sts	London, England.
Velasco, (Marmanillo) Edward Wall, Gilbert	and Daker Sts	Cuzco, Peru, S. Am.
Wall Gilbert	. 148 Cote St. Antoine Rd.	.Westmount, Que.
(Withdrew Jan., 1920)		O tarment Out
Wayland, Raymond Joseph	1301 St. Viateur Ave	. Outremont, Que.
(Withdrew, Jan., 1920) Webster, Robert Chilion Peter	196 Metcalfe St	.Ottawa, Ont.
White Charles Percy		.Sussex, N.B.
Webster, Robert Chillon Peter White, Charles Percy White, Gerald Leland Whitemore, Carl Raymond.	Wortley Road	. London, Ont.
Whittemore, Carl Raymond.		Montroal Que
Whittemore, Carl Raymond. Willis, Irwin Davidson Wilson, Harley		Outremont, Que,
Wilson, Percy Roy	Summit Ave	. ault Ste. Marie, Ont.
Winter, Frederick Roberts		. westmount, Que.
Winter, Frederick Roberts Wood, Robert Wright, John Edwin (Withdrew Jan., 1920)	102 Emerald St S	Hamilton, Ont.
(With drow Jan 1920)		The second s
(Withdrew Jan., 1920) Wylde, Charles Napier	101 Crescent St	. Montreal, Que.
Yorston, Frederic Harrison Zybach, Jack Melchior		. Magara Fans, Ont.
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\*Partial.

#### SECOND YEAR

#### STREET ADDRESS

#### CITY OR TOWN

 
 AMME
 STREET ADDRESS
 CHY OR TOWN

 Ahern, Arthur Weston
 8 St. Denis Ave.
 Quebec, Que.

 Anderson, Dan
 289 Richmond St
 Charlottetown, P.E.I.

 Armstrong, Lawrence Henry:
 845 Oxenden Ave.
 Montreal, Que.

 Banfill, Harold Leroy.
 R.R. No. 3.
 Richmond, Que.

 Bastable, Ross Waller.
 96, 44th Avenue
 Lachine, Que.

 Benett, Charles Morgan
 7 Dufferin Ave.
 Brantford, Ont.

 Biggar, Pereival Elliott.
 The Roxborough
 Ottawa, Ont.

 Binmore, George Bedell
 148 Northcliffe Ave.
 Montreal, Que.

 Bonneville, Sydney
 455 Besserer St.
 Ottawa, Ont.

 Boronow, Paul.
 469 Victoria Ave.
 Montreal, Que.

 Brown, Charles Lennox.
 4025 Dorchester St.
 Montreal, Que.

 Brown, George Basil.
 614 Sherbrooke St. W.
 Montreal, Que.

 Brown, Lawrence Elliott.
 149 Carling Ave.
 Ottawa, Ont.

 Carlen, Lawrence Elliott.
 149 Carling Ave.
 Ottawa, Ont.
 Crawford, Robert Eric Ander-

NAME

Buchanan, John Edmond ...... 477 Cote St. Luke Rd ..... Montreal, Que. Cromwell, Alexander Ross. Dand, Raymond Murray. \*Davis, Sydney Herbert. Desbarats, George Henry. Montreal, Que. Dobson, Robert Munro Drummond, Ross Newton Duff, Edgar C New Glasgow, N New Glasgow, N Ottawa, Ont. Ottawa, Ont. Montreal, Que. Drummond, Ross Newton Drummond, Ross Newton Duff, Edgar C 

 Duff, Edgar C.
 Carbonear, Nfld.

 Eager, Norman H. A.
 4628 St. Catherine St.
 Westmount, Que.

 \*Elliott, Gerald Burton
 385 Lansdowne Ave.
 Westmount, Que.

 Evans, William
 791 University St.
 Montreal, Que.

 Farquharson, John Spencer.
 Retreat
 Constant Spring P.O.,

 Fisk, George Harold.
 166 Drummond St.
 Montreal, Que.

 Ford, Robert
 15 Craig St.
 Ottawa, Ont.

 Foss, Roy Holmes.
 1 Bellevue Ave.
 Sherbrooke, Que.

 Foster, Stanley Campbell
 2236 Mance St.
 Montreal, Que.

 Fotheringham, John Popham.
 824 Echo Drive.
 Ottawa, Ont.

 Fraser, Andrew Stockwell
 380 Elgin St.
 Ottawa, Ont.

 Friedman, Victor Edward
 322 Elm Ave
 Westmount, Que.

 Fry, John Dawson
 66 McTavish St.
 Montreal, Que.

 Glen, Alexander F.
 Ste. Agathe des
 Montre, Que.

..... New Glasgow, N.S. Jamaica, B.W.I. Monts. Que.

\*Partial.

NAME	STREET ADDRESS	CITY OR TOWN
Grant, Ralph Glencoe	.73 Ash Ave	Montreal, Que. Etchemin Bridge, Que.
Grant, Ralph Glencoe Gravel, Emile		Mantropl Quo
(Left early in Session) Gurman, Israel T. I Hamel, J. H. N. Albert Hamilton, Herbert J	50 Notre Dame St	Three Rivers, Que.
Hamilton, Herbert J	421 Metcalfe Ave.	Westmount, Que.
namitton, rimp Dawson I	. c/o o.e. Amorting of the	U.S.A.
Hanington, Francis Carleton		Ottawa, Ont.
*Harling, Frank Norman Harrison, Donald Ranald Hastings, Walter H	.205 Westmount Blvd	Westmount, Que.
Harrison, Donald Ranald	2030 Broad St	Regina, Sask.
Hastings, Walter H Holcomb, Harcourt Edward		. Ste. Anne de Bellevue, Que.
Holmes, Everett Eric	.353 Grosvenor Ave	Westmount, Que.
Holmes, Everett Eric Holt, Ernest William Hulburd, William Chauncey	901 ()Id ()rehard Ave	Wontreat. Que.
(Left Oct. 7th, 1919) Humes, Harold Louis Hunter, Piercy Starkey	.4288 Western Ave	. Montreal, Que.
(A		
Jandrew, Cyrus Bertram Jenks, William Stuart		
Johnson, Edwin Lewis Kerr, George Elliott King, John David		. Montreal, Que.
Kirsh, Harry Kyle, Donald Gordon		
Loebel, John Mayer	3 St. Matthew St	Montreal, Que.
Luke, Morley Corbus	.41 Brock Ave. N	Montreal West, Que.
(Arch.)	19 MacGregor St	. Montreal, Que.
McCallum, Fred Lee McDougall, Donald Hamiltor	and Child I Mine Di	Welland, Ont.
McDougall, Donald Hamilton MacGlashan, Lionel Creighton	n22 Cote des Neiges Rd	Vaudreuil Sta., Que.
MacGregor, Roderick Archibald	Compa Street	New Glasgow, N.S.
Archibald MacKeen, David Whitney	Maplewood	Halifax, N.S.
MacKeen, David Whitney Mackenzie, George Home Mackenzie, William Bigelow		Moncton, N.B.
	192, 5th Avenue 26 Burton Ave	Westmount, Que.
McLennan, Gordon Roderick Macnaughton, Moray Fraser. MacNider, Clarence Henry Macrae, Donald		Westmount, Que.
Macrae, Donald		Clinton, Ont.
Macrae, Donald McTaggart, George Duncan Macoun, John Macoun Martin, Kenneth Beriah	Experimental Farm	Ottawa, Ont. Westmount, Que.
Midgley, Russell Edward	1020 Gt Cathoring St	Westmount Que
Monsarrat, Charles Alexander	·L	Rivière du Loup, Que.
(Left Jan. 9th, 1920) Morris, Robert Schofield		
(Arch.)	10 Frontonac St	Sherbrooke, Que,
Morrisette, Gordon Joseph Morrison, David Reid		Montreal, Que.
Morrison, David Reid Mott, Harold Edgar	139 Middle Gate	winnipeg, Man.

\*Partial.

NAME	STREET ADDRESS	CITY OR TOWN
	251 Wilson Ave	
Silcox. Murphy, Edward Justin *Murray, Alexander Durand (Arch.)	620 Victoria Ave	Westmount, Que. New York, N.Y.
Nesbitt, Martin Becerra Newman, Percy Cecil Normandin, Bomeo Armon	100 L R10 de Plata	Guazapares, Chihuahua, Mexico.
Notman, James Geoffrey Ouellette, Paul.		Westmount, Que.
Parker, Charles Alexander Parsons, Eric Allan Perry, Alfred Leslie		. Ottawa, Ont. . Montreal, Que.
(Arch.)		Montreal, Que.
Pevzner, Isidore Pfeiffer, Walter Moodie		
Quinlan, James T. Ramsay, Kenneth MacPhers Bankin William Donald Ja		
Rankin, William Donald, Jr. Reed, Gordon. Reeve, Charles Lailey Reid, Eric Arnold	004 D. T.ID.	. Woodstock, N.B. .St. Andrews, N.B.
Reiffenstein, John Christoph Renouf, Edward Trudeau Root, Stephen Eastman Ross, David Roy		. Westmount, Que. . Montreal, Que.
Ross, David Roy		. Westmount, Que. . Truro, N.S.
Ross, James Hargrave Drummond Salter, Fred Cumberland		Montreal, Que.
Scott, Paul Stuart Sherrard, Edwin Atwater Simons, John Joseph	1 Forden Ave	Westmount, Que.
Simons, John Joseph. Spratt, Maynard James Taber, Harold E.		Ottawa, Ont.
Taber, Harold E Tatley, David Lambert Taylor, Edward Plunket		Westmount, Que.
Thompson Cecil E	157 Eroph St.	St. John West, N.B.
1 ucker, Bryant Burgess	Kings Nympton Rectory	. Chulmleigh, N.
Furley, Gerald Aloysius Furnbull, Rupert Davidson		Rothogar ND
Wain, Eric James. Wait, Eric Holloway Watt, Leslie Alexander		. Montreal, Que. Ste. Anne de Bellevue.
Weldon Thomas Harbort	000 D 1 . 0. W	Que.
Wiggs, Henry Ross (Arch)	Hessel Grove St For	St. Jovite Sta., Que.
Wilder, Hartland Bates Williams, Archibald Lyle		Quebec, Que. Westmount, Que.
Wilson, James Moir	St. Joseph St	Lachine, Que.

\*Partial.

#### NAME

#### STREET ADDRESS

CITY OR TOWN

Wilson, Selwyn Hamilton Wonham, Walter Richard Woolward, Charles Desmond	336 Wood Avenue	Rosean, Dominica,
W 1 4 W Charles		B.W.I. Westmount, Que.

Wright, W. Stanley.....430

#### THIRD YEAR.

# Abbott-Smith, Reginald Ban-.....Buckingham, Que. Roumania. Calkin, Darrell Lorraine Kentville, N.S. Cambron, Adrien 40 Council St. Sherbrooke, Que. Cameron, John Vindsor Hotel St. Montreal, Que. Canning, Dow Vernon 132 Vendome Ave. Montreal, Que. .....St. Kitts, B.W.I. Challenger, James Othneil..... Westmount, Que. Croft, Carman Milward 504 Lansdowne Ave. Westmount, Que. Croft, Carman Milward Digby, N.S. Cromwell, Harry Roy 489 Melrose Ave Montreal, Que. Cuddy, John Michael 269 Mance St. Montreal, Que. Cunningham, Frederick James. 299 McLeod St. Ottawa, Ont. Davis, Samuel c/o Royal Bank of Can. Stanley St., Montreal. Dewar, Charles Leonard. 184 Waverley St. Ottawa, Ont. Durant, N. Morton Parrsboro, N.S. Eaton, Milton Treherne, Man. Farmer, Rupert Whitley Oughterson. St. Philip, Barbados, B.W.J. B.W.J. FFFFFFGGGGGGGG

Farnsworth, Arthur Leslie		Cookshire, Que.
Fellows Howard	. Box 14	Stellarton, N.S.
Ferguson John Alexander	. Box 576	. Nelson, B.C.
Forbes Karl	.807 Shuter St	Montreal, Que.
Fortin, Gaston Lalonde	.191 Mance St	. Montreal, Que.
Fowler Wallace Wadsworth	.41 Arlington Ave	Westmount, Que.
Fardner, John George	.106 St. Matthew St	Montreal, Que.
Gauthier, Paul Gilles	.1550 Mance St	Montreal, Que.
Tibbs John Hodgson		. Buckingham, Que.
Tiles George Reid		Lachute, Que.
Cliddon William Gilbert C.	.430 Nelson St	Ottawa, Ont.
Goodman, Charles Davis	.1617 Jeanne Mance St	Montreal, Que.
(Arch)		
Coodmin Cassels Dunhar		.Baie Verte, N.B.
Could Walter Stilson	174 East St	London, Ont.
Groon Frederick Gordon	.161 Charlotte St	.St. John, N.B.
Grondin, Leon Joseph	.31 Mayor St	Montreal, Que.
(Arch.)		
(111011.)		

\*Partial.

# REGISTER OF STUDENTS STREET ADDRESS

# CITY OR TOWN

Italy.

Hall, John G..... Hannan, James.... 

 Hall, John G.
 Cornwall, Ont.

 Hannan, James.
 2 Home Place
 Irvington, N, Y.

 Harris, Clifford Norton.
 73 Willibrord Ave
 Verdun, Que.

 Harrison, Donald Ranald
 Tamworth, Ont.

 (Withdrew Oct., 1919.) Irving, George Ewart Logan.... P.O. Box 152.... Jackson, Carl Henry. Jelly, Calvin Sherwood Jenckes, Kennan Brooks. 18 Quebec St. Johnston, Harry Wyatt 25 Bellingham Road. Jordan, Herbert Scott. 446 Mount Stephen Ave Jue, Peter B Kay, Stuart Evans. Kennedy, Charles Laurence. Kirby, Guy Hurlston.... Langstroth, Cecil Craven.... Lantz, Floyd Crawford..... Lewis, James Wentworth. Livingstone, Kenneth MacKay. 1249 Kenyon St., N.W. Lordly, Guy Sterling. Louttit, William Charles... Loutth, Whitan Loy, John Austin. McCurdy, Lyall Radcliffe. Macdonald, Daniel..... Macfarlane, Donald Henry McIntyre, Gordon Mackenzie, Donald Gordon MacPhail, Jeffrey Burland. Mawdsley, James Buckland Maxwell, Edward Blythe \*Millidge, Brydone deBlois. Mitchell, Frank Leslie Mooney, Renel Burdett...... Muir, Wilson James Nutter, Jack Caswell..... O'Halloran, James..... Patterson, Kenneth Breck..... 4222 Dorchester St.....

NAME

Phelan, Thomas E ... Robertson, Andrew Murray Rochester, Gordon Hamilton.. Rochester, Lloyd Baillie... Salamis, Basil K. Saunders, James Erling. Scriver, Frederick William. Scriver, Frederick William. Shotwell, John Stuart G. Sloves, Moses. Sloves, Moses. Smith, David Whitney. Smith, Roy Hamilton Smith, Roy Ha Saunders, James Erling. 

336 Lagauchetiere St. W. 41 Lorne Ave..... Wayside Inn. 132 Crescent St. 154 Britain St. 3371 Greenshields Ave. 177 Waverly St....

36 Melbourne St..... 84 St. Famille St. 1012 Dorchester St. W.... 216 Peel St.....

312 Peel St ... 57 Cranston Ave. 161 Admiral Road.....

.386 Roslyn Ave.....

408 Queen St....

2100 Park Av 373 Grosvenor Ave .338 Kensington Ave..... 2432 St. Urbain St.....

145 James St.

Carleton Place, Ont. Sherbrooke, Que. Outremont, Que. Westmount, Que. Montreal, Que. Montreal, Que. Parkdale, Man. Cookshire, Que. Hampton, N.B. Montreal, Que. St. John, N.B. Washington, D.C. St. John, N.B. Montreal, Que. Ottawa, Ont. New Glasgow, N.S. Springhill, Que Sherbrooke, Que. Montreal, Que. Montreal, Que. Montreal, Que. Clemens, Alta. Montreal, Que. St. John, N.B. Toronto, Ont. Stellarton, N.S. Westmount, Que. Lennoxville, Que. Ottawa, Ont. Montreal, Que. England. Westmount, Que. Montreal, Que. Westmount, Que. Westmount, Que. Montreal, Que ..... Haileybury, Ont. Ottawa, Ont. .782 Shuter St..... Montreal, Que

\*Partial.

#### CITY OR TOWN

.I.

e.

B.C.

Tansley, Wilfred       46 Mecklenburg St.         Thomspon, Gordon Maurice       54, 12th Ave.         Thompson, Walter Wilfrid       1267 Bernard Ave.	vancouver, D.U.
Timmerman, Everett       260 Bishop St         Drinkwater.       264 Pius IX Blvd.         Tison, Maurice.       234 Pius IX Blvd.         Van Etten, Fred. Bouton.       156 Wall St.	
(Arch.) Vaughan, Harold WilfredSt.Elmo Apts., Colony St. Vineberg, Samuel SullivanSt.Elmo Apts., Colony St. Ward, Melville Ernest St. C. 52 Clergy St. Warriner, Norman Downing681 Shuter St Watson, Conrad EthelbertRace Course P.O.	Kingston, Ont. Montreal, Que.
Waldon Loslio Smiley 636 Dorchester St., W	Montreal, Que. Montreal, Que. Ottawa, Ont. Norwood, Ont. Sherbrooke, Que Winnipeg, Man.

#### FOURTH YEAR

Arbuckle, James Stewart		Pictou, N.S.
Austin, Clarence Ward		Kamloons, B.C.
Austin, Clarence Ward		Ct Tambort Que
Ditamana I Noó	554 Riverside UTIVe	DU. Lamber of Que.
Bourret, Paul		Smith's Falls Ont.
Bradley, Herbert Ellison		Simul S Fans, One
Cameron, Edward I alke		Stellarton, N.S.
Chisholm, Alex. Harold		Doorida boary =
Code, Francis Leslie	alo l'I l'ode	
Coue, Francis Losite	Trade& Commerce Dept.	Ottawa, Ont.
A STATE OF A STATE OF A STATE OF A STATE OF A STATE OF A STATE OF A STATE OF A STATE OF A STATE OF A STATE OF A	Trauca Commerce Depu	Droghrville Ont
Cole, William Stanley		Drockvine, One.

Creighton, Charles Pearse...... 38 Royal Ave..... New Westminster

Hart, Lawrence Folger

Crowe, Cyril Holesworth. Davies, Vernon Russell. Dawson, Heber William Schwarz, 436 Gilmour St. Nottawa, Ont. DeCew, Reginald Mark. Demers, Paul E. Deneau, Gaston Douglas, George Vibert. Durnford, Alexander Tilloch G.9 Simpson St. Montreal, Que. Montreal, Que. Montreal, Que. Ottawa, Ont. Montreal, Que. Montreal, Que. Ottawa, Ont. Montreal, Que. Montreal, Que. Montreal, Que. Montreal, Que. Montreal, Que. Montreal, Que. (Arch.) 

 Elder, John Campbell.
 108 Strathearn Ave
 Wohrtearn Ave

 Elderkin, Karl Osler.
 Weymouth, N.S.

 Emery, Herbert James.
 10,044, 106th Street.
 Edmonton, Alta.

 Erlenborn, Willi.
 51 York St.
 Westmount, Que.

 Ferrier, Alan.
 799 University St.
 Montreal, Que.

 Fox, Hugh Dean.
 57 Birckhead Place.
 Toledo, Ohio

 Gilbert, Philip Geoffrey B.
 496 Huron St.
 Toronto, Ont.

 Greene, Leslie Kirk.
 39 Crescent St.
 Montreal, Que.

 Hacker, Louis Waldo
 Summerside, P.F.

Westmount, Que. Westmount, Que.

Ottawa, Ont. Hutton Mills, B.C.

.Summerside, P.E.I.

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NAME

# STREET ADDRESS

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# STREET ADDRESS

# CITY OR TOWN

Kearns, William Francis74 Somerset West	044
Kelly, John Lee	Ottawa, Ont.
Kinknotnial II all mi	Buckingham, Que
Ankpatrick, Harold Thompson	Parrehoro NG
Labell, Maurice N.	arisboro, 14.6.
Lafontaine Gerard H 1902 GL TT 1	Mansonville, Que.
La Manthe, Gerard H 1303 St. Hubert St	Montreal, Que
Labell, Maurice N. Lafontaine, Gerard H. LaMontagne, Henri Gaston	Montroal Oue
Larose, Paul. 219 Prud'hormen A	
Larose, Paul	Montreal, Que.
Lie, Harold Calleton	St. John N B
Lindsay, Guy Adamson	Winning Man
Lyman, Gordon 74 McTorrich St	Winnipeg, Man.
(Arch.)	Montreal, Que.
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Macpherson, Hugh	Non Ola D. H.I.
Macklin, Herbert George. Mahaffy, Herbert LaurenceB. 6, Board of Trade. Millar, Thomas Boyd.	New Glasgow, N.S.
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Millar, Thomas Boyd	
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Millidge, Brydone deBlois	St John MD
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Robertson Pohent Maria 190 Crescent St.	. Montreal, Que.
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Robertson, Robert McFadzeau 100 Riverside Drive Ross, Bruce	Montreal, Que. Lachine, Que. Westmount, Que. Montreal, Que. Wareham, Dorset, England.
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Robertson, Robert McFadzeau 100 Riverside Drive.         Ross, Bruce.       393 Kensington Ave.         Ross, James Hamilton       811 University St.         *Routledge, Henri Oscar.       "Furzebrook" House.         (Withdrew Dec. 15, 1919)         Rutherford, Archibald         Bowman.       467 Mt. Pleasant Ave.         Rutherford, William Jackson.       109 Cote St. Antoine Rd.	Montreal, Que. Lachine, Que. Westmount, Que. Montreal, Que. Wareham, Dorset, England. Westmount, Que.
Robertson, Robert McFadzeau 100 Riverside Drive.         Ross, Bruce.       393 Kensington Ave.         Ross, James Hamilton       811 University St.         *Routledge, Henri Oscar.       "Furzebrook" House.         (Withdrew Dec. 15, 1919)         Rutherford, Archibald         Bowman.       467 Mt. Pleasant Ave.         Rutherford, William Jackson.       109 Cote St. Antoine Rd.	Montreal, Que. Lachine, Que. Westmount, Que. Montreal, Que. Wareham, Dorset, England. Westmount, Que.
Robertson, Robert McFadzeau 100 Riverside Drive.         Ross, Bruce.       393 Kensington Ave.         Ross, James Hamilton       811 University St.         *Routledge, Henri Oscar.       "Furzebrook" House.         (Withdrew Dec. 15, 1919)         Rutherford, Archibald         Bowman.       467 Mt. Pleasant Ave.         Rutherford, William Jackson.       109 Cote St. Antoine Rd.	Montreal, Que. Lachine, Que. Westmount, Que. Montreal, Que. Wareham, Dorset, England. Westmount, Que.
Robertson, Robert McFadzeau. 100 Riverside Drive.         Ross, Bruce.       393 Kensington Ave.         Ross, James Hamilton       811 University St.         *Routledge, Henri Oscar.       "Furzebrook" House.         (Withdrew Dec. 15, 1919)       "Furzebrook" House.         Rutherford, Archibald       467 Mt. Pleasant Ave.         Rutherford, William Jackson.       109 Cote St. Antoine Rd.         Schippel, Walter Herbert.       573 Durocher Ave.         Scott, William Beverley.       55 Sussor Ave.	Montreal, Que. Lachine, Que. Westmount, Que. Mortreal, Que. Warcham, Dorset, England. Westmount, Que. Outremont, Que. Dalhousie, N.B.
Robertson, Robert McFadzeau. 100 Riveschi & Drive.         Ross, Bruce.       393 Kensington Ave.         Ross, James Hamilton.       811 University St.         *Routledge, Henri Oscar.       "Furzebrook" House         (Withdrew Dec. 15, 1919)       "Furzebrook" House         Rutherford, Archibald       467 Mt. Pleasant Ave.         Rutherford, William Jackson.       109 Cote St. Antoine Rd.         Scott, William Beverley.       55 Sussex Ave.	Montreal, Que. Lachine, Que. Westmount, Que. Montreal, Que. Wareham, Dorset, England. Westmount, Que. Westmount, Que. Outremont, Que. Dalhousie, N.B. Montreal. One
Robertson, Robert McFadzeau. 100 Riveschi & Drive.         Ross, Bruce.       393 Kensington Ave.         Ross, James Hamilton.       811 University St.         *Routledge, Henri Oscar.       "Furzebrook" House         (Withdrew Dec. 15, 1919)       "Furzebrook" House         Rutherford, Archibald       467 Mt. Pleasant Ave.         Rutherford, William Jackson.       109 Cote St. Antoine Rd.         Scott, William Beverley.       55 Sussex Ave.	Montreal, Que. Lachine, Que. Westmount, Que. Montreal, Que. Wareham, Dorset, England. Westmount, Que. Westmount, Que. Outremont, Que. Dalhousie, N.B. Montreal. One
Robertson, Robert McFadzeau. 100 Riveschi & Drive.         Ross, Bruce.       393 Kensington Ave.         Ross, James Hamilton.       811 University St.         *Routledge, Henri Oscar.       "Furzebrook" House         (Withdrew Dec. 15, 1919)       "Furzebrook" House         Rutherford, Archibald       467 Mt. Pleasant Ave.         Rutherford, William Jackson.       109 Cote St. Antoine Rd.         Scott, William Beverley.       55 Sussex Ave.	Montreal, Que. Lachine, Que. Westmount, Que. Montreal, Que. Wareham, Dorset, England. Westmount, Que. Westmount, Que. Outremont, Que. Dalhousie, N.B. Montreal. One
Robertson, Robert McFadzeau. 100 Riveschi & Drive.         Ross, Bruce.       393 Kensington Ave.         Ross, James Hamilton.       811 University St.         *Routledge, Henri Oscar.       "Furzebrook" House         (Withdrew Dec. 15, 1919)       "Furzebrook" House         Rutherford, Archibald       467 Mt. Pleasant Ave.         Rutherford, William Jackson.       109 Cote St. Antoine Rd.         Scott, William Beverley.       55 Sussex Ave.	Montreal, Que. Lachine, Que. Westmount, Que. Montreal, Que. Wareham, Dorset, England. Westmount, Que. Westmount, Que. Outremont, Que. Dalhousie, N.B. Montreal. One
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Robertson, Robert McFadzeau. 100 Riverside Drive.         Ross, Bruce.       303 Kensington Ave.         Ross, James Hamilton       811 Universide Drive.         Ross, James Hamilton       811 Universide Drive.         Ross, James Hamilton       811 Universide Drive.         Routledge, Henri Oscar       "Furzebrook" House.         (Withdrew Dec. 15, 1919)       Rutherford, Archibald         Bowman.       467 Mt. Pleasant Ave.         Rutherford, William Jackson.       109 Cote St. Antoine Rd.         Schippel, Walter Herbert.       573 Durocher Ave.         Scott, William Beverley.       55 Sussex Ave.         Shapter, Carl.       137 Charron St.         Shrimpton, Dudley John.       330 Victoria Ave.         Smith, Donald T       811 University St.	Montreal, Que. Lachine, Que. Westmount, Que. Wareham, Dorset, England. Westmount, Que. Outremont, Que. Outremont, Que. Dalhousie, N. B. Montreal, Que. Montreal, Que. Montreal, Que.
Robertson, Robert McFadzeau. 100 Riverside Drive.         Ross, Bruce.       303 Kensington Ave.         Ross, James Hamilton       811 Universide Drive.         Ross, James Hamilton       811 Universide Drive.         Ross, James Hamilton       811 Universide Drive.         Routledge, Henri Oscar       "Furzebrook" House.         (Withdrew Dec. 15, 1919)       Rutherford, Archibald         Bowman.       467 Mt. Pleasant Ave.         Rutherford, William Jackson.       109 Cote St. Antoine Rd.         Schippel, Walter Herbert.       573 Durocher Ave.         Scott, William Beverley.       55 Sussex Ave.         Shapter, Carl.       137 Charron St.         Shrimpton, Dudley John.       330 Victoria Ave.         Smith, Donald T       811 University St.	Montreal, Que. Lachine, Que. Westmount, Que. Wareham, Dorset, England. Westmount, Que. Outremont, Que. Outremont, Que. Dalhousie, N. B. Montreal, Que. Montreal, Que. Montreal, Que.
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Robertson, Robert McFadzeau. 100 Rivestide Drive.         Ross, Bruce.       393 Kensington Ave.         Ross, James Hamilton       811 University St.         "Routledge, Henri Oscar.       "Furzebrook" House.         (Withdrew Dec. 15, 1919)       "Furzebrook" House.         Rutherford, Archibald       467 Mt. Pleasant Ave.         Rutherford, William Jackson.       109 Cote St. Antoine Rd.         Schippel, Walter Herbert.       573 Durocher Ave.         Scott, William Pringle.       55 Sussex Ave.         Shapter, Carl.       137 Charron St.         Smith, Donald T.       811 University St.         Smith, Edmund Howard       453 Grosvenor Ave.         Standish, Samuel James.       50 Corder.	Montreal, Que. Lachine, Que. Westmount, Que. Mortreal, Que. Wareham, Dorset, England. Westmount, Que. Outremont, Que. Dalhousie, N.B. Montreal, Que. Montreal, Que. Westmount, Que. Montreal, Que. Westmount, Que. Westmount, Que. Waterloo, Que.
Robertson, Robert McFadzeau. 100 Riverside Drive.         Ross, Bruce.       393 Kensington Ave.         Ross, James Hamilton       811 Universide Drive.         Routledge, Henri Oscar.       "Furzebrook" House.         (Withdrew Dec. 15, 1919)       "Furzebrook" House.         Rutherford, Archibald       467 Mt. Pleasant Ave.         Bowman.       467 Mt. Pleasant Ave.         Rutherford, William Jackson       109 Cote St. Antoine Rd.         Schippel, Walter Herbert.       573 Durocher Ave.         Scott, William Beverley       55 Sussex Ave.         Seath, William Pringle       55 Sussex Ave.         Shrimpton, Dudley John       330 Victoria Ave.         Smith, Donald T       811 University St.         Smith, Edmund Howard       453 Grosvenor Ave.         Stewart, Malcolm Gordon       2159 Esplanade Ave.         Taylor, John Ross.       107 Cote St. Antoine Rd.         Thomas, Philip.       143 Colonial Ave.	Montreal, Que. Lachine, Que. Westmount, Que. Mortreal, Que. Wareham, Dorset, England. Westmount, Que. Outremont, Que. Dalhousie, N.B. Montreal, Que. Montreal, Que. Westmount, Que. Montreal, Que. Westmount, Que. Westmount, Que. Waterloo, Que.
Robertson, Robert McFadzeau. 100 Riverside Drive.         Ross, Bruce.       393 Kensington Ave.         Ross, James Hamilton       811 Universide Drive.         Routledge, Henri Oscar.       "Furzebrook" House.         (Withdrew Dec. 15, 1919)       "Furzebrook" House.         Rutherford, Archibald       467 Mt. Pleasant Ave.         Bowman.       467 Mt. Pleasant Ave.         Rutherford, William Jackson       109 Cote St. Antoine Rd.         Schippel, Walter Herbert.       573 Durocher Ave.         Scott, William Beverley       55 Sussex Ave.         Seath, William Pringle       55 Sussex Ave.         Shrimpton, Dudley John       330 Victoria Ave.         Smith, Donald T       811 University St.         Smith, Edmund Howard       453 Grosvenor Ave.         Stewart, Malcolm Gordon       2159 Esplanade Ave.         Taylor, John Ross.       107 Cote St. Antoine Rd.         Thomas, Philip.       143 Colonial Ave.	Montreal, Que. Lachine, Que. Westmount, Que. Mortreal, Que. Wareham, Dorset, England. Westmount, Que. Outremont, Que. Dalhousie, N.B. Montreal, Que. Montreal, Que. Westmount, Que. Montreal, Que. Westmount, Que. Westmount, Que. Waterloo, Que.
Robertson, Robert McFadzeau. 100 Rivestide Drive.         Ross, Bruce.       393 Kensington Ave.         Ross, James Hamilton       811 University St.         *Routledge, Henri Oscar.       "Furzebrook" House.         (Withdrew Dec. 15, 1919)       "Furzebrook" House.         Rutherford, Archibald       667 Mt. Pleasant Ave.         Bowman.       467 Mt. Pleasant Ave.         Rutherford, William Jackson.       109 Cote St. Antoine Rd.         Schippel, Walter Herbert.       573 Durocher Ave.         Scott, William Beverley.       55 Sussex Ave.         Shapter, Carl.       137 Charron St.         Shrimpton, Dudley John.       330 Victoria Ave.         Smith, Donald T       811 University St.         Stewart, Malcolm Gordon.       2159 Esplanade Ave.         Stewart, Malcolm Gordon.       2159 Esplanade Ave.         Thomas, Philip.       143 Colonial Ave.         Thomas, Driver Creichtor.       "Teame Colonial Ave."	Montreal, Que. Lachine, Que. Westmount, Que. Mortreal, Que. Warcham, Dorset, England. Westmount, Que. Outremont, Que. Dalhousie, N.B. Montreal, Que. Montreal, Que. Westmount, Que. Westmount, Que. Waterloo, Que. Montreal, Que. Waterloo, Que. Montreal, Que. Westmount, Que. Montreal, Que.
Robertson, Robert McFadzeau. 100 Rivestide Drive.         Ross, Bruce.       393 Kensington Ave.         Ross, James Hamilton       811 University St.         *Routledge, Henri Oscar.       "Furzebrook" House.         (Withdrew Dec. 15, 1919)       "Furzebrook" House.         Rutherford, Archibald       667 Mt. Pleasant Ave.         Bowman.       467 Mt. Pleasant Ave.         Rutherford, William Jackson.       109 Cote St. Antoine Rd.         Schippel, Walter Herbert.       573 Durocher Ave.         Scott, William Beverley.       55 Sussex Ave.         Shapter, Carl.       137 Charron St.         Shrimpton, Dudley John.       330 Victoria Ave.         Smith, Donald T       811 University St.         Stewart, Malcolm Gordon.       2159 Esplanade Ave.         Stewart, Malcolm Gordon.       2159 Esplanade Ave.         Thomas, Philip.       143 Colonial Ave.         Thomas, Driver Creichtor.       "Teame Colonial Ave."	Montreal, Que. Lachine, Que. Westmount, Que. Mortreal, Que. Warcham, Dorset, England. Westmount, Que. Outremont, Que. Dalhousie, N.B. Montreal, Que. Montreal, Que. Westmount, Que. Westmount, Que. Waterloo, Que. Montreal, Que. Waterloo, Que. Montreal, Que. Westmount, Que. Montreal, Que.
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Robertson, Robert McFadzeau. 100 Rivestide Drive.         Ross, Bruce.       393 Kensington Ave.         Ross, James Hamilton       811 University St.         *Routledge, Henri Oscar.       "Furzebrook" House.         (Withdrew Dec. 15, 1919)       "Furzebrook" House.         Rutherford, Archibald       667 Mt. Pleasant Ave.         Bowman.       467 Mt. Pleasant Ave.         Rutherford, William Jackson.       109 Cote St. Antoine Rd.         Schippel, Walter Herbert.       573 Durocher Ave.         Scott, William Beverley.       55 Sussex Ave.         Shapter, Carl.       137 Charron St.         Shrimpton, Dudley John.       330 Victoria Ave.         Smith, Donald T       811 University St.         Stewart, Malcolm Gordon.       2159 Esplanade Ave.         Stewart, Malcolm Gordon.       2159 Esplanade Ave.         Thomas, Philip.       143 Colonial Ave.         Thomas, Driver Creichtor.       "Teame Colonial Ave."	Montreal, Que. Lachine, Que. Westmount, Que. Mortreal, Que. Warcham, Dorset, England. Westmount, Que. Outremont, Que. Dalhousie, N.B. Montreal, Que. Montreal, Que. Westmount, Que. Westmount, Que. Waterloo, Que. Montreal, Que. Waterloo, Que. Montreal, Que. Westmount, Que. Montreal, Que.
Robertson, Robert McFadzean. 100 Rivestide Drive.         Ross, Bruce.       393 Kensington Ave.         Ross, James Hamilton       811 University St.         "Routledge, Henri Oscar.       "Furzebrook" House.         (Withdrew Dec. 15, 1919)       "Furzebrook" House.         Rutherford, Archibald       467 Mt. Pleasant Ave.         Rutherford, William Jackson.       109 Cote St. Antoine Rd.         Schippel, Walter Herbert.       573 Durocher Ave.         Scott, William Pringle.       55 Sussex Ave.         Shapter, Carl.       137 Charron St.         Smith, Donald T.       811 University St.         Smith, Donald T.       811 University St.         Stewart, Malcolm Gordon.       2159 Esplanade Ave.         Thomas, Philip.       143 Colonial Ave         (Arch.)       "Fan-na-Grine," Cote des Neiges Road.         Twinberrow, James Oswald.       4160 Sherbrooke St., W.	Montreal, Que. Lachine, Que. Westmount, Que. Mortreal, Que. Wareham, Dorset, England. Westmount, Que. Outremont, Que. Dalhousie, N.B. Montreal, Que. Montreal, Que. Westmount, Que. Westmount, Que. Montreal, Que. Montreal, Que. Montreal, Que. Montreal, Que. Montreal, Que. Montreal, Que. Montreal, Que.
Robertson, Robert McFadzean. 100 Rivestide Drive.         Ross, Bruce.       393 Kensington Ave.         Ross, James Hamilton       811 University St.         "Routledge, Henri Oscar.       "Furzebrook" House.         (Withdrew Dec. 15, 1919)       "Furzebrook" House.         Rutherford, Archibald       467 Mt. Pleasant Ave.         Rutherford, William Jackson.       109 Cote St. Antoine Rd.         Schippel, Walter Herbert.       573 Durocher Ave.         Scott, William Pringle.       55 Sussex Ave.         Shapter, Carl.       137 Charron St.         Smith, Donald T.       811 University St.         Smith, Donald T.       811 University St.         Stewart, Malcolm Gordon.       2159 Esplanade Ave.         Thomas, Philip.       143 Colonial Ave         (Arch.)       "Fan-na-Grine," Cote des Neiges Road.         Twinberrow, James Oswald.       4160 Sherbrooke St., W.	Montreal, Que. Lachine, Que. Westmount, Que. Mortreal, Que. Wareham, Dorset, England. Westmount, Que. Outremont, Que. Dalhousie, N.B. Montreal, Que. Montreal, Que. Westmount, Que. Westmount, Que. Montreal, Que. Montreal, Que. Montreal, Que. Montreal, Que. Montreal, Que. Montreal, Que. Montreal, Que.
Robertson, Robert McFadzean. 100 Rivestide Drive.         Ross, Bruce.       393 Kensington Ave.         Ross, James Hamilton       811 University St.         "Routledge, Henri Oscar.       "Furzebrook" House.         (Withdrew Dec. 15, 1919)       "Furzebrook" House.         Rutherford, Archibald       467 Mt. Pleasant Ave.         Rutherford, William Jackson.       109 Cote St. Antoine Rd.         Schippel, Walter Herbert.       573 Durocher Ave.         Scott, William Pringle.       55 Sussex Ave.         Shapter, Carl.       137 Charron St.         Smith, Donald T.       811 University St.         Smith, Donald T.       811 University St.         Stewart, Malcolm Gordon.       2159 Esplanade Ave.         Thomas, Philip.       143 Colonial Ave         (Arch.)       "Fan-na-Grine," Cote des Neiges Road.         Twinberrow, James Oswald.       4160 Sherbrooke St., W.	Montreal, Que. Lachine, Que. Westmount, Que. Mortreal, Que. Wareham, Dorset, England. Westmount, Que. Outremont, Que. Dalhousie, N.B. Montreal, Que. Montreal, Que. Westmount, Que. Westmount, Que. Montreal, Que. Montreal, Que. Montreal, Que. Montreal, Que. Montreal, Que. Montreal, Que. Montreal, Que.
Robertson, Robert McFadzean. 100 Rivestide Drive.         Ross, Bruce.       393 Kensington Ave.         Ross, James Hamilton       811 University St.         "Routledge, Henri Oscar.       "Furzebrook" House.         (Withdrew Dec. 15, 1919)       "Furzebrook" House.         Rutherford, Archibald       467 Mt. Pleasant Ave.         Rutherford, William Jackson.       109 Cote St. Antoine Rd.         Schippel, Walter Herbert.       573 Durocher Ave.         Scott, William Pringle.       55 Sussex Ave.         Shapter, Carl.       137 Charron St.         Smith, Donald T.       811 University St.         Smith, Donald T.       811 University St.         Stewart, Malcolm Gordon.       2159 Esplanade Ave.         Thomas, Philip.       143 Colonial Ave         (Arch.)       "Fan-na-Grine," Cote des Neiges Road.         Twinberrow, James Oswald.       4160 Sherbrooke St., W.	Montreal, Que. Lachine, Que. Westmount, Que. Mortreal, Que. Wareham, Dorset, England. Westmount, Que. Outremont, Que. Dalhousie, N.B. Montreal, Que. Montreal, Que. Westmount, Que. Westmount, Que. Montreal, Que. Montreal, Que. Montreal, Que. Montreal, Que. Montreal, Que. Montreal, Que. Montreal, Que.
Robertson, Robert McFadzean. 100 Rivestide Drive.         Ross, Bruce.       393 Kensington Ave.         Ross, James Hamilton       811 University St.         "Routledge, Henri Oscar.       "Furzebrook" House.         (Withdrew Dec. 15, 1919)       "Furzebrook" House.         Rutherford, Archibald       467 Mt. Pleasant Ave.         Rutherford, William Jackson.       109 Cote St. Antoine Rd.         Schippel, Walter Herbert.       573 Durocher Ave.         Scott, William Pringle.       55 Sussex Ave.         Shapter, Carl.       137 Charron St.         Smith, Donald T.       811 University St.         Smith, Donald T.       811 University St.         Stewart, Malcolm Gordon.       2159 Esplanade Ave.         Thomas, Philip.       143 Colonial Ave         (Arch.)       "Fan-na-Grine," Cote des Neiges Road.         Twinberrow, James Oswald.       4160 Sherbrooke St., W.	Montreal, Que. Lachine, Que. Westmount, Que. Mortreal, Que. Wareham, Dorset, England. Westmount, Que. Outremont, Que. Dalhousie, N.B. Montreal, Que. Montreal, Que. Westmount, Que. Westmount, Que. Montreal, Que. Montreal, Que. Montreal, Que. Montreal, Que. Montreal, Que. Montreal, Que. Montreal, Que.
Robertson, Robert McFadzean. 100 Riverside Drive.         Ross, Bruce.       393 Kensington Ave.         Ross, James Hamilton       811 University St.         "Routledge, Henri Oscar.       "Furzebrook." House         (Withdrew Dec. 15, 1919)       "Furzebrook." House         Rutherford, Archibald       467 Mt. Pleasant Ave.         Rutherford, William Jackson       109 Cote St. Antoine Rd.         Scott, William Beverley.       573 Durocher Ave.         Scath, William Pringle       55 Sussex Ave.         Shapter, Carl.       137 Charron St.         Smith, Donald T.       811 University St.         Smith, Edmund Howard       453 Grosvenor Ave.         Standish, Samuel James.       107 Cote St. Antoine Rd.         Thomas, Philip.       143 Colonial Ave.         (Arch.)       "Fan-na-Grine," Cote des Neiges Road.         Twinberrow, James Oswald       4160 Sherbrooke St., W.         Vessot, Charles Ulysses R.       67 Balsam St.         White, MacLeod       9 Tower Place.         Wickenden, Jean Francois       9 Tower Place.	Montreal, Que. Lachine, Que. Westmount, Que. Wareham, Dorset, England. Westmount, Que. Outremont, Que. Outremont, Que. Dalhousie, N. B. Montreal, Que. Montreal, Que. Westmount, Que. Westmount, Que. Westmount, Que. Montreal, Que. Westmount, Que. Montreal, Que.
Robertson, Robert McFadzean. 100 Riverside Drive.         Ross, Bruce.       393 Kensington Ave.         Ross, James Hamilton       811 University St.         "Routledge, Henri Oscar.       "Furzebrook." House         (Withdrew Dec. 15, 1919)       "Furzebrook." House         Rutherford, Archibald       467 Mt. Pleasant Ave.         Rutherford, William Jackson       109 Cote St. Antoine Rd.         Scott, William Beverley.       573 Durocher Ave.         Scath, William Pringle       55 Sussex Ave.         Shapter, Carl.       137 Charron St.         Smith, Donald T.       811 University St.         Smith, Edmund Howard       453 Grosvenor Ave.         Standish, Samuel James.       107 Cote St. Antoine Rd.         Thomas, Philip.       143 Colonial Ave.         (Arch.)       "Fan-na-Grine," Cote des Neiges Road.         Twinberrow, James Oswald       4160 Sherbrooke St., W.         Vessot, Charles Ulysses R.       67 Balsam St.         White, MacLeod       9 Tower Place.         Wickenden, Jean Francois       9 Tower Place.	Montreal, Que. Lachine, Que. Westmount, Que. Wareham, Dorset, England. Westmount, Que. Outremont, Que. Outremont, Que. Dalhousie, N. B. Montreal, Que. Montreal, Que. Westmount, Que. Westmount, Que. Westmount, Que. Montreal, Que. Westmount, Que. Montreal, Que.
Robertson, Robert McFadzean. 100 Rivestide Drive.         Ross, Bruce.       393 Kensington Ave.         Ross, James Hamilton       811 University St.         "Routledge, Henri Oscar.       "Furzebrook" House.         (Withdrew Dec. 15, 1919)       "Furzebrook" House.         Rutherford, Archibald       467 Mt. Pleasant Ave.         Rutherford, William Jackson.       109 Cote St. Antoine Rd.         Schippel, Walter Herbert.       573 Durocher Ave.         Scott, William Pringle.       55 Sussex Ave.         Shapter, Carl.       137 Charron St.         Smith, Donald T.       811 University St.         Smith, Donald T.       811 University St.         Stewart, Malcolm Gordon.       2159 Esplanade Ave.         Thomas, Philip.       143 Colonial Ave         (Arch.)       "Fan-na-Grine," Cote des Neiges Road.         Twinberrow, James Oswald.       4160 Sherbrooke St., W.	Montreal, Que. Lachine, Que. Westmount, Que. Wareham, Dorset, England. Westmount, Que. Outremont, Que. Outremont, Que. Dalhousie, N. B. Montreal, Que. Montreal, Que. Westmount, Que. Westmount, Que. Westmount, Que. Montreal, Que. Westmount, Que. Montreal, Que.

\*Partial.

NAME	STREET ADDRESS	CITY OR TOWN
Wilson, Eldon Parker Windsor, J. Rorke		. Ottawa, Ont. . Westmount, Que.
F	IFTH YEAR (Architecture only)	

# FACULTY OF MEDICINE

#### FIRST YEAR

ILL U.G. ILL G. W. Lala	10 Dellarmo Arro	Westmount Que
Abbott-Smith, George Wakely.	IU Dellevue Ave	Koslo BC
Abey, Harry Ross		Cananagua Ont
Acton, Jos. Henry		Gananoque, Ont.
Altner, Harry Arthur	537 Cadieux St	Montreal, Que.
Almord Horold Codric	84 Burnee Ave	St. John, N.D.
Argue, Forrest Birkley		Shawville, Que.
Argue, Forrest Birkley Aronson, Jack	484 St. Patrick St	Ottawa, Ont.
Rockman Poter Louis	125h St. Urbain St.	MUnucai, Que.
Baglon Horry Edison		Danville, Que.
Beairsto, Everett Benjamin		Malpeque, P.E.I.
Darres I Clifford	217 11th Avenue H	Calgary, Alta.
Boyce, J. Onnord	517, 11011 Avenue, 12	River Bourgeois, N.S.
Boyd, John H. Boyle, Joseph Edgar.	077 Decrean Arro	Ottawa Ont
Boyle, Joseph Edgar	Z11 Bronson Ave	Langester Ont
Brady, Charles Peter †Breitman, Reuben		Mantroal Que
<sup>†</sup> Breitman, Reuben	190 St. Timothee St.	Montreat, Que.
Drown Fronk Moilelo	Box 125	Carman, man.
Deserved Taxanan on Wilmot	904 DOLY AVA	ULLAWA, ULL.
Bruce, Hugh Graham		Revelstoke, B.C.
Brown, Laurence Withot. Bruce, Hugh Graham Bustin, Howard Barlow	158 St. James St	St. John, N.B.
Dutlon William Shaw	LI Hairmont Ave	Ollawa, One.
Caldwall John Front	102 Bank St	Ottawa, Ont.
Cardozo, Bertrand Chalmers, Frank Burne		.Cayes, Haitï.
Chalmore Frank Burne	1927 Angus St.	Regina, Sask.
Chigholms Colin Anous	Box 185	Antigunish, 11.N.
Chickeles Daniel Mail		Port nastings, N.D.
Clarke, Austin M.		Newcastle, N.B.
Cleland, John George Paxton	The Postory	Penticton, B.C.
Cleland, John George Paxton.	D D No 9	Chesterville, Ont.
Clement, Hugh Wilfred	R.R. NO. 2	Ottowo Ont
Clendinnen, Ivan Carman	.384 Arnington Ave	Sodlov Sask
Coupal, Jean Louis		St John Woot NB
Carilashank John Morrill	2 CHIVE ST	. DU. JUHH WEBU, 14.1.
Cuntia Horny Croyle	Summerside	. Somerset, Dermuda
Castia Victor Charlos	18 COWER St	St. John S. Ivnu.
Dow Edmin Ethelbert	354 15th Avenue, W.	vancouver, D.C.
Desembles Loop	uni inforet St., W.	MUUSCJAW, DASK.
Eager, Richard Fred	176 Second Ave	Ottawa, Ont.
Eager, Richard Fred	. 110 Decond 11 0	

†Double Course.

#### NAME

#### STREET ADDRESS

(Left Oct., 1919) Left Oct., 19191281 St. Urbain St.Montreal, Que.Ferguson, James AbnerCumberland, Ont.Finlay, Stanley Peter1368 Hornby St.Vancouver, B.C.Fisher, Frank LemuelTruro, N.S.Fitzmaurice, Lawrence WylieCampbellton, N.B.Forrest, James Roberts2019 Hutchison St.Montreal, Que.Forrest, James Roberts2019 Hutchison St.Wictoria, B.C.Fraser, Donald ScottBox 520New Glasgow, N.S.Fraser, James Oliphant236 Duckworth St.St. John's, Nfld.Freedman, Joseph93 South Ave.Lachine, Que.Galipeau, Edwin Joseph Lorne. 506 Moreau St.Montreal, Que.Galipeau, John Albert506 Moreau St.Montreal, Que.Geddes, Aubrey KentBox 30.Truro, N.S.Gincherman, Abie24 Clarke St.Montreal, Que.Ginkeman, Harry328 Redfern Ave.Westmount, Que.Graham, Howard CarsonKemptville, Ont.Grant, William Harold Skeith. 4332 Montrose Ave.Westmount, Que.Grindtham, Jeffrey21 Peel St.Montreal, Que.Grant, William George546 Broadway W.Vancouver, B.C.Hainlen, Edgar WillisLake Pleasant,Hamilton Co., N. Y.Hall, Edmund BrintonStondway W.Vancouver, B.C. Hall, Edmund Brinton..... Bridgetown, N.S.

Howell, John M.

†Hooper, Willis Mathieu. Hope, John Donaldson Hosang, Samuel Alfred Baldwin 50 New St. Port of Spain, 

CITY OR TOWN

Hamilton Co., N.Y. 

 Hall, Edmund Brinton
 Bridgetown, N.S.

 Hall, Noel Bathurst
 Kaslo, B.C.

 Hall, Norman Douglas
 1985, 12th Avenue, W.
 Vancouver, B.C.

 Halperin, Joshua Sydney
 1461 St. Lawrence Blvd.
 Montreal, Que.

 Hamilton, Robert Stanford
 1420 Fort St.
 Victoria, B.C.

 Hamilton, Robert Stanford
 1420 Fort St.
 Victoria, B.C.

 Harris, Sydney Louis
 375 Lisgar St.
 Ottawa, Ont.

 Helmeken, John Sebastian
 915 Moss St.
 Victoria, B.C.

 Henderson, Reginald Smith
 Merigomish, N.S.

 Henry, John Stewart.
 Salisbury, N.B.

 Henry, Reginald Barrett.
 68 Hillcrest Ave
 Montreal West, Que.

 Hill, Nicholas Parsell.
 361 Kensington Ave.
 Westmount, Que.

 Hilton, George E. M.
 126 Lewis St.
 Ottawa, Ont.

 Holmes, Thomas Carlyle
 Victoria, B.C.
 Westport, Essex Co.,

 Holt, Charles Robert
 Westport, Essex Co.,
 N.Y.

 Hooper, Willis Mathieu
 Brownsburg, Que.
 N.Y.

 Trinidad, B.W.I. Howell, John M.380 Victoria Ave.Westmount, Que.Hudon, Frederick Valmore.Richmond, Que.Jeffrey, Joseph RoydenArnprior, Ont.Johnson, Hobart Whitney.Soperton, Ont.Johnston, Douglas ButterworthAthens, Ont.Jones, Thomas Meredith100 Jones Blvd.Victoria, B.C.Kaufman, Moses RalphKaufman, Moses Ralph637 St. André St.Montreal, Que.Hemmingford, Que.Kelly, Edward P.Buckingham, Que.Kelly, Frederick Gerard.130 Fitzroy St.Charlottetown, P.E.I.

\*Partial.

<sup>†</sup>Double Course.

# NAME

# STREET ADDRESS

City or Town

	A	and the second sec
Kelly, William Moore Kershaw, Edmund Vanston		Huntingdon, Que.
Vanker Edward Vanston	016 Duccoll St	Victoria B.C.
Kersnaw, Edmund Vanston	910 Russell St	Ottoma Ont
Langlois Albert	659 Cumberland St	Ottawa, Ont.
Lanthian John Cavil	1170 St Antoine Bd	Montreal, Que.
Langlois, Albert. Lanthier, John Cecil	11/9 Db. 200000 100	Charlettotown DEI
Lantz, Joseph Pulsifer		Charlottetown, 1.12.1.
Lawson, John Walter		Eganville, Ont.
La Zarta Lagrand Clarence	R R No 2	Iroquois, Ont.
Lazerte, Leonard Olarence	10.10. 110. 2	Closcow Sta Ont
Lindsay, John Ralston		Chasgow Dear, One.
Little, Lawrence Peniston	201 McLeod St	Ottawa, Ont.
Lloyd Milton Sills		Rocanville, Sask.
Lioyu, million onio	16 Lombort Ave	Chelsea, Mass.
Lantz, Joseph Pulsifer. Lawson, John Walter LaZerte, Leonard Clarence. Lindsay, John Ralston Little, Lawrence Peniston. Lloyd, Milton Sills Lynn, Leo J McBride, William Haskett	10 Lamber 6 Ave	Came Ont
McBride, William Haskett		Carp, One.
MagDarmot Pembroke Noel	4932 Western Ave	Westmount, Que.
MacDermid, Lynden Elwood MacDermot, Pembroke Noel MacDonald, Aeldred Alexander	1002 110500111 1110	Howro Boucher NS
MacDonald, Aeldred Alexander		Tavic Doucher, 196
Macdonald, Daniel A Macdonald, Donald Andrew		Fraser's Millis, N.D.
Macdonald Donald Andrew	Scarth St	Regina, Sask.
McDonald, Donald John Macdonald, Sutherland MacDonnell, Wilfred George	Archibald Ave	North Sydney, N.S.
McDonald, Donald John	Archibald Ave	Worth Sydney, Itist
Macdonald, Sutherland		vankleek Hill, Ollo.
MacDonnell Wilfred George	111 Hilton Ave	Toronto, Ont.
McElligott, Dominic C		Ecanville, Ont.
MCEnigott, Dominic C		Antigonich NS
MacGillivray, Donald Joseph.		Antigonish, 14.D.
McGinn, William John		North Wiltshire,
M. Cuine John A		Cornwall Ont.
McGuire, John A †McIntosh, Clarence Alexander	10 D 1 4	Ottoma Ont
<sup>†</sup> McIntosh, Clarence Alexander	.43 Park Ave	Ottawa, Ont.
MaIntoch William Taylor		vankleek mm, Ont.
MacKeen, Robert Arthur H		Rothesay, N.B.
Mackeen, Robert Arthur II		Sudhum Ont
†McKinnon, James Donald		Suabary, Onc.
McLauchlin, Lucien Gould McLean, Ernest Matthew		Truro, N.S.
McLoon Ernest Matthew	31 Frederick St.	Port of Spain,
McLean, Enness materiew	. of frederica, setter.	Trinidad, B.W.I.
		Thindad, Dinit
McLellan, Allister Matheson McVey, John Aloysius		Tatamagouche, N.S.
McVey John Aloysius	187 Clemow Ave	Ottawa, Ont.
Major, Emile Joseph Sylvain	19 Friel St	Ottawa Ont.
Major, Emile Joseph Sylvan	. 12 Filei Du	Dlind Diron Ont
Malley, John Dorion		. Blind River, Onc.
Malley, John Dorion Marcotte, Edward G	.26 Jackson St.	. Rochester, N.H.
Marsh, John Paul	121 Grand Allée	Quebec Que.
Marsh, John Faul	1000 M	Wastmount Que
Massie, Redvers Albert	.4038 Tupper St	. Westmount, Que.
Middlaton I wall Archibald		
Millieton, Lyan Michibard		Lachute Mills, Que.
	61 Combridge St	Lachute Mills, Que.
Middleton, William	61 Cambridge St	Victoria, B.C.
	.61 Cambridge St	Victoria, B.C.
Mitchell Arnold Wilberforce	.61 Cambridge St .359 Cumberland St .368 Victoria Ave	Victoria, B.C. Ottawa, Ont. St. Lambert, Que.
Mitchell, Arnold Wilberforce	61 Cambridge St. 359 Cumberland St. 368 Victoria Ave	Victoria, B.C. Ottawa, Ont. St. Lambert, Que.
Mitchell, Arnold Wilberforce	61 Cambridge St. 359 Cumberland St. 368 Victoria Ave	Victoria, B.C. Ottawa, Ont. St. Lambert, Que.
Mitchell, Arnold Wilberforce	61 Cambridge St. 359 Cumberland St. 368 Victoria Ave	Victoria, B.C. Ottawa, Ont. St. Lambert, Que.
Mitchell, Arnold Wilberforce	61 Cambridge St. 359 Cumberland St. 368 Victoria Ave	Victoria, B.C. Ottawa, Ont. St. Lambert, Que.
Mitchell, Arnold Wilberforce	61 Cambridge St. 359 Cumberland St. 368 Victoria Ave	Victoria, B.C. Ottawa, Ont. St. Lambert, Que.
Mitchell, Arnold Wilberforce	61 Cambridge St. 359 Cumberland St. 368 Victoria Ave	Victoria, B.C. Ottawa, Ont. St. Lambert, Que.
Mitchell, Arnold Wilberforce	61 Cambridge St. 359 Cumberland St. 368 Victoria Ave	Victoria, B.C. Ottawa, Ont. St. Lambert, Que.
Mirchell, Arnold Wilberforce. Mooney, Fraser Dudley. Morris, Geoffrey Marshall Morris, George Douglas. Morrissey, Richard Herbert. Murray, David Fraser. Nach Arthur B	61 Cambridge St. 359 Cumberland St. 368 Victoria Ave 80 Askin St. 186 Joseph St. 1005 Pemberton Road	Victoria, B.C. Ottawa, Ont. St. Lambert, Que. Stellarton, N.S. Windsor, N.S. London, Ont. Newcastle, N.B. Victoria, B.C. Victoria, B.C.
Mitchell, Arnold Wilberforce. Mooney, Fraser Dudley Morris, Geoffrey Marshall. Morris George Douglas. Morrissey, Richard Herbert. Murray, David Fraser Nash, Arthur B.	61 Cambridge St. 359 Cumberland St. 368 Victoria Ave 80 Askin St. 186 Joseph St. 1005 Pemberton Road. 49 Young St.	Victoria, B.C. Ottawa, Ont. St. Lambert, Que. Stellarton, N.S. Windsor, N.S. London, Ont. Newcastle, N.B. Victoria, B.C. Victoria, B.C. Hamilton, Ont.
Mitchell, Arnold Wilberforce. Mooney, Fraser Dudley Morris, Geoffrey Marshall. Morris George Douglas. Morrissey, Richard Herbert. Murray, David Fraser Nash, Arthur B.	61 Cambridge St. 359 Cumberland St. 368 Victoria Ave 80 Askin St. 186 Joseph St. 1005 Pemberton Road. 49 Young St.	Victoria, B.C. Ottawa, Ont. St. Lambert, Que. Stellarton, N.S. Windsor, N.S. London, Ont. Newcastle, N.B. Victoria, B.C. Victoria, B.C. Hamilton, Ont.
Mitchell, Arnold Wilberforce. Mooney, Fraser Dudley Morris, Geoffrey Marshall. Morris George Douglas. Morrissey, Richard Herbert. Murray, David Fraser Nash, Arthur B.	61 Cambridge St. 359 Cumberland St. 368 Victoria Ave 80 Askin St. 186 Joseph St. 1005 Pemberton Road. 49 Young St.	Victoria, B.C. Ottawa, Ont. St. Lambert, Que. Stellarton, N.S. Windsor, N.S. London, Ont. Newcastle, N.B. Victoria, B.C. Victoria, B.C. Hamilton, Ont.
Mirchell, Arnold Wilberforce. Mooney, Fraser Dudley. Morris, Geoffrey Marshall Morris, George Douglas. Morrissey, Richard Herbert Murray, David Fraser. Nash, Arthur B. Nelson, Harry Freas. Nelson, Julius.	61 Cambridge St. 359 Cumberland St. 368 Victoria Ave 80 Askin St. 186 Joseph St. 1005 Pemberton Road. 49 Young St. 11113, 88th Avenue. 1385 Delorminer Ave	Victoria, B.C. Ottawa, Ont. St. Lambert, Que. Stellarton, N.S. Windsor, N.S. London, Ont. Newcastle, N.B. Victoria, B.C. Victoria, B.C. Hamilton, Ont. Edmonton, Alta. Montreal Que.
Mirchell, Arnold Wilberforce. Mooney, Fraser Dudley. Morris, Geoffrey Marshall. Morris, George Douglas. Morrissey, Richard Herbert. Murray, David Fraser. Nash, Arthur B. Nelson, Harry Freas. Nelson, Julius. Noonan, Wilfred James V.	61 Cambridge St. 359 Cumberland St. 368 Victoria Ave 80 Askin St. 186 Joseph St. 1005 Pemberton Road. 49 Young St. 11113, 88th Avenue. 1385 Delorimier Ave.	Victoria, B.C. Ottawa, Ont. St. Lambert, Que. Stellarton, N.S. Windsor, N.S. London, Ont. Newcastle, N.B. Victoria, B.C. Victoria, B.C. Hamilton, Ont. Edmonton, Alta. Montreal, Que. Ancaster, Ont.
Mirchell, Arnold Wilberforce. Mooney, Fraser Dudley. Morris, Geoffrey Marshall. Morris, George Douglas. Morrissey, Richard Herbert. Murray, David Fraser. Nash, Arthur B. Nelson, Harry Freas. Nelson, Julius. Noonan, Wilfred James V.	61 Cambridge St. 359 Cumberland St. 368 Victoria Ave 80 Askin St. 186 Joseph St. 1005 Pemberton Road. 49 Young St. 11113, 88th Avenue. 1385 Delorimier Ave.	Victoria, B.C. Ottawa, Ont. St. Lambert, Que. Stellarton, N.S. Windsor, N.S. London, Ont. Newcastle, N.B. Victoria, B.C. Victoria, B.C. Hamilton, Ont. Edmonton, Alta. Montreal, Que. Ancaster, Ont.
Mirchell, Arnold Wilberforce. Mooney, Fraser Dudley. Morris, Geoffrey Marshall. Morris, George Douglas. Morrissey, Richard Herbert. Murray, David Fraser. Nash, Arthur B. Nelson, Harry Freas. Nelson, Julius. Noonan, Wilfred James V.	61 Cambridge St. 359 Cumberland St. 368 Victoria Ave 80 Askin St. 186 Joseph St. 1005 Pemberton Road. 49 Young St. 11113, 88th Avenue. 1385 Delorimier Ave.	Victoria, B.C. Ottawa, Ont. St. Lambert, Que. Stellarton, N.S. Windsor, N.S. London, Ont. Newcastle, N.B. Victoria, B.C. Victoria, B.C. Hamilton, Ont. Edmonton, Alta. Montreal, Que. Ancaster, Ont.
Mirchell, Arnold Wilberforce. Mooney, Fraser Dudley. Morris, Geoffrey Marshall Morris, George Douglas. Morrissey, Richard Herbert. Murray, David Fraser. Nash, Arthur B. Nelson, Harry Freas. Nelson, Julius. Noonan, Wilfred James V. Olmsted, John Gerald Maurice Peters, Warren Haliburton.	61 Cambridge St. 359 Cumberland St. 368 Victoria Ave 80 Askin St. 186 Joseph St. 1005 Pemberton Road. 49 Young St. 11113, 88th Avenue. 1385 Delorimier Ave. 28 Mitchell Ave	Victoria, B.C. Ottawa, Ont. St. Lambert, Que. Stellarton, N.S. London, Ont. Newcastle, N.B. Victoria, B.C. Victoria, B.C. Hamilton, Ont. Edmonton, Alta. Montreal, Que. Ancaster, Ont. Glace Bay, N.S. Toronto, Ont.
Mirchell, Arnold Wilberforce. Mooney, Fraser Dudley. Morris, Geoffrey Marshall Morris, George Douglas Morrissey, Richard Herbert. Murray, David Fraser. Nash, Arthur B Nelson, Harry Freas. Nelson, Julius. Noonan, Wilfred James V Olmsted, John Gerald Maurice Peters, Warren Haliburton Petersen, Swara Elias.	61 Cambridge St. 359 Cumberland St. 368 Victoria Ave 80 Askin St. 186 Joseph St. 1005 Pemberton Road. 49 Young St. 11113, 88th Avenue. 1385 Delorimier Ave. 28 Mitchell Ave. 15 Arnold Road	Victoria, B.C. Ottawa, Ont. St. Lambert, Que. Stellarton, N.S. Windsor, N.S. London, Ont. Newcastle, N.B. Victoria, B.C. Hamilton, Ont. Edmonton, Alta. Montreal, Que. Ancaster, Ont. Glace Bay, N.S. Toronto, Ont. Kingston, Jamaica.
Mirchell, Arnold Wilberforce. Mooney, Fraser Dudley. Morris, Geoffrey Marshall. Morris, George Douglas. Morrissey, Richard Herbert. Murray, David Fraser. Nash, Arthur B. Nelson, Harry Freas. Nelson, Julius. Noonan, Wilfred James V.	61 Cambridge St. 359 Cumberland St. 368 Victoria Ave 80 Askin St. 186 Joseph St. 1005 Pemberton Road. 49 Young St. 11113, 88th Avenue. 1385 Delorimier Ave. 28 Mitchell Ave. 15 Arnold Road	Victoria, B.C. Ottawa, Ont. St. Lambert, Que. Stellarton, N.S. Windsor, N.S. London, Ont. Newcastle, N.B. Victoria, B.C. Hamilton, Ont. Edmonton, Alta. Montreal, Que. Ancaster, Ont. Glace Bay, N.S. Toronto, Ont. Kingston, Jamaica.

†Double Course.

#### NAME

## STREET ADDRESS

## CITY OR TOWN

 Presner, Jack Copple
 1497 St. Urbain St.
 Montreal, Que.

 Pretty, Henry Gurth
 141 Hunter St. East.
 Peterboro, Ont.

 \*Pugsley, Douglas Russell
 137 Paradise Row
 St. John, N.B.

 Pullar, William C
 8 East Queen St.
 Kingston, Jamaica.

 Quackenbush, James Gordon
 143 Nepean St.
 Ottawa, Ont.

 †Rabinovitch, Jacob
 213 Laval Ave.
 Montreal, Que.

 Rabinovitch, Phineas
 213 Laval Ave.
 Montreal, Que.

 Ramjohn, Mohamed Rahaman.73 Cipiro St.
 San Fernando,
 Trinidad. B.W.I.

 Habinovitch, Jacob
 213 Laval Ave
 Montreal, Que.

 Rabinovitch, Phineas
 213 Laval Ave
 Montreal, Que.

 Ramjohn, Mohamed Rahaman.73 Cipiro St
 San Fernando,

 Trinidad, B.W.I.
 Trinidad, B.W.I.

 Ransay, Clyde Neville
 90 Undereliffe Road
 Montreal, Que.

 Reid, Herbert Gordon
 Broadway St.
 Winnipee, Man.

 Richardson, Eric Carleton
 21 Pine St.
 Brockville, Ont.

 Rivenovich, Louis
 1877 St. Urbain St.
 Montreal, Que.

 Roach, Robert Dickson.
 977 St. Catherine St.
 Montreal, Que.

 Rosenbaum, Saul
 475 St. James St.
 Montreal, Que.

 Ross, Hugh Graham
 414 Bourgeois St.
 Montreal, Que.

 Ross, James B.
 414 Bourgeois St.
 Montreal, Que.

 Ross, James B.
 433 Rideau St.
 Ottawa, Ont.

 Rusoisky, Harry.
 604a Henri Julien Ave.
 Montreal, Que.

 Roant, Thomas Everett.
 682 Charlevoix St.
 Montreal, Que.

 Schleifstein, Joseph Isaac.
 1049 St. Urbain St.
 Montreal, Que.

 Schleifstein, Joseph Isaac.
 1049 St. Urbain St.
 Montreal, Que.

 Schleifstein, Joseph Isaac.
 1049 St. Urbain St.

 Thurber, Donald Stuart.
 Millerton, N.D.

 Tidmarsh, Clarence
 Charlottetown, P.

 Johnson, B.A.
 Charlottetown, P.

 Trites, Albert Edward
 Salisbury, N.B.

 Turpel, William Nicholson
 2551 Quadra St.
 Victoria, B.C.

 Urquhart, Robert Glen
 Revelstoke, B.C.
 Bildeford, Me.

 Vallieres, Joseph Leon
 57 Centre St.
 Bildeford, Me.

 Volpe, Emil Alfred
 364 Villeneuve Ave. W.
 Montreal, Que.

 Wade, Robert Simpson
 Renfrew, Ont.
 Renfrew, Ont.

 .....Charlottetown, P.E.I. Wade, Robert Simpson..... 

\*Partial.

†Double Course.

# NAME

# STREET ADDRESS

CITY OR TOWN

TITTT		
Ward, Richard Vance	101 Dufferin St	Moncton, N.B.
Webster Bruce Peck		Lansdowne, Ont.
Webster Leith Hillm	an	Marie, P.E.I.
Wair Coorgo Wesley		Trail, B.C.
White George M	Box 116	Marysville, N.D.
Wiggins Reginald He	ber	Sackville, N.D.
Wight, George Earle.		Montreal, Que.
Zinck, Russell Clark.		Chester, N.S.

# SECOND YEAR

Ackman, Frederic Douglas	. 177 Botsford St	Moncton, N.B.
Acker John Christopher		Halliax, N.D.
*Anderson, Marian	09 Prunewick St W	Fredericton, N.B.
"Anderson, Marian	.92 Drunswick Dt. W	St John NB
Anglin, Ives Maurice		Departford Opt
Apps, Carl O Aylward, Gerald Fitzgerald		Brantiora, Ont.
Avlward, Gerald Fitzgerald	.3809, 8th Street W	Calgary, Alta.
Backer David Russell	1444 Clarke St.	Montreal, Que.
Ballon Harry Clarence	255 Bishop St.	Montreal, Que.
Benger, Manfred Paul	336 Van Norman St	Port Arthur, Ont.
Blumenfeld, Edward Alexander	1012 Clarko St	Montreal Que.
Boon, George Arthur	16 Cuilloumo St	Longueuil Que
Boon, George Arthur	. 10 Guillaume St	Dreakton Mass
Boucher, Pierre A	.20 Clinton Ave	Brockton, Mass.
Boyle, Ernest Sterling		Wallace, N.S.
Britton, Sydney William		Barnstaple, Devon,
		England.
Browne, Leslie Aitchison	.172 Mance St	. Montreal, Que.
Bucklow Francis Joseph		Gloucester JCt., N.D.
Bulger Craig D		Eganville, Ont.
Burke, Hugh Edmund		Little Metis Beach.
Burke, nugn Lamuna	******************************	Que.
Campbell, S. Hardie		Chosley Ont
Campbell, S. Hardie	104 33711 . 1 4	Ottomo Ont
Caron, René Edouard	.194 Wilbrod Ave	. Ottawa, Ont.
Carter, Ralph Harlan	.Box 538	Truro, N.S.
Cochin Martin Francis	clo Sir M P Cashin	St. John S. Mild.
+Center Ervin Alfred	R. R. No. 2	Lachute, Que.
Chan Qui Hin	552 Fisgard St.	Victoria, B.C.
Chatters, Othello Pritchard	620 Olympic Place	.Seattle, Wash.
Chesley, Arthur Sharp	60 Clarendon St	St. John, N.B.
Cohen, Jacob	566 St Dominique St	Montreal Que.
Cook, Maynard Stephen	22 Molaund Arro	Ottown Ont
Cook, Maynard Stephen	.55 Meigund Ave	Montrool Quo
†Coveler, Harry A	.231 St. Lawrence Diva	. Montreat, Que.
Crewson, Arthur Llewellyn Curtis, Edwin Johnston		. Alexandria, Ont.
Curtis, Edwin Johnston	.2406, 5th Avenue W	. Vancouver, B.C.
Lavidson Walter Wellonald.		. INOW COIL, OHU.
Dawson, Martin Henry		.Truro, N.S.
Demaray John Franklin		.Forest, Ont.
Dowd Kenneth Eardley	13 Third Avenue	.Ottawa. Ont.
Druker Maurice Emanuel	113 Garfield Ave	. Detroit, Mich.
DuBerger, René L., B.A	63 King St	Sherbrooke, Que.
Duberger, Rene L., D.R.	R R No 2	Billings' Bridge, Ont.
Duncan, Garfield George Duskes, Emile	09 Dino Avo F	Montroal Que
Duskes, Emile		Class Box NS
Ein, William	1001 Classing by Ct	Westmount Oue
Elder, Herbert Munro		. westmount, Que.
Eldorlin Robert Ewart		Wolfville, N.S.
Engor Norbert	229 Esplanade Ave	Montreal, Que.
+Ereaux Lemuel Price	463 Elm Ave	.Westmount, Que.
+ Derna Ottar Dlain	10 Sooliv St	St John N B
†Everett, Herbert Stewart Fegen, Solomon		.St. Andrews, N.B.
Foren Solomon	12 Marlborough St	Montreal, Que.
1.0gon, Doromon		

\*Partial.

†Double Course.

# STREET ADDRESS CITY OR TOWN

NAMESTREET ADDRESSCITY OR TOWNFeldman, Jacob996 Cadieux St.Montreal, Que.Fineberg, Maxwell414 Clarke AveWestmount, Que.Foster, Joseph Graeme443 McLaren St.Ottawa, Ont.Fraser, William AllanRockland Ave. and St.Charles St.Victoria, B.C.Charles St.Victoria, B.C.Freedman, Newman Barnett.86 Park AveMontreal, Que.German, Leland Erle86 Pine Ave. WMontreal, Que.German, Leland Erle933 (1zth AvenueRegina, Sask.Gibbins, Emma Culross152 Brunswick St.Rochester, N. Y.Gold, Solomon197 Drolet St.Montreal, Que.Goldberg, Louis993 City Hall AveMontreal, Que.Goldberg, Louis993 City Hall AveMontreal, Que.Guber, Arthur Saul1234 Cadieux St.Montreal, Que.Harlon, Ronald Lornec/o Can. Bank of CommerceQuebec, Que.Harwood, William Liddell2064 Hutchison St.Montreal, Que.Hay, James Cecil654 Dallas RoadVictoria, B.C.Heller, Harry442 Henri JulienMontreal, Que.Hill, Emerson Stanley137 McLeod St.Ottawa, Ont.Hume, William Edward15 Montreal St.Sherbrooke, Que.Jackman, Leo J.45 Springdale St.St. John's, Nfd.Jardine, Ingham WrightKensington, P.E.I.Ladysmith, B.C.Jessup, Horace SihlerLadysmith, B.C.Montreal, Que.Johnson, Francis Bell.48 Lorne Ave.Montreal, Que.Johnson, Francis Bell48 Lo Jassup, Horace Sihler. Johnson, Francis Bell. Kearns, Hubert John. Knight, Francis Herbert. Montreal, Que. Kearns, Hubert John. Chesterville, Ont. Knight, Francis Herbert. Guilford, Me. Knowlon, Henry Corey. Korenberg, Samuel. Kutzman, Nathaniel. 1557 St. Lawrence Blvd. Montreal, Que. 

 Kutzman, Natnaniei.
 1557 St. Lawrence Bivd...Montreal, Que.

 Lamoy, Lester Thomas.
 Ausable Forks, N.Y.

 Lax, Abel.
 Hawkesbury, Ont.

 Lewis, Mortimer H.
 520 Plant St.
 Utica, N.Y.

 Lipsey, Hyman.
 486 Strathcona Ave.
 Westmount, Que.

 (Withdrew early in Session)
 120 Charles St.
 St. Jahr, N.P.

 Logan, Herbert L.
 120 Chesley St.
 St. John, N.B.

 †McClure, James Carswell
 Cowansville. Que.

 McDonald, Claude Augustine...201 Agnes St.
 New Westminster.

 McDonald, Ronald Joseph ..... 201 Agnes St..... New Westminster

NAME

B.C. 

 McGill, C. Sherlock.
 B.C.

 McGrand, Frederic Addison...Mouth of Keswick.
 York Co., N.B.

 McGregor, Douglas Urquhart.
 Waterdown, Ont.

 MacIntosh, Donald Smith.
 West River, N.S.

 McLean, Daniel Irving.
 Charlottetown, P.E.I.

 McLeod, Charles E, Jr.
 Box 80.

 Madentosh, Victor Owen.
 59 Morris St.

 Maillard, Edgar Randolph
 1 Frederick St.

 Muir, Harold U.
 Chesley, Ont.

 Marcus, David.
 1074 St.

 Massé, Norman.
 548 St. Denis St.

 Mootteel, St.
 Montreal, Que.

 Mitchell, Samuel Leslie.
 207 Douglas Ave.

 Moodie, George Earl.
 Otter Lake, Que.

 Morgan, George Senkler.
 4173 Western Ave.

 Murray, William Alexander.
 22 Balmont St.

 Morgan, George Conkler.
 22 Balmont St.

 Morgan, George Conkler.
 49 Larch Street.

 Morgan, George Conkler.
 40 Larch Street.

 B.C. 

†Double Course.

### STREET ADDRESS

CITY OR TOWN

NAME	STREET ADDRESS	CITY OR IOWN
Parlow, Allan Laurence. Parsons, Cecil J. F. †Petersen, James Norman.	411 McLaren St	Ottawa, Ont. Harbor Grace, Nfld.
†Petersen, James Norman	1214a Des Erables St	Montreal, Que.
Petrie, Edward Archibald Pinbey John Wolfenden	3 Leonard Ave	Hudson Heights, Que.
Petrie, Edward Archibald Pinhey, John Wolfenden Quinn, John Gladstone	.352 Nepean St	.Ottawa, Ont.
Robertson, James Ritchie Robillard, Antoine Benjamin	262 Laganchetiere St. P.	Montreat, Que.
Dobillard Matthew Joseph	195 Nicholas St.	Ottawa, Ont.
Deser hauna Wilfrod	475 St. James St.	Montreal, Que.
Rowan, Arthur Alexander		
Rubenstein Charles S	823 Almond St.	.Syracuse, N.Y.
+ Pubin Soul	68 Colonial Ave	Montreal, Que.
Rutenberg, Leo Scharfe, Ernest E	.1008 St. Urbain St	Billings' Bridge, Ont.
Schiltz Frances Helen	307 Ninth Street	Saskatoon, Bask.
Schultz Charles	191 Colonial Ave	Montreal, Que.
Schurman, Charles Good Segal, Benjamin Wolf		Wolfville, N.S.
Solgor Juliug	1702 Clav Ave	New YORK UILY.
Shover Frank W	95 Canning Street	. Montreal, Que.
Shoots Cooil Clarence		. Massena, N. I.
Sheret, Andrew William †Silver, Philip George	450 Mt Pleasant Ave	Westmount, Que.
Silverberg, Arvid C		.Karsnas, Finland.
Silverberg, Arvid C Skinner, George Ferguson	.178 Queen St	St. John, N.B.
Skinner, William Kerr Smallman, Ralph Benjamin,	76 Willowdale Ave	Outremont, Que.
$(\mathbf{D} \mathbf{Q}_{-})$		
Smith, Herbert Gordon Smith, John Walter. Smith, Walton Harold Young	. 205 Rockland Road	St. John, N.B.
Smith, John Walter	904 Taxon St	Ottawa Ont
+Comonillo Wolloop Bortrom		. DIISIOI. N.D.
Spiro Charles		New Glasgow, N.D.
†Tarshis, Anny Thompson, Hugh Herbert	Box 56	Gananoque, Ont.
†Vaughan, James M		
Wallace, Frank Wilbert	P.O. Box 622	Nelson, B.C.
Watson, Charles Arthur Waxman, Abe	1999 Clarke St	Montreal, Que.
Whiting Dichard Charles	622 Belmont Ave. W	Montreal, Que.
Wilkie, Archibald Leslie, Wilson, George Andrew		Antigonish, N.S.
Wilson, George Andrew	R.R. No. 2	Mars, Ont.

### THIRD YEAR

Adams, Earl Hay	Pointe Claire, Que.
Allen, Harold McClennan 108 Carlton St	Toronto, Ont.
Archibald, William Charles	Wolfville, N.S.
Arthur, Wilfrid Stewart.	Sudbury Ont.
Bassen, Edward Joseph	St John N B
Bassen, Edward Joseph 201 King St. East	St John NB
Bassen, Joseph Murray	Westmount Ous
Beall, Franklin George	westmount, Que.
Behan, Edmund Joseph	. Pembroke, Ont.
Romiamin Ben 455 Clarke St.	Montreal, Que.
Blampin, Winired Alice 139a Stanley St	Montreal, Que.
Diampin, winned Ano	

†Double Course.

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# STREET ADDRESS CITY OR TOWN

NAMESTREET ADDRESSCITY OR TOWNBoyd, Jessie Marion4253 Dorchester St.Westmount, Que.Breitman, Harry B273 Laval Ave.Montreal, Que.Brooks, W. ArthurIndian Head, Sask.Brouse, Ivan Edwin505 Birks BuildingVancouver, B.C.Brown, Trevor GoffMelville, Sask.Buckman, Charles174 Laval Ave.Montreal, Que.Bussière, Henry Charles114 St. Famille St.Montreal, Que.Clark, Stanley KillamLawasack, Sask.Coler, Eugene Seeley297 Prince Arthur St. W. Montreal, Que.Copeland, John GardnerCornwall, Ont.Davis, Aaron32 Notre Dame St.Lachine, Que.Dickey, Ernest,Perdue, Sask.Donnelly, Russell H.St. John, N.B.Druckman, Karl.190 Pine Ave. E.Montreal, Que.Feigenbaum, Benjamin1058 City Hall Ave.Montreal, Que.Feigenbaum, Benjamin1058 City Hall Ave.Kenogami, Que.Fuhmann, Charles FredericKenogami, Que.St. John's, Nfid.Gardner, Alexander John356 Notre Dame St.Montreal, Que. 

 Fox, Charles B.
 St. John S. Wild.

 Gardner, Alexander John
 Cornwall, Ont.

 George, Dixon McDonald
 356 Notre Dame St. W... Montreal, Que.

 Goldman, Solomon
 490 Wilson Ave
 Montreal, Que.

 Gold, Moses Israel
 1185 St. Lawrence Blvd... Montreal, Que.

 Gordon, Donald Cameron
 208 Bay St.
 Ottawa, Ont.

 Griffin, Charles Norman
 Paradise, Montserrat, B.W.I.

NAME

N.S.

 Klein, David
 180 St. Joseph Blvd. W.
 Montreal, Que.

 Laishley, Wilfrid
 228 Waverly St.
 Ottawa, Ont.

 Levin, Tom
 1352a Cadieux St.
 Montreal, Que.

 Livshin, Nathan.
 110 Monroe St.
 Syracuse, N.Y.

 \*McCaw, Isabel C.
 152 Mance St.
 Montreal, Que.

 McCormick, Robert Roy.
 Arnprior, Ont.

 Macdonald, Douglas Ogilvie.
 Sutton, Que.

 McGregor, John
 1082 Cloverdale Ave.
 Saanich, B.C.

 McIntosh, John Forbes.
 43 Park Ave.
 Ottawa, Ont.

 MacLellan, Donald Francis.
 Glenville, N.S.
 Strutton, S 

\*Partial.

### STREET ADDRESS

### CITY OR TOWN

1 TIMAS		
Parke, George Kenneth Percival, Eleanor Susan Potter, Carlyle Thornton Robertson, George Henry		
Rose, William Harold Rosenfeld, Joseph E Ross, Alexander Grant. Rothschild, David. Ryan, John Thomas. Schmidt, Otto Victor. Shapiro, Charles Engleson. Sharp, Harold Hayes Starson, Walter Thomas, B.A. Summers, Russel Arthur. Usher, Barney David. Watson, Edgar Robert. Wells, Thomas James. Werd, Fort Bush.	74 Morris St. 323 Grosvenor Ave. 214 Glencoe St. 4095 Tupper St. 477 Wellington St. 3 Fulton Ave. 1614 Mance St. 970 Tupper St. P.O. Box 85.	Morrisburg, Ont. Battle Creek, Mich. Halifax, N.S. Westmount, Que. Montreal West, Que. Ottawa, Ont. Sussex, N.B. Sherbrooke, Que. Montreal, Que. Montreal, Que. Hawkesbury, Ont. Rock Island, Que. Avonmore, Ont. Nelson, B.C.
Wittenborg, Samuel Simon	Frontenac St	

### FOURTH YEAR

Aarons, Morton Joseph	510 Madison St.	
Almond Walton W		. Albario, Alba.
Armour, John Campbell	P P No 3	Perth. Ont.
Armour, John Campbell		Billings' Bridge Ont.
Beamish, Oswald Foster		Transport DE I
Dall Errorett Hand		ITVOR. I.L.I.
Downstoin Folix BA	1659 Mance St	. Montreal, Que.
Dolt William	Oueen's Road	. St. John S. Milu.
*Dournot Dorgio C	411 Mance St	. Montreat, Que.
Bristol, John LeVarrie		Grenada, B.W.I.
Caldwell, Alexander Lorne		Loverna, Sask.
Caldwell, Alexander Lorne	TOA Wildon Arro	Outremont Que
Candlish, Henry Maiben		Mantroal Que
Cassidy, Gordon James		Montreat, Que.
Chandlen Edward Bronner	26 Rotstord St	. WIORCION, IN.D.
Collins, George A.	107 Carey Ave	Wilkes-Barre, Pa.
(With drops contrain coccon)		
Cooder Howard Russell	201 Esplanade Ave	Montreal, Que.
Corbott John Robert	10 975 12bth Street	. Eumonon, Alta.
Crewson, Walter Lionel		Alexandria, Ont.
Cully, James H		Pembroke Ont
Cully, James H	47 Tana 64	Albany NV
Daley, Mark Joseph		Westmount Que
Dawson, Howard LeRossigno	121 Bellevue Ave	Westmount, Que.
Dorrongo Wallace John	11.516, 102nd Avenue	Edinoniton, Alta.
Dowdall Cooffroy Francis		Almonte, Ont.
DuVornot Edward ()liver		Digby, 14.0.
Eakin, William Wilson		. Quebec. Que.
Eliasoph, Benjamin Emerson, C. Leonard	210 Guilford St	St. John West, N.B.
Field, Thomas Harold	5610 Jagnor Avo	Edmonton Alta
Field, Thomas Harold	3010 Jasper Ave	Mottowo Ont
Field, Thomas Harold Fink, Charles Telesphore Fish, Frank Hamilton	Conto del Change NT W	Colora Alto
Fish, Frank Hamilton		Calgary, Alta.
Fish, Frank Hamilton Fournier, Dudley Freedman, Morris		Sudbury, Ont.
Freedman, Morris	749a City Hall Ave	Montreal, Que.
a 1 Tanah Transa Drownol		. FULLEISIII. N.D.
Greenberg, Moses Gross, Harry S	220 Pine Ave W.	Montreal, Que.
Gross, Harry S.		Vankleek Hill Ont
Harkin, George Herbert		vanalook IIII, One.

\*Partial.

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NAME

NAME	STREET ADDRESS	CITY OR TOWN
Hawthorne, Allan Blackall	316 Grosvenor Ave	Westmount Que
HawGorne, Allan Blackall. Heinbecker, Peter Henderson, Egbert F. Holling, Stanley Arnold. Hooper, Harold Smith. Hornbeck, Charles Sahler. Humphreys, John Clarles. Hutchison, Keith Ogilvie. Jamieson, Wm. Dawson Stuart Jones, Francis Edward. Kearns, P. J.		Listowel Ont
Henderson, Egbert F	162 Prospect St	Hamilton Ont
Holling, Stanley Arnold	48 Arlington Ave	Westmount Que
Hooper, Harold Smith	. 10 1111111111111011 1110	Brownsburg Que.
Hornbeck, Charles Sahler	37 Wall St	Kingston N V
Humphreys John Clarles		Kinburn Ont
Hutchison Keith Ogilvie	354 MacKay St	Montroal Que
Jamieson, Wm Dawson Stuart	macray St	Clapham Que.
Jones, Francis Edward	104 Henderson Ave	Ottown Ont
Kearns, P. J.	120 Fourth Ave	Ottawa, Ont.
Keeping, B.C.	. 125 Four on Ave	Murray Harbour
		P.E
Kenning, Stuart Guthrie	1503 Belcher St	Victoria BC
Kinsman, Reginald Price	. 1000 Detener St	Waterwille King's C
Lally, Louis Michael John Lande, Joseph	312 Chanal St	Ottomo Ont
Lande Joseph	1060 Joanno Manco St	Montreal Oue
Lann Victor P	D D No 5	Canton, Onto
Lapp, Victor R. Learoyd, Douglas Rainsford Levitt, Abel.	96 Dolph St	Cobourg, Ont.
Levitt Abal	.20 Kalph St	North Base Ort
Levill, Abel	••••••	North Bay, Ont.
Lockhart, James R McBride, Clifford D McCaffrey, Lawrence Edward.	10 790 91-4 4	Bristol, N.B.
McCoffront Lorenza Educat	.10,730, 81st Ave	.S. Edmonton, Alta.
McCallrey, Lawrence Edward.	********	Ormstown, Que.
McDonald, John O		
McGillivray, Alexander Malcolm	DDN	D 11 11 0 1
Malcolm	. R.R. No. 1	Dalkeith, Ont.
McKee, William Boyd Malamud, William Malo, Robert Florent.		Rossburn, Man.
Malamud, William	. 1508 Esplanade Ave	Montreal, Que.
Malo, Robert Florent	• • • • • • • • • • • • • • • • • • • •	Sudbury, Ont.
Manning, Onnon Edgar		Magog Une.
Mapplebeck, Thomas Eric	• • • • • • • • • • • • • • • • • • • •	Rochester, N.H.
Mulloy, John Knox	• • • • • • • • • • • • • • • • • • • •	Wetaskiwin, Alta.
Murray, John Stewart Ofiesh, Kanaan		River John, N.S.
Offesh, Kanaan	.444 Lagauchetiere St. E	Montreal, Que.
Orobko, John. Palmer, John Hammond		Chamberlain, Sask.
Palmer, John Hammond		. Gagetown, N.B.
Paradis, Charles O Parkins, Gerald Adams		Bessemer, Mich.
Parkins, Gerald Adams	.828 University St	Montreal, Que.
Patterson, Robert Earl		Merigomish, N.S.
Patterson, Robert Earl. Pendrigh, Robert Murray Planche, Lancelot Stuart.	.69 Mecklenburg St	.St. John, N.B.
Planche, Lancelot Stuart		Cookshire, Que.
Porter, William Arthur		Yarmouth, N.S.
Porter, William Arthur. Raftery, Charles Raymond Riddell, Arthur Ezra Robillard, John Joseph, B.A	.7 Bishop St	Montreal, Que.
Riddell, Arthur Ezra		Morrisburg, Ont.
Robillard, John Joseph, B.A	.195 Nicholas St	Ottawa, Ont.
Ross, Charles Brown, B.A Ross, F. Dudley E Ryan, Eric James		Lucan, Ont.
Ross, F. Dudley E	.791 University St	Montreal, Que.
Ryan, Eric James	.4721 Western Ave	Westmount, Que.
Scherzer, Morris. Scott, John William. Seriver, Walter de Mouilpied Silverman, Benjamin.	.220 Villeneuve St. W	Montreal, Que.
Scott, John William	.10,217, 107th Street	Edmonton, Alta.
Scriver, Walter de Mouilpied	.4425 St. Catherine St	Westmount, Que.
Silverman, Benjamin	.745 City Hall Ave	Montreal, Que.
Smith, Ebenezer Knox Smith, Herbert Bryant	. 1825 Brandon Hill	Knoxville, Tenn.
Smith, Herbert Bryant	.64 Montgomery St	Gloversville, N.Y.
Smith, James Wallace Hepburn Stewart, Charles Conacher	n.1569 Mance St	Montreal, Que.
Stewart, Charles Conacher	. Kincarrathie Crescent	Perth, Scotland.
Strasberg, Alex	.674 City Hall Ave	Montreal, Que.
Strean, George	.740 Notre Dame St. W	Montreal, Que.
Strasberg, Alex Strasberg, Alex Tennant, Percy Stuart		Vernon, B.C.

### 381

.E.I.

s Co.,

302		
NAME	STREET ADDRESS	CITY OR TOWN
Thompson, Eustace Edmund		
Thompson, Gordon Edward Trefry, Harold Scott Tremble, George Edward Usher, Saul Julius Valentine, John Baptist. Walters, Lawrence John Walton, Roy Atkinson	423 Grosvenor Ave. .970 Tupper St. .145 Besserer St. .7 Sophia St.	Montreal, Que. Montreal, Que. Ottawa, Ont. Ottawa, Ont. Fort Saskatchewan, Alta.
Whitcomb, Harold Austin Whiting, Harry St. John Wyseman, Roderick Randolph (Withdraw Feb. 20, 1920)	127 Abbott Ave	Smith's Falls, Ont. Westmount, Que. Trinidad, B.W.I.
(Withdrew Feb. 20, 1920) Young, Morley Alphonso R	.11,828, 94th Street	Edmonton, Alta.
	FIFTH YEAR	
Sector Seld(a) generally		Turnen Laka Ist
Ainsley, Harry Bryson		. Tupper Lake Jct., N.Y.
Baltzan, David Mortimer Beattie, William Walter, B.A Branch, Edmund Arnold Grey	.212, 28th Street W .309 Stanley St	Saskatoon, Sask. Montreal, Que. St. John's, Antigua, B.W.I
Brow, George Raymond Brown, H. Stanley Cahalan, Richard Edward Campbell, H. Casselman, Hubert Haldane L Cassidy, Halton Creighton Coulson, Robert Berry McAllai Duffy, Joseph Leonard Eaton, Carl Margeson. Ellis, Harold Lloyd Facey, Frederick Duncan. Facey, Frederick Duncan. Farmer, Vincent Foley, Timothy Francis J. Fraser, Alex. A. Gilhooly, Joseph P. Gillanders, Henry Edwin, B.A. Goodrich, Blynn Orville. Gordon, John Keith, B.A.	.88 Upper Prince St 100 Orange St 272 Dorchester St. W. ee 383a Aylwin Ave n.538 Grosvenor Ave 404 Mance St. 222 Powell Ave 	Charlottetown, P.E.I. Cornwall, Ont. Wyandotte, Mich. Montreal, Que. Winchester, Ont. Montreal, Que. Montreal, Que. Truro, N.S. St. Vincent, B.W.I. Millet, Alberta. Vankleek Hill, Ont. Glencar, Caragh Lake, Co. Kerry, Ireland. Lakefield, Ont. Ottawa, Ont. Lemesurier, Que. Skowhegan, Me. Winnipeg, Man.
Henderson, Marshall Watt Heney, Vincent Paul. Kramer, Raymond Walter Levitt Nathan Little, George Douglas Lozinsky, Ezra MacDougall, James Alexander McEuen, Charles Stuart McLeod, Roderick Alexander Markson, Moses Miller, Louis Albert Montgomery, Lorne Cuthbert Morte, Herman Moyse, Manole Don Notkin, Louis J. Notkin, Meyers	<ul> <li>321 Chapel St.</li> <li>1040 Michigan Ave.</li> <li>600 Rockland Ave.</li> <li>1148 St. Urbain St.</li> <li>43 Grosvenor Apts., Sherbrooke St. W.</li> <li>189 Villeneuve St. W.</li> <li>9621, 107th Avenue.</li> <li>933 Dorion St.</li> <li>140 Cherrier St.</li> </ul>	Ottawa, Ont. Ottawa, Ont. Guelph, Ont. Detroit, Mich. Outremont, Que. Montreal, Que. Grand River, P.E.I. Montreal, Que. Southey, Sask. Alexandria, Ont. Edmonton, Alta. New Richmond, Que. Sion, Valois, Switzerland. Montreal, Que.

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NAME	C	0
INAME	STREET ADDRESS	City or Town
Parsons, Arthur Reginald		
Denne Dil IN I		
Power, Richard M. H		
Ruby, Carl	.199 Esplanade Ave	. Montreal, Que.
Ryan, Clarence A		. Vancouver, B.C.
Segall, Harry Nathan		
Sihler, Charles Harold		
Stuart, William Charles	.929 Willow Ave	. Hoboken, N.J.
Taylor, Clifford Etheridge		.Cobalt. Ont.
Thorne, Lawrence Hubert		Millbrook, Ont.
Trainor, Owen Connolly		Charlottetown, P.E.I.
Trefry, Alfred Wade		Arcadia, Varmouth
		Co., N.S.
Tweedie, William C		. Rockland, Ont.
Vinet, Abraham K	.85 Mt. Royal Ave. W	. Montreal, Que.
Waugh, Theodore Rogers		St Albans Vt.
Williamson, Norman Trenholm	n.143 The Boulevard	Westmount, Que.
Wilson, Percy Milton	.628. 12th Avenue E	Vancouver, B.C.
Young, Arthur W		
	A STREET STREET STREET	

DIPLOMA OF PUBLIC HEALTH

Church, Cyril Klock, M.D	.Aylmer East, Que.
Daw, William Fraser, M.D 4042 Dorchester St. W	
Douglas, Edgar, M.D	.Halifax, N.S.
Goodridge, Leslie Ayres, M.DP.O. Box 79	.Bridgetown, Barbados
Maunsell, Frederick Wyndham,	
M.D	.Eridge, Masterton,
	New Zealand.
Wheaton, H. Ashley, M.D.	.Petitcodiac, N.B.
The second second second second second second second second second second second second second second second se	

### FACULTY OF DENTISTRY

### FIRST YEAR

.88 City Councillors St	
. 371 Sangumet St	. Montreal, Que.
.536 Argyle Ave	. Westmount, Que.
	.Winnipeg, Man.
·	.Salisbury, N.B.
.60a Roberval Ave	Maisonneuve, Que.
.325 Drew St	. Woodstock, Ont.
.45 Montreal St	.Sherbrooke, Que.
.328 Sunnyside Ave	.Ottawa, Ont.
	Ste. Anne de Bellevue.
	Que.
.228 Waverley St.	
2127 Retallack St.	
	. 1042 St. Dominique St. 



### STREET ADDRESS CITY OR TOWN

.

NAME	STREET ADDRESS	CITY OR TOWN
Levy, Albert	57 Sharbrooke St E	Montreal, Que.
Lloyd, Howard George	929 Deerson Arro	Toronto Ont
Lloyd, Howard George	150 St Espello St	Montreal Que
McCarthy, Gerald James	. 150 St. Famille St	Tothbridge Alta
McClenaghan, George Herbert	.604, 12th Street S	Mentreal Que
McDonagh, William Anthony.	.1168 Deforimier Ave	Montreal, Que.
Macmillan, Allan John	. 100 Strathcona Ave	.Ottawa, Ont.
McNally, W. J. Simon.		Barachois, Gaspe, Que.
MacRae Donald		. Maxville, Ont.
Martin, Russell Edwin		. Melbourne, Que.
Martin, Russell Edwin Matthews, Harold Walter	.33 Parade St	.St. John's, Nfld.
(With drown Ion 6th 1020)		
Mills James William		.Ormstown, Que.
Mornitas George	Montreal Gen. Hospital.	Montreal, Que.
Murray Parvin Lamont		.Lord's Cove, N.B.
Murray, Parvin Lamont Phelps, Walter Scaling	1173 Cote St. Antoine Rd.	Westmount, Que.
Dialtal Martin Raid		Cowansville, Que.
Pollack, Joseph	11 Colonial Ave	Montreal, Que.
(With drow Ion 10th 1020)		. montrour, que
(Withdrew Jan. 19th, 1920) Radnay, Frank S.	247 Maitland St	London, Ont.
Ranger, Edgar Felix	902 Northaliffa Ava	Montreal Que
Ranger, Edgar Felix	.205 INOI UICIIIIC AVE	Altorio Alto
Robinson, Leslie Gilbert	AOTE OF TT-1 Of	Montrool Quo
Simon, Morey Leonard	. 1075 St. Urbain St	Montreal, Que.
Singer, Jack	.1093 St. Lawrence Blvd	. Montreal, Que.
Strean, Lyon Peter	.740 Notre Dame St. W	. Montreal, Que.
Sullivan Francis William		. Woodstock, N.D.
Tanner, Charles William	.1917 Angus St	. Regina, Sask.
Valley Arthur	.9 Main St	. WINOOSKI, VL.
Woodman, John Bernard		.Coaticook, Que.
Houthan, oonin Donna arriver		CARLEN CONTRACTOR

### SECOND YEAR

†Bourke, William Manly	42 Lorne Ave	Montreal, Que.
Broderick, J. Vincent	Box 341	Cornwall, Ont.
Burton, Thomas Edwin		Cookshire, Que.
Crowe, Albert Douglas	1041 Second Ave. N.W	Moose Jaw, Sask.
Dworkin, Simon	2226 St. Urbain St	Montreal, Que.
Fels, Gerald Bernard	612 Victoria Ave	Westmount, Que.
Franklin, Gerald	1539 Esplanade Ave	Montreal, Que.
*Ginsburg, Dr. Mary	1111 Amsterdam Ave	New York, N.Y.
Gross, Munsey Edward	1658 Mance St	Montreal, Que.
Grossman Albert	214 Cherrier St.	Montreal, Que.
Harris, Saul.	25 Craig St. W	Montreal, Que.
Kelly, Gordon Percy		Huntingdon, Que.
Lank, Harold Henry	1591 Cadieux St	Montreal, Que.
Rosen, Louis Julius	1630 Jeanne Mance St	Montreal, Que.
Swancesky, Alphonse Augustine	.219. 5th Ave	New Westminster,
i) wanteesky, inphonee ingeseine		B.C.

### THIRD YEAR

Bernfeld, Benjamin	.218 St. Joseph Blvd	
Goldwater, Ephraim (B.A.)	.201 St. Joseph St	Lachine, Que.
Gregson William Ewart	. 1216 Gladstone Ave	
Hale, George M	.104 Grey Ave	Montreal, Que.
Hyams, Bernard Lawrence	.66 St. Famille St.	Montreal, Que.
Kutzman, Ernest Abraham	. 1557 St. Lawrence Blvd	Montreal, Que.
Laurin, Earl	.341 Charlevoix St	Montreal, Que.
Ratner, Michael	726 Colonial Ave	Montreal, Que.
Rosenbaum, Frank Leon	36 Sherbrooke St. W	Montreal, Que.
Russell, Samuel	1440 Gerrard St	Toronto, Ont.
Salomon, Nathan	179 Esplanade Ave	Montreal, Que.
Shklar, Louis.	833 St. Urbain St.	Montreal, Que.
Veith, G. Selwyn	80 Duluth Ave. W	Montreal.Que.
Weiner Judah	1654 Esplanade Ave	Montreal Que.
Weiner Judan	. TUOT L'oplanado II vo	monour, que.

\*Partial. †Double Course.

STREET ADDRESS CITY OR TOWN

### FOURTH YEAR

Adams, Marston Emery	Magog Que
Common, John Stevenson 208 Wilson Ave	Montreal, Que.
Dance, James	Montreal Que
Donnelly, William Thomas 64 Moore St.	St. John N.B.
Eidinger, Louis Samuel	Montreal Que
Fineberg, Joseph	Montreal, Que.
Jenks, Archie Nathaniel	. Coaticook. Que.
Leany, W. Gordon	Franklin Centre Que
MacSween, Sydney Alexander 375 Jeanne Mance St.	Montreal Que
Parker, Chester T	Leeds Village Que
Pesner, Isidore N	. Montreal, Que.
Ratner, Banus	Montreal Que
Schachter, Samuel Joseph 260 Ontario St. E.	Montreal Que
Walsh, Arthur Lambert	Montreal. Que.

### DEPARTMENT OF PHARMACY

Adams, Job Leonard	.781 Bloomfield Ave	.Outremont. Que.
Armstrong, Gordon Dennis	.539 Grand Trunk St.	Montreal, Que.
Boucher, Eugene	3002 St. Hubert St.	Montreal Que
Choquette, Jean Bruno		.St. Pie, Bagot Co.,
Cunningham, Samuel John	.144 Rozel St	. Montreal, Que.
Dubnitsky, Joseph	.31 Butler St	. Montreal, Que.
Fish, Nathan	.335 Esplanade Ave	. Montreal, Que.
Frosst, Eliot Sumpter	.17 Forden Ave	.Westmount, Que.
Gauthier, Conrad		
G		Que.
Gruppy, Georges	.2475 Christophe Colomb	. Montreal, Que.
Hayes, Martin, Jr	.602b City Hall Ave	Montreal, Que.
Hertz, Ella	.2280 Esplanade Ave	Montreal, Que.
Hicks, Nelles V. Hoichberg, Louis		Chesterville, Ont.
Holchberg, Louis.	.351 Berri St	Montreal, Que.
Lambly, Comrie Stewart	.358 Victoria Ave	Westmount, Que.
Lyons, Clarence Owen	.271 Sherbrooke St. W	Montreal, Que.
Lyons, Robert H	.271 Sherbrooke St. W	Montreal, Que.
Magnan, Charles Auguste		St. Elizabeth,
Mourand Hanna Casan		
Maynard, Harry George Miller, Michael Jack	. 2008 Mance St	Montreal, Que.
Mooro Coorro Edward	217 St Logar b Dlad W	Montreal, Que.
Moore, George Edward Musgrove, Annie	.317 St. JOSeph Diva. W	Montreal, Que.
Neamtan, Jessie	1997 St Lawron on Dlyd	Montreal Que.
Pehleman, C. Alex	216 Shutor St	Montreal Que.
Poritsky, Mary	A40 St Urbein St	Montroal Que.
Rosen, Abraham.	861 City Hall Ave	Montreal Que
Saunders, Harold Lynds		Bedford Que
Schacher, Dorothy	846 Cadieux St	Montreal Que
Selsky, David.	184 Laval Ave	Montreal Que
Shuman, Lionel.	1775 St. Urbain St	Montreal, Que,
Simpson, Walter John	413 Esplanade Ave	Montreal, Que.
Singer, Frank L.	.421 Esplanade Ave	Montreal, Que.
Terk, Nathan	. 1048 Clarke St.	Montreal, Que.
Tyrrell, Kenneth	. 15 Plateau St	Montreal, Que.
Weinrauch, E. L	.1199 St. Urbain St	Montreal, Que.

### FACULTY OF LAW

### FIRST YEAR

### STREET ADDRESS

NAME	STREET ADDRESS	City or Town
Abbott, Douglas Charles Amirkhanian, Armen		Lennoxville, Que.
Abbott, Douglas Charles	VMCA	Brantford, Ont.
*Armstrong, Talbert Allen	Ducha Dark	Barbados, B.W.I.
*Armstrong, Talbert Allen	Dusity I alk	Montreal Que
Biggar, Winchester Henry	. Drummond Apts	Monsonville Que
Biggar, Winchester Henry Boright, William Nelson Brisebois, Joseph Adelard	·····	Ottown Ont
Brisebois, Joseph Adelard	.214 St. Patrick St.	Montroal Que
Comon Coonce BA		, riun, Que.
Calan Hanny	14 (Fillesnie St.	BIELDIORC, Que.
Cohen, Lawrence Z	25 Rosemount Ave	Westmount, Que.
C 11' T.L. Malhoumpo	596 Clorko A TO	westmount. Que.
Crestohl, Leo Davide	1655 Esplanade Ave	Montreal, Que,
Crestoni, Leo Davide	1055 Esplanade Ave	Halifax N.S.
Crosby, Robert Richard G.		Sandy Cove Digby
Crowell, Kenneth Lee		Co., N.S.
deLisle, Gaston	100 T T	Westmount Que
deLisle, Gaston	490 Lansdowne Ave	Westmount, Que.
de Lisle, Gaston. de Martigny, F. Camille L Dillon, Wentworth Roy.		St. Jerome, Que.
Dillon, Wentworth Roy	301 Metcalfe St	. Ottawa, Ont.
Dobell, Francis Curzon, B.A. Driscoll, John Russell C	306, 8th Street	Saskatoon, Sask.
Duelegtt Edward Hogan	30 Laval Ave	Montreal, Que.
Gallay, Abraham, B.A Gibson, Samuel Hersey		Port-of-Spain,
Gibson, Samuel Heisey		Trinidad.
Glazer, Louis.	33 Chaboillez Square	. Montreal, Que.
Glazer, Louis		Campbellton, N.B.
-Goodman, Clara Allia	1000 Emlanada Ave	Montreal, Que.
Glazer, Louis. Goodman, Clara Anita Goren, Charles Henry Hague, Harry McLeod	779 Dorehoster St W	Montreal Que.
Hague, Harry McLeod		Westmount Que
Hannen, Francis Raymond	19 Drummond St	Montroal Que
Harold, Joseph James, B.A.		Winteria P.C.
Hartley, Robert Wilfrid		Victoria, B.C.
Harold, Joseph James, B.A Hartley, Robert Wilfrid Hayes, Murray William	16 Windsor Ave	Westmount, Que.
Hayes, Murray William Henry, Wallace Ross		Strathcona, Alta.
Henry, Wallace Ross. Holtham, Bartley Nelson, B Hurtubise, Louis Vincent	.A	Waterville, Que.
Hurtubise Louis Vincent		Ottawa, Ont.
Hutchison, Paul Pheips, B.A Kavanagh, Henry Harold LaBelle, Joseph Arthur W	276 Pine Ave., W	Montreal, Que.
La Dolla Joseph Arthur W	70 Bolton St.	Ottawa, Ont.
LaBelle, Joseph Arthur W Lafleur, Maurice Theodore Lallemand, John C	314 Peel St	Montreal. Que.
Laneur, Maurice Theodore	760 Sherbrooke St. W	Montreal, Que.
Lallemand, John C		Melbourne, Que,
Lallemand, John C. Larivière, Henri Alfred, B.A Lecker, Calla	75 Mt Boxel Ave W	Montreal, Que,
Lecker, Calla.	14 Mumor Avo	Westmount Que.
MacKenzie, Colin		Campbellton, N.B.
McCloskey, Francis L MacKenzie, Colin. McLaughlin, Henry.	266 Marcil Ave	Montreal, Que.
McLaughlin, Henry MacLean, Herbert Bayne, B	.A.127 Drummond St	Montreal, Que.
McLeod Ross		Baddeck, Cape Breton
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\*Partial.

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NAME	STREET ADDRESS	City or Town
*Macnaughton, Duncan	Dundurawe,	
	Arboretum Rd	.Edinburgh, Scotland
Macpherson, John Stewart B. Marcotte, Rosaire		
Marion, Camille Wilfrid A		Rockland Ont
Marion, Camille Wilfrid A Marler, George Carlyle		. Montreal, Que.
Mergler, Joseph Konrad	. 198 Ontario St. E	Montreal, Que.
Murphy, John Austin		Montreal, Que.
Nantel, Eugene Joseph Nicholson, James Gordon	276 Pino Avo W	Montroal Que.
Nolan, Cyril Patrick	72 Albert Hall Mansions	Montreal, Que.
	Hyde Park	.London S.W. 7, Eng.
O'Halloran, Melbourne, B.A		. Montreal, Que.
Orlando, Anthony		. Montreal, Que.
Phelan Charles Chanelle	238 Konsington Are	Bay Roberts, Nnd.
Purcell, John Merritt	.556 Rensington Ave	Huntingdon, Que.
Parsons, Richard A Phelan, Charles Chapelle Purcell, John Merritt Ranger, David Victor	.283 Northcliffe Ave	.Montreal, Que.
(Withdrew early in Session)		
Ritchie, John R., B.A.		Aylmer, Que.
Rivard, Joseph Edward Rochon, Jean Lionel Fernand.	705 St Urbein St	Montreal Que.
*Rubenstein, Mortimer Ross.	4928 Sherbrooke St. W	Westmount, Que.
Ryan, Donald Devlin	.2519 Park Ave	.Montreal, Que.
Savage, Joseph Clifford	.492 Victoria Ave	.St. Lambert, Que.
Solomon, Abraham S		
Steinberg, Benjamin Strickland, Leslie Clyde		
Stuart, Albert William, B.A		Napierville, Que.
Sutherland, William	110 St. Mark St.	Montreal, Que.
(Withdrew Nov., 1919) Terroux, Arthur Maguire		
Terroux, Arthur Maguire Towers, Graham Ford, B.A	.797 University St	. Montreal, Que.
Travers, Tedcastle C		St. Godfroi, Que.
Vanier, Peter Anthony	.861 Dorchester St. W	. Montreal, Que.
Weisman, Ellis Sol		
Wilson, Kenneth A	. Victoria St	.Sherbrooke, Que.
Wolfe, John Patrick Younger, George Robert, B.A.		
rounger, George Robert, D.A.	. 100 Olandeboye Ave	. Hostinount, que.

### SECOND YEAR

Anglin, Gerald GardnierSt. John, N.B.	
Bernard, Rodolph	
Chevalier, AlexandreDrummondville, Q	ue.
Crankshaw, John Edwin451 Claremont Ave Westmount, Que.	
Foster, George Buchanan8 Edgehill AveMontreal, Que.	
Gallery, John O'Neill	
Genest, Frank D	
*Goulet, DonatSt. Georges, Que.	
Grigg, Alec Phelps, B.AJas. Coristine & Co Montreal, Que.	
Harris, Edmund Parker Dale263 MacLaren St Ottawa, Ont.	
Hibbard, Charles Ambrose L. 101 St. Luke St Montreal, Que.	
Honey, Howard PercyAbbotsford, Que.	
(LL.B. Course)	
Kearney, John Doherty 499 Elm Ave Westmount, Que.	
Loranger, Louis D	
(Withdrew Jan., 1920)	
McCaffrey, Clarence Francis A.262 Prince Arthur St. W Montreal, Que.	
McGillis, Alexander Francis4833 Western Ave Westmount, Que.	
Mackeen, Henry Poole	

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\*Partial.

NAME	STREET ADDRESS	City or Town
Mackenzie, John M		. Hartsville, P.E.I.
(LL.B. Course) Meyerovitch, Philip Moscovich, Max Enoch Neumann, Harold	.93 Villeneuve St. W Cor. 8th St. & 9th Ave. S.	Montreal, Que. Lethbridge, Alta.
(LL.B. Course) Patterson, James Duke Penverne, John J Perron, James B	.4049 Dorchester St. W 202 Gauthier St 296 Pine Ave. W	Westmount, Que. Montreal, Que. Montreal, Que.
Phillimore, Gerald Hawkeswoo Popliger, Israel Alexander	.734 Shuter St.	Montreal, Que.
(LL.B. Course) Presner, Philip Robertson, James Hilary H Sabourin, A. O. Ivan	.4156 Dorchester St	. westmount, Que.
Shapiro, Joseph J Shulman, Samuel Alex Shulemson, Abraham	. 127 Mount Royal Ave. W . 1632 St. Urbain St . 717 Berri St . 138 Hampton Ave	. Montreal, Que. . Montreal, Que. . Montreal, Que. . Montreal, Que.
Walker, Bernard Wattington		.Hamilton, Bermuda.

### THIRD YEAR

*Baker, Effie	Glenmere	Bolton Centre, Que.
Erry Honry Stevenson BA	14 Highland Ave	Montreal west, Que.
Hughog Adollo Currie BA	854 Lorne Crescent.	Montreal, Que.
Maillat Roger	83 Durocher St.	Montreal, Que.
Mogur William Mortimer B.	A 1881 St. Urbain St	Montreal, Que.
Micholson William Cedric B	A 276 Pine Ave. W	Montreal, Que.
Ponder Gordon Matthew		Windsor Mills, Que.
Philbrick George W		Danvine, Que.
Comin Andró RA		nigaua, Que.
Shromor David	1505 Clarke St.	. Montreal, Que.
Siglar May I	16XI Notre Dame St. W.	Montreal, Que.
Tolzage Leadore L.	1628 Hutchison St	. Montreal, Que.
Versailles, Maurice, B.A	131 Stanley St	Montreal, Que.

### FACULTY OF AGRICULTURE

### FIRST YEAR

Anderson, Ian Mackay *Anderson, William Walker Armstrong, Thomas	.365 De l'Epèe Ave 26 St. Anne Road Hampton Plantation	Ste. Anne de Bellevue St. Philip, Barbados, B.W.I.
*Bliss, Quartus Bowen, George Harry Bushell, Winston Chaplin, Edward Bruce *Coleman, John Geoffrey Collis, John Lennard Blannin *Cooper, Merrill Russell	108 Hickson Ave. 150 Cote St. Antoine Rd. 282 Farmington Ave. 20 Hospital St. 27 St. Sacrament St.	.St. Lambert, Que. Westmount, Que. Hartford, Ct., U.S.A. Montreal, Que. .Ormstown, Que.
*Creller, Neil Forester Dimmock, Frederick. Drummond, Charles Hepburn. *Edward, Douglas Arthur	32 Robert St. R.M.D. No. 1.	. Stanbridge East, Que. . Ottawa, Ont. . Sherbrooke, Que.

\*Partial.

NAME	STREET ADDREES	CITY OR TOWN
*Emberley, Kenneth Fenwick.		
*Ferry, Charles Stewart *Gnaedinger, Lionel Albert *Gnaedinger, Weston Emmanue Graham, Archibald Robert Grisdale, John Hume Heslop, Thomas Arthur	l 315 Roslyn Ave R.R. No. 1 Experimental Farm	Westmount, Que. Boilard, Que. Ottawa, Ont. Macdonald College,
Horsey, Arthur Sutherland Hunt, George Edward *Kirby, Thomas Howard *Kurle, Anthony Frederick *McEwan, Alan Grandage	.Ste. Genevieve	Cookshire, Que. Jacques Cartier, Que.
*McFarlane, Alexander Stirling *MacGregor, George Harold C	. York St	(England). Fredericton, N.B.
McKibbin, Reginald Robert *McLaughlin, Clair Reginald MacLennan, Malcolm McOuat, Thomas Edward Matthews, Gordon Stuart *Naylor, Edgar Herbert	Box 27	Chelsea, Que. Foster, Que. Scotstown, Que. Lachute, Que.
*Ness, Robert Brodie Perron, Wilfrid Henri *Purvis, John William		. Howick, Que. .St. Philippe de
*Rolleston, Lancelot Omond	.32 Main St	Georgetown, Demerara, British Guiana, South
Russell, Mary Gertrude *Sweet, Dwight Norman *Thompson, Percy Edmond *Thomson, Roswell Tremblay, Felix. *Vallatton, Gordon Philip	R.R. No. 2 Montreal Rd 242 Sherbrooke St. W	Russellville, N.B. Sutton, Que. Sherbrooke, Que. Montreal, Que. Baie St. Paul, Que. Ste. Agathe des
Vanterpool, Thomas Clifford		
*Wiggins, John Keble Williams, Edward Kimpton Wurzburger, Ralph Laurence *Zeederberg, Thelma Marie	.73a Ste. Famille St c/o Geo. Wurzburger ." The Shanty "	Sackville, N.B. Montreal, Que.
	SECOND YEAR	
*Armitage, Wendell Henry	Box 23	Sherbrooke, Que,

# 

	Que.
Beaudin, Leon Joseph Arcadius	Ormstown, Que.
Bouchard, Francois	
Brighton, Harris Weir	Westmount, Que.
Cliche, Louis Philippe	East Broughton, Que.
Crang, William Clifford	
A CARL THE REPORT OF THE REPOR	Que.
Donalds, Daniel Angus	Halifax, N.S.
Gordon, William LaurenceR.R. No. 1	Lachute, Que.
Graham, James Wesley	
Hamilton, James Young	

\*Partial.

### NAME

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### STREET ADDRESS

City or Town

Hammond, George Henry. Lachaine, Osias Wenceslas. Lefebvre, John Gordon	Montreal, Que Montreal, Que Montreal, Que. Ormstown, Que. Howick, Que. Westmount, Que. Beaconsfield, Que. Hull, Que. Lachine Rapids, Que. Ottawa, Ont.
Skinner, Clarence Tipson	.Macdonald College, Que.
Smith, Laurence Arlington. Sutherland, John Douglas4330 St. Catherine St *Templeton, Robert William Winter, James McGill	.Sutton, Que. Westmount, Que. Riverfield, Que.

### THIRD YEAR

Barrett, W. H		Shawville, Que.
Daily Iogonh Stonhonon		Roberval, Que.
Bradford, William Cecil Rogers.	R R No.5	Lachute, Que.
Bragg, Paul Douglas	A Harris Ave	Moncton, N.B.
Bragg, Paul Douglas	JI IIaIIIS IIVO	Glen Sutton Que.
Brock, Otto Carlyle		Magdonald College
Brown, John George		Que.
		Que.
Buchanan, James Stewart	Apt. 3, 670 Sherbrooke St.	W.
Butler, Henry Albert	Kelligrews	Newfoundland
Cil Enonly Dormord	720 Manlewood Ave	Montreal, Que,
Dalas Davil Maginturo	263 Charlotte St	SL. JOHN. N.D.
Denison, Simeon Minor	Donison's Mills	Richmond, Que,
Denison, Simeon Minor	1700 ITutobicon St	Montreal Que
Dogherty, F. W		Outor's Co NB
Hetherington, Samuel Judson	Cody's	Willessburg Ont
Hockey, John Frederick	Box 4	Tillsonburg, Ont.
Jones, Arthur Reginald Laurie, Douglas Melrose McClintock, Pearl Major, Thomas Grant	398 Melrose Ave., N.D.G.	Montreal, Que.
MaClintock Pearl		St. Andrews' E., Que.
Maion Thomas Grant	37 Crescent St	Montreal, Que.
Matthews, George Douglas		Que.
	110 Coder Arro	Pointe Claire, Que,
Milne, Arthur Robb	110 Cedar Ave	Winchester Ont
Newton, Dorothy Elizabeth		Termeville Que.
Norcross, Ashley Christopher.		Centionale Que.
Daigo Morton Baldwin		Outlicour, Que.
D. William Thomas	Butternut Ridge	ning s UU., N.D.
D. Langer Archibold William	2158 Mance Street	Montreal, Que.
D' Landson Jamos Koith	384 Oxford Ave	Montreal, Que.
*Ross-Ross, Philip Durnford de	Quincy	.Lancaster, Ont.
Scannell, James Wesley Simmonds, Pyre Morton Smith, James Black	10 Wollington St	Amherst, N.S.
Simmonds, Pyre Morton	to wennigton bo	New Glasgow Que
Smith, James Black		Ottoma Ont
Watson, Cyril James	379 Lyon St	Ottawa, Ont.

\*Partial.

STREET ADDREES

### FOURTH YEAR

NAME

Ashton, William Elmo Birch, Anthony Home Wyrley264 Wood Avenue	
Buckland, Allan John.	
Derick, Russell Arthur	.Clarenceville, Que.
Dunsmore, Wilford GrantBox 82	. Huntingdon, Que.
Hatch, Earle CliftonOromocto	
Hay, Angus LockhartBox 235	
Hay, Wiliam Drew	. Lachute, Que.
Hodgins, Samuel Raymond Norris. Box 46	
Jones, Walter Norman116 Grey Ave	
MacAloney, Mary Lee Fairview	
Matthews, Albert Edward	
14 11 11 11 11 11 11 11 11 11 11 11 11 1	Que.
Maw, William Alfred	
Ness, John Earle	
Pesner, Abraham Noah 1918 Mance St	
Peterson, Clyde Farrington	
Reid, W. J	.Chateauguay Basin,
neiu, w. J	Que.
Saunders, Leslie Gale	
Skinner, Samuel Greenway	
	Que.
Welsh, John Nicholas	
	and bernors, day.

SPECIAL STUDENTS

Boyce, Charles Edward	Moncton, N.B.
St. George, Percival Townshend .36 The New Sherbro	Montreal, Que. boke Montreal.

### DEPARTMENT OF SOCIAL SERVICE

### CERTIFICATE COURSE

Ballantyne, Elizabeth	.28 Terrasse Viau	.Montreal, Que.
Duncan, Ruth Mary		
(Withdrew December, 1919)		
Fleet, Jane Drummond	.33 Ontario Ave	. Montreal, Que.
Friedman, Malca Hilda	.128 Prince Arthur St. E	. Montreal, Que.
Goldstein, Amy J	.Ritz-Carlton Hotel	. Montreal, Que.
(Left January, 1920)		Washington and and
Hannah, Jessie K	.731 Sherbrooke St. W	Montreal, Que.
(Withdrew Dec., 1919)		
Hay, Clara C	.76 King St	.St. John, N.B.
Lambert, Helen Theodora		
Oughtred, Eleanor, B.A	.376 Claremont Ave	.Westmount, Que.
Parkins, Jessie F	.828 University St	. Montreal, Que.
Robson, Jean Hay	.321 Dromore Ave	.Winnipeg, Man.
Stevenson, Jessie G	.28 McTavish St	Montreal, Que.
(Withdrew Dec., 1919)		State Streetings
Warren, Edith	.4 Tower Ave	. Montreal, Que.
Williams, Thelma Doris		

### PARTIAL COURSES

### STREET ADDRESS

CITY OR TOWN

Adair ('H	
Adam, C. H.	
Aldy, C. A	
Allison, May	70 Jeanne Mance St Montreal, Que.
Arnold, Gertrude	
Baker Ethel	70 Jeanne Mance St. Montreal, Que.
Barnos W B	
Darnes, W. D	Granby Oue
Diampin, Madge	Granby, Que. 
Brainin, Mrs. M	
Broderick, Harriet	
Bryce, Winnifred	6 Albert Place
Butler Helen	1610 Jeanne Mance St. Montreal, Que.
Campbell M F (Migg)	New Glascow N.S.
Campbell, M. F. (MISS)	A Montogue Mangiong
Carey, Margaret	
	Baker Street London, W., England.
Cassidy, Mrs	70 Jeanne Mance St Montreal, Que.
Caverhill, Jessie Beatrice H.	
Caverhill Mrs T	386 Sherbrooke St. W Montreal, Que.
Christia Iozzia M	
Christie, Jessie M	TO I Martine I Martinel Out
Clarke, Miss	70 Jeanne Mance St Montreal, Que.
Coghlin, Mrs. C. J.	70 Jeanne Mance St Montreal, Que.
Davidson, Katharine	
Davidson Orion H	
Davidson, Orion II	Campbellton, N.B. 
Davison, Miss Mary A	A017 Western Area Westernount Out
Dawson, Miss H	
Dilts. J. A.	
Dilworth Kate	Cork, Ireland
Domling Christing P	165 Winslow St St John W N B
Downing, On Istine R	Ct Columba House Cottle
Drechsel, Hilda	
	mentMontreal, Que.
Drew, Miss L. N.	
Dumaresa, Edna	
Eaton Miss Mariorie	Truro, N.S.
Emmorson Joan Campbell	300 St Joseph Blvd W Montreal Que
Emmerson, Jean Campben.	
	100 Man-Cald Ct. Mantmal Oug
Ewing, Estelle	168a Mansfield St Montreal, Que.
Ewing, Estelle Foreman, Kathryn	
	ment Montreal, Que. Richford, Vt. 70 Jeanne Mance St. Montreal, Que. 
Cara Lillion	70 Joanno Mango St Montroal Que
Cara Lillion	70 Joanno Mango St Montroal Que
Cara Lillion	70 Joanno Mango St Montroal Que
Cara Lillion	70 Joanno Mango St Montroal Que
Cara Lillion	70 Joanno Mango St Montroal Que
Gass, Lillian. Gaukrodger, C. Gouldburn, Elizabeth	
Gass, Lillian. Gaukrodger, C. Gouldburn, Elizabeth Grosjean, G. F.	
Gass, Lillian. Gaukrodger, C. Gouldburn, Elizabeth Grosjean, G. F.	
Gass, Lillian. Gaukrodger, C. Gouldburn, Elizabeth Grosjean, G. F.	
Gass, Lillian. Gaukrodger, C. Gouldburn, Elizabeth Grosjean, G. F.	
Gass, Lillian. Gaukrodger, C. Gouldburn, Elizabeth Grosjean, G. F.	
Gass, Lillian. Gaukrodger, C. Gouldburn, Elizabeth Grosjean, G. F. Hilton, Amy B. (Mrs.) Hoben, Miss Grace. Hogan, Miss Hunt. Miss	
Gass, Lillian. Gaukrodger, C. Gouldburn, Elizabeth Grosjean, G. F. Hilton, Amy B. (Mrs.) Hoben, Miss Grace. Hogan, Miss Hunt. Miss	
Gass, Lillian. Gaukrodger, C. Gouldburn, Elizabeth. Grosjean, G. F. Hilton, Amy B. (Mrs.). Hoben, Miss Grace. Hogan, Miss Hunt, Miss James, Janet. Jobbing Miss	
Gass, Lillian. Gaukrodger, C. Gouldburn, Elizabeth. Grosjean, G. F. Hilton, Amy B. (Mrs.). Hoben, Miss Grace. Hogan, Miss Hunt, Miss James, Janet. Jobbing Miss	
Gass, Lillian. Gaukrodger, C. Gouldburn, Elizabeth. Grosjean, G. F. Hilton, Amy B. (Mrs.). Hoben, Miss Grace. Hogan, Miss Hunt, Miss James, Janet. Jobbing Miss	
Gass, Lillian. Gaukrodger, C. Gouldburn, Elizabeth. Grosjean, G. F. Hilton, Amy B. (Mrs.). Hoben, Miss Grace. Hogan, Miss. Hunt, Miss. James, Janet. Jobbling, Miss. Kingman, Elsie Douglass. Krzysinski, Ladislaw.	
Gass, Lillian. Gaukrodger, C. Gouldburn, Elizabeth. Grosjean, G. F. Hilton, Amy B. (Mrs.). Hoben, Miss Grace. Hogan, Miss. Hunt, Miss. James, Janet. Jobbling, Miss. Kingman, Elsie Douglass. Krzysinski, Ladislaw.	
Gass, Lillian. Gaukrodger, C. Gouldburn, Elizabeth. Grosjean, G. F. Hilton, Amy B. (Mrs.). Hoben, Miss Grace. Hogan, Miss. Hunt, Miss. James, Janet. Jobbling, Miss. Kingman, Elsie Douglass. Krzysinski, Ladislaw.	
Gass, Lillian. Gaukrodger, C. Gouldburn, Elizabeth Grosjean, G. F Hilton, Amy B. (Mrs.) Hoben, Miss Grace Hogan, Miss Hunt, Miss James, Janet. Jobbling, Miss. Kingman, Elsie Douglass Krzysinski, Ladislaw Learmonth, Winnifred Lessard, Miss	70 Jeanne Mance St.       Montreal, Que.         756 University St.       Montreal, Que.
Gass, Lillian. Gaukrodger, C. Gouldburn, Elizabeth Grosjean, G. F Hilton, Amy B. (Mrs.) Hoben, Miss Grace Hogan, Miss Hunt, Miss James, Janet. Jobbling, Miss. Kingman, Elsie Douglass Krzysinski, Ladislaw Learmonth, Winnifred Lessard, Miss	70 Jeanne Mance St.       Montreal, Que.         756 University St.       Montreal, Que.
Gass, Lillian. Gaukrodger, C. Gouldburn, Elizabeth Grosjean, G. F. Hilton, Amy B. (Mrs.) Hoben, Miss Grace. Hogan, Miss James, Janet. Jobbling, Miss. Kingman, Elsie Douglass. Kirgysinski, Ladislaw. Learmonth, Winnifred. Lessard, Miss. Letourneau, Miss Alma. Livingstone, Duncan.	70 Jeanne Mance St.       Montreal, Que.         756 University St.       Montreal, Que.
Gass, Lillian. Gaukrodger, C. Gouldburn, Elizabeth Grosjean, G. F. Hilton, Amy B. (Mrs.) Hoben, Miss Grace. Hogan, Miss James, Janet. Jobbling, Miss. Kingman, Elsie Douglass. Kirgysinski, Ladislaw. Learmonth, Winnifred. Lessard, Miss. Letourneau, Miss Alma. Livingstone, Duncan.	70 Jeanne Mance St.       Montreal, Que.         756 University St.       Montreal, Que.
Gass, Lillian. Gaukrodger, C. Gouldburn, Elizabeth. Grosjean, G. F. Hilton, Amy B. (Mrs.). Hoben, Miss Grace. Hogan, Miss. Hunt, Miss. James, Janet. Jobbling, Miss. Kingman, Elsie Douglass. Kingman, Elsie Douglass. Krzysinski, Ladislaw. Learmonth, Winnifred. Lessard, Miss. Letourneau, Miss Alma. Livingstone, Duncan. Lloyd, J. E. Lynch, Miss E.	70 Jeanne Mance St.       Montreal, Que.         756 University St.       Montreal, Que.
Gass, Lillian. Gaukrodger, C. Gouldburn, Elizabeth. Grosjean, G. F. Hilton, Amy B. (Mrs.). Hoben, Miss Grace. Hogan, Miss. Hunt, Miss. James, Janet. Jobbling, Miss. Kingman, Elsie Douglass. Kingman, Elsie Douglass. Krzysinski, Ladislaw. Learmonth, Winnifred. Lessard, Miss. Letourneau, Miss Alma. Livingstone, Duncan. Lloyd, J. E. Lynch, Miss E.	70 Jeanne Mance St.       Montreal, Que.         756 University St.       Montreal, Que.
Gass, Lillian. Gaukrodger, C. Gouldburn, Elizabeth. Grosjean, G. F. Hilton, Amy B. (Mrs.). Hoben, Miss Grace. Hogan, Miss. Hunt, Miss. James, Janet. Jobbling, Miss. Kingman, Elsie Douglass. Kingman, Elsie Douglass. Krzysinski, Ladislaw. Learmonth, Winnifred. Lessard, Miss. Letourneau, Miss Alma. Livingstone, Duncan. Lloyd, J. E. Lynch, Miss E.	70 Jeanne Mance St.       Montreal, Que.         756 University St.       Montreal, Que.
Gass, Lillian. Gaukrodger, C. Gouldburn, Elizabeth Grosjean, G. F. Hilton, Amy B. (Mrs.) Hoben, Miss Grace. Hogan, Miss Hunt, Miss. James, Janet. Jobbling, Miss. Kingman, Elsie Douglass. Krzysinski, Ladislaw Learmonth, Winnifred. Lessard, Miss. Letourneau, Miss Alma. Livingstone, Duncan. Lloyd, J. E. Lynch, Miss E. Manson, Janet. Marsh, A. T.	70 Jeanne Mance St.       Montreal, Que.         756 University St.       Montreal, Que.
Gass, Lillian. Gaukrodger, C. Gouldburn, Elizabeth. Grosjean, G. F. Hilton, Amy B. (Mrs.). Hoben, Miss Grace. Hogan, Miss Hunt, Miss James, Janet. Jobbling, Miss. Kingman, Elsie Douglass. Kirzysinski, Ladislaw Learmonth, Winnifred. Lessard, Miss Letourneau, Miss Alma. Livingstone, Duncan. Lloyd, J. E. Lynch, Miss E. Manson, Janet. Marsh, A. T. McAdam, F. G.	70 Jeanne Mance St.       Montreal, Que.         756 University St.       Montreal, Que.
Gass, Lillian. Gaukrodger, C. Gouldburn, Elizabeth. Grosjean, G. F. Hilton, Amy B. (Mrs.). Hoben, Miss Grace. Hogan, Miss Hunt, Miss James, Janet. Jobbling, Miss. Kingman, Elsie Douglass. Kirzysinski, Ladislaw Learmonth, Winnifred. Lessard, Miss Letourneau, Miss Alma. Livingstone, Duncan. Lloyd, J. E. Lynch, Miss E. Manson, Janet. Marsh, A. T. McAdam, F. G.	70 Jeanne Mance St.       Montreal, Que.         756 University St.       Montreal, Que.

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NAME

# NAMESTREET ADDRESSCITY OR TOWNMoore, Mrs.70 Jeanne Mance St.Montreal, Que.Moore, Miss L.342 Grosvenor Ave.Westmount, Que.Munn, FloraSt. Columba House Settle-Murphy, J. A.Montreal General Hosp.Murphy, J. A.Montreal General Hosp.Mussen, Mrs. A. E.731 Sherbrooke St. W.O'Callaghan, Miss.61 Bishop St.Montreal, Que.Montreal, Que.O'Callaghan, Miss.61 Bishop St.Montreal, Que.Montreal, Que.Parkes, R. H.756 University St.Montreal, Que.Parkes, R. H.70 Jeanne Mance St.Parkes, R. H.70 Jeanne Mance St.Porter, Mary.70 Jeanne Mance St.Porter, Mary.70 Jeanne Mance St.Porter, Mary.70 Jeanne Mance St.Montreal, Que.Prentice, Mona.773 Sherbrooke St. W.Montreal, Que.Reed, Miss.61 Bishop St.Moles, Irene.1032 Dorchester St. W.Robertson, Grace.620 Transportation Bldg.Montreal, Que.Robertson, K.4156 Dorchester St. W.Montreal, Que.Stopflocher, (Mrs.)904 Van Horne Ave.Montreal, Que.Scott, Bessie.247 Hutchison St.Que.904 Van Horne Ave.Montreal, Que.Scott, Bessie.70 Ganne Mance St.Montreal, Que.Shand, Gwan.70 Geanne Mance St.Montreal, Que.Scott, Bessie.756 University St.Montreal, Que.

# STUDENTS IN ATTENDANCE.

SESSION 1919-1920.

Arts.	Under- graduates.	Partials.	Total.
First Year—Men. Women. Second Year—Men. Women. Third Year—Men. Women. Fourth Year—Men. Women.	$ \begin{array}{cccccccccccccccccccccccccccccccccccc$	21 17 12 11 11 14 3 0	127 98 68 54 58 51 43 29
School of Commerce. First Year—Men Women Second Year—Men Third Year—Men	· 2 · 13	6 0 0 1	$     \begin{array}{r}       79 \\       2 \\       13 \\       10 \\       632     \end{array} $
Applied Science. First Year Second Year Third Year Fourth Year Fifth Year (Architecture).	. 154 . 121 . 90	2 4 4 1 0	$ \begin{array}{c} 270 \\ 158 \\ 125 \\ 91 \\ 2 \\ 646 \end{array} $
MEDICINE. First Year—Men Second Year—Men Women. Third Year—Men Women. Fourth Year. Fifth Year. Diploma of Public Health	$\begin{array}{cccccccccccccccccccccccccccccccccccc$	2 0 1 0 1 1 0 	$225 \\ 145 \\ 4 \\ 83 \\ 6 \\ 108 \\ 57 \\ 6 \\ \\ 634$
DEPARTMENT OF PHARMACY. For the Diploma of Pharmacy—Men Women FACULTY OF DENTISTRY.		 	$\frac{27}{5}$
FACULTY OF DENTISTRY. First YearSecond YearWomen Third Year Fourth Year	$\begin{array}{ccc} & 14\\ & 0\\ & 14\\ \end{array}$	0 0 1 0 0	$ \begin{array}{c} 47 \\ 14 \\ 1 \\ 14 \\ 14 \\ 90 \end{array} $

Law.	Under- graduates.	Partials.	Total.
First Year-Men	. 83	3	86
Women	. 2	0	2
Second Year—Men Women		1	34 0
Third Year—Men	. 11	0	11
Women	. 1	1	2
Agriculture.			135
First Year-Men		27	50
Second Year-Men.	. 24	. 3	27
Third Year—Men Fourth Year—Men	. 32 20	1	33 20
	. 10	U.	130
FACULTY OF MUSIC.			
Proceeding to the Degree of Mus. BacI			
Proposing to the Dislams of Lingsticts in	Nomen		. 8
Proceeding to the Diploma of Licentiate in	Wusic—Me	omen	20
Partial Students			
			109
			2517
Less number whose names appear in more	e than one li	st	
Tetel			
Total			. 2483
DEPARTMENT OF SOCIAL SERVICE.			
Certificate Course			. 14
Partial Students			
			109

### NUMBER OF STUDENTS IN ATTENDANCE 395

# UNDERGRADUATE AND GRADUATE SOCIETIES.

No Club or Society which has not been approved by the Cor-poration is entitled to use the name of the University, or of the Royal Victoria College. Applications for such approval, accompanied by a copy of the constitution, should be addressed to the Registrar.

### The Students' Council of McGill University.

### OFFICERS 1920-21.

President-D. R. Learoyd, Med. '21. Controller-J. W. Jeakins, B.A. Secretary-James A. Lalanne, B.A.

### Executive Council.

R. S. O'Meara, Comm. '21, Representative from Arts. J. D. Kearny, Law '21, Representative from Law.' A. M. Robertson, Sci. '21, Representative from Medicine. R. Kinsman, Med. '21, Representative from Medicine. J. Copeland, Med. '22, President McGill Union. G. A. Parkins, B.A., Med. '21, President Rugby Club. J. H. Cully, Med. '21, President Hockey Club. R. L. Hamilton, Med. '23, President Track Club. K. Forbes, Sci. '21, President Athletic Association. J. N. Petersen, Med. '22, President "McGill Daily."

### The McGill Union.

### OFFICERS 1920-21.

President-J. Copeland, B.A., Med. '22. Vice-President-C. E. Thompson, Sci. '23. Secretary-S. H. Davis, Sci. '23.

### "McGill Daily."

### OFFICERS 1920-21.

President-J. N. Petersen, Med. '22. Editor-in-Chief-R. J. Clark, Law '22. Managing Editor-W. F. Macklaier, Arts '22.

### Undergraduates' Literary and Debating Society.

### OFFICERS 1920-21.

Hon. President-Dean Moyse. Hon. I. U. D. L. Rep.-Dr. Leacock. I. U. D. L. Rep.-J. C. Farthing. President-D. C. Abbott. Vice-President—F. O. Peterson. Secretary—C. P. Hébert. Treasurer—W. S. Lighthall.

### Arts' Undergraduates' Society.

OFFICERS 1920-21. President—J. C. Farthing. Vice-President—W. F. Macklaier. Treasurer—A. T. McIntyre. (Other Officers to be elected.)

### R. V. C. Undergraduates' Society.

OFFICERS 1919-20. Hon. President—Miss Hurlbatt. President—Jean Nichol, '20. Vice-President—Janie Spier, '21. Sec.-Treasurer—Nora James, '22. (Presidents from the four years to be elected.)

### Undergraduates' Society in Applied Science.

### Officers 1919-20.

Hon. President—Dr. J. B. Porter. President—C. A. Buchanan, '19. Vice-President—R. H. Patten, '19. Secretary—H. L. Mahaffy, '20. Treasurer—J. R. Dunbar, '20. Asst. Treasurer—J. M. Cuddy, '21.

### Undergraduates' Society in Law.

OFFICERS 1919-20. President—M. Versailles. Vice-President—G. G. Anglin. Secretary—J. O. Gallery. Treasurer—Mrs. W. P. Hughes.

### Medical Undergraduates' Society.

OFFICERS 1920-21. H.c., President—Dr. Alex. Hutchison. President—W. de M. Scriver. Vice-President—Keith Hutchison. Treasurer—Kenneth Johnson. Secretary—A. L. Wilkie. Asst. Secretary—C. J. Tidmarsh. Councillors {Dr. Bazin. Dr. Lewis. Mr. Coler.

### Philosophical Society.

OFFICERS 1920-21. Hon. President—Dr. W. Caldwell. Hon. Councillors {Dr. J. W. A. Hickson. Dr. W. Tait. President—L. A. Sperber, '21. Vice-President—R. J. Clarke, B.A. Secretary—M. H. Franklin, '21. Treasurer—H. Echenberg, '21.

### Chemical Society.

### OFFICERS 1919-20.

President—Mr. E. G. Young, B.A. Secretary-Treasurer—Mr. G. S. Whitby. Executive Committee—Dr. A. Stansfield, Dr. L. V. King, Mr. O. Maass, M.Sc.

### Mining Society.

(No list of Officers received.)

### Physical Society.

OFFICERS 1920-21.

President—Dr. A. N. Shaw. Vice-President—Dr. A. S. Eve. Secretary—Mr. R. J. Clark, B.A. Executive Committee—The above named officers.

### Commercial Society.

### OFFICERS 1920-21.

Hon. President—R. M. Sugars. President—R. S. O'Meara. Vice-President—A. L. Phillips. Secretary—Miss G. E. Dougall. Treasurer—A. H. MacKinnon.

### Historical Club.

### OFFICERS 1920-21.

Hon. President—Dr. C. E. Fryer. President—S. G. Murray. Vice-President—P. J. Kearns. Treasurer—H. Cousens. Secretary—P. H. Addy. Advisory Committee {B. N. Holtham. C. Mackenzie.

### Electrical Club.

### OFFICERS 1919-20.

Hon. President—Dr. L. A. Herdt. Hon. Vice-President—Prof. C. V. Christie. President—E. J. Pope. Secretary—A. G. Anderson. Treasurer—T. A. G. Bishop. C. P. Creighton. H. W. Dawson. J. R. Dunbar K. B. Robertson. J. R. Windsor.

### Mechanical Club.

### OFFICERS 1920-21.

Hon. President—Prof. C. M. McKergow. President—J. C. Hall, Sci. '21. Sec.-Treas.—E. B. Maxwell, Sci. '21. Representative—L. R. McCurdy, Sci. '21.

### Political Economy Club.

Officers 1920-21.

Hon. President—Dr. Stephen Leacock. Hon. Vice-President—Dr. J. C. Hemmeon. President—L. W. Kern, Arts. '21. Vice-President—H. Borden, Arts '21. Secretary—G. S. McDougall, Arts '22. Treasurer—P. H. Addy, Arts '22.

### Architectural Society.

OFFICERS 1920-21.

President—W. K. G. Lyman. Secretary—A. L. Perry. Treasurer—A. T. G. Durnford. Committee {Prof. R. Traquair. W. Carliss. L. E. Brown. Partial Representative—To be elected. First Year Representative—To be elected.

### Cercle Français.

### Officers 1920-21.

Hon. President-Prof. René du Roure. President-M. H. Franklin, Arts '21. Vice-President-G. H. Phillimore, Law '21. Secretary-F. H. Walter, Arts '23. Treasurer-D. Cowan, Arts '23.

### Société Française.

### OFFICERS 1920-21.

Hon. President—Mlle. L. Touren. President—Connie Harvey. Vice-President—Doris Sharples. Secretary-Treasurer—Audrey Lamb. Reporter—Winnifred Birkett. Representatives—Fourth Year, Rebecca Contant; Third Year, Evelyn Banfill; Second Year, Dorothea McConnel.

### Delta Sigma Society.

### Officers 1919-20.

Hon. President—Mrs. W. Vaughan. Hon. Vice-President—Miss V. Brown. President—D. Mawdsley. Vice-President—E. Holland. Secretary-Treasurer—R. Shatford. Representatives—Fourth Year, G. Ewing; Third Year, K. Godwin; Second Year, E. McPartiln. Poster Representative—H. Nichol.

### Young Men's Christian Association of McGill.

All members of McGill University, and of the affiliated Colleges, are welcomed as Associate Members; the active membership comprises those who are church members, or who subscribe to a simple statement of faith, and approve the objects of the Association.

The home of the Association is Strathcona Hall, which, in addition to affording ample accommodation for the work of the Association as a whole, provides residence for sixty-seven men.

Full particulars regarding the work of the Association are given in the annual Hand Book, and will also be supplied by the General Secretary.

### Officers 1920-21.

Hon. President—Mr. W. M. Birks. President—Angus McLean, B.A.
Ist Vice-President—R. Hall, Theo. '22.
2nd Vice-President—H. H. Hart, Med. '22.
Rec.-Secretary—J. B. Ross, Med. '25. Treasurer—T. G. Browne, Med. '21.
Gen.-Secretary—J. G. McKay, B.A., M.C.

### Young Women's Christian Association of McGill University.

Officers 1920-21.

Honorary President—Mrs. F. D. Adams. President—Edith Barnes. Vice-President—S. MacRae. Recording Secretary—G. Beckwith. Corresponding Secretary—D. Cross. Treasurer—L. Kerr.

### Royal Victoria College Athletic Association.

### Officers 1919-20.

Hon. President-Miss Lichtenstein. Honorary Adviser-Miss E. M. Cartwright. President-Queenie Savage. Vice-President-Eva Ross. Secretary-Treasurer-Mary Fry. Basket Ball Manager-Grace Moody. Tennis Manager-M. McDougall. Hockey Manager-Hazel Davidson. Fancy Skating Manager-Isabel Imrie. Sports Manager-Helen Nichol.

### Athletic Association.

OFFICERS 1919-20.

President—G. A. Parkins. Vice-President—L. C. Montgomery. Secretary—H. Fisk.

### Rugby Football Club.

OFFICERS 1920-21.

Hon. President—Geo. Macdonald, B.A. President—G. A. Parkins. Vice-President—R. B. Anderson. Sec.-Treasurer—J. G. Notman. Faculty Representatives—Medicine, B. Keeping; Arts, B. Rutherford; Science, D. Ambridge; Law, G. Nicholson.

### Swimming Club.

OFFICERS 1920-21.

Hon. President—A. S. Lamb, M.D. President—L. W. Walters, Med. '21. Vice-President—F. R. Winter, Sci. '23. Secretary—W. Laidley, Sci. '23. Treasurer—L. Parsons, Sci. '23. Med. Rep.—W. Laishley, Med. '22. Arts Rep.—M. Gaboury. Sci. Rep.—P. Scott, Sci. '22. Manager—M. Gaboury, Sci. '22. Reporter—G. Miller, Med. '22.

### Lawn Tennis Club.

OFFICERS 1920-21.

Honorary President—L. K. Greene, President—M. E. St. C. Ward. Vice-President—B. B. Claxton. Secretary-Treasurer—J. O'Halloran. Alumni Representative—Dr. H. R. Cleveland. Arts Representative—J. C. Farthing. Science Representative—B. Gordon. Medicine Representative—C. N. Ramsay. Law Representative—F. D. Kearney.

### Harriers' Club.

### OFFICERS 1920-21.

Hon. President-Dr. MacMillan. President-R. L. Hamilton. Vice-President-C. L. Palmer. Sec.-Treasurer-Arnold Armstrong. Captain-P. A. Boucher.

### Ski Club.

OFFICERS 1920-21. Hon. President—Lieut.-Col. Herbert Molson, M.C. President—W. J. Rutherford. Vice-President—D. Gordon. Secretary—D. Foss. Treasurer—O. N. Owens.

### Hockey and Skating Club.

OFFICERS 1919-20. Hon. President—Capt. L. Roberts. President—E. J. Behan. Vice-President—J. Gallery. Sec.-Treas.—D. Dawes. Medicine:—V. Lapp. Science:—J. Notman. Arts & Law:—F. McGillis.

### Track Club.

OFFICERS 1920-21. Hon. President—Mr. W. Nicholson, B.A. President—R. L. Hamilton. Hon. Sec.-Treas.—Mr. M. Sutherland. Vice-President—J. King. Sec.-Treaswrer—J. C. Hay.

### Boxing, Fencing and Wrestling Club.

OFFICERS 1920-21. President—G. W. Bain, Sci. '21. Vice-President—J. Long, Law '22. Secretary—G. O. Matthews, Med. '23. Manager—D. W. MacKeen, Sci. '22.

### Western Club of McGill University.

The Club has for its objects the furthering of the interests of McGill in the four Western Provinces and the helping of new students to McGill from these Provinces.

Students from Manitoba, Saskatchewan, Alberta, or British Columbia, coming to McGill for the first time, are requested to communicate with the Secretary of the Club, care The Union, McGill University, Montreal.

OFFICERS 1920-21. Hon. President-Dr. J. L. Todd. President-R. S. O'Meara. Vice-President-A. S. Caldwell. Secretary-E. H. Henderson. Treasurer-J. M. Jones. British Columbia:-J. S. Helmcken, 915 Moss St., Victoria, B.C. Alberta:-F. H. Fish, 3219-4th St., Calgary, Alta. Saskatchewan:-S. K. Clark, Kamsack, Sask. Manitoba:-K. M. Winslow, 137 Middlegate, Winnipeg, Man.

### Eastern Townships Club.

### (No list of Officers received.)

### The Maritime Club of McGill University.

The objects of this Club, which was formed nine years ago by the amalgamation of the Nova Scotia and New Brunswick and Prince Edward Island clubs, is to promote in every way possible, the best interests of students coming to McGill from the Maritime Provinces. Such students are urgently requested to communicate with the Secretary of the Club, who will be glad to render them all assistance in his power.

### Officers 1920-21.

Hon. President—Dr. C. A. Peters. President—A. R. Lawrence, Sci. '22. Vice-President—P. MacIntyre, Med. '21. Secretary—H. S. Trefry, Med. '21. Treasurer—A. H. Chisholm, Sci. '21.

### American Club.

### OFFICERS 1920-21.

Hon. President—Dr. J. Bonsall Porter. President—H. V. Karnes, Sci. '20. Vice-President—Henry C. Knowlton, Med. '23. Treasurer—Keith Livingstone, Sci. '21. Secretary—H. C. Waugh, Med. '20. Asst.-Secretary—Harold Katzman, Med. '22.

### Newfoundland Club of McGill University.

Officers 1920-21.

President—C. F. Davis, Arts '22. Vice-President—L. J. Jackman, Med. '23. Secretary—G. Bishop, Sci. '23. Treasurer—A. W. Johnson, Com. '21. Reporter—R. Lemesurier, Arts '23.

### McGill University Oriental Society.

(No list of Officers received.)

### Graduates' Society of McGill University.

### Officers 1919-20.

President—Major George Macdonald, B.A., M.C. Vice-Presidents—J. A. Nicholson, M.A., LL.D., Col. J. M. Elder, B.A., M.D. and Prof. Nevil Norton Evans, M.Sc. Treasurer—W. W. Robinson, M.A. Secretary—G. T. Hyde, B.Sc., 14 Phillips Sq., Montreal. Executive Secretary—John W. Jeakins, B.A.

### GRADUATE SOCIETIES

### Alumnae Association of McGill University.

### OFFICERS 1920-21.

President-Miss Ada Dickson, B.A. '04. 1st Vice-President-Mrs. A. R. Howell, B.A. '01. 2nd Vice-President-Miss G. Hunter, B.A. '88. 3rd Vice-President-Miss P. Leslie, B.A. '14. 4th Vice-President-Miss C. I. McKenzie, B.A. '04. Corresponding Secretary-Miss Nora Morgan, B.A. '19. Asst.-Corresponding Secretary-Miss Enid Price, B.A. '17. Asst.-Recording Secretary-Miss S. L. Shaw, B.A. '94. Treasurer-Miss A. Muriel Gillean, B.A. '05. Assistant-Treasurers-The Misses Taylor, B.A. '00 and '14.

### New York Graduates' Society.

### OFFICERS 1919-20.

President—W. W. Colpitts, Sci. '99. 1st Vice-President—F. G. Wickware, Sci. '06. 2nd Vice-President—Robert MacDougall, Arts '90. Secretary—W. H. Donnelly, Med. '03. 178 Woodruff Ave., Brooklyn, N.Y. Treasurer—O. S. Hillman, Med. '06.

### GOVERNORS.

	W. E. Deeks, Med. '93. R. A. Weagant, Sci. '05.
1921 CLASS-	{Frank Miller. H. George Schwartz, Med. '98.
1922 Class—	J. L. Joughin, Med. '06. D. S. Likely, Med. '05.

### NON-RESIDENT COUNCILLORS.

Prof. J. C. Bracq, Arts '81, Poughkeepsie, N.Y.; Dr. C. J. Patterson, Med. '86, Troy, N.Y.; Dr. J. B. Harvie, Med. '81, Troy, N.Y.; Mr. R. O. King, Sci. '95, Buffalo, N.Y.; Mr. T. H. Addie, Sci. '02, Wilmington, Del.; Dr. E. W. Smith, Med. '82, Meriden, Conn.

### Ottawa Valley Graduates' Society.

### Officers 1920-21.

Honorary President—P. D. Ross, B.Sc. President—A. W. Duclos, B.A., B.C.L. Vice-Presidents—J. B. McRae, B.Sc.; O. S. Finnie, B.Sc. D.L.S.; Dr. C. T. Ballantyne. Secretary—J. H. H. Nichols, 2 Sweetland Ave., Ottawa, Ont. Treasurer—Frederic E. Bronson, B.Sc. Executive Committee—Gordon G. Gale, M.Sc.; Dr. H. B. Small; Dr. R. Harvie; S. C. Ells.

### GRADUATE SOCIETIES

### McGill Alumni Association of Chicago.

(No list of Officers received.)

McGill Graduates' Society of Honan, China. (No list of Officers received.)

### McGill Graduates' Society of Manitoba.

(No list of Officers received.)

### McGill Graduates' Society of British Columbia.

Officers 1920-21.

Hon. President—Dr. R. E. McKechnie. President—Dr. F. P. Patterson. Vice-President—Mr. W. H. Powell, B.Sc. Secretary—Mr. Geo. H. Housser, B.A. Treasurer—Abraham Lighthall, B.Sc.

### District of Bedford McGill Graduates' Society.

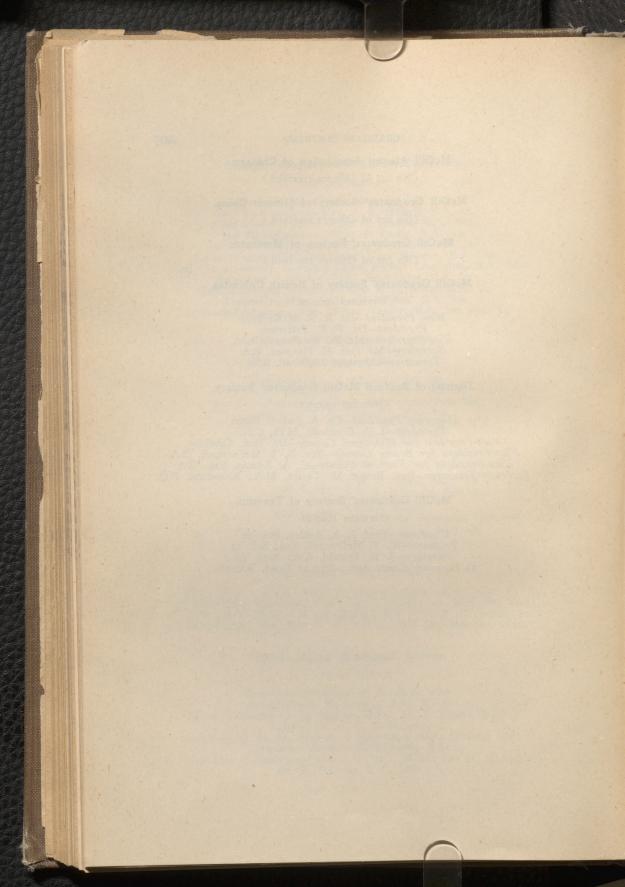
Officers 1920-21.

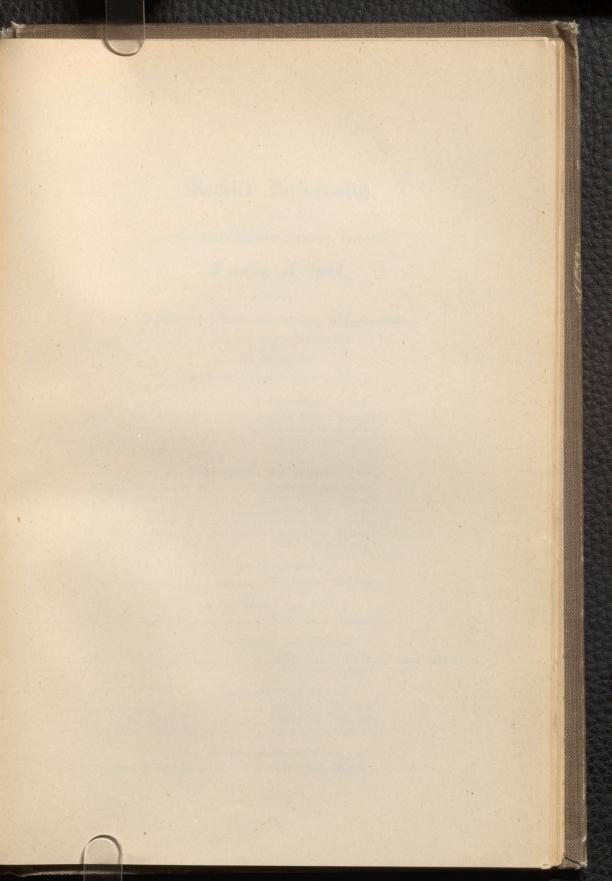
Honorary President—Dr. A. Judson Eaton. President—J. A. Corcoran, M.D., C.M. Vice-President for Missisquoi County—Dr. Wm. Crothers. Vice-President for Brome County—Rev. G. J. McCormack, B.A. Vice-President for Shefford County—C. A. Adams, Esq., B.A. Secretary-Treasurer—Rev. Ernest M. Taylor, M.A., Knowlton, P.Q.

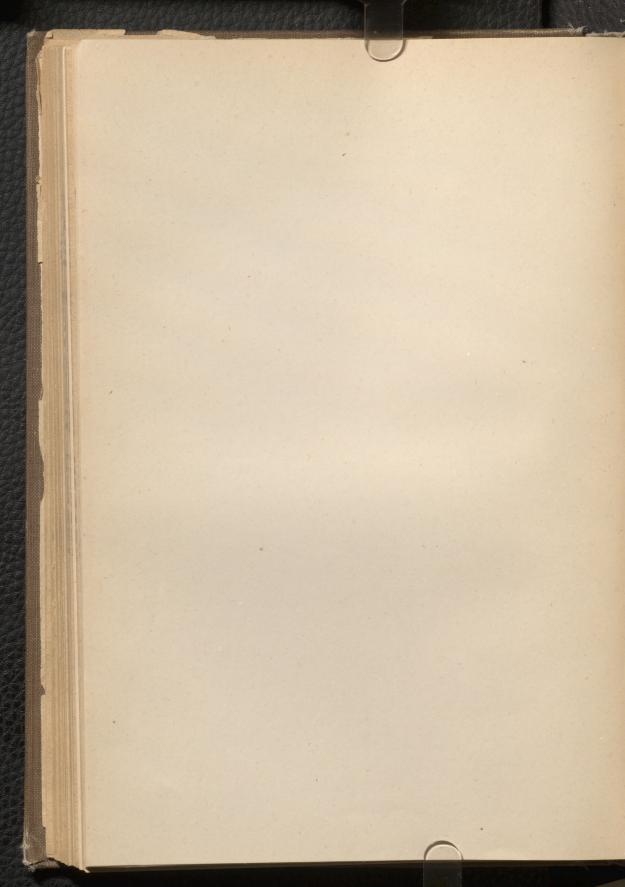
### McGill Graduates' Society of Toronto.

OFFICERS 1920-21.

Chairman—Prof. L. A. Arkley, Sci. '00. Treasurer—C. T. McDougall, Esq., Sci. '13. Secretary—J. R. Donald, Esq., Arts '13. 74 Hampton Court Apts., Avenue Road, Toronto.







# McGill University.

### SESSIONAL EXAMINATIONS, 1919-1920.

# Faculty of Arts.

### FOURTH YEAR (GRADUATING CLASS).

PASSED FOR THE DEGREE OF B.A.

### In Honours.

### (Subjects arranged alphabetically.)

1. In Chemistry.

Rorke, E. Christine First Class Honours.	
Hill, Eleanor M First Class Honours.	
Davidson, Gertrude H Second Class Honours.	
Goddard, Mabel A Second Class Honours.	

### 2. In Economics and Political Science.

Biggar, Winchester H	First Class Honours.
Taylor, Robert D	First Class Honours.
Nichol, Helen R. H	
Caverhill, George R	Second Class Honours.
Greaves, Edwin M	Third Class Honours.
Martin, Erle C	Third Class Honours.

3. In English.

Moody, Mary G. H ..... First Class Honours.

### 4. In English and French.

Novick, Fannie ..... First Class Honours.

### 5. In English and German.

Meyer, Bertha ..... First Class Honours and Henry Chapman Prize.

### 6. In English and History.

Nichol, Jean	First Class	Honours.
Cameron, Sarah S	First Class	Honours.
Freedman, Lewis K	First Class	Honours.

### 7. In English and Latin.

Macdonald, Brenda ..... First Class Honours.

### 8. In English and Philosophy.

Wiseman, Solomon ..... First Class Honours. Mawdsley, Mary D..... First Class Honours in English and Second Class Honours in Philosophy.

9. In French and Latin.

Wall, Eileen M ..... Second Class Honours.

10. In Mathematics and Physics.

Douglas, Allie V ..... First Class Honours and Anne Molson Gold Medal.

First Class General Standing.

Ewing, Gwendolyn G ..... Special Certificate.

PASSED FOR THE DEGREE OF B.SC. (IN ARTS.) IN HONOURS.

Shaw, Thomas P. G ..... First Class Honours.

PASSED FOR THE DEGREE OF B.A.

### IN THE ORDINARY COURSE.

### (In order of merit.)

Class I.—Ewing, Gwendolyn G. Class II.—Imrie, Isabelle M.; Lalond, George F.; McLean, Angus H. and Mathers, Fred D., equal; McMillan, Myrtle; Bunt, Heber and Smith, Clifford B., equal; Peterson, Norman E.; McMillan, Hazel and Scott, Irene E., equal; Latham, James A.; Duncan, William L.; Savage, Queenie; Macnaughton, Margaret R.; Wilson, Alice E. Class III.—Henry, Edith F.; Reid, Jean; MacKinnon, Flora J.; DiFlorio, Pasquale; McDougall, Marguerite; Townshend, Cecil W.; O'Brien, John L. Unranked.—Boyd, Bernice E.; Lewis, Doris E.; McGibbon, Archibald D.; McRae, Roderick A.; Nicoll, Howard. Howard.

DOUBLE COURSE STUDENT IN ARTS AND MEDICINE QUALIFIED TO OBTAIN THE DEGREE OF B.A.

Davis, Aaron.

DOUBLE COURSE STUDENTS IN ARTS AND MEDICINE QUALIFIED TO OBTAIN THE DEGREE OF B.A. ON COMPLETION OF THE SECOND YEAR IN MEDICINE.

Center, Ervin A. Coveler, Harry A. Evans, Otty B. Everett, Herbert S Knowlton, Henry C. McClure, James C. Murray, William A. Somerville, Wallace B. DOUBLE COURSE STUDENT IN ARTS AND DENTISTRY QUALIFIED TO OBTAIN THE DEGREE OF B.A. ON COMPLETION OF THE SECOND YEAR IN DENTISTRY.

Bourke, William M.

DOUBLE COURSE STUDENT IN ARTS AND APPLIED SCIENCE QUALIFIED TO OBTAIN THE DEGREE OF B.A.

Dobson, Robert M.

PASSED FOR THE DEGREE OF B.SC. (IN ARTS.)

### IN THE ORDINARY COURSE.

### (In order of merit.)

Class I.-None. Class II.-Donald, Frederick C. Class III.-Charlton, Dorothy K.; Joseph, Alfred H.

DOUBLE COURSE STUDENTS IN ARTS (B.SC. COURSE) AND MEDICINE QUALIFIED TO OBTAIN THE DEGREE OF B.SC. ON COMPLETION OF THE SECOND YEAR IN MEDICINE.

Ereaux, Lemuel P. Freedman, Newman B. Petersen, James N. Rubin, Saul. Silver, Philip G. Vaughan, James M.

### PASSED FOR THE DEGREE OF B. COM.

### (In order of merit.)

Class I.—Badian, Alan M.; Antliff, William S.; Wetstein, Harris; Shapira, William. Class II.—Burland, George H.; Levitt, Moses; MacDonald, Findlay M. Class III.—None. Passed Special Examinations.—Glickman, Bernard.

### THIRD YEAR.

### HONOURS.

### B.A. COURSE.

### (Subjects arranged alphabetically.)

### In Botany, Chemistry and Zoology.

Godwin, Kathleen F..... First Class Honours and Penhallow Prize. Spier, Jane D..... First Class Honours.

### In Chemistry.

Larkin,	Beatrice J	First Class	Honours.
Barnes,	Edith L.	First Class	Honours
Olding,	Maude E. M	First Class	Honours.

### 4 In Economics.

	First Class Honours and First Mac- kenzie Exhibition.
Fife, Harry M	kenzie Exhibition.
Borden, Henry )	First Class Honours and Second Mackenzie Exhibition.
Raphael, Max I.) equal	Mackenzie Exhibition.
Korn Marshall	. Second Class Honours.
Kern Louis W	. Second Class Fionours.
Pratt, William F	. Second Class Honours.
Davidson, Winnifred H. } equal Ross, Henry T	Second Class Honours.
Rowat, Harland C	Second Class Honours.
Rowat, Harland C	. Decond Chass III
Cameron, Katharine L.} equal .	Second Class Honours.
Sperber, Lionel A	Second Class Honours
Common, Ernest C	Third Class Honours
Franklin, Michael H	. I IIII ( Class Fromours.

### In English and French.

Harvey, Constance M...... Second Class Honours. Mathewson, Dorothy R..... Second Class Honours in English and Third Class Honours in French.

### In English and History.

### In French.

Silverman, Malca ..... Second Class Honours.

### In Geology.

Dart, J. Doris..... First Class Honours.

### In German.

Silverman, Malca ..... First Class Honours.

### In Greek and History.

Holland, Ethelwyn J..... First Class Honours and Dr. Barclay Exhibition.

In Mathematics.

Thornton, Jessie M ..... Second Class Honours.

In Mathematics and Physics.

McPherson, Anna I..... First Class Honours.

#### B.SC. COURSE

#### In Chemistry.

Hemming, Clarissa ...... First Class Honours. Foran, Herbert P..... First Class Honours.

### PASSED THE THIRD YEAR EXAMINATIONS.

# I. For Course Leading to B.A.

### (Arranged in alphabetical order.)

Bagg, Barnes (D.S.), Barnes (E.L.), Borden (E.L.), Borden (H.), Bunt (s), Cameron (G.M.), Cameron (K.L.), Campbell, Cockfield, Common, Contant, Curtis, Dart, Davidson, Farthing, Fife, Foran, Ford (C.), Ford (K.M.) (s), Ford (R.H.), Foster (s), Franklin, Gillespie, Godwin, Hackett, Harvey, Hébert, Holland, Husk, Kern (L.W.), Kern (M.J.), Larkin, Lewis (s), Macdiarmid, McGreer (s), McMinn (s), McPherson, Mathewson, Mills, Moule, Olding, Pratt, Raphael, Ross, Rowat, Silverman, Sperber, Spier, Stevenson, Symonds, Thornton (s). Garrow (aegrotat).

# 2. Double Course in Arts and Medicine (B.A., M.D.)

# (On completion of the First Year in Medicine.)

Boyce, Breitman, Bustin, Hooper, McIntosh (C. A.), McKinnon (J. D.), Schleifstein, Teitelbaum.

# 3. Double Course in Arts and Dentistry (B.A., D.D.S.)

(On completion of the First Year in Dentistry.) Mills (J.W.).

4. Double Course in Arts and Applied Science (B.A., B.Sc.) O'Heir (s), Smith.

# 5. For Course Leading to B.Sc.

Hemming, McCall, Phillips.

# 6. Double Course in Arts (B.Sc.) and Medicine (B.Sc., M.D.)

(On completion of the First Year in Medicine.) Freedman, Kay, Mirsky, Rabinovitch (J.), Richardson.

#### SECOND YEAR.

### HONOURS:

### In Mathematics and Physics.

Tuffy, Magdalen E ..... First Class Honours.

#### PRIZES.

McGoun, Isabella W	First Mackenzie Exhibition.
Pierce, Sydney D	Second Mackenzie Exhibition.
Moore, Dale H.	Neil Stewart Prize.
Moore, Dale H	Appie Macintosh Prize
Reid, Janet L	Magintosh Prize
Shatford, Ruth M	. Annie Macintosh 1112c.

### PASSED THE SECOND YEAR EXAMINATIONS.

### I. Course Leading to B.A.

Class I.—Shatford, Kerr, Reid. Weibel. Class II.—Snyder; Harris and White, equal; Macrae (D.), Riley, Holloway, Stewart (A. I. M.) (s), McPartlin, Newnham, Fry, Foley, Hall, Banfill; McGoun and Moore (s), equal; Sharples (s), Peterson, Pierce, O'Hagan; Avison and Cousens, equal. Class III.—Davis, McDonald, Elliot, Klineberg, Henderson, Murray (s), Joseph (s), Kneeland, Howell, Johnson; Mansfield (s) and Tait (s), equal; Rough (s), Rosenstein (s), Smith, Bullock (s), Mathewson (s), Higinbotham (s), Addy (s).

### 2. Double Course, B.A., B.Sc.

Class I.-None. Class II.-None. Class III.-Leslie (s).

### 3. Course Leading to LL.B.

Class I.-None. Class II.-Anderson. Class III.-Lidstone (s) and Rohrlich, equal.

# 4. Course Leading to LL.B., B.C.L.

Class I-None. Class II .- Macklaier (s). Class III .- None.

### 5. Course Leading to B.Sc.

Class I.-None. Class II.-Wilson. Class III.-Hibbard (s).

### 6. Double Course, B.Sc., M.D.

(On completion of certain Medical subjects.)

Alexander, Kanigsberg, Kennedy, McCulloch, Scheffer, Steine, Wolepor, Zuckerman.

### 7. Course Leading to B. Com.

Class I.-Laffoley, O'Meara. Class II.-Werry, Rutherford (J. B.), Shapira, Rutherford (W. K.), Blackman. Class III.-Dougall, Johnson, Lefkowitz (s).

### FIRST YEAR.

#### PRIZE.

Adney, Francis Glenn.....Coster Memorial Prize.

### PASSED THE FIRST YEAR EXAMINATIONS.

# 1. Course Leading to B.A.

Class I.—Willard, Pratt, Walter, LeMessurier. Class II.—Foster, Cowan, Johnson, Wood-Legh, Stewart (A. E.), Spector, Crestohl, Dorken, Collins, Freedman, Freeman, Gittleson, Grigg (s), Gault; Ball (s) and Goldblatt, equal. Class III.—Banfill, Evans (K. J.), Slack, Figler (s), Fair and Howell (s), equal; Shlakman (s), Smith (s); Mettarlin (s) and Prudham (s), equal; Teed, Henderson, Shirriff, Ogilvy (s), Molson (s), Wadsworth (s), Allan, Ginn (s), Marsh (s), Fitch, Cross (s), Levinson (s), Perry; Wilson (W. H.) (s) and Beckwith, equal; Wighton, Pick (s), Holtham (s), McGerrigle (s), Campbell (E. D.) (s), Anderson (s), Russel (s), Epstein (s), Johnston (s).

### 2. Course Leading to B.Sc.

Class I.—Adney. Class II.—Mendelsohn, Lacowitsky, Liffiton, Canning. Class III.—Winn (s), Addleman (s), Paxton (s), Davidson, Knowlton, Freyvogel, Duval (R. H.), Finkelstein (s), Mitchell (s).

### 3. Course Leading to B.H.S.

Class I.-None. Class II.-None. Class III.-Reyner, Hodge (D. E.), (s).

### 4. Course Leading to B. Com.

Class I.—Holland, Tomalin, Caplan. Class II.—Kaplan, Nichol (G. H. G.), Shea, Dustan (s), Becker (s), Richter (s), Tyler, Burke, Shecter. Class III.—Mott (s), Kellnor (s), Clarkson (s), Jones.

GRANTED YEAR ON ACCOUNT OF ENLISTMENT.

(In alphabetical order.)

### SECOND YEAR.

Goubjila (T.V.) (s).

### FIRST YEAR.

### Course Leading to B.A.

Amaron, Burnett, Craik, Egg. Heron, McIntyre, Moore (s), Puddicombe, Radmore, Read, Smith (J. R.), Strange, VanVliet, Way (s), Wells, Woodhouse (s).

### Course Leading to B.Sc.

Bishop, Cantley, Mossman, Pye.

### Course Leading to B. Com.

Aaronson, Benson (G. F.), Benson (W. D.), Cockshutt, Dobell, Drummond, Elderkin, Finley, Fraser, Hamilton, Hughes, Kee, Kirsch, Laffoley, MacKinnon, MacMahon, Meunier (s), Miller (s), Mullen, Munro, Nichol (J. M.), O'Brien, Phillips (s), Reid, Roussac, Skelton, Small (s), Smith (E. D.), Smith P. G.), Whittall.

# STANDING IN THE SEVERAL SUBJECTS.

(Arranged alphabetically in order of Departments.)

### DEPARTMENT OF BOTANY.

#### Course 2.

Class I.-Snyder, Henderson, Dart. Class II.-Kay. Class III.-Mac-Farlane.

#### Courses 4 and 6 (Part 1).

Class I.-Spier, Godwin, Higginson. Class II.-None. Class III.-None.

### Courses 4 and 6 (Part 2).

Class I.-Godwin, Spier. Class II.-None. Class III.-Higginson.

#### Course 5.

Class I .- Higginson. Class II .- Kay. Class III .- None.

### DEPARTMENT OF CHEMISTRY.

#### Course I.

Class I.—Adney, Winn, Dart, Reid, Hannen, Weibel, Mendelsohn, Lacowitsky. Class II.—Finkelstein, Paxton, Martin; Holloway and Snyder, equal; Reilly, Bernstein; Leggatt and Liffiton and Mitchell and Rosenstein, equal; Tait and Tuffy, equal; Canning. Class III.—Freyvogel and Joseph and Smith (A. V.), equal; Bourgoin and Rosen, equal; Reyner; Campbell (E. M.) and Duval (R. H.) and Knowlton and Moock and Schwartzman, equal; McConnel (M.); Feilding and Miller, equal; Mansfield, Henderson, Rough; Hameroff and Howell, equal; Bagley and Boyd and Copland and Goldman and Hodge (D. E.) and Mathewson, equal.

#### Course 2.

Class I.—Phillips, Mirsky, Barnes (E. L.); McCall and Rabinovitch (J.), equal; Olding. Class II.—Larkin, Wilson (C.). Class III.—Richardson, Kay; Freedman (J.) and Roy, equal.

#### Course 3 (a).

Class I.—Spier, McCall, Alexander; Larkin and Steine, equal; Joseph, Godwin; Barnes (E. L.) and Olding, equal. Class II.—Gradinger and Wolepor, equal; Scheffer, Roy, Kennedy, McCulloch, Zuckerman, Levy, Kanigsberg. Class III.—None.

### Course 3 (b).

Class I.—McCall, Foran, Larkin. Class II.—Barnes (E. L.) and Kennedy (W. R.), equal; Scheffer; Joseph and Roy, equal; Irwin, Olding, Alexander. Class III.—Wolepor, Zuckerman, Steine, McCulloch, Kanigsberg, Levy.

### Course 4.

Class I.—Foran, Phillips, Mirsky; McCall and Vaughan, equal; Ereaux. Class II.—Rabinovitch (J.), Larkin; Donald and Olding, equal; Kay, Barnes (E. L.). Class III.—Freedman (J.); Roy, Richardson, Wilson (C.).

### Course 5.

Class I.-McGlaughlin. Class II.-Hemming, Shaw. Class III.-Galley, Charlton.

### Course 6.

Class I.—Hill, Rorke, Goddard, Davidson. Class II.—Hemming. Class III.—Rabinovitch (B.).

### Course 7.

Class I.-Petersen (J. N.). Class II.-Rubin and Silver, equal; Rorke, Freedman (N. B.), Hill, Davidson. Class III.-Goddard.

#### Course 8.

Class I.-Rorke, Goddard, Hill. Class II.-Donald, Davidson. Class III.-Rabinovitch (B.).

#### Course 9.

Class I.-Hemming and Rorke, equal; Hill, Foran. Class II.-Davidson, Goddard, Irwin. Class III.-Joseph.

#### Course 10.

Class I.-McGlaughlin, Phillips, Spier, Hemming. Class II.-Godwin, Rorke, Hill. Class III.-None

#### Course 12.

Class I .- Shaw. Class II.-McGlaughlin. Class III .- None.

### Course 13.

Class I.-Rorke, McGlaughlin; Hill and Shaw, equal. Class II.-Donald, Hemming, Davidson. Class III.-Goddard, Charlton.

#### Course 14.

Class I.-Rorke. Class II.-Shaw, Galley. Class III.-McGlaughlin, Charlton, Davidson, Hill.

#### Course 15.

Class I.-Rorke; Davidson and McGlaughlin, equal; Shaw, Hill, Charlton. Class II.-Donald, Galley Class III.-None.

#### DEPARTMENT OF CLASSICS.

#### Greek: Course I.

Class I.-None. Class II.-LeMesurier and Wood-Legh, equal; Ginn. Class III.-Edgecombe, McGerrigle, McLaren, Whitmore, Wilson (W. R.).

#### Greek: Course 3.

Class I.-Birkett and Shatford, equal; Collins. Class II.-Hall. Class III.-Norman; Anderson and Kneeland and White, equal.

#### Greek: Course 4.

Class I.-Kerr. Class II.-None. Class III.-None.

#### Greek: Course 5.

Class I.-None. Class II.-Holland. Class III.-None.

### Greek: Course 7.

### Class I.-Holland. Class II.-None. Class III.-None.

#### Latin: Course 1.

Class I.—Gittleson and Willard, equal; Cowan. Class II.—Foster, Freedman; Ball and Freeman and LeMessurier and Murray and Pratt and Walter and Wood-Legh, equal; Stewart (A. E.); Collins and Howell, equal; Spector; Dorken and Shlakman, equal; Cross and Douglas, equal; Figler and Henderson and Johnson (D. M.), equal. Class III.—Davidson, Campbell (L.); Crestohl and Goldblatt, equal; Addleman, Kerr, Shirriff; Bissett and Grigg and Marsh and Wisenberg, equal; Fitch and Mc-Phail, equal; Banfill and Ginn and Jathes and Prudham and Slack and Teed, equal; Fair and Levinson and Mettarlin and Smith (D. F.) and Wadsworth, equal; Campbell (E. D.) and Russel, equal; Beckwith; Allan and Beattie (M. T.) and Mc-Connel (D. A.) and Scovil and Turner, equal; Calder and Kert and Klineberg and Moore (E. N.) and Wighton, equal; Collinge and Evans (K. J.) and Gault and Holtham and Pick and Wilson (W. R.), equal; Ditchfield and McGerrigle and Molson and Owens, equal; Stephenson and Superior, equal; Anderson and Brown and Bubroff and Campbell (F. R.) and Epstein and Johnston and McGibbon and McLellan and Wilson W. H.), equal.

#### Latin: Course 2.

Class I.—Kerr, Birkett; Shatford and Shea, equal; Elliot and Weibel, equal. Class II.—Reid; Harris and Holloway and Snyder, equal; Macklaier and McPartlin, equal; Stewart (A. I. M.), Anderson, Macrae (D.). Class III.—Henderson; Addy and Avison, equal; Foley and O'Hagan and Rohrlich, equal; Moore and Zealand, equal; McDonald and Pierce, equal; Howell, Caldwell, Sharples, Fry, Mathewson; Leslie and McGoun and Newnham and Riley and Symonds, equal; Banfill and Copland and Smith, equal; Klineberg; Gaboury and Johnson (A. S.) and Peterson, equal.

# Latin: Course 3.

Class I.-Macdonald. Class II.-Wall, MacKinnon. Class III.-None.

### Latin: Course 5.

Class I.-None. Class II.-Macdonald, Wall, MacKinnon. Class III.-None.

#### DEPARTMENT OF ECONOMICS AND POLITICAL SCIENCE.

#### Course I.

Class I.—McGoun; Moule and Pierce, equal; Harris and Weibel, equal. Class II.—Cameron (G. M.), Banfill, Riley, Murray, Curtis, Foley, Peterson, Tait. Class III.—Anderson; Cahana and Rohrlich, equal; O'Hagan, Davis; Macrae (D.), Fraser; Avison and Cousens, equal; Copland and Wilder, equal; Ford (K. M.); Addy and Bullock and Gaboury and Hall and Henderson and Lidstone and McDonald and Macdougall (J. M.) and Rosenstein and Schafer and Smith (A. V.) and Teggart, equal.

#### Course 2.

Class I.—Fife and Mathers, equal; Raphael. Class II.—Rowat; Cameron (K. L.) and Kern (M. J.), equal; Taylor; Borden (H.) and Common and Smith (C. B.), equal; Caverhill, Stevenson, Davidson; Pratt and Ross, equal; Peterson (N. E.); Franklin and Smith (A. E.), equal; Townshend. Class III.— Sperber, Kern (L. W.), Echenberg.

### Course 3.

Class I.—Borden (H.), Farthing, Kern (L. W.), Kern (M. J.), Pratt. Class II.—Ross; Raphael and Taylor, equal; Macnaughton, Davidson, Fife, Sperber, Caverhill; Cameron (K. L.) and Rowat, equal; Bunt (H.) and Campbell (S. D.), equal. Class III.—McCall; O'Brien and Smith (R. M.), equal; McMinn, Macdiarmid; Gillespie and McLean and O'Heir, equal; Stevenson, Common, Franklin.

#### Course 8.

Class I.—Fife and Raphael, equal; Borden (H.) and Caverhill, equal; Sperber. Class II.—Davidson (W. H.), Kern (L. W.); Ross and Taylor, equal; McLean; Common and Garrow, equal; Nichol (H. R. H.) and Rowat and Smith (C. B.), equal; Kern (M. J.) and Pratt, equal; Cameron (K. L.) and DiFlorio and O'Brien, equal. Class III.—Duncan, Greaves, Martin, Franklin; Echenberg and Henry, equal.

#### Course 9.

Class I.—Farthing, Fife; Borden (H.) and Raphael and Taylor, equal, Class II.—Kern (M. J.); Kern (L. W.) and O'Brien, equal; Pratt; Davidson (W. H.) and Nichol (H. R. H.) and Ross, equal; Rowat; Cameron (K. L.) and Caverhill and Sperber, equal; McDougall, Common. Class III.—Greaves, Martin, Franklin, Echenberg.

#### Course 10.

Class I.—Freedman (L. K.) and Peterson (N. E.), equal; Ewing, Cameron (S.). Class II.—Nichol (H. R. H.); O'Brien and Smith (C. B.), equal; McDougall, Henry. Class III.—Greaves, Townshend; Duncan and Martin, equal.

#### Course II.

Class I.—None. Class II.—Duncan and O'Brien, equal; Nichol (H. R. H.) and Townshend, equal; Henry. Class III.—Greaves, Martin.

#### Course 12.

Class I.-None. Class II.-O'Brien and Townshend, equal. Class III.-Duncan, Nichol (H. R. H.), Adair, Martin, Henry, Greaves.

DEPARTMENT OF EDUCATION.

#### Course I.

Class I.—Mawdsley, Nichol (J.); MacKinnon and Macnaughton, equal. Class II.—Scott, Imrie, McDougall, Lalond, Savage; Latham and McMillan (M.) and Reid (J.) and Wilson, equal. Class III.—McMillan (H.), Henry.

#### Course 2.

Class I.—Wiseman. Class II.—Cameron (K. L.) and Symonds, equal; Barnes (D. S.) and Davidson, equal; Campbell (S. D.) and Silverman, equal; Cockfield and Larkin and Mills, equal; Holland; Imrie and Latham and Thornton, equal; Rexford, McGreer. Class III.—Contant, Deery, Duncan, Rorke, Ford (R. H.); Ford (C.) and Foster and Macdiarmid, equal; Mc-Pherson, Goddard.

#### DEPARTMENT OF ENGLISH.

#### Course I.

Class I.—Willard, Fitch, Slack, Walter; Collins and Davidson and Freeman and Ginn and Gittleson and Hudon and Johnson (D. M.) and Roy, equal. Class II.—James, Owens; Shlakman and Wilson (W. H.), equal; Canning and Collinge and Grigg and Paxton, equal; Allan and Anderson and Cowan and Kydd and Stewart (D. L.), equal; Calder and Crestohl and Montgomery and Wilson (W. R.), equal; Banfill and Reyner, equal; Figler and Hodge (E. A.), equal; Adney and Cross and Gault, equal; Fullerton and Ogilvy and Reilly, equal; Dobbie and Livingstone and Wood-Legh, equal; Addleman and Foster and Fraser and Henderson and Laidlaw and MacDonnell and Teed and Wadsworth, equal; Bissett and Ditchfield and Feilding and Jackson (H. N.) and Kerr and Leggatt and Prath and Prudham and Russel and Winn, equal; Bernstein and Campbell (L.) and Epstein and McLaren and Moore (E. N.) and Stephenson and Wighton, equal; Ball and Beckwith and Freedman and Freyvogel and Knowlton and Lamb and Wisenberg and Young, equal; Hodge (D. E.) and Lacowitsky and McPhail and Pick and Rosen and Shirriff and Wilder, equal; Duval (R. H.) and Evans (K. J.) and Liffiton and Perry and Spector, equal; Beattie (M. T.) and McConnel (D. A.) and McEwen and Shatford (R. A.) and Simpson and Stewart (A. E.), equal; Fair and LeMessurier and Mitchell and Schwartzman and Smith (D. F.), equal; Hoover and Miller and West, equal; Evans (A. L.); Bubroff and Campbell (E. D.) and Dorken and Forsyth and Holtham and McGerrigle and McGibbon and Maclean, equal; Hannen; Campbell (E. M.) and Edgecombe and Hameroff and Levinson and Marsh and Mettarlin and Turner, equal; Campbell (F. R.) and Johnston and Martin (D. G.), equal; Macnab and Mendelsohn and Shillington, equal; Klineberg and Martin (S. A. V.), equal; Howell and Matts and Rabinovitch, equal; Beattie (J. R.) and Fridman and Hutcheson, equal; Boyd and Laurin, equal; Ballantyne and Clark (H. S.) and Clarke (V.) and Finkelstein and Kert and Molson and Murray and Pye and Superior, equal; Goldblatt and McAvoy and Norman; equal.

#### Course 2 (Men).

Class I.—Walter, Spector, Freeman, Willard, Davidson. Class II.— Figler, Addleman, Lacowitsky; Adney and Mettarlin, equal; Goldblatt and McGerrigle and Ogilvy, equal; Collins, Cowan; Duval (R. H.) and Marsh, equal; Molson; Levinson and Mendelsohn, equal; Johnson; Gault and Holtham and Jackson (H. N.) and Livingstone, equal; LeMessurier; Crestohl and Wadsworth and Wilson (W. H.), equal. Class III.—Moore (E. N.); Ginn and Henderson, equal; Allan and Fullerton, equal; Epstein and Forsyth, equal; Martin (S. R.), Fraser, Calder, West; Hudon and Miller and Norman and Wilson (W. R.), equal; Rosen; Anderson and Ballantyne and Howell, equal; Boyd and Clark (H. S.) and Simpson, equal; Finkelstein and Mc-Gibbon and Stephenson, equal; Boulanger and Edgecombe and . McAvoy and Martin (D. G.) and Owens and Prudham and Winn, equal.

#### Course 2 (Women).

Class I.—Douglas and Foster and Pratt, equal; Fair, Laidlaw, Mc-Phail, Liffiton, Freedman, Teed; Evans (K. J.) and Wood-Legh, equal; Paxton and Slack, equal; Bissett and Wisenberg, equal; Grigg and James and Kerr and Pick and Shlakman, equal. Class II.—Ball and Beckwith and Campbell (L.) and Dorken, equal; Banfill and Reyner, equal; Canning and Kydd and Stewart (A. E.), equal; Magee; McConnel (D. A.) and Scovil, equal; Leggatt; MacDonnell and Russel, equal; Matts, Campbell (E. D.) and Gittleson, equal; Montgomery and Reilly, equal. Class III.—McEwen and Turner, equal; Fridman; Jenkins and Wighton, equal; Beattie (M. T.) and Brankley, equal; Maclean; Cross and Ditchfield and Dobbie, equal; Campbell (E. M.) and Smith (D. F.), equal; Lamb; Fitch and Roy and Shirriff, equal; Evans (A. L.) and Hodge (D. E.), equal; Freyvogel, Knowlton; Laurin and Rabinovitch, equal; Johnston, Murray, Mitchell, Clarke; Wilder and Young, equal.

# Course 3 (Men).

Class I.—White, Moore; Cousens and Harris and Kennedy and Kerr and Macklaier and Peterson, equal. Class II.—Lidstone, Bunt (L. O.); Anderson and Murray and O'Hagan, equal; Kanigsberg and Rosenstein, equal; Bullock and Copland, equal; Alexander; Fraser and Johnson (A. S.) and Symonds, equal; McDougall (J. M.) and Wolepor, equal; Avison and Davis and Pierce, equal; Hall and Johnston (C. F.) and Shea, equal; McCulloch. Class III.—Bussiere and Higinbotham and Mathewson, equal; Bourgoin and Caldwell and Gaboury and Steine, equal; Rohrlich; Leslie and Richards, equal; Zuckerman; Badger and McDougall (G. S.) and Scheffer, equal; Addy and Kneeland and Stanway, equal; Elliot, Gradinger, Barrett, Schafer.

#### Course 3 (Women).

Class I.—Shatford, Weibel, Millen, Levy, Reid (J. L.), Riley, Fry; Birkett and Sharples, equal; McGoun and Stewart (A. I. M.), equal. Class II.—Foley, Hibbard; Medbury and Newnham, equal; Macrae (D.), Mansfield, McPartlin; Henderson and Snyder, equal; Tuffy; Banfill and MacDonald and MacRae (S. E.) and Tait and Wilson (C. R.), equal; Brown and Klineberg and Palmer and Teggart, equal. Class III.—Ayer and Brooke and Howell, equal; Holloway and Rough, equal; Joseph, Zealand, Smith (A. V.).

#### Course 4.

Class I.—Mathers and Shatford, equal; Reid (J. L.); Kerr and Newnham, equal; Harris; Birkett and Cousens, equal; Riley, Macrae (D.), Joseph, Mills, Murray. Class II.—Foley and Fry and Gaboury, equal; Avison and Howell and Johnston (C. F.) and Palmer and Rough and Shea and Symonds, equal; Banfill and Davis and Mansfield, equal; O'Hagan and Sharples, equal; Peterson and Wilson (C. R.), equal; Brooke; Hall and McPartlin, equal; Anderson; Klineberg and Livingstone and Tait, equal; Bunt (L. O.) and Smith (A. V.) and Zealand, equal. Class III.—Caldwell and Kneeland and Moore, equal; Stewart (A. I. M.), MacRae (S. E.), Bagley, Bullock, Brown; Ayer and Fraser and Higinbotham, equal.

#### Course 5.

Class I.—Hacket, Cockfield, Barnes (D. S.). Class II.—Borden (E. L.), Latham; Bagg and Gillespie, equal. Class III.—Stevenson, Reid, Willson; Farthing and Ford (R. H.), equal.

#### Course 6.

Class I.—Macdonald and Nichol (J.), equal; Macnaughton; Barnes (D. S.) and Cockfield, equal; Ewing; Imrie and Moule, equal; Hackett and Moody and Wilson, equal. Class II.—Gillespie and Wiseman, equal; Ford (C.) and Husk and Latham and O'Brien, equal; Borden (E. L.) and Campbell (S. D.) and Freedman (L. K.) and McMillan (M.), equal; McMillan (H.); Cameron (G. M.) and Reid (J.), equal; Bagg and Barnard, equal; Farthing and Lewis, equal; Ford (K. M.), Savage; Morrison and Reid (R. V.) and Symonds and Willson, equal. *Class III.*—Mc-Greer, Macdiarmid, Foster, Bunt (L. O.), Deery, McIntosh, DiFlorio.

#### Course 7.

Class I.—Cameron (S. S.) and Cockfield, equal; Hackett and Nichol (J.), equal; Freedman (L. K.) and Moody, equal; Farthing, Campbell (D.); Barnes (D. S.) and Ford (R. H.), equal. Class II.—Husk, Gillespie, McGreer, Deery; Bagg and Harvey, equal; Ford (C.) and Lewis, equal; Mathewson. Class II.—Ford (K. (M.); Borden (E. L.) and Hébert and O'Heir, equal; Macdiarmid and Stevenson, equal; Cameron (G. M.), Foster.

#### Course 9.

Class I.-None. Class II.-Latham, Duncan. Class III.-None.

#### Course 10.

Class I.—Mawdsley, Meyer, Novick, Moody, Ewing, Imrie; Savage and Scott, equal; Latham and Macnaughton, equal. Class II.— McMillan (H.) and Wilson, equal; McMillan (M.), McKinnon; DiFlorio and Macdonald and McLean, equal. Class III.—None.

### Course II.

Class I.—Cameron (S. S.) and Macdonald, equal; Freedman (L. K.). Class II.—None. Class III.—None.

#### Course 12.

Class I.—Ewing and Mawdsley, equal; Moody, Wiseman; Cameron (S. S.) and DiFlorio, equal; Meyer and Novick, equal; Imrie. Class II.—Hébert and Nichol (J.), equal. Class III.—None.

#### Course 13.

Class I.-None. Class II.-Harvey. Class III.-Mathewson, Hébert.

#### Course 14.

Class I.-Meyer, Novick, Macdonald. Class II.-Moody. Class III.-None.

#### Course 15.

Class I.—Harvey. Class II.—Moody, Farthing, McIntosh; Bunt (L. O.) and Mathewson, equal. Class III.—McGreer, Ford (R. H.).

#### Course 16.

Class I.—Mawdsley, Wiseman, Scott, Moody; Cameron (S. S.) and Freedman and Mathewson, equal. Class II.—Reford, Hébert, Harvey, Lewis. Class III.—None.

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### Course 19.

Class I.—Hackett, Wiseman; McMillan (M.) and Meyer, equal; Cockfield and Macnaughton and Moody, equal; Mawdsley; Mc-Millan (H.) and Moule, equal. Class II.—Novick; Campbell (S. D.) and Imrie, equal; Reid (J.); Barnes (D. S.) and Barnard, equal; Deery and Wilson (A. E.), equal; Macdiarmid and Willson (R. E.), equal; Ford (C.) and McIntosh, equal; Bagg and Cameron (G. M.) and Scott, equal. Class III.—Foster; Borden (E. L.) and Ford (K. M.) and Savage, equal; Fitzsimons and Husk and McRae, equal; Reid (R. V.), Ford (R. H.).

#### Course 20.

Class I.-Nichol (J.). Class II.-Ford (C.), Husk, O'Heir. Class III.-None.

### DEPARTMENT OF GEOLOGY.

#### Course I.

Class I.—Phillips; Armstrong and Gillespie, equal; McLean; Cameron (G. M.) and Mills, equal; Holloway and Wilson (C. R.), equal; McMinn, Barnes (E. L.); Ford (C.) and Foster, equal; Stevenson. Class II.—Barnes (D. S.); Hibbard and White, equal; Kneeland and Smith (C. B.), equal; Contant, Ford (K. M.), Campbell; Deery and Willson (R. E.), equal. Class III.—Borden (E. L.), Bunt (L. O.); Kelly and McGreer, equal; Macdiarmid; Ford (R. H.) and McIntosh, equal; Falconer, Lewis, Barrett.

#### Course 2.

Class I.-Duncan, McMillan (M.) and Scott, equal; McMillan (H.), Ewing, Wilson. Class II.-Lalond, Imrie, Peterson. Class III.-Reid (J.), DiFlorio, Savage, Morrison.

#### Course 3.

Class I.-Dart, McMillan (M.). Class II.-McMillan (H.), Reid (J.). Class III.-Morrison.

#### Course 4.

Class I.-Dart, McMillan (H.). Class II.-McMillan (M.). Class III.-Reid (J.).

#### Course 5.

Class I.-Phillips, Dart, McCall. Class II.-Shaw, Olding. Class III.-Charlton.

#### Course 6.

Class I.-Shaw, McGlaughlin; Dart and McCall and Phillips, equal; Charlton, Olding. Class II.-None. Cass III.-None.

#### Course 10.

Class I .- Dart. Class II.- None. Class III.- None.

#### DEPARTMENT OF HISTORY.

#### Course 1.

Class I.-Foster, Willard, Shlakman, Dorken, Fair, Pratt, Stewart (A. E.); Campbell (L.) and Henderson, equal; Grigg and Howell and Spector, equal; LeMessurier. Class II.-Smith; Addleman and Johnson (D. M.) and Laidlaw, equal; Evans (K. J.) and Freeman and Wood-Legh, equal; Walter; Fraser and Prudham and Wadsworth, equal; Davidson and Freedman and Perry and Scovil, equal; Slack and Wilson (W. H.), equal; Montgomery; Douglas and Kydd and Pick and Shirriff, equal; Campbell (E. D.) and Levinson and Palmer, equal; Cowan and Gault, equal; Collins; Goldblatt and MacDonnell and Moore (E. N.) and Ogilvy, equal; Anderson and Banfill and Bissett and Holtham and McPhail, equal. Class III.-West, Matts; Fullerton and Ginn and Johnston (J. L.), equal; Magee and Teed, equal; Cross and Fridmann and McEwen, equal; Kert and Russel and Wisenberg, equal; Beckwith and Duval (I. B.) and Evans (A. L.) and Figler and Kerr and McConnel (D. A.), equal; Clark (H. S.) and Edgecombe and Ellison and Mettarlin and Murray and Norman, equal; Malts and Stephenson, equal; Ballantyne and Ditchfield and Dobbie and Turner, equal; Beattie (M. T.) and Hodge (E. A.) and Hutcheson, equal; Beattie (M. T.) and Hodge (E. A.) and Fitch and Klineberg and Lamb, equal; Campbell (F. R.) and Fitch and Klineberg and Lamb, equal; Campbell (F. R.) and Fitch and Martin (S. A. V.) and Owens and Simpson, equal; Clarke (V.) and Hoover and McGibbon and Molson, equal; Allan and Epstein and Forsyth and Roy and Young, equal.

#### Course 2.

Class I.—McGoun, Bunt (H.), Riley, Reid, Harris, Macrae (D.); Banfil and Peterson, equal; Rohrlich; Anderson and Avison, equal; Davis and Foley and Murray and Rosenstein, equal. Class II.—Hall; Copland and Mills, equal; Cousens, McDougall (J. M.), McDonald, Tait, McPartlin; Johnston (C. F.) and Joseph and Lidstone, equal. Class III.—Brown, Howell; Addy and Teggart, equal; Ayer, Barrett, MacRae (S. E.), Fraser; McDougall (G. S.) and Webster, equal; Livingstone and Mansfield and O'Hagan and Smith, equal.

### · Course 5.

Class I.—Nichol (J.), Cockfield, Moule, Peterson (N. E.), Holland, Mills. Class II.—Hackett, Smith (R. M.), Wilson, Bagg, Reid (J.). Class III.—McDougall, Husk.

#### Course 7.

-Class I.—Hackett, Holland, Nichol (H. R. H.), Cockfield, Ewing, Barnes (D. S.). Class II.—Bagg and Bunt (H.), equal; Scott and Smith (C. B.), equal; Morrison, Mills, Deery, Curtis; Borden (E. L.) and Ford (C.) and Gillespie and Imrie, equal. Class III.—Henry and Willson, equal; Husk and Smith (R. M.), equal; Ford (K. M.).

### Course 8.

# Class I.-Nichol (J.), Cameron (S. S.). Class II.-None. Class III.-None.

#### Course 9.

Class I.—Nichol (J.), Hackett, Freedman; Cameron (S. S.) and Holland, equal; McDougall. Class II.—Cameron (K. L.) and Davidson and Kern (M. J.) and Moule, equal; Ewing; Cockfield and Kern (L. W.), equal; Borden (H.) and Bunt (H.), equal; O'Heir and Ross and Townshend, equal; McMillan (M.); Bagg and Pratt and Savage, equal; Mathers, Macnaughton, Wilson (A. E.); McMillan (H.) and Scott, equal. Class III.—Husk, Reid (J.).

#### Course 10.

Class I.—Freedman (L. K.), Peterson (N. E.); Greaves and Taylor, equal. Class II.—Smith; Duncan and Lalond, equal; O'Brien, Townshend, Martin, DiFlorio. Class III.—None.

#### DEPARTMENT OF MATHEMATICS.

#### Course 1: Algebra.

Class I.—Mendelsohn and Smith (D. F.) and Walter, equal; Canning and Cowan and Foster and Plow and Stewart (D. L.), equal; Munro (W. D.): Crestohl and Gittleson and Hannen, equal; Laidlaw and Pratt and Shatford, equal; Grigg, Calder; Duval (R. H.) and Fraser, equal; Lacowitsky and Smith (F. M.), equal; Fensom; Finkelstein and Rosen, equal; Allan and. Spector, equal. Class II.—Gault and MacDonnell, equal; Stewart (A. E.); Freedman and Molson, equal; Evans (A. L.) and LeMessurier and MacNab, equal; Reyner; Clark (H. S.) and Coyle and Hudon, equal; Collins and Dorken and Ogilvy, equal; Epstein and Fitch and McIntyre and Marsh, equal; Shirriff and Wilson (W. H.), equal; Boyd, Martin (D. G.); Figler and Palmer, equal; Campbell (E. M.) and Davidson, equal. Class III.—Wighton; Collinge and Holtham, equal; Hodge (D. E.) and McEwen, equal; Ballantyne (C. T.) and Hameroff and Hutcheson, equal; Freyvogel and Kerr, equal; Perry, Liffiton; Beckwith and Bissett and Fair and Laurin, equal; Brankley; Knowlton and Kydd, equal; McPhail, Moore (E. N.); Banfill and Levinson and Montgomery and Slack, equal; Anderson and Owens and Shillington, equal; Edgecombe, Reilly; Ginn and Goldblatt and Martin (S. A. V.) and Mettarlin, equal; Bubroff and Douglas (F. M.) and Forsyth and Henderson and Magee and Superior and Teed, equal.

#### Course 1: Geometry.

Class I.-Gittleson, LeMessurier; Mendelsohn and Rosen and Schwartzman, equal; Canning and MacDonnell, equal; Stewart (D. L.); Freeman and Reilly and Smith (J. R.), equal; Foster and Moore (E. N.), equal; Crestohl and Ogilvy, equal; Hannen and Leggatt and Walter, equal; Fraser and Laidlaw, equal; Gault, Mossman, Anderson; Evans (K. J.) and MacNab, equal. Class II.—Dorken; Figler and Fitch and Molson, equal; Allan and Goldblatt and Palmer and Read, equal; Grigg, Hameroff, Lacowitsky; Beattie (M. T.) and Edgecombe and Perry and Spector, equal; Cowan and Wadsworth, equal; Clarke (V. M.) and Shatford, equal; McGibbon, Heron; Clark (H. S.) and Craik and Hoover and Kerr and Roy, equal; Epstein and Puddicombe and Teed, equal; Lamb and Paxton and Slack, equal; Collinge and Duval (R. H.) and Henderson and Radmore and Shillington and Stephenson and Wilson (W. H.), equal. Class III.—Beckwith and Collins and Hodge (D.) and Hutcheson and Knowlton and MacFarlane and Magee and Wilson (W. R.), equal; Fensom, Boyd; Bubroff and Moore (A. F.), equal; Freedman and Howell and McEwen and Miller, equal; Woodhouse, Kydd; Bissett and Fair and Rabinovitch and VanVliet, equal; Amaron and Bernstein (J. C.) and Mick, and Russel, equal; Feilding and Owens and Plow and Simpson, equal; Hudon and MacGerrigle and Mettarlin, equal; Beattie (J. R.) and Davidson, equal; Levinson and Murray and Way and Holtham and Matts, equal; Levinson and Murray and Way and Wells, equal; Addleman and Ballantyne (C. T.) and Banfill and Chisholm and Fullerton and Kert, equal; Ball and Evans (A. L.) and Finkelstein and McIntyre and Pick and Réyner, equal.

### Course 1: Trigonometry.

Class I.-Evans (A. L.) and LeMessurier, equal; Canning, Lacowitsky; Mendelsohn and Stewart (D. L.), equal; Gault and Pratf and Smith (D. F.) and Stewart (A. E.), equal; Perry, Shatford, Foster, Evans (K. J.), Walter; Fensom and Mac-Donnell, equal; Allan and Laidlaw, equal. Class II.-Smith (F. M.); Dorken and Freyvogel, equal; Cowan and Hannen, equal; Munro (W. D.); Collins and Crestohl and Shirriff, equal; Ogilvy; Finkelstein and Liffiton, equal; Rosen; Knowlton and Marsh, equal; Fraser. Class III.-Beattie (M. T.); Freedman and Gittleson and Spector and Wilson (W. H.), equal; MacNab and Plow, equal; Epstein and Wighton, equal; Calder and Davidson and Palmer and Teed, equal; Fair and Howell, equal; Banfill and Marsh, equal; Paxton; Holtham and Schwartzman and Shillington, equal; Brankley and Slack, equal; Coyle and Fullerton, equal; Edgecombe and Reyner, equal; Campbell (F. R.) and Henderson, equal; Clarke (V. M.); Beattie (J. R.) and Dobbie and Duval (R. H.) and Kydd and Montgomery, equal; Beckwith and Brown (M. C.) and Hudon and McEwen and Shlakman and Turner, equal.

# Course 2: Algebra, Trigonometry, Theory of Equations.

Class I.-Adney, Johnson (D. M.), Willard, Freeman. Class II.-Feilding; Prudham and Winn, equal. Class III.-Mitchell.

### Course 2: Advanced Geometry.

Class I.—Adney and Willard, equal; Johnson (D. M.), Feilding. Class II.—Freeman and Prudham, equal; Mitchell. Class III.— Winn; Freyvogel and Liffiton and Wighton, equal.

### Course 3: Algebra.

Class I.—Smith (R. M.), Snyder, Macklaier, Elliot. Class II.— Higinbotham, Tuffy, Hibbard. Class III.—Holloway, Leslie, Henry, Johnson (A. S.).

### Course 3: Geometry.

Class I.-Snyder, Leslie, Holloway. Class II.-Smith (R. M.), Higinbotham, Macklaier. Class III.-Stewart (A. I. M.), Henry; Elliot and Tuffy, equal.

### Course 4: Analytical Geometry.

Class I.-Foran and Tuffy, equal. Class II.-Larkin. Class III.-Joseph.

### Course 4: Calculus.

Class I.-None. Class II.-Foran, Tuffy. Class III.-Joseph and Larkin, equal.

### Course 5.

Class I.-Smith (R. M.), Joseph, Tuffy, Leslie. Class II.-Roy. Class III.-Galley.

#### Course 6.

Class I .- Tuffy. Class II .- Smith (R. M.). Class III .- Joseph.

Course 7: Analytical Geometry of Three Dimensions.

Class I.-McPherson. Class II.-Thornton, Galley. Class III.-None.

### Course 7: Calculus.

Class I.-None. Class II.-McPherson, Thornton. Class III.-Galley.

Course 8: Functions of a Complex Variable.

Class I .- Douglas. Class II.- None. Class III .- None.

# Course 8: Functions of a Real Variable.

Class I.-Douglas. Class II.-None. Class III.-None.

#### Course 12.

Class I.-None. Class II.-McPherson and Thornton, equal. Class III.-None.

### DEPARTMENT OF MODERN LANGUAGES.

#### French: Course 1.

Class I.—Banfill and Holland and James and Willard, equal. Class II.—Freedman; Cameron (E. W.) and Dorken and Perry and Pratt, equal; Howell, Shea; Hudon and Wadsworth, equal; Caplan and Tomalin and Wisenberg, equal; Addleman and Foster and Richter and Shlakman, equal; Campbell (L.) and Figler and Spector, equal. Class III.—Ball and Cross and McLaren, equal; Davidson and Goldblatt and Shecter, equal; Bissett and Evans (K. J.) and Fensom and Gault and Grigg and Slack, equal; Campbell (E. D.) and Fitch and Goodkowsky and Kerr and Kert, equal; Dobell and Johnson (D. M.) and Wood-Legh, equal; Fair and Moore (E. N.) and Morphy, equal; Gittleson; Johnston and Kydd and Pepin and Stewart (A. E.), equal; Kaplan; Falconer (K.) and Ginn and Kellnor and Mettarlin and Pick and Webster and West, equal; Clark (H. S.) and Levinson and Tyler and Wilson (W. R.), equal; Crestohl and Ditchfield and Teed, equal; Beckwith and Calder and Clarkson and Collinge and Kee and Wighton, equal; Owens and Simpson, equal; Campbell (F. R.) and Henderson and Marsh, equal; Ogilvy and Palmer and Superior, equal; Martin (S. A. V.); Allan and Ballantyne (C. T.) and Burke and Epstein and Freeman and Jenkins and Jones and Matts and Russel and Shillington and Shirriff and Stephenson, equal.

### French: Course I, Advanced.

Class I.-McConnel (D. A.), Walter, Comings, Cowan. Class II.-Douglas, Molson, Roy, Murray; Klineberg and Lamb, equal. Class III.-Laurin.

#### French: Course 2.

Class I.—Mendelsohn; Knowlton and Liffiton and Reyner, equal. Class II.—Feilding; Adney and Leggatt, equal; Boyd and Canning and Martin (D. G.), equal. Class III.—Freyvogel and Lacowitsky and McConnel (M.), equal; Campbell (E. M.) and Paxton, equal; Hameroff, Mitchell, Duval (R. H.), Schwartzman, Beattie (J. R.), Miller, Hodge (D. E.), Pye.

#### French: Course 3.

Class I.—Shea, Macrae (D.). Class II.—Macklaier and Symonds, equal; Bourgoin, Newnham, Riley, Elliot; Harris and McGoun and Snyder and Weibel, equal; Pierce, McPartlin. Class III.— Mansfield; Joseph and Lyall and Rough, equal; Johnson (A. S.) and Macdonald, equal; Henderson, Mathewson; Aylen (L.) and Leslie, equal; Lidstone, Brooke, Schafer, MacRae (S. E.); Teggart and Webster, equal; Howell; Addy and Badger and Rohrlich, equal.

### French: Course 3, Advanced.

Class I.—Comings and Shatford, equal; Birkett and Sharples, equal. Class II.—Aylen (D. E.), Bullock, Klineberg; Banfill and Fry, equal. Class III.—Copland and Gaboury, equal.

### French: Course 7, Third Year.

Class I.-Moule and Raphael, equal. Class II.-Silverman, Harvey, Contant, Mathewson, Hébert. Class III.-Common and Franklin, equal; Rowat, Lewis.

### French: Course 7, Fourth Year.

Class I.-Novick, Wall. Class II.-MacKinnon, Caverhill. Class III.-Latham, Mathers.

French: Course 8, Third Year.

Class I .- Silverman. Class II .- Harvey. Class III .- Mathewson.

French: Course 8, Fourth Year.

Class I .- Wall. Class II .- Novick. Class III .- None.

French: Course 9, Third Year.

Class I.-Hébert, Contant. Class II.-None. Class III.-Harvey; Mathewson and Silverman, equal.

- French: Course 9, Fourth Year.

Class I .- Wall, Novick. Class II .- None. Class III .- None.

French: Course 11, Third Year.

Class I.-Hébert. Class II.-Harvey, Silverman, Contant, Mathewson. Class III.-None.

French: Course 11, Fourth Year.

Class I.-Novick, Wall. Class II.-None. Class III.-None.

German: Course 1a.

Class I.—Goldblatt. Addleman, Crestohl. Class II.—Mettarlin, Kert. Class III.—Klineberg; Douglas and Fitch, equal; Davidson.

German: Course 1b.

Class I.—Liffiton. Class II.—Adney; Irwin and Millen, equal; Finkelstein and Lacowitsky, equal. Class III.—Mendelsohn and Miller, equal: Hannen; Canning and Reyner, equal; Knowlton and Paxton, equal; Winn, Hodge (D.), Schwartzman, Hameroff.

#### German: Course 2.

Class I.—Ball. Class II.—Dorken, Wisenberg, Campbell (L.). Class III.—McConnel (D. A.).

### German: Course 3.

Class I.—Hershon. Rabinovitch. Class II.—None. Class III.—Smith (F. M.), Feilding.

### German: Course 4.

Class I.-None. Class II.-Brooke, Klineberg. Class III.-None.

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German: Course 6, Third Year.

Class I.-Silverman. Class II.-None. Class III.-None.

German: Course 6, Fourth Year. Class I.—Meyer. Class II.—None. Class III.—None.

German: Course 7, Third Year Honours. Class I.—None. Class II.—Silverman. Class III.—None.

German: Course 7, Fourth Year Honours. Class I.—Meyer, Class II.—None, Class III.—None.

German: Course 8, Third Year Honours. Class I.—Silverman. Class II.—None. Class III.—None.

German: Course 8, Fourth Year Honours. Class I.—Mever. Class II.—None. Class III.—None.

DEPARTMENT OF ORIENTAL LANGUAGES.

Course I.

Class I.-Moore, White. Class II.-Hall, Litchfield. Class III.-Davis.

Course 5.

Class I.-Lalond. Class II.-None. Class III.-None.

#### Course 6.

Class I.-Lalond. Class II.-None. Class III.-None.

DEPARTMENT OF PHILOSOPHY.

Educational Psychology.

Class I.-Wiseman, Mawdsley. Class II.-Curtis. Class III.-Adair.

### Course I.

Class I.—Macklaier, Newnham. Class II.—Contant, McMinn, McGoun; Fry and Kerr, equal; Leslie and O'Hagan, equal; Lidstone; Bunt (H.) and Johnston (C. F.), equal. Class III.—Richards, McDonald, Peterson (F. O.); McPartlin and Murray, equal; Foley and Ford (R. H.) and Higinbotham and Kneeland and Pierce, equal; Bullock and Webster, equal; Anderson and McDougall (J. M.) and Moore, equal; Barnes (D. S.); Rohrlich and Savage and Stewart (A. I. M.), equal; Elliot and Gaboury and Harris and Rosenstein, equal; Avison and Badger, equal; Cousens and Deery and Livingstone and Shea, equal; Reid (R. V.); McAvoy and Robson, equal; Borden (E. L.) and Brown (F. T.) and Bunt (L. O.) and Caldwell and McDougall (G. S.), equal.

### Course 2.

Class I.-Reid (J. L.), Kerr. Class II.-McGoun, Bunt (H.); Elliot and Macklaier, equal; Stewart (A. I. M.). Class III.-Lidstone, Peterson (F. O.), Bullock; Fry and Leslie, equal; Kneeland; Cahana and McDonald (A. C.) and Sharples, equal; Shea, McDougall (J. M.); Copland and Mathewson, equal; Anderson and Foley and Gaboury and Rohrlich and Rosenstein and Webster, equal.

#### Course 3.

Class I.—Shatford (R. M.); McMinn and McPartlin, equal. Class II.—Contant and Newnham, equal; Murray, Livingstone, Higmbotham, Johnston (C. F.); Avison and Cousens, equal; O'Hagan. Class III.—McAvoy.

#### Course 4.

Class I.—Farthing; Fife and McMinn. equal; McDougall and McLean, equal. Class II.—Mullen and Peterson (N. E.), equal; Cameron (G. M.). Class III.—None.

#### Course 6.

Class I.-Lalond, Morrison. Class II.-Sutherland. Class III.-Reford.

Course 7.

Class I.-Wiseman. Class II.-Mawdsley, Sperber. Class III.-Curtis; Morrison and Reford, equal.

#### Course 8.

Class I.-Wiseman, Mawdsley. Class II.-None. Class III.-Reford.

#### Course 12.

Class I .- None. Class II .- Curtis. Class III .- None.

### DEPARTMENT OF PHYSICS.

#### Course I.

Class I.—Adney, LeMessurier, Crestohl, Willard, Winn, Johnson (D. M.); Grigg and Pratt, equal. Class II.—Prudham, Freeman; Stewart (A. E.) and Stewart (D. L.), equal; Fensom and Spector, equal; Foster, Cowan; Clark and Hannen, equal; Reilly; Mendelsohn and Stewart (A. I. M.), equal; Beattie (M. T.); Gault and Walter, equal; Smith (D. F.). Class III.—Duval (R. H.) and Shiŕriff, equal; Ball and Banfill and Gittleson and Marsh and Perry and Pick and Teed, equal; Collins and Lacowitsky and Slack and Wilson (W. H.), equal; Boyd; Hackett and Ogilvy and Stephenson, equal; Fullerton and Laidlaw and Reyner, equal; Allan and Canning and Evans (A. L.) and Knowlton and Moock, equal; Dorken and Figler and Henderson and Hodge (D. E.) and Kert and MacDonnell and McPhail, equal; Fair and Finkelstein and Freedman and Holt-

ham and Hoover and Liffiton, equal; Campbell (F. R.) and Cross and Freyvogel and Goldblatt and Johnston (J. L.) and Molson and Wilson (W. R.), equal; Bernstein and Campbell (E. D.) and Matts and Montgomery, equal; Beckwith and Collinge and Fitch and Levinson and Munro (W. D.) and Paxton and Rosen and Schwartzman and Shillington and Wighton, equal; Anderson and Bubroff and Elliot and Evans (K. J.) and Hameroff and Mitchell and Shlakman and Turner, equal; Fraser and Ginn and Leggatt and Martin (D. G.), equal; Edgecombe and Howell and Jackson and Martin (S. A. V.) and Newnham and Simpson and Wadsworth, equal; Campbell (E. M.) and Scovil, equal; Duval (I. B.) and Laurin and McGerrigle and Norman, equal; Beattie (J. R.) and Dobbie and Forsyth and Lamb and McEwen and Roy, equal; Calder and Russel, equal; Hodge (E. A.).

#### Course 2.

Class I.-None. Class II.-Larkin, Weibel, Steine, Whitmore; Alexander and McCulloch, equal; Barnes (E. L.), Pierce; Kennedy and Smith (R. M.), equal; Olding and Tuffy, equal. Class III.-Wolepor, McLean, Hibbard; Roy and Scheffer, equal; Irwin and Kanigsberg and Zuckerman, equal; Gradinger, Johnson (A. S.), O'Heir.

#### Course 3.

Class I.-Steine, Foran. Class II.-Phillips, McCulloch, McPherson, Alexander, Zuckerman. Class III.-Thornton, Hershon, Kennedy, Wolepor, Scheffer, Gradinger, Kanigsberg.

#### Course 5.

Class I.-None. Class II.-McPherson. Class III.-Galley, Joseph; Charlton and Thornton, equal.

### Course 6.

Class I.-None. Class II.-McPherson. Class III.-Thornton.

#### Course 7.

Class I.-None. Class II.-McPherson. Class III.-None.

#### Course 8.

Class I.-None. Class II.-Douglas. Class III.-None.

#### Course 10.

Class I.-Douglas. Class II.-None. Class III.-None.

#### Course II.

Class I.-Hemming. Class II.-None. Class III.-Goddard; Charlton and Galley, equal.

#### Course 13.

Class I.-Douglas. Class II.-None. Class III.-Goddard and Hemming, equal; Charlton and Galley, equal.

#### Course 15.

Class I .- Douglas. Class II .- None. Class III .- None.

Course 16.

Class I.-Douglas. Class II.-None. Class III.-None.

DEPARTMENT OF ZOOLOGY.

#### Course 2.

Class I.-None. Class II.-Snyder, Dart, Donald, Macfarlane, Henderson. Class III.-None.

### Course 3

Class I.-Godwin, Spier. Class II.-Higginson, Rabinovitch. Class III.-None.

#### Course 4.

Class I.-None. Class II.-Higginson. Class III.-None.

Course 5.

Class I.-None. Class II.-Kay and Mirsky, equal; Richardson, Rabinovitch (J.), Freedman (J.). Class III.-None.

### SCHOOL OF COMMERCIAL STUDIES.

#### FIRST YEAR.

#### ACCOUNTANCY.

Class I.—Ellin; Cockshutt and Holland, equal; Becker; Dustan and Kaplan, equal; Snyder and Wilson (D. G.), equal; Tomalin, Nichol (G. H. G.), Phillips, Kee. Class II.—Caplan, Tyler; Shea and Steine, equal; Falconer, Wallace; Brownstone (A. M.) and Munro (J. E.), equal. Class III.—Windatt, Samit; Marks and Riley, equal; Clarkson and Goodkowsky and Kellnor, equal; Burke, Rann, Bashaw, Usher, Caswell, Mott; Brownstone (S. L.) and Carruthers and Dobbie and Jones and Shecter and Simpson, equal.

#### DRAWING.

Class I.—Ellin and Shecter, equal; Steine and Tomalin, equal; Brownstone (A. M.) and Falconer and Nichol (G. H. G.), equal; Simpson; Caplan and Holland, equal. Class II.—Wilson (C. P.); Becker and Finley, equal; Snyder, Brownstone (S. L.); Burke and Kersley, equal; Wallace; Jones and Kellnor, equal; Webster; Carruthers and MacMahon, equal. *Class III.*—Mott and Shea, equal; Caswell and Clarkson, equal; Kaplan and Pepin, equal; Bulgin and Kee, equal; Tyler; Riley and Usher, equal; Calvert, Windatt; Dustan and Hamilton and Richter and Samit, equal; Mullen, Smith (E. D.).

#### ECONOMIC GEOGRAPHY.

Class I.—Cockshutt and Nichol (G. H. G.) and Shea, equal; Kaplan and Tomalin, equal; Windatt, Pepin, Dobell, Kee, Webster; Becker and Carruthers and Steine and Wilson (D. G.), equal; Dustan, Burke, Kellnor, Jones; Holland and Kersley and Simpson, equal. Class II.—Caplan and Tyler, equal; Snyder, Mott; Brownstone (A. M.) and Clarkson and Shecter and Wallace, equal. Class III.—Brownstone (S. L.), Bulgin; Goodkowsky and Usher, equal; Samit, Creighton, Caswell, Falconer; Marks and Richter, equal; Calvert; Bashaw and Rann and Riley, equal.

#### ENGLISH.

Class I.—Wilson (D. G.), Kellnor, Tomalin, Dustan, Caplan, Holland, Nichol (G. H. G.); Becker and Steine, equal. Class II.— Clarkson, Wallace, Falconer; Brownstone (A. M.) and Pepin, equal; Goodkowsky and Richter, equal; Tyler, Shea, Mott. Class III.—Kee, Simpson, Bulgin; Riley and Usher, equal; Kaplan; Brownstone (S. L.) and Samit and Shecter, equal; Kersley and Windatt, equal; Caswell, Burke, Jones, Bashaw, Rann, Carruthers.

### HISTORY.

Class I.—Tomalin, Nichol (G. H.G.), Shea, Cockshutt, Dobell, Kaplan, Carruthers, Ellin; Jones and Windatt, equal; Caplan and Kee and Kellnor and Pepin and Webster, equal; Caplan and Kee Clarkson and Steine, equal; Becker and Snyder, equal; Dustan and Richter and Shecter, equal; Holland, Mott; Goodkowsky and Simpson and Wallace, equal; Falconer and Wilson (D. G.), equal; Brownstone (S. L.) and Creighton, equal. Class III.— Usher; Marks and Tyler, equal; Brownstone (A. M.); Kersiey and Rann and Samit, equal; Finley, Bashaw; Calvert and Caswell and Riley, equal; Bulgin.

#### MATHEMATICS: ALGEBRA.

Class I.—Holland and Snyder, equal; Phillips, Shecter, Caplan, Shea, Ellin; Nichol (G. H. G.) and Richter, equal; Tomalin, Kaplan, Wilson (D. G.), Becker, Dobell, Burke. Class II.—Dustan and Tyler, equal; Falconer, Steine, Wallace. Class III.—Mott; Jones and Kee and Skelton, equal; Smith (P. G.); Webster and Windatt, equal; Kersley, Simpson, Kellnor; Caswell and Riley, equal; Brownstone (S. L.).

#### MATHEMATICS: GEOMETRY.

Class I.—Holland, Caplan, Dustan, Nichol (G. H. G.), Kaplan, Mac-Kinnon, Roussac; Jones and Smith (P. G.), equal; Shea, Ellin, Tomalin. Class II.—Munro; Cockshutt and Shecter, equal; Tyler, Becker; Phillips and Steine, equal; Usher, O'Brien, Hughes. Class III.—Richter and Windatt, equal; Kee, Fraser, Laffoley, Mott, Wallace; Kellnor and Mullen, equal; Elderkin, Finley; Nichol (J. M.) and Wilson (D. G.), equal; Aaronson and Burke and Carruthers and Marks, equal; Goodkowsky and Kersley and Pepin and Simpson and Webster, equal.

#### MATHEMATICS: TRIGONOMETRY.

Class I.—Holland, Dustan, Becker, Tomalin; Caplan and Ellin, equal; Shea. Class II.—Phillips and Tyler, equal; Richter; Nichol (G. H. G.) and Shecter, equal; Mott, Burke, Kaplan, Steine. Class III.—Skelton, Riley, Kee, Wilson (D. G.), Jones, Samit.

#### PHYSICS.

Class I.—Holland, Dustan, Kaplan, Caplan; Nichol (G. H. G.) and Tomalin, equal; Brownstone (S. L.) and Windatt, equal; Tyler, Falconer; Ellin and Mott, equal; Shea; Burke and Riley, equal; Steine. Class II.—Kee, Shecter, Becker, Wilson (D. G.), Clarkson, Webster; Kellnor and Samit and Usher, equal. Class III.—Simpson, Richter; Bulgin and Caswell, equal; Brownstone (A. M.), Carruthers, Finley; Goodkowsky and Marks and Pepin, equal; Kersley, Creighton.

#### SECOND YEAR.

#### ACCOUNTANCY.

Class I.-Laffoley, Rutherford (W. K.). Class II.-O'Meara, Dougall, Shapira; Blackman and Werry, equal; Rutherford (J. B.). Class III.-Johnson, Shaw, Friedman.

#### BUSINESS ORGANIZATION.

Class I.—Laffoley; Johnson and O'Meara and Werry, equal; Dougall and Rutherford (J. B.), equal. Class II.—Lefkowitz and Rutherford (W. K.) and Shapira, equal; Blackman, Shaw. Class III.—Kellnor, Friedman.

#### COMMERCIAL LAW.

Class I.—Rutherford (J. B.). Class II.—Rutherford (W.), Blackman, Laffoley, Werry, Lefkowitz, O'Meara. Class III.—Dougall and Shapira, equal; Johnson and Shaw, equal; Friedman.

#### ECONOMIC GEOGRAPHY.

Class I.—Laffoley and O'Meara, equal; Rutherford (W. K.); Johnson, Shapira; Rutherford (J. B.) and Werry, equal. Class II.— Dougall, Friedman, Shaw, Blackman; Kellnor and Lefkowitz, equal. Class III.—None.

#### ECONOMICS.

Class I.—O'Meara, Laffoley. Class II.—Shapira and Werry, equal; Johnson, Lefkowitz, Rutherford (J. B.), Blackman, Shaw, Rutherford (W. K.). Class III.—Friedman, Dougall, Kellnor.

#### ENGLISH.

Class I.-Laffoley, O'Meara. Class II.-Werry, Rutherford (J. B.), Rutherford (W. K.), Blackman. Class III.-Shapira, Johnson, Dougall, Lefkowitz, Shaw, Kellnor.

#### HISTORY OF COMMERCE.

-Class I.-Werry, Laffoley, Shapira, O'Meara, Rutherford (J. B.); Blackman and Johnson and Lefkowitz, equal; Dougall. Class II.-Shaw, Rutherford (W. K.). Class III.-Kellnor, Friedman.

#### MATHEMATICS.

Class I.-Laffoley, Shapira, Werry. Class II.-Rutherford (J. B.), Lefkowitz; Dougall and Rutherford (W. K.), equal. Class III.-Blackman, Johnson, Friedman, Benson (G. F.).

#### FRENCH.

Class I.-O'Meara and Laffoley, equal. Class II.-Werry, Shapira. Class III.-Johnson; Blackman and Rutherford (J. B.) and Rutherford (W. K.), equal; Lefkowitz, Kellnor; Dougall and Shaw, equal.

### THIRD YEAR.

#### ACCOUNTANCY.

Class I.-None. Class II.-Wetstein, Shapira, Badian, Antliff. Class III.-Burland, Levitt, Glickman.

#### ECONOMICS.

Class I.-Antliff, Burland. Class II.-Levitt, Badian, Shapira. Class III.-MacDonald.

#### ECONOMICS OF TRANSPORT.

Class I.-Shapira, MacDonald. Class II.-None. Class III.-None.

#### ENGLISH.

Class I.—Antliff and Badian, equal; Burland, Wetstein; Levitt and Shapira, equal. Class II.—Masson, MacDonald. Class III.— None.

#### FRENCH.

Class I.-Shapira, Badian, Wetstein. Class II.-Macdonald, Antliff, Masson. Class III.-Levitt, Burland.

#### INDUSTRIAL ORGANIZATION.

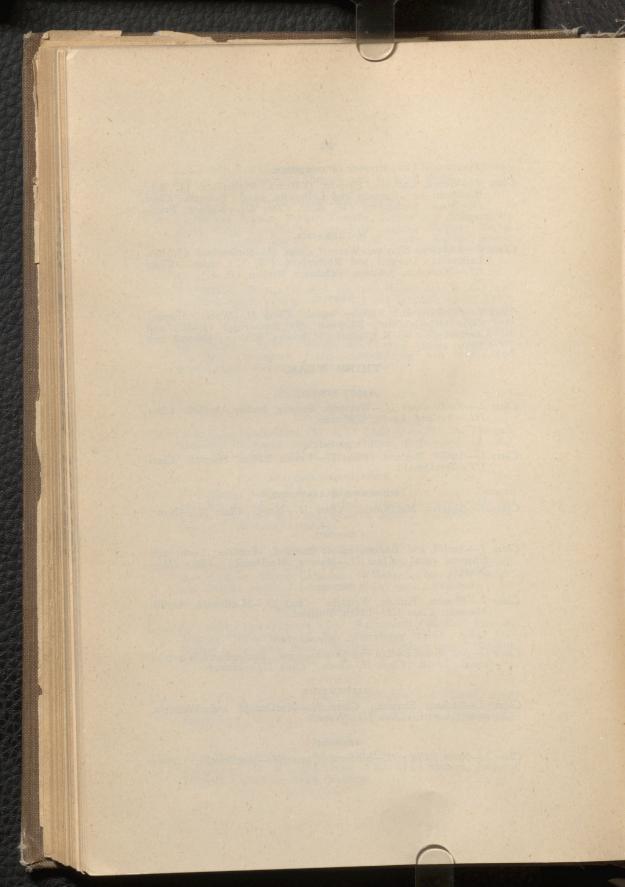
Class I.—Antliff and Badian and Shapira, equal; Burland and Wetstein, equal; Levitt. Class II.—None. Class III.—Masson.

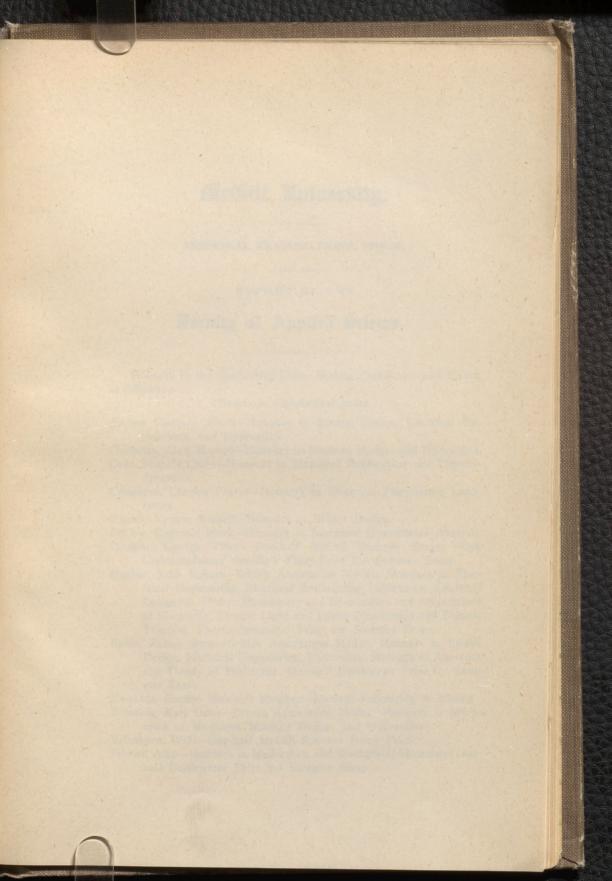
#### MATHEMATICS.

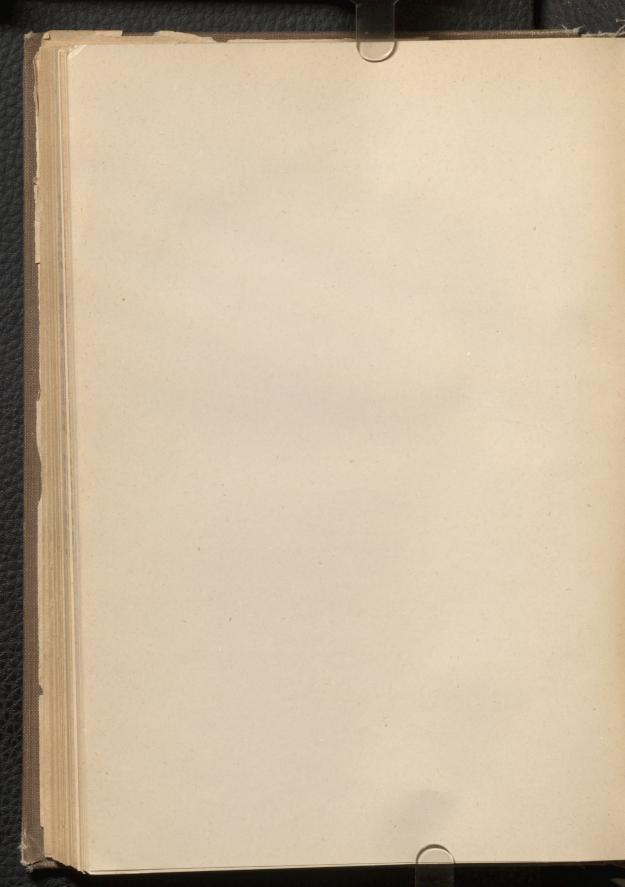
Class I.-Badian, Shapira. Class II.-MacDonald and Wetstein, equal; Levitt. Class III.-None.

#### SPANISH.

Class I.-None. Class II.-Shapira. Class III.-MacDonald.







# McGill University.

SESSIONAL EXAMINATIONS, 1919-20.

### REPORT OF THE

# Faculty of Applied Science,

Honours in the Graduating Class, Medals, Certificates and Prizes, as follows :---

(Names in alphabetical order.)

Austin, Clarence Ward-Honours in Bridge Design, Electrical Engineering, and Hydraulics.

Chisholm, Alex. Harold-Honours in Machine Design, and Hydraulics.

Code, Francis Leslie—Honours in Electrical Engineering and Thermodynamics.

Creighton, Charles Pearse-Honours in Electrical Engineering Laboratory.

Davies, Vernon Russell-Honours in Bridge Design.

DeCew, Reginald Mark-Honours in Inorganic Quantitative Analysis.

Douglas, George Vibert—One-half McCall Summer Essay Prize, Undergraduates' Society's First Prize for Summer Essay.

Dunbar, John Robert—British Association Medal; Honours in Electrical Engineering, Electrical Engineering Laboratory, Electrical Designing, Electro Photometry and Illumination and Applications of Electricity, Electric Light and Power Distribution and Electric Traction, Thermodynamics; Prize for Summer Essay.

Eadie, Robert Scott-British Association Medal; Honours in Bridge Design, Electrical Engineering, Hydraulics, Strength of Materials and Theory of Structures; One-half Drinkwater Prize for Summer Essay.

Edwards, Gordon Maxwell Meighen-Dawson Fellowship in Mining.

Elderkin, Karl Osler-British Association Medal; Honours in Mechanics of Machines, Machine Design, and Hydraulics.

Erlenborn, Willi-One-half McCall Summer Essay Prize.

Ferrier, Alan-Honours in Hydraulics, and Strength of Materials; Onehalf Drinkwater Prize for Summer Essay. Gilbert, Philip Geoffrey Britton-British Association Medal.

Kearns, William Francis-Honours in Advanced Inorganic Chemistry. Larose, Paul-British Association Medal; Honours in Advanced Or-

ganic Chemistry, Physical Chemistry, and Industrial Chemistry. Lindsay, Guy Adamson—Honours in Strength of Materials, and Theory of Structures.

Little, Harold Butler-One-half Louis Robertson Prize for Architectural Design.

McEvers, Harold Eric-One-half Louis Robertson Prize for Architectural Design.

Millar, Thomas Boyd-Honours in Advanced Inorganic Chemistry.

Roberton, Kenneth Baillie-Honours in Electrical Engineering Laboratory, and Thermodynamics.

Schippel, Walter Herbert—Honours in Electro Photometry and Illumination and Applications of Electricity, and Electric Light and Power Distribution and Electric Traction.

Taylor, John Ross-Honours in Inorganic Quantitative Analysis, and Industrial Chemistry.

Vessot, Charles Ulysses Robert—Crosby Steam Gauge and Valve Company's Prize for Summer Essay.

### PASSED FOR THE DEGREE OF BACHELOR OF ARCHITECTURE.

(In order of merit.) Little, Harold Butler, Ottawa, Ont. McEvers, Harold Eric, Cobourg, Ont.

# (Unranked.)

# (In alphabetical order.)

Chipman, Noel Ingersoll, Montreal, Que. Thomas, Phillip, Montreal, Que.

### PASSED FOR THE DEGREE OF BACHELOR OF SCIENCE.

### IN CHEMICAL ENGINEERING.

(In order of merit.) Larose, Paul, Montreal, Que. Taylor, John Ross, Westmount, Que. Cameron, Edward Parke, Montreal, Que. DeCew, Reginald Mark, Hutton Mills, B.C. Mosher, Wilfrid Douglas, Lunenburg, N.S. Crowe, Cyril Holesworth, Stewiacke, N.S. Lafontaine, Gerard H., Montreal, Que. Labell, Maurice Nelson, Mansonville, Que. Ross, James Hamilton, Jr., Montreal, P.Q. Hobart, George Maxwell, Montreal West, Que. Edward, Arthur James, Westmount, Que. Kearns, William Francis; Ottawa, Ont. Rashback, Harry H., Montreal, Que.

### (Unranked.)

Proudfoot, David Gibb, Montreal, Que.

#### IN CHEMISTRY.

Millar, Thomas Boyd, Portage la Prairie, Man.

#### IN CIVIL ENGINEERING.

#### (In order of merit.)

Eadie, Robert Scott, Ottawa, Ont. Austin, Clarence Ward, Kamloops, B.C. Robertson, Robert McFadyen, Lachine Locks, P.Q. Ferrier, Alan, London, England. Wickenden, John Francois, Danbury, Conn., U.S.A. Cole, William Stanley, Brockville, Ont. Seath, W. Pringle, Montreal, Que. Betournay, J. Noe, St. Lambert, Que. Greene, Leslie Kirk, Montreal, Que. Deneau, Gaston, Montreal, Que. Powell, John Murray, Ottawa, Ont. LaMontagne, Henri Gaston, Montreal, Que. Mahaffy, Herbert Laurence, Montreal, Que.

### (Unranked.)

(In alphabetical order.)

Davies, Vernon Russell, Franklin, Man. Lindsay, Guy Adamson, Winnipeg, Man. MacEwen, Toronto, Ont. McPhail, Donald Stuart, Jamaica, B.W.I. Ross, Bruce, Westmount, Que. Wilson, Eldon Parker, Ottawa, Ont.

### IN ELECTRICAL ENGINEERING.

(In order of merit.)

Dunbar, John Robert, Ottawa, Ont. Schippel, Walter Herbert, Montreal, P.Q. Code, Francis Leslie, Ottawa, Ont. Dawson, Heber William, Ottawa, Ont. Pope, Eric Julyan, Westmount, Que. Thompson, Trevor Creighton, Montreal, P.Q. Creighton, Charles Pearse, New Westminster, B.C. Arbuckle, James Stewart, Pictou, N.S. Hacker, Louis W., Summerside, P.E.I. Windsor, J. Rorke, Westmount, Que.

### (Unranked.)

#### (In alphabetical order.)

Ord, Sidney Arthur, Port Carling, Ont. Roberton, Kenneth Baillie, Montreal, Que. Standish, Samuel James, Waterloo, Que.

#### IN MECHANICAL ENGINEERING.

#### (In order of merit.)

Elderkin, Karl Osler, Weymouth, N.S. Chisholm, Alex. Harold, Stellarton, N.S. Shrimpton, Dudley John, Westmount, Que. Mackenzie, Brouard Hunter Tyndall, Moncton, N.B. Smith, Edmund Howard, Westmount, Que. Vessot, Charles Ulysses Robert, Ottawa, Ont. McNicoll, Charles, Westmount, Que. Scott, William Beverly, Dalhousie, N.B. Rutherford, Archibald Bowman, Westmount, Que, Kirkpatrick, Harold Thompson, Parrsboro, N.S. Twinberrow, James Oswald, Gateshead on Tyne, England. Shapter, Carl, Montreal, Que. Macpherson, Hugh, New Glasgow, N.S. Rutherford, William Jackson, Westmount, Que.

#### (Unranked.)

Patten, Roy Hamilton, St. George, Ont. IN METALLURGICAL ENGINEERING.

Penney, Edgar, Carbonear, Nfld.

#### IN MINING ENGINEERING.

#### (In order of merit.)

Gilbert, Philip Geoffrey Britton, Toronto, Ont. Henry, Leslie S., Montreal, Que. (B.A.). Erlenborn, Willi, Westmount, Que. Edwards, Gordon Maxwell Meighen, Ottawa, Ont. White, MacLeod, New Denver, B.C. Emery, Herbert James, Edmonton, Alta. Dyer, Harry O'Regan, Sutton, Que. Bradley, Herbert Ellison, Smith's Falls, Ont.

### (Unranked.)

### (In alphabetical order.)

Beach, Donald Johnston, Ottawa, Ont. Douglas, George Vibert, Montreal, Que. Gerez, Jose Manuel, Ottawa, Ont. Karnes, Harry V., Kansas City, Mo., U.S.A. Lawrence, Harold George, St. John, N.B. Lee, Harold Carlton, St. John, N.B. Mooney, Frank Melbourne, Montreal, P.Q.

### PASS LIST OF THE SESSIONAL EXAMINATIONS.

#### FOURTH YEAR.

#### IN ARCHITECTURE.

(In order of merit.)

Durnford, Alexander Tilloch Galt, Montreal, P.Q. Lyman, Walter Kenneth Gordon, Montreal, P.Q.

### PRIZES.

### THIRD YEAR.

#### (In alphabetical order.)

Anderson, Alexander Gordon-British Association Exhibition for Strength of Materials and Mechanics.

- Canning, Dow Vernon-British Association Prize for Strength of Materials and Mechanics.
- Congleton, Lord—Undergraduates' Society's Second Prize for Summer Essay.
- Cunningham, Frederick James—British Association Exhibition for Strength of Materials and Mechanics; First J. M. McCarthy Fieldwork Prize.

Fowler, Wallace W.-The Milton Hersey Prize for Summer Essay, also Undergraduates' Society's Third Prize for Summer Essay.

Macphail, Jeffrey Burland-One-half Second J. M. McCarthy Fieldwork Prize.

Mawdsley, James Buckland-One-half Second J. M. McCarthy Fieldwork Prize.

### PASS LIST OF THE SESSIONAL EXAMINATIONS.

### THIRD YEAR.

#### IN ARCHITECTURE.

(In order of merit.) Goodman, Charles Davis, Montreal, P.Q. \*Van Etten, Frederick Bouton, Kingston, N.Y., U.S.A.

#### IN CHEMISTRY.

Timmerman, Everett Drinkwater, Montreal, P.Q.

(Unranked.)

Fox, Hugh Dean, Toledo, Ohio, U.S.A.

#### IN CHEMICAL ENGINEERING.

### (In order of merit.)

Green, Frederick Gordon, St. John, N.B. Jelly, Calvin Sherwood, Carleton Place, Ont. Johnston, Harry Wyatt, Outremont, P.Q. \*Mitchell, Frank Leslie, Toronto, Ont. Croft, Carman Milward, Digby, N.S. \*Lantz, Floyd Crawford, Montreal, P.Q. \*Giles, George Reid, Lachute, P.Q. \*Cuddy, John Michael, Montreal, P.Q. Goodwin, Cassels Dunbar, Baie Verte, N.B. Challenger, James Othneil, St. Kitts, B.W.I. \*Smith, Roy Hamilton, Pictou, N.S. \*Calkin, Darrell Lorraine, Kentville, N.S. \*Warriner, Norman Downing, Montreal, P.Q. \*Cockfield, Alfred Ernest, Outremont, P.Q. \*Cambron, Adrien, Sherbrooke, P.Q. \*Copping, Allan Blythe, Westmount, P.Q. \*Forbes, Karl, Montreal, P.Q. \*Irving, George Ewart Logan, Moncton, N.B. \*Kav. Stuart Evans, Montreal, P.Q.

#### IN CIVIL ENGINEERING.

#### (In order of merit.)

Cunningham, Frederick James, Ottawa, Ont. Gardner, John George, Montreal, P.Q. Macphail, Jeffrey Burland, Montreal, P.Q.

\*Conditional upon passing supplemental examinations.

Fortin, Gaston Lalonde, Montreal, P.Q. Farmer, Rupert Whitley, Barbados, B.W.I. Watson, Conrad Ethelbert, Jamaica, B.W.I. \*Hannan, James, Jr., Irvington, N.Y., U.S.A. \*Brault, Paul G. A., Outremont, P.Q. \*Loy, John Austin, Ottawa, Ont. \*O'Sullivan, Louis, Montreal, P.Q. \*Lewis, James Wentworth, St. John, N.B. \*Gauthier, Paul Gilles, Montreal, P.O.

#### (Unranked.)

Elder, John Campbell, Montreal West, P.Q. \*Ferguson, John Alex., Nelson, B.C.

#### IN ELECTRICAL ENGINEERING.

#### (In order of merit.)

Anderson, Alexander Gordon, Buckingham, P.Q. Canning, Dow Vernon, Notre Dame de Grace, P.Q. \*Phelan, Thomas Enslow, Westmount, P.Q. Gliddon, W. G. Claude, Ottawa, Ont. Fellows, Howard, Stellarton, N.S. \*Jackson, Carl Henry, Montreal, P.Q.

\*Vineberg, Samuel Sullivan, Winnipeg, Man.

\*Eaton, Milton, Treherne, Man.

Thompson, Gordon Maurice, Vancouver, B.C.

\*Louttit, William Charles, Montreal, P.Q.

\*Bishop, Trenholme Allen Gill, Montreal, P.Q.

\*Acton, Harold Joseph, Westmount, P.Q.

\*Macdonald, Dan., Springhill, P.Q.

### (Unranked.)

Demers, Paul Emile, Montreal, P.Q. Parnell, Eric, Medford, Mass., U.S.A. Sloves, Moses, Montreal, P.Q. Wiggs, Gordon Lorne, Quebec, P.Q.

#### IN MECHANICAL ENGINEERING.

### (In order of merit.)

Congleton, John Brooke (Lord), London, England. \*Maxwell, Edward Blythe, Montreal, P.Q. McGurdy, Lyall Radcliffe, New Glasgow, N.S.

\*Conditional upon passing supplemental examinations.

Macfarlane, Donald Henry, Sherbrooke, P.Q. O'Halloran, James, Ottawa, Ont.

\*Mooney, Reuel Burdett, Stellarton, N.S. Hall, John G., Cornwall, Ont.

\*Langstroth, Cecil Craven, Hampton, N.B. \*Winslow, Kenelm M., Winnipeg, Man.

### IN METALLURGICAL ENGINEERING.

#### (In order of merit.)

\*Harrison, Donald Ranald, Tamworth, Ont. \*Nutter, Jack Caswell, Lennoxville, P.Q. \*Jordan, Herbert Scott, Westmount, P.Q. \*Fowler, Wallace W., Westmount, P.Q.

#### IN METALLURGY.

# \*Henderson, Conway Hemsley Drummond, Westmount, P.Q.

### IN MINING ENGINEERING.

### (In order of merit.)

Bain, George W., Lachute, P.Q. Brow, James Barratt, Charlottetown, P.E.I. \*Saunders, James Erling, Westville, N.S. \*Weldon, Leslie Smiley, Montreal, P.Q. \*Mawdsley, James Buckland, Clemens, Alta. Cromwell, Harry Roy, Notre Dame de Grace, P.Q. \*Dewar, Charles Leonard, Ottawa, Ont.

\*Davis, Samuel, Montreal, P.Q.

### (Unranked.)

Bourret, Paul E., Montreal, P.Q. \*Palmer, Charles Leonard, London, England.

#### SECOND YEAR.

### PRIZES.

### (In alphabetical order.)

McTaggart, George Duncan-Second Prize for Mathematics and Mechanics.

Mott, Harold Edgar-First Prize for Mathematics and Mechanics.

Perry, Alfred Leslie-Anglins Ltd. Prizes for Architectural Drawing, and Construction.

Taber, Harold Edward-Third Prize for Mathematics and Mechanics.

\*Conditional upon passing supplemental examinations.

# PASS LIST OF THE SESSIONAL EXAMINATIONS.

## IN ARCHITECTURE.

#### (In order of merit.)

Perry, Alfred Leslie, Notre Dame de Grace, P.Q. Luke, Morley C., Montreal West, P.Q.
\*Wiggs, Henry Ross, Quebec City, P.Q.
\*Morris, Robert Schofield, Jr., Hamilton, Ont.
\*Watt, Leslie Alexander, Ste. Anne de Bellevue, P.Q.

#### (Unranked.)

Brown, Lawrence Elliott, Ottawa, Ont.

### IN CHEMISTRY.

# (In order of merit.)

\*Taylor, John Ellis, St. John West, N.B. Binmore, George Bedell, Montreal, P.Q.

#### OTHER COURSES.

# (In order of merit.)

McTaggart, George Duncan, Clinton, Ont. Weldon, T. Herbert, Montreal, P.O. Bush, Harold Frederick, Ottawa, Ont. \*Mott, Harold Edgar, Winnipeg, Man. Biggar, Percival Elliot, Ottawa, Ont. Brooks, Charles Lennox, Montreal, P.Q. Dobson, Robert Munro, Outremont, P.Q. Clarke, Edward Lawrence, Montreal, P.Q. Carlyle, Arthur William, Ottawa, Ont. Bissell, Harold Rodolph, Toronto, Ont. Hanington, Francis Carleton, Ottawa, Ont. \*Bonneville, Sydney, Ottawa, Ont. \*Desbarats, George Henry, Ottawa, Ont. Morrisette, Gordon Joseph, Sherbrooke, P.Q. Grant, Ralph Glencoe, Montreal, P.Q. Taber, Harold Edward, Carleton Place, Ont. Kyle, Donald Gordon, Westmount, P.Q. Messenger, William Aubrey, Montreal, P.Q. Fraser, Andrew Stockwell, Ottawa, Ont. \*Carson, Cecil Edward, Westmount, P.Q. equal. \*Murphy, Alex. Gordon Silcox, Westmount, P.Q.

Ross, James Hargrave Drummond, Westmount, P.Q. Clark, George Silas, Lachute, P.Q. McLennan, Gordon Roderick, Ottawa, Ont. } equal. \*Holmes, Everett Eric, Westmount, P.Q. Wain, Eric James, St. Lambert, P.Q. Woolward, Charles Desmond, Dominica, W.I. \*Holt, Ernest William, Notre Dame de Grace, P.Q. Banfill, Harold Leroy, Richmond, P.Q. Bastable, Ross Waller, Lachine, P.Q. Gordon, George Blair, Montreal, P.Q \*Hastings, Walter Hindson, Regina, Sask. Loebel, John Mayer, Montreal, P.Q. equal. \*Tatley, Lambert David, Westmount, P.Q. Eager, Norman Herbert Aldwyn, Montreal, P.Q. \*Crawford, Robert Eric Anderson, Montreal, P.Q. Spratt, Maynard James Campbell, Ottawa, Ont. \*Wilson, James M., Lachine, P.Q. \*Gurman, Israel, I. T., Montreal, P.Q. Boronow, Paul, Westmount, P.Q. \*Parker, Charles Alexander, Ottawa, Ont. \*Farquharson, John Spencer, Jamaica, B.W.I. \*Cousineau, Charles A., Montreal, P.Q. Duff, Edgar Cowperthwaite, Carbonear, Newfoundland. \*Armstrong, Lawrence Henry, Montreal, P.Q. Brown, Edmund Vere, Winnipeg, Man. \*Gnaedinger, Paul Ernest, Montreal, P.Q. \*MacGregor, Roderick Archibald, New Glasgow, N.S. \*Brown, George Basil, Montreal, P.Q. \*Glen, Alexander Fulton, Montreal, P.Q. \*Evans, William, Montreal, P.Q. \*Bradfield, John Ross, Morrisburg, Ont. \*Lorin, L. Gustave, Montreal, P.Q. \*Wonham, Walter Richard, Westmount, P.Q. \*Jandrew, Cyrus Bertram, Ottawa, Ont. \*Fisk, George Harold, Montreal, P.Q. \*Wright, Weir Stanley, Westmount, P.Q. \*Pevzner, Isadore, Montreal, P.Q. \*Simons, John Joseph, Michel, B.C. \*Chorney, Melvin Mendel, Montreal, P.Q. \*Macrae, Donald, Westmount, P.Q. \*Ford, Robert, Ottawa, Ont.

\*Conditional upon passing supplemental examinations.

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\*Taylor, Edward Plunket, Ottawa, Ont.

\*Anderson, Dan, Charlottetown, P.E.I.

\*Drummond, Ross Newton, Montreal, P.Q.

\*Humes, Harold Louis, Westmount, P.Q.

\*Macnaughton, Moray Fraser, Westmount, P.Q.

\*Normandin, Romeo Armand, Montreal, P.Q.

\*Reiffenstein, John Christopher, Westmount, P.Q.

\*Tucker, Bryant Burgess, Chulmleigh, North Devon, England.

\*Mitchell, James Murray, Montreal, P.O.

\*Wilder, Hartland Bates, Westmount, P.Q.

# (Unranked.)

### (In alphabetical order.)

\*Ahern, Arthur Weston, Quebec, P.Q. Brandes, Emmanuel, Montreal, P.Q. Cartwright, George Herbert, Croydon, England (Aegrotat). Durant, Norman Morton, Parrsboro, N.S. Hart, Lawrence Folgar Carleton, Ottawa, Ont. Hill, Stanley Clayton, Richmond, P.Q. Livingstone, Kenneth Mackay, Washington, D.C. Salamis, Basil, Montreal, P.Q.
\*Salter, Frederick Cumberland, Westmount, P.Q. Smith, David Whitney, Montreal, P.Q.
\*Thompson, Cecif E.; Ottawa, Ont. Tison, Maurice, Montreal, P.Q.
Ward, Melville Ernest St. Clair, Kingston, Ont. Whelen, Morland Powers, Ottawa, Ont. Wilson, James Kinnear, Sherbrooke, P.Q.

### FIRST YEAR.

### PRIZES.

#### (In alphabetical order.)

Kennedy, Neil-Second Prize for Mathematics, Descriptive Geometry and Physics.

Larose, Marcel Jules-First Prize for Mathematics, Descriptive Geometry and Physics.

Moore, Reginald Arthur—Scott Exhibition for Mathematics. Descriptive Geometry and Physics.

# PASS LIST OF THE SESSIONAL EXAMINATIONS.

#### IN ARCHITECTURE.

# (In order of merit.)

Cooper, Hugh Christopher Dunstan, Truro, England. \*Macleod, Alexander Norman, New Waterford, N.S.

## (Unranked.)

Amos, Pierre Charles, Montreal, P.Q. Watt, Leslie Alexander, Ste. Anne de Bellevue, P.Q.

### OTHER COURSES.

#### (In order of merit.)

Moore, Reginald Arthur, New Westminster, B.C. Larose, Marcel Jules, Montreal, P.Q. \*Kennedy, Neil, Owen Sound, Ont. Layne, John Graham, Barbados, B.W.I. Hunten, Kenneth William, Johnville, Que. Laidley, Wendell Howard, Montreal, P.Q. Culpeper, Bernard Armel, Barbados, B.W.I. Cregeen, Kenneth Thomas, Montreal, P.Q. Stephen, Gordon Robert, Montreal, P.Q. Lewis, Joseph, Ottawa, Ont. Oliver, James Harold, Rockburn, Que. equal. Toole, Francis James, London, England. Faith, Willard Vanamber, Winchester, Ont. Harbert, Edward Thomas, Montreal, P.Q. Craik, Oliver Stanley, Melbourne, P.Q. Radley, Percy Edward, Ottawa, Ont. Crain, George Edwin, Ottawa, Ont. Yorston, Frederic Harrison, Montreal, P.Q. Matheson, Arthur Marshall, Ottawa, Ont. Wood, Robert, Notre Dame de Grace, P.Q. Cooper, Paul Emerson, Portland, Me. Macaulay, Kenneth Douglas, Montreal, P.Q. equal. Munro, David John Best, Montreal, P.Q. \*Buller, Francis Hamilton, Montreal, P.Q. Rochester, Bertram Cole, Ottawa, Ont. Bloomfield, Jacob, Montreal, P.Q. Gordon, Harold Cowan Morton, Glace Bay, N.S. equal. Turnbull, Andrew Rutherford, Welland, Ont.

Armstrong, Arnold Victor, Montreal, P.Q. McNaughton, Ronald Russel, Victoria, B.C. Ambridge, Douglas White, Mexico City, Mexico. ] equal. Powell, Allan Trew, Ottawa, Ont. Binns, George Frederick, Notre Dame de Grace, P.Q. Pelletier, Rene Arthur, Montreal, P.Q. Foss, Donald Burrowes, Sherbrooke, P.Q. Finley, Frederick Lovell, Montreal, P.Q. Legg, Roland Edward, Victoria, B.C. \*Willis, Irwin Davidson, Montreal, P.Q. Eadie, Thomas Wardrope, Ottawa, Ont. Bieler, Jacques Louis, Westmount, P.Q. Smith, Archie Ewart, Brandon, Man. equal. Read, Douglas Ellery, Sherbrooke, P.Q. Davies, Clarence Bernard, Hull, P.Q. Roquet, Leo Laurent, Ottawa, Ont. Griffith, Thomas Raymond, Montreal, P.Q. McKindsey, Gordon, Lennoxville, P.Q. Rorke, Charles Burnell, Montreal, P.Q. Peters, Arthur Wright, Westmount, P.Q. McLagan, Thomas Rodgie, Westmount, P.Q. Brisbane, William Gordon, Westmount, P.Q. Finlayson, Harold Musgrove, Montreal, P.Q. | equal Buffam, Basil Scott Whyte, Perth, Ont. \*Allan, John Maynes, Halifax, N.S. Terrance, Emmett Howard, Ottawa, Ont. \*Webster, Robert Chilion Peter, Ottawa, Ont. LeBaron, Karl Shurtleff, Sherbrooke, P.Q. Mills, Charles Perkins, Ottawa, Ont. equal. Ross, Malcolm Vaughan, Quebec, P.Q. ( \*Desloover, Raymond, Montreal, P.Q. Blackall, John Fenwick Walker, St. Johns, Newfoundland Smallhorn, Edward Robert Thomas, Montreal, P.Q. Downs, Henry William, Lennoxville, P.Q. equal. \*Grant, Grainger Stewart, Halifax, N.S. \*Gaudet, Gaston, Montreal, P.Q. Cuttle, William Gordon, Montreal, P.Q. Bleau, Alphonse, Maisonneuve, Montreal, P.Q. \*Baxter, Warren Phelps, Montreal West, P.Q. Scott, James McDonald, Valleyfield, P.Q. Timmis, Harold Gordon, New York, U.S.A. \*Bradshaw, Gordon Rothwell, Nelson, B.C.

\*Sherwood, Thomas K., Westmount; P.Q. \*Johnson, William James, Lachine, P.Q. Cross, George Esplin, Westmount, P.Q. Morin, Charles Auguste, Montreal, P.Q. Brough, Frank Sheldon, Westmount, P.Q. Patton, Hugh Bradford, Montreal, P.Q. Streadwick, Ralph Donell St. George, Jamaica, B.W.I. Bradshaw, Frederick Wykeham, London, England. Patterson, Thomas Bitton, Lumsden, Sask. equal. \*Tallon, Joseph Andrew, Quebec, P.Q. Clark, Howard Langley, Croydon, England. Adams, Albert Oliver, Bowesville, Ont. \*Davis, William Wallace, Ottawa, Ont. \*Herman, Reuben, Montreal, P.Q. \*Gegg, Richard Conrad, Hongkong, China. \*Whittemore, Carl Raymond, Trail, B.C. \*Fagan, James Wilfrid, Montreal, P.Q. Dalrymple, Edward Ross, Westmount, P.Q. \*Graham, George Patterson, New Glasgow, N.S. }equal. \*White, Gerald Leland, London, Ont. Carpenter, Thayer Robinson, Lachute Mills, P.Q. \*Stirling, Laurie Brodie, Montreal, P.Q. \*Simpson, James Catanach, Jr., Montreal, P.Q. \*MacLaren, Albert Roy, Buckingham, P.Q. \*Denis, Bertrand Tyrrell, Quebec, P.Q. \*McMeans, Lendrum Edmund, Winnipeg, Man. \*Simpson, Richard Loudon, Montreal, P.Q. \*Chisholm, Joseph Donald, Antigonish, N.S. equal. \*Horsey, Richard Mounstephen, Montreal, P.Q. \*Taschereau, Rogers Harwood, Ottawa, Ont. \*Owens, Owen Norreys Harrington, Montreal, P.Q. \*Lawrence, Frederick Sylvester, Notre Dame de Grace, P.Q. equal. \*Livingstone, Arnold Clarence, Montreal, P.Q. \*Caldwell, Charles Edward, Conception Bay, Newfoundland. \*Abbott-Smith, Harry B., Montreal, P.Q. equal. \*McCaw, John Blacklock, Sherbrooke, P.Q. ] \*Maclaren, Alexander Barnet, Buckingham, P.Q. \*Brodeur, Jean Charles, Ottawa, Ont. \*Oliver, Cuthbert Jack, New York, U.S.A. \*Bishop, Eric Gordon, Bonavista Bay, Newfoundland. } equal. \*Raginsky, Bernard, Montreal, P.Q.

\*Conditional upon passing supplemental examinations.

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\*Champion, Cecil Hugh, Chateauguay Basin, P.Q. \*Jackson, Lawrence Wright, Ottawa, Ont. \*Wylde, Charles Napier, Montreal, P.Q. \*Berry, Charles Frederick, Cartierville, P.Q. \*Holden, John Hastie, Westmount, P.Q. \*Hamilton, Geoffrey John, Montreal, P.Q. \*Parsons, Frederick Errol Leslie, Montreal, P.Q. \*Gamble, Robert Bruce, Ottawa, Ont. \*Kingan, Gordon Herron, Montreal, P.Q. \*Dickinson, Albert Godfrey, Duncan, B.C. \*Powell, Fraser Edwin, Ottawa, Ont. \*Zybach, Jack Melchior, Niagara Falls, Ont. } equal.

\*Evans, Charles Durward, Quebec, P.Q.

# (Unranked.)

# (In alphabetical order.)

Bethune, John Strachan Talbot, Montreal, P.Q. Cohen, Joseph, Ottawa, Ont. Cromwell, Alexander Ross, Cookshire, P.Q. Davis, Sydney Herbert, Ottawa, Ont. De Salaberry, Bernard, Ottawa, Ont. (aegrotat). Elliot, Gerald Burton, Westmount, P.Q. Foss, Roy Holmes, Sherbrooke, P.Q. Fry, John Dawson, Montreal, P.Q. Gnaedinger, Adrien Leslie, Westmount, P.Q. Gooch, Harold Cowasjee, Dundee, P.Q. Gualtieri, Santo, Thorold, Ont. Hamilton, Herbert James, Westmount, P.Q. Hamilton, Philip Dawson Prior, Midvale, Utah, U.S.A. Harling, Frank Norman, Montreal. Johnson, Edwin Lewis, Outremont, P.Q. Kerr, George Elliott, Fernie, B.C. King, John David, Montreal, P.Q. Kirsch, Harry, Notre Dame de Grace, P.Q. McCallum, Fred. Lee, Welland, Ont. MacNider, Clarence Henry, Westmount, P.Q. Midgley, Russell Edward, Montreal, P.Q. Morrison, Dave Reid, Westmount, P.Q. Munro, William Cauldwell, Notre Dame de Grace, P.Q. Murphy, Edward Joseph O'Murrough, Saskatoon, Sask. Nesbitt, Martin Bicirra, Chihuaha, Mexico. Notman, James Godfrey, Westmount, P.Q.

Patterson, Kenneth Beck, Westmount, P.Q. Quinlan, James T., Westmount, P.Q. Ramsey, Kenneth McIherson, Quebec, P.Q. Reeve, Charles Lailey, Outremont, P.Q. Reid, Howard Edward, St. John, N.B. Root, Stephen Eastman, Westmount, P.Q. Scott, Paul Stuart, Montreal, P.Q. Turnbull, Rupert Davdson, Rothesay, N.B. Velasco, Edward Marnanillo, Cuzco, Peru.

### STANDING IN THE SEVERAL SUBJECTS.

# (I) STUDENTS IN ARCHITECTURE.

#### ARCHITECTURAL DESIGN.

- Fifth Year.—Class I.—Littl: and McEvers, equal. Class II.—None. Class III.—Thomas.
- Fourth Year.-Class I.-None. Class II.-Durnford. Class III.-Lyman.
- Third Year.-Class I.-None. Class II.-Goodman. Class III.-Van Etten.
- Second Year.—Class I.—Perry. Class II.—Brown (L. E.), Wiggs, Luke, Morris. Class III.—Watt, Hunter.

#### ARCHITECTURAL DRAWING.

- Fourth Year.—Class I.—Ione. Class II.—Lyman. Class III.— Thomas, Durnford.
- Third Year.—Class I.—Noie. Class II.—Goodman. Class III.—Van Etten.
- Second Year.—Class I.—Pirry; Brown (L. E.) and Wiggs, equal; Luke. Class II.—Anos and Watt, equal. Class III.—Hunter, Morris.
- First Year.—Class I.—Wilon (P. R.). Class II.—Cooper, Macduff, Bouillon, McLeod (A. N.). Class III.—Strong.

#### AR(HITECTURAL ESSAY.

- Fifth Year.—Class I.—Litle. Class II.—Thomas. Class III.—Mc-Evers.
- Fourth Year.—Class I.—None. Class II.—Thomas, Lyman. Class III.—Durnford.
- Third Year.—Class I.—None. Class II.—Goodman. Class III.—Van Etten.
- Second Year.—Class I.—Like and Perry, equal; Wiggs. Class II.— Watt, Morris, Hunte. Class III.—Brown (L. E.).

## ARCHITECTURAL GEOMETRY.

First Year.—Class I.—Cooper. Class II.—Macduff, Strong. Class III.—McLeod (A. N.), Bouillon.

### BUILDING CONSTRUCTION.

Second Year.—Class I.—Perry. Class II.—Luke, Wiggs, Watt. Class III.—Morris.

## BUILDING DETAILS.

Second Year.—Class I.—Perry, Wiggs, Luke. Class II.—Watt, Morris. Class III.—Van Etten, Hunter.

### ELEMENTS OF ARCHITECTURE.

First Year.—Class I.—Cooper, Bouillon. Class II.—None. Class III. McLeod (A. N.), Macduff, Strong.

#### ELEMENTS OF COMPOSITION.

Second Year.—Class I.—Perry. Class II.—Wiggs; Morris and Luke, equal; Brown (L. E.) and Watt, equal. Class II.—Hunter.

## FREEHAND DRAWING.

- Fourth Year.—Class I.—None. Class II.—Durnford, Thomas. Class III.—Lyman.
- Third Year.—Class I.—None. Class II.—Goodman. Class III.—Van Etten.

Second Year.—Class I.—Perry, Luke. .Class II.—Hunter, Morris; Amos and Brown (L. E.) and Watt, equal. Class III.—None.

First Year.—Class I.—Cooper (H. C. D.) and Wilson (P. R.), equal. Class II.—Bouillon and Strong, equal; McLeod (A. N.). Class III.—None.

HEATING AND VENTILATION.

Fourth Year.-Class I.-None. Class II.-Durnford. Class III.-Lyman.

#### HISTORY OF ARCHITECTURE (CLASSIC).

Second Year.—Class I.—Perry. Class III.—Wiggs. Class III.—Luke, Brown (L. E.), Morris, Watt, Hunter.

#### HISTORY (GENERAL).

First Year.—Class I.—Cooper (H. C. D.). Class II.—Macduff, Amos. Class III.—McLeod (A. N.); Bouillon and Strong, equal.

# HISTORY OF ARCHITECTURE (MODERN).

Fifth Year.—Class I.—Little and McEvers, equal. Class II.—None. Class III.—None.

#### HISTORY OF ARCHITECTURE (RENAISSANCE).

Third Year.—Class I.—Durnford. Class II.—Goodman and Lyman, equal. Class III.—Van Etten.

## HISTORICAL DRAWING.

Fifth Year.-Class I.-None. Class II.-Little. Class III.-McEvers.

### HYGIENE OF BUILDINGS.

Fourth Year.—Class I.—None. Class II.—Durnford, Lyman. Class III.—None.

### MODELLING.

- Fifth Year.—Class I.—Little and McEvers, equal. Class II.—None. Class III.—None.
- Fourth Year.—Class I.—None. Class II.—Durnford and Thomas, equal; Lyman. Class III.—None.

### ORNAMENT AND DECORATION, NO. 9.

Fourth and Third Years.—Class I.—None. Class II.—Goodman. Class III.—Durnford, Lyman, Brown, Van Etten.

## ORNAMENT AND DECORATION, NO. 10.

Fourth and Third Years.—Class I.—None. Class II.—Brown (L. E.), Lyman. Class III.—Goodman, Thomas, Durnford, Van Etten.

#### PERSPECTIVE.

Third Year.—Class I.—Goodman, Van Etten. Class II.—Brown (L. E.). Class III.—None.

#### PHYSICS.

First Year.—Class I.—None. Class II.—Cooper (H. C. D.), Amos. Class III.—None.

#### PHYSICS LABORATORY.

First Year.—Class I.—Cooper (H. C. D.), Amos. Class II.—McLeod (A. N.), Macduff. Class III.—None.

#### PROFESSIONAL PRACTICE.

Fifth Year .- Class I.- Thomas. Class II.- None. Class III.- None.

#### STRUCTURAL ENGINEERING.

Third Year.-Class I.-None. Class II.-Goodman. Class III.-None.

Second Year.—Class I.—Perry, Morris. Class II.—Brown (L. E.) and Luke, equal. Class III.—Watt, Wiggs, Hunter.

# STRUCTURAL ENGINEERING (DRAFTING) (II.).

Third Year.-Class I.-Goodman. Class II.-None. Class III.-Van Etten.

# STRUCTURAL ENGINEERING (DRAFTING) (I.)

Second Year.-Class I.-Perry. Class II.-Brown (L. E.), Hunter, Luke, Wiggs. Class III.-Morris, Watt.

# SUMMER READING AND WORK.

Fifth Year.—Class I.—None. Class II.—None. Class III.—Little. Fourth Year.—Class I.—None. Class II.—Lyman, Durnford. Class

# III.—None.

Third Year.—Class I.—None. Class II.—Van Etten. Class III.— Goodman.

Second Year.-Class I.-Wiggs; Morris and Perry, equal; Luke. Class II.-Brown (L. E.), Watt. Class III.-None.

#### THEORY OF DESIGN.

Fourth and Third Years.-Class I.-Goodman. Class II.-Lyman, Durnford, Van Etten. Class III.-None.

### (2) STUDENTS IN OTHER COURSES.

### APPLICATIONS OF ELECTRICITY.

Fourth Year.—Class I.—Creighton, Dunbar; Code and Thompson, equal; Pope. Class II.—Dawson, Schippel, Wiggs, Windsor. Class III.—Standish, Demers, Roberton, Hacker, Parnell, Arbuckle.

#### APPLIED ELECTRO-CHEMISTRY AND LABORATORY.

Fourth Year.—Class I.—Millar; Labell and Taylor, equal; Dunbar and Edward and Larose, equal. Class II.—Code, Cameron, Decew, Creighton, Rashback, Arbuckle; Hobart and Pope, equal. Class III.—Dawson; Crowe and Kearns, equal; Ross (J. H.), Thompson, Schippel, Lafontaine; Mosher and Smith (D. T.), equal; Patten, Windsor; Parsons and Roberton, equal; Fox and Hacker and Millidge and Stewart and Wiggs, equal.

#### BRIDGE DESIGN.

Fourth Year.—Class I.—Davies, Austin, Eadie; Lindsay and Robertson, equal. Class II.—Ferrier, McPhail, Elder, Ross (B.), Betournay, Wickenden, Greene. Class III.—LaMontagne, Cole, Seath, Deneau, Powell, Mahaffy, MacEwen.

#### CHEMISTRY.

#### ADVANCED INORGANIC CHEMISTRY.

Fourth Year.—Class I.—Millar, Kearns. Class II.—DeCew and Hobart, equal; Taylor. Class III.—Fox, Smith (D. T.).

## ADVANCED ORGANIC CHEMISTRY.

Fourth Year.—Class I.—Larose, Labell. Class II.—Millar, Mosher, . Crowe; Cameron and Lafontaine, equal. Class III.—Rashback, Ross (J. H.), Edward.

#### FOOD CHEMISTRY.

Fourth Year.—Class I.—Larose; Cameron and Lafontaine, equal. Class II.—Ross (J. H.), Crowe, Mosher. Class III.—Labell, Rashback; Edward and Fox and Parsons, equal.

### GENERAL CHEMISTRY.

Second Year .- Class I .- Tatley, Mott, Brooks, Grant, Cartwright; Desbarats and Weldon, equal; Clarke; Bissell and Taber, equal; Bush and Farquharson, equal; Macnaughton. Class II. -Kyle; Carson and Hastings, equal; Wright, McTaggart; Duff and Holt and Midgley, equal; Ahern and Carlyle and Woolward, equal; Bonneville and Gurman and Hanington and Munro and Ross (J. H. D.), equal; Pevzner; Biggar and Chorney and Gnaedinger (P. E.), equal; Brown (G. B.) and Crawford and Dobson and Humes and Mitchell (J. M.) and Morrisette, equal; Bastable; Anderson and Gordon and Holmes and Loebel and Messenger, equal; Drummond and Taylor (E. P.) and Wilson (J. M.), equal; Banfill and Boronow and Clark and Fraser, equal. Class III .- Jandrew and McLennan and Spratt, equal; Benett and Cousineau and Ford and MacGregor, equal; Kerr and Mackenzie (G. H.) and Reed and Wilder, equal; Lorin and Normandin and Reid, equal; Evans and King, equal; Scott; Parker and Wilson (H. A.), equal; Brown (E. V.) and Fisk and Murphy (A. G. S.) and Nesbitt and Wain, equal; Davis (S. H.) and Reiffenstein, equal; Kirsh; Hamilton and Turton, equal; Simons and Tucker, equal; Coughlan and Glen and Jenks and Macrae, equal; Buchanan and Hamel and McDougall and Morrison and Pfeiffer and Thompson, equal.

Second Year.—(Chemistry Course). Class I.—None. Class II.— Taylor (J. E.), Binmore. Class III.—None.

#### HISTORY OF CHEMISTRY.

Fourth Year.—Class I.—Millar and Larose, equal; DeCew and Lafontaine, equal; Edward. Class II.—Ross (J. H.), Cameron, Hobart, Rashback, Smith (D. T.), Taylor. Class III.—Labell, Mosher, Crowe; Kearns and Parsons, equal.

## INORGANIC INDUSTRIAL CHEMISTRY.

Fourth Year.—Class I.—Larose, Taylor, Crowe. Class II.—DeCew; Edward and Millar, equal; Cameron; Millidge and Rashback, equal. Class III.—Lafontaine and Smith (D. T.), equal; Labell and Penney, equal; Ross (J. H.), Kearns, Fox; Hobart and Mosher and Parsons, equal.

# INORGANIC QUALITATIVE ANALYSIS.

- Third Year.—Class I.—None. Class II.—Armstrong, Bain. Class III.—Brow; Cromwell and Tansley, equal; Saunders; Scriverand Weldon and Wells, equal; Gualtieri.
- Second Year.—Cass I.—Binmore. Class II.—Taylor (J. E.). Class III.—None.

#### INORGANIC QUANTITATIVE ANALYSIS.

Third Year.—Class I.—Jelly; Cuddy and Green, equal; Mitchell, Smith (R. H.); Forbes and Harrison and Timmerman, equal. Class II.—Lantz and Warriner, equal; Harris, Johnston, Croft; Goodwin and Henderson and Jordan, equal; Cockfield and Giles and Stroud and Yates, equal. Class III.—Cambron and Clossey and Rochester (G. H.), equal; Cloutier and Cohen and Shotwell, equal; Calkin and Nutter, equal; Kay; Hyndman and Irving, equal; Copping; Gibbs and Mackenzie, equal; Challenger.

# ORGANIC CHEMISTRY.

Third Year.—Class I.—Johnston; Green and Timmerman, equal. Class II.—Thomson, Giles; Cohen and Mitchell, equal. Class III.—Jelly, Croft, Lordly; Challenger and Cuddy, equal; Goodwin and Lantz and Smith (R. H.), equal; Calkin and Cambron and Cockfield and Harris and Kay and McIntyre, equal.

### ORGANIC INDUSTRIAL CHEMISTRY.

Fourth Year.—Class I.—Larose, Millar, Taylor; Cameron and Crowe and Mosher, equal; Edward. Class II.—Labell and Smith (D. T.), equal; DeCew; Lafontaine and Rashback, equal; Kearns, Parsons. Class III.—Hobart, Millidge, Ross (J. H.).

#### PHYSICAL CHEMISTRY.

Third Year.—Class I.—Mitchell, Thomson; Jelly and Timmerman, equal. Class II.—Lordly and Giles, equal; Millidge; Cuddy and Gibbs, equal; Warriner, Johnston, Irving, Green; Lantz and Croft and Cockfield, equal. Class III.—Calkin and Mc-Intyre, equal; Henderson, Challenger; Forbes and Yates, equal; Cloutier; Cambron and Smith (R. H.), equal; Goodwin and Hyndman and Purcell and Rochester (G. H.), equal.

#### PHYSICAL CHEMISTRY AND LABORATORY.

Fourth Year.—Class I.—Larose; Cameron and Taylor, equal. Class II.—Ross (J. H.), Mosher; Crowe and Millar, equal; DeCew. Class III.—Labell, Lafontaine, Kearns, Edward; Hobart and Rashback and Smith (D. T.), equal.

#### CRYSTALLOGRAPHY.

# Fourth Year.—Class I.—Millar, Armstrong (P. F.). Class II.—None. Class III.—None.

#### DESCRIPTIVE GEOMETRY.

First Year .- Class I .- Larose and Moore, equal; Kennedy and Matheson and Smith, equal; Culpeper and Griffith and Webster and Yorston, equal; Armstrong and Hunten and Livingstone and Macaulay, equal; Blackall and Cregeen and Desloover and Finley and Lawrence and Stephen and Toole, equal; Cooper (P. E.) and McNaughton and Read, equal; Champion and Craik and Radley and Timmis and Willis, equal; Bieler and Grant and Laidley and Lewis, equal; Faith and Johnson and Powell (A. T.) and Stirling and Taschereau and Turnbull (A. R.), equal; Binns and Crain and Eadie and Gamble and Munro (D. J.) and Pelletier, equal; Baxter and Brough and Chisholm and Harbert, equal; Wood; Graham and Murphy (E. J. O.) and Scott (J. M.) and Smallhorn and Velasco and Wylde, equal; Buller and McLagan, equal; Bloomfield and Horsey and Raginsky, equal; Davis and Gordon, equal; Cross and Gaudet and Layne, equal; Bradshaw (F. W.) and Brisbane and Cuttle and Davies and McKindsey and Peters, equal; Macnutt; Abbott-Smith and Mac-Laren (A. R.) and Oliver (J. H.) and Renouf and Roquet and Shier and Simpson (J. C.) and Terrance (E. H.), equal; Berry and Clark (H. L.) and Legg and Owens and Rochester and Rorke, equal. Class II .- Ambridge and Bleau and Finlayson and Foss (D. B.) and Herman and Holden and McCaw and Murray, equal; Bradshaw (G. R.) and Fagan and LeBaron and Reid, equal; Allan (J. M.) and Denis and Lea and Mills and Patton

and Sherwood and Stethem and Whittemore, equal; Ross (M. V.); Downs and Foss (L. J.) and Held and Munn and Powell (F. E.) and Tallon and White (G. L. W.), equal; Brodeur (J. C.) and Maclaren (A. B.) and Simpson (R. L.) and Streadwick, equal; Braithwaite and Gegg and Gilbert and Kingan and McMeans, equal; Dormer and Elkington and Harling, equal; Cope and Raskin, equal; Buffam and Desbarats and Mignault, equal; Currier and Gooch and Hamilton and Jackson and Moran (T. M.) and Plow, equal; Bishop (E. G.) and Carpenter and Jerrom and Morin (C. A.) and Oliver (C. J.) and Winter, equal; Baillie and Dupuis and Gauthier and McDonald and Munro (G. H.) and Stone, equal; Antliff and Holcomb and Lemieux and Snyder, equal; Caldwell and James; equal. Class III .- Bishop (J. G.) and Brodeur (J. P.) and Dalrymple and Parsons and Paterson (A. P.) and Salter, equal; Macpherson and Taylor (M. B.), equal; Harvey; Evans and Goldberg and Patterson (T. B.) and Rhind and White (C. P.), equal; Mc-Dermott and Taylor, (C. W.), equal; Hutchison; Foster and Miller and Smeaton and Turley, equal; McCracken and Mallison and Nutting and Poulin and Reaper and Scott (L. J.), equal; Ball and Williams, equal; Adams and McKyes, equal; Leitch; Davidson (S. C. K.) and Dickinson and Zybach, equal; Allan (D. H.) and Brumell and Cornell and Elvidge and Kyle and MacLaren (J. N.) and Martin and Ross (A. E.) and Roughsedge and Wilson (H.), equal.

# DESCRIPTIVE GEOMETRY AND PERSPECTIVE.

Second Year .- Class I .- Wain, Desbarats; Hanington and Holt, equal; Armstrong and Bonneville and Weldon, equal; Mott; Fraser and McTaggart and Taber, equal; Clark and Wonham, equal; Bissell and Crawford and Murphy (E. J. O.) and Ross (J. H. D.), equal; Bush and Gnaedinger (P. E.) and Mitchell, equal; Glen and Grant and Tatley, equal; Cartwright and Cousineau, equal; Dobson and Lorin, equal; Brown (E. V.); Holmes and Macrae and Morrisette, equal; Bradfield and Kirsh, equal; Elliot; Carlyle and Carson, equal; Anderson and Biggar and Brown (G. B.) and McLennan and Taylor (J. E.), equal; Clarke and Messenger and Reiffenstein and Simons, equal. Class II .- Tucker; Eager and Gaboury and Hamilton, equal; Boronow and Gnaedinger (A. L.), equal; Foss and Humes and Notman, equal; Gooch; Banfill and Farquharson and Fisk and Reid, equal; Chorney and Pevzner, equal; Spratt; Kyle and MacGlashan and Macnaughton and Wait, equal; MacNider and Murphy (A. G. S.) and Wilder, equal; Fry and Gordon, equal;

Bastable and Evans and Martin and Thompson, equal; Benett and Hastings and Loebel and Sherrard, equal; Friedman and Taylor (E. P.), equal. *Class 111.*—Reed, Gurman; Coughlan and MacGregor, equal; Mackenzie (G. H.); Brooks and Ford and Ramsey and Turton, equal; Newman and Parker, equal; Drummond and Jandrew and Quinlan and Wheeler and Woolward, equal; McDougall and Root, equal; Ahern and Johnson and Scott and Wilson (J. M.), equal; Morrison, Wilson (H. A.); Davis (S. H.) and Lawrence and Nesbitt and Normandin and Parsons and Reeve and Ross (D. R.) and Wright, equal.

#### DESIGNING.

Fourth Year.—Class I.—Elderkin, Chisholm, Macpherson. Class II. —Twinberrow; McNicoll and Rutherford (A. B.), equal; Scott and Smith (E. H.), equal; Shrimpton, Mackenzie (B. H. T.); Shapter and Vessot, equal. Class III.—Rutherford (W. J.), Kirkpatrick.

#### ECONOMICS.

Third Year .-- Class I .-- Lantz, Mitchell; Congleton and Giles and Whelen, equal; Green; Jelly and Johnston and Lewis, equal; Loy and Saunders, equal; Anderson and Harrison and McIntyre, equal; Macphail; Bain and Gliddon, equal; Croft and Farmer and Hannan and Louttit and Winslow, equal; Gardner and Thompson, equal. Class II .- Jordan and Lordly and McCurdy, equal; Calkin and Challenger and Phelan and Robertson, equal; Canning and Mawdsley, equal; Eaton and Fellows and Kirby, equal; Copping and Cromwell and Davis (Samuel), equal; Cunningham and Perrault and Weldon, equal; Gualtieri and Wells, equal; Hyndman and Wilkins, equal; Fortin and O'Sulivan and Palmer and Shotwell and Vineberg and Ward, equal; Macfarlane and Warriner, equal; Cohen and Hall and Hill, equal; Cambron and Durant and Jackson and Scriver, equal. Class III .- Bishop and Forbes and Langstroth and Macdonald, equal; Dewar and Fowler and Henderson and Sloves, equal; Purcell and Thomson, equal; Livingstone; Acton and Brow and Maxwell, equal; Cockfield and Millidge, equal; Gould and Smith (D. W.) and Smith (R. H.), equal; Kay and Mooney, equal; Watson, Perriton; Gauthier and Hurtubise, equal; Abbott-Smith and Clossey and Goodwin and Jenckes and O'Halloran, equal; Farnsworth and Irving and Tison and Vaughan and Wilson, equal.

# ELECTRIC LIGHT AND POWER DISTRIBUTION.

Fourth Year.—Class I.—Dunbar, Schippel, Dawson. Class II.—Arbuckle. Class III.—Windsor; Pope and Code, equal; Creighton; Demers and Thompson, equal; Roberton and Hacker, equal; Standish and Stewart and Patten, equal.

# ELECTRIC TRACTION.

Fourth Year.—Class I.—Dunbar and Schippel, equal; Dawson, Pope. Class II.—Thompson, Creighton, Stewart. Class III.—Demers and Wiggs, equal; Code, Standish, Windsor; Arbuckle and Hacker, equal.

## ELECTRICAL DESIGNING.

Fourth Year.—Class I.—Dunbar, Code. Class II.—Schippel; Creighton and Roberton, equal; Wiggs. Class III.—Standish, Dawson, Hacker, Parnell, Windsor, Stewart, Arbuckle, Pope, Thompson.

### ELECTRICAL ENGINEERING.

- Fourth Year.—Class I.—Dunbar, Code. Class II.—Pope and Thompson, equal; Wiggs. Class III.—Schippel, Demers, Windsor; Creighton and Parnell, equal; Dawson, Arbuckle, Stewart.
- Third Year.—Class I.—Phelan, Sloves, Canning; Anderson and Jackson, equal. Class II.—Macdonald, Acton; Eaton and Fellows, equal; Louttit, Gliddon, Vaughan, Thompson. Class III.— Bishop and Vineberg, equal.

# ELECTRICAL PHOTOMETRY AND ILLUMINATION.

Fourth Year.—Class I.—Schippel, Dunbar. Class II.—Dawson and Roberton, equal; Code and Patten and Pope, equal; Thompson; Creighton and Windsor, equal. Class III.—Parnell and Standish, equal; Arbuckle.

#### ELECTRO METALLURGY.

Fourth Year.—Class I.—Creightton, Thompson, Dawson. Class II.— Penney and Schippel, equal; Hacker, Dunbar, Arbuckle; Code and Pope and Stewart, equal. Class III.—Windsor and Standish, equal; Parnell, Demers.

#### ELEMENTS OF ELECTRICAL ENGINEERING.

Fourth and Third Years.—Class I.—Winslow, Eadie; Austin and Henry, equal; Larose; Edwards and McPhail, equal. Class II.—Mosher, Erlenborn; Crowe and Davies, equal; Hobart; Gilbert and Wickenden, equal; Taylor and White, equal; Seath. Macklin, Penney, Ross (B.); Gould and Ferrier and Macfarlane, equal; Cameron and Labell, equal; Robertson; Cole and Congleton and MacEwen, equal. *Class III.*—Lee, Jenckes; Emery and Lafontaine, equal; Karnes and Millidge and Powell, equal; Wilson; Elder and O'Halloran, equal; Betournay, Edward, Langstroth; Kearns and McCurdy, equal; Ross (J. H.); Dyer and Hall and LaMontagne and Lindsay and Rashback, equal; DeCew and Deneau and Douglas and Durant and Mahaffy and Maxwell and Mooney (F. M.) and Mooney (R. B.), equal.

#### ENGINEERING ECONOMICS.

Fourth Year .- Class I .- Davies, Gilbert, Eadie, Macklin; Dunbar and Schippel, equal; Larose; Crowe and Twinberrow, equal; Creighton, Austin, Dyer, Labell; Greene and Patten, equal; Mackenzie Class II .- Lafontaine and Scott and Wickenden, equal; Chisholm and Elderkin and Mahaffy, equal; Mosher; LaMontagne and Rutherford (A. B.), equal; Cole and Smith (D. T.), equal; DeCew and Hobart and Powell and Robertson, equal; Dawson and Vessot, equal; Hart, Betournay; Code and Ferrier and Wilson, equal; Erlenborn and Mooney and Stewart, equal; Hacker and Shrimpton, equal. Class III .- McNicoll and Mc-Phail and Pope, equal; Deneau and Douglas and McLean and Parsons and White, equal; Standish; Roberton and Smith (E. H.), equal; Cameron, Bradley, Ross (B.); Edwards and Lee, equal; Rashback and Windsor, equal; Ross (J. H.). Edward; Arbuckle and Bourret and Emery and Karnes and Kearns and McEwen and Macpherson and Rutherford (W. J.) and Seath and Wiggs, equal.

#### ENGINEERING LAW.

Fourth Year.—Class I.—Dunbar, Elderkin, Smith (E. H.), Gilbert, Wickenden; Creighton and Greene and Mosher, equal; Shrimpton; Chisholm and DeCew and Eadie and Kearns and Rashback, equal; Davies and Henry and MacEwen and Mackenzie, equal. Class II.—Rutherford (A. B.); Millar and Ross (J. H.), equal; Hobart and Macklin, equal; Larose and Penney, equal; Hart; Ferrier and Stewart, equal; Dawson and Labell and Lafontaine and McLean and Robertson, equal; Lee and Ross (B.) and White, equal; Bradley and Macpherson and Parsons, equal; Code and Emery and Karnes and Roberton, equal; Thompson. Edward, Twinberrow; Arbuckle and Austin and Windsor, equal. Class III.—Scott, Wiggs; Deneau and McNicoll and Schippel, equal; Fox and Pope, equal; Erlenborn; Dyer and

Parnell and Shapter, equal; LaMontagne and Mooney, equal; Kirkpatrick; Bourret and Cole and Demers and Edwards and Elder and Hacker and Smith (D. T.), equal.

#### ENGLISH.

First Year .- Class I .- Moore; Buller and Toole, equal; Ambridge and Cregeen and Griffith and Hunten and Layne, equal. Class II .- Radley, Harbert; Lawrence and MacCallum, equal; Bradshaw (F. W.) and Olive (C. J.), equal; Cooper (H. C. D.) and Stephen, equal; Binns and Bradshaw (G. R.), equal; Bloomfield and Culpeper and Kingan and Laidley and Lewis and Munro (D. J. B.) and Taschereau, equal; Allan (D. H.); Larose and Maclaren (A. B.) and Mills and Rhind and Rochester and Simpson (R. L.), equal. Class III .- Bishop (J. G.) and Davies and Finlayson and Gilbert and Kennedy and Matheson and Whittemore, equal; Armstrong and Bishop (E. G.) and Blackall and Buffam and Cuttle and Denis and Horsey and Johnson and LeBaron and McKyes and Peters and Powell (A. T.) and Rorke and Roughsedge and Yorston, equal; Antliff and Baillie and Ball and Carpenter and Champion and Clark and Cox and Fagan and Gegg and Legg and McMeans and Martin (C. K.) and Parsons and Pelletier and Reaper and Shier and Smallhorn and Stirling and Winter and Wood, equal; Allan (J. M.) and Brodeur (J. C.) and Desloover and Gamble and Graham and Macduff and McLeod (A. N.) and Raginsky and Terrance (E. H.) and Timmis and Zyback, equal; Braithwaite and Brisbane and Caldwell and McDermott and Ross (M. V.) and Taylor (C. W.), equal; Amos and Brumell and Currier and Downs and Eadie and Finley and Lea and McEwen and Patton, equal; Adams and Brough and Campbell (D. H.) and Evans and Hambly and Macaulay and Mallison and Olive and Oliver (J. H.) and Roquet and Ross (A. E.) and Snyder and Dickinson, equal; Berry and Cooper (P. E.) and Davidson (S. C. K.) and Goldberg and Katz and Mulligan and Powell (F. E.) and Raskin and Tallon and Turnbull (A. R.) and Wilson (H.), equal; Gaudet and Holden and James and Mc-Innis and McKindsey and Macpherson and Poulin and Simpson (J. C.) and St. Germain and Munro (G. H.), equal; Bleau and Herman and Hutchison and Kyle and Morrin (J. J.) and Owens and Paterson (A. P.) and Plow and Robinson and Scott (J. M.) and Streadwick and Velasco, equal; Renouf; Desbarats and Dormer and Gauthier and Hamilton and Leitch and Macnutt and Morin (C. A.) and Murray and Taylor (A. F.), equal.

#### EXPERIMENTAL ENGINEERING.

Fourth Year.—Class I.—Elderkin, Chisholm. Class II.—McNicoll, Mackenzie; Rutherford (A. B.) and Shrimpton, equal. Class III.—Rutherford (W. J.); Scott and Smith (E. H.) and Twinberrow, equal; Vessot; Macpherson and Shapter, equal; Kirkpatrick.

### FIRE ASSAYING.

- Fourth Year.-Class I.-Taylor, DeCew. Class II.-None. Class III.-Hobart, Mosher, Smith (D. T.).
- Third Year.—Class I.—Bain; Harrison and Jordan, equal; Weldon; Davis (Samuel) and Mawdsley and Palmer, equal; Saunders. Class II.—Cromwell, Tansley, Dewar, Brow, Fowler, Wells Armstrong, Nutter. Class III.—Livingstone, Douglas; Gualtieri and Scriver, equal.

#### FOUNDATIONS AND MASONRY.

Third Year.—Class I.—Cunningham; Macphail, Fortin. Class II.— Farmer and Hannan, equal; Gardner, Watson, O'Sullivan; Brault and Robertson, equal; Lewis, Loy. Class III.—Gauthier and Hurtubise, equal.

#### FREEHAND DRAWING AND LETTERING.

First Year .- Class I .- Armstrong and Moore, equal; Kennedy and Legg, equal; Larose and McKyes, equal; Lewis and Munro (G. H.) and Wood, equal; Kingan, Hunten; Gaudet and Shier and Stephen, equal; Hamilton; Russell and Toole, equal; Macaulay; Chisholm and Herman and Lane and McKindsey, equal; Desloover and McNaughton and Powell (A. T.), equal; Cregeen and LeBaron, equal; Adams and Faith and McDermott, equal; Cooper (P. E.) and Patton and Rorke and Streadwick and Turnbull (A. R.), equal; Crain and Cuttle and Kotsonas and Maclaren (A. B.) and Plow, equal; Bradshaw (F. W.) and Champion and Munro (D. J.) and Reaper and Sherwood and White (C. P.) and Wylde, equal; Eadie and Oliver (J. H.) and Read and Stirling, equal. Class II .- Craik and Harbert and James and Laidley and Macnutt and Radley and Simpson (J. C.), equal; Matheson and Timmis, equal; McMeans and Webster, equal; Binns; Finlayson and Patterson (T. B.) and Raginsky, equal; Bloomfield and Brumell and Martin and Morrin (J. J.) and Roquet, equal; Elvidge and Finley and Foss (D. B.) and Foster and Pelletier and Smith and White (G. L. W.), equal; Baxter and Gordon and Raskin and Smeaton and Stethem and Willis, equal; Allan (J. M.)

and Fagan and Jerrom and Lawrence, equal; Brisbane and Gilbert and MacLaren (J. N.) and Morin (C. A.), equal; Bieler and Goldberg and Livingstone, equal; Ball and Bradshaw (G. R.) and Buffam and Cornell and Culpeper and Dickinson and Grant, equal; Buraschi and Griffith and Moseley and Mulkins and Murphy (E. J. O.) and Reid, equal; Currier and Holcomb and Mulligan and Scott (J. M.), equal; Downs. Class III .- Antliff and Evans and McDonald and Oliver (C. J.) and Rhind and Terrance (E. H.), equal; Ambridge and Baillie and Davies and Gamble and Parsons and Rochester. equal; Blackall and Braithwaite and Carpenter and Holden and Johnson and Katz and McLagan and MacLaren (A. R.) and Roughsedge and Taylor (C. W.), equal; Peters; Bishop (J. G.) and Cope and Elkington and Olive and Owens and Smallhorn and Taschereau and Taylor (M. B.) and Winter, equal; Caldwell and Campbell (A. T.) and Fleming and Jackson and Marcionelli and Mills and Zybach, equal; Horsey and Hutchison and Ross (M. V.), equal; Abbott-Smith and Brough and Echlin and Nutting and Wilson (H.), equal; Dalrymple and Davis and McCaw and Whittemore and Yorston, equal; Berry and Paterson (A. P.) and Scott (L. J.), equal; Brodeur (J. P.) and Foss (L. J.) and Leitch and MacCallum and Timmis (L. H.), equal; Cox and Gegg and Held and McEwen, equal; Campbell (D. H.); Clark (H. L.) and Miller and Snyder, equal; Allan (D. H.) and Bleau, equal.

#### GEODESY.

Fourth Year.—Class I.—None. Class II.—Davis and Eadie, equal; Wickenden, Macklin, Greene, Ferrier, Austin; Betournay and Dineen, equal; Hart and Robertson (R. McF.), equal; La-Montagne, MacEwen. Class III.—McPhail, Powell, Seath; Elder and Ross (B.), equal; Cole and McLean and Mahaffy, equal; Wilson.

#### GEODETIC FIELDWORK.

Fourth Year.—Class I.—Eadie and Robertson (R. McF.), equal. Class II.—Cole and Ferrier, equal; Deneau; Betournay and MacEwen, equal; Austin and Wickenden, equal; Powell; Seath and Wilson, equal. Class III.—McLean, Greene; LaMontagne and Mahaffy, equal; Hart and Macklin, equal.

#### GEOLOGY FIELD SCHOOL.

Fourth Year.-Class I.-Gilbert; Douglas and Emery, equal. Class II.-Bradley, Bourret. Class III.-None.

## GEOLOGY (GENERAL).

Third Year.—Class I.—Bain, Farmer, Timmerman, Brow, Mawdsley. Class II.—Gardner, Saunders; Cromwell and Tansley, equal; Weldon, Cunningham, Jordan, Hannan; Henderson and Livingstone, equal; Cohen; Brault and Clossey and Davis (S.) and Lewis and Wells, equal. Class III.—Fowler and O'Sullivan, equal; Scriver; Fortin and Watson, equal; Harrison, Gualtieri; Loy and Robertson, equal; Nutter, Rochester (L. B.); Hurtubise and Macphail, equal; Dewar, Ferguson; Gauthier and Muir, equal.

#### GEOLOGY (HISTORICAL).

Fourth Year.—Class I.—Gilbert. Class II.—Douglas, Emery, Bradley. Class III.—None.

### GEOLOGY OF CANADA.

Fourth Year.—Class I.—Gilbert and Henry, equal; Lee, Edwards, 'Douglas, Erlenborn. Class II.—Emery, Dyer. Class III.— White, Bourret, Karnes, Bradley.

# GRAPHICAL STATICS.

Second Year .- Class I .- Fraser, Perry, Macrae, Brooks; Carlyle and Weldon, equal; Banfill and Carson and Luke and McTaggart and Wilder, equal; Bonneville and Foss and Gnaedinger (P. E.) and Pevzner and Reiffenstein, equal; Tucker, Mott, Bastable; Boronow and Cousineau and Messenger, equal; Biggar and Clark and Coughlan and Desbarats, equal; Morrisette. Class II .- Holt; Clarke and Dobson and Hanington and Spratt, equal; Armstrong; Taber and Wonham, equal; Bush and Crawford and Martin, equal; Holmes and Pfeiffer, equal; Cartwright and Eager and Kyle and MacKeen and Reid and Ross (J. H. D.), equal; Bradfield and Mitchell (J. M.) and Simons, equal; Brown (L. E.) and Loebel, equal; Hastings and Notman and Tatley and Wilson (H. A.), equal; Bissell and Chorney and Gnaedinger (A. L.) and Ramsey, equal; Ahern and MacNider, equal; McDougall and Morris, equal; Glen and Kirsh and Scott, equal. Class III .- Lorin; Friedman and Gordon and Normandin and Salter, equal; Fry ard Gurman and McLennan and Wain and Wiggs and Woolward, equal; Anderson and Brown (E. V.) and Farquharson and Mackenzie (G. H.), equal; Quinlan and Reed, equal; King and Wright, equal; Grant; Brown (G. B.) and Drummond and Ford and Hamilton and Macnaughton, equal; Kerr, Wait; Fotheringham and MacGregor, equal; Evans, Humes; Jandrew and MacGlashan and Thompson and Wilson (J. M.), equal; Benett and Bethune and Cromwell and Reeve and Root and Taylor (E. P.) and Turton and Watt and Wheeler and Wilson (S. H.), equal.

# HEATING AND VENTILATION.

Fourth Year.—Class I.—Elderkin. Class II.—Chisholm, Shrimpton, Shapter; Scott and Vessot, equal; McNicoll, Smith (E. H.). Class III.—Kirkpatrick; Mackenzie (B. H. T.) and Rutherford (A. B.), equal; Macpherson, Twinberrow, Rutherford (W. J.).

## HYDRAULICS.

Fourth and Third Years.—Class I.—Chisholm and Eadie and Elderkin, equal; Cunningham, Farmer, Ferrier, Austin; Dunbar and Greene, equal; Gardner and Macphail (J. B.) and Schippel, equal; Wickenden. Class II.—Kirkpatrick; Smith (E. H.) and Windsor, equal; McPhail (D. S.); Robertson and Shapter and Watson, equal; Gauthier and Mackenzie, equal; Davies, Rutherford (A. B.), Shrimpton, Lewis, Hurtubise. Class III.—O'Sullivan and Seath, equal; Ross; Arbuckle and Dawson and Scott, equal; Brault and Hannan, equal; Betournay and Hacker, equal; Muir; Macklin and Twinberrow, equal; Code and Thompson, equal; Creighton and Demers and Fortin and Vessot, equal; Cole and Ferguson and Loy and McLean and Roberton and Rutherford (W. J.), equal. Unranked.—McNicoll.

# HYDRAULICS AND LABORATORY (SHORT COURSE).

Fourth Year.—Class I.—Taylor, Gilbert. Class II.—Larose; Bradley and Mosher, equal; Ross (J. H.), Henry; DeCew and Labell, equal; Lafontaine, Edward. Class III.—Crowe; Douglas and White, equal; Cameron and Edwards, equal; Erlenborn, Lee, Dyer, Kearns, Emery.

# HYDRAULIC MACHINES.

Fourth Year.—Class I.—Eadie and Elderkin, equal; Chisholm and Ferrier, equal; Lindsay and Smith (E. H.), equal; Austin and Davies, equal. Class II.—Greene and Shapter, equal; McPhail, Shrimpton, Wickenden; Seath and Twinberrow, equal; Cole and Robertson, equal. Class III.—Mahaffy, Kirkpatrick, Ross (B.), Deneau, Scott, Macpherson; LaMontagne and Macklin, equal; Hart and MacEwen, equal; Elder and Powell, equal.

#### LABORATORIES.

#### CHEMICAL LABORATORY.

Second Year .- Class I .- Weldon, Gurman; Carlyle and Tatley, equal; Bush and McTaggart, equal; Dobson and Gnaedinger (P. E.) and Grant and Taber, equal; Benett and Carson, equal. Class II .- Bastable and Brooks and Desbarats and Hanington and Murphy (A. G. S.), equal; Wright; Bissell and Mitchell (J. M.) and Wain, equal; Drummond, Hastings; Ahern and Messenger and Ross (J. H. D.), equal; Fraser and Loebel and McLennan, equal; Farquharson; Clarke and Gordon and Holmes and Macnaughton and Mott, equal; Hamilton; Boronow and Fry and Jandrew and Kyle and Midgley and Pevzner and Ross (D. R.), equal; Nesbitt and Thompson, equal; Banfill and Biggar and Bradfield and Brown (G. B.) and Buchanan and Cartwright and Evans, equal; Clark and Morrisette and Taylor (E. P.), equal. Class III .- Crawford and McGregor and Mackenzie (G. H.) and Reiffenstein, equal; Chorney and King and Lorin, equal; Bonneville and Brown (E. V.) and MacKeen and Reed and Root and Wait, equal; Anderson and Cousineau and Kirsh and Simons and Spratt and Woolward, equal; Gnaedinger (A. L.) and Humes, equal; Duff; Wilson (J. M.) and Wonham, equal; Holt and MacNider, equal; Foss and Jenks and Parker, equal; Armstrong and Ford, equal; Davis (S. H.) and Reid and Wilder, equal; Glen and Munro and Wilson (H. A.), equal; Fotheringham and Macrae and Murphy (Justin), equal; Kerr and Scott and Wheeler, equal; Johnson and Macoun and Martin and Morrison and Notman and Quinlan and Tucker and Turton and Williams and Wilson (S. H.), equal.

Second Year (Chemistry and Metallurgy Courses).—Class I.—Binmore. Class II.—Taylor (J. E.), Schleifstein. Class III.—None.

CHEMICAL LABORATORY (INORGANIC LABORATORY).

Fourth Year (Chemical Engineering Course).—Class I.—DeCew and Taylor, equal. Class II.—Hobart. Class III.—Kearns, Smith (D. T.).

Fourth Year (Chemistry Course).—Class I.—None. Class II.— Millar. Class III.—None.

CHEMICAL LABORATORY (INORGANIC QUALITATIVE ANALYSIS).

Third Year.—Class I.—Bain. Class II.—Brow and Livingstone, equal; Cromwell; Armstrong and Scriver, equal. Class III.—Davis (Samuel) and Dewar, equal; Mawdsley and Weldon, equal; Tansley and Wells, equal; Gualtieri and Rochester (L. B.), equal; Saunders. Second Year (Chemistry and Metallurgy Courses).—Class I.—Schleifstein, Taylor (J. E.), Binmore. Class II.—None. Class III.— None.

# CHEMICAL LABORATORY (INORGANIC QUANTITATIVE ANALYSIS).

- Fourth Year (Metallurgical Engineering Course).—Class I.—None. Class II.—None. Class III.—Penney.
- Third Year (Chemical Engineering Course).—Class I.—Jelly, Mitchell, Lantz, Johnston. Class II.—Smith (R. H.), Harris, Green, Giles; Challenger and Forbes, equal; Cuddy and Warriner, equal; Croft and Goodwin and Kay and Stroud and Yates, equal. Class III.—Copping, Cockfield; Cambron and Rochester (G. H.), equal; Calkin and Gibbs, equal; Hyndman and Irving, equal; Abbott-Smith and Purcell, equal; Cloutier and Mackenzie and Patterson and Shotwell, equal.
- Third Year (Chemistry Course).—Class I.—Timmerman. Class II.— None. Class III.—Cohen.
- Third Year (Metallurgical Engineering Course).—Class I.—None. Class II.—Jordan, Fowler, Harrison, Nutter. Class III.— Clossey.
- Third Year (Metallurgy Course).—Class I.—None. Class II.—Henderson. Class III.—None.

### CHEMICAL LABORATORY (ORGANIC).

- Fourth Year.—Class I.—Lafontaine, Cameron. Class II.—Larose, Mosher, Crowe; Ross (J. H.) and Labell, equal; Edward. Class III.—Parsons, Fox, Rashback.
- Third Year.—Class I.—Johnston; Copping and Cuddy and Hyndman and Stroud, equal; Mitchell; Jelly, Harris; Green and Lantz and Timmerman, equal; Croft and Kay and Thomson, equal; Shotwell; Purcell and Smith (R. H.) and Warriner, equal. Class II.—Millidge; Calkin and Forbes and Gibbs and Rochester (G. H.), equal; Giles and McIntyre, equal; Challenger and Patterson, equal; Abbott-Smith; Cambron and Goodwin, equal; Yates, Cockfield, Lordly. Class III.—Mackenzie; Cohen and Irving, equal.

#### ELECTRICAL ENGINEERING LABORATORY.

Fourth Year (Electrical Engineering Course).—Class I.—Creighton, Dunbar, Roberton, Schippel, Dawson. Class II.—Parnell, Code, Thompson, Pope, Hacker. Class III.—Standish, Patten, Arbuckle, Wiggs, Stewart, Demers, Windsor.

- Fourth and Third Years .- Class I .- Eadie, Robertson; Cole and Wilson (E. P.), equal; Betournay and Deneau and Larose, equal; Austin; Ferrier and Erlenborn, equal; Davies; Henry and Maxwell and Mooney (R. B.), equal; Congleton and Edwards and Gould and MacEwen, equal; LaMontagne and Macfarlane and Smith (D. W.), equal; Jue and Lafontaine and McCurdy and McPhail (D. S.) and O'Halloran, equal; Karnes and White, equal; Powell; Gilbert and Millidge and Winslow, equal; Ross (B.); McLean and Penney and Wickenden, equal. Class II.-Macklin; Mosher and Seath, equal; Cameron (E. P.) and Hall and Jenckes, equal; Crowe; Douglas and Lindsay, equal; Edward; Farnsworth; Elder and Emery and Perriton, equal; Hart; Mahaffy and Parsons, equal; Langstroth; Durant and Labell and Wilkins and Wilson (J. K.), equal; Lee and Rashback, equal. Class III .- Dyer and Hobart, equal; DeCew and Taylor, equal; Ross (J. H.), Ward, Kearns, Smith (D. T.), Bradley, Bourret.
- Third Year (Electrical Engineering Course).—Class I.—Phelan, Anderson, Hill, Fellows, Vincberg. Class II.—Louttit, Thompson, Jackson, Acton, Eaton, Vaughan, Bishop, Gliddon, Kirby, Kennedy, Canning. Class III.—Tison, Whelan, Macdonald, Sloves, Salamis, Clerk.

#### ELECTRO-METALLURGY LABORATORY.

Fourth Year.-Class I.-Penney. Class II.-None. Class III.-None.

#### GEODETIC LABORATORY.

Fourth Year.—Class I.—None. Class II.—Deneau, Robertson (R. McF.); Eadie and Wickenden, equal; Betournay and Davies and MacEwen and Ross (B.) and Seath, equal; Cole and Ferrier, equal; Austin and Powell, equal. Class III.—Elder and Wilson, equal; Mahaffy; Greene and McLean and McPhail and Macklin, equal; LaMontagne, Hart.

#### HYDRAULICS LABORATORY.

Fourth and Third Years.—Class I.—Eadie, Dunbar, Code, Austin; Chisholm and Elderkin and Schippel, equal; Vessot; Creighton and Cunningham and Seath, equal. Class II.—Fortin and Gauthier, equal; McNicoll; Betournay and Cole and Farmer and Robertson (R. McF.) and Twinberrow, equal; Ferrier and Robertson (A. M.), equal; Kirkpatrick and Mackenzie (B. H. T.) and Rutherford (A. B.) and Shapter, equal; Dawson and Macphail (J. B.) and Pope, equal; Gardner and Millidge and Wiggs and Wilson and Windsor, equal; Davies and Hannan and Wickenden, equal; Loy and Macpherson and Muir and Roberton and Smith (E. H.), equal; Hurtubise and O'Sullivan, equal; Brault and McPhail (D. S.) and Thompson (T. C.), equal; McLean and Shrimpton, equal; Perrault and Scott and Watson, equal. *Class III.*—Lewis; Greene and Ross (B.), equal; Rutherford (W. J.); Macklin and Parnell, equal; Arbuckle and Demers and Ferguson and Stewart and Hacker, equal.

# MECHANICAL ENGINEERING LABORATORY.

- Fourth Year.—Class I.—Chisholm. Class II.—Elde:kin, McNicoll, Shrimpton, Vessot. Class III.—Smith (E. H.), Mackenzie, Kirkpatrick; Rutherford (A. B.) and Scott, equal; Macpherson; Shapter and Twinberrow, equal; Rutherford (W. J.).
- Third Year (General Course) .- Class I .- Congleton, Dewar, Winslow, Croft, Jelly, Green. Class II .- Warriner, Shotwell; Lantz and Macphail, equal; Cunningham and Maxwell and O'Halloran, equal; Bain and Gould and Hannan, equal; Johnston; Farmer and Gardner, equal; Harrison and McCurdy, equal; Fortin and Kay and Mooney, equal; Brow and Cuddy and Fowler and Macfarlane and Mitchell, equal; Palmer; Jordan and Langstroth, equal; Cockfield and Hall and Mawdsley and Watson and Weldon, equal; Hurtubise and Lordly and McIntyre, equal; Hyndman. Class III .- Durant, Goodwin; Brault and Cambron and Gibbs and Robertson, equal; Forbes and Lewis and Smith (R. H.), equal; Copping and Loy, equal; Farnsworth and Purcell, equal; Calkin and Davis (Samuel), equal; Saunders; Clossey and Irving and Muir and Nutter and Perriton and Ward, equal; Smith (D. W.); Gauthier and Henderson and Jenckes and O'Sullivan and Wells, equal; Challenger and Livingstone, equal; Cromwell and Stroud, equal.
- Third Year (Electrical Engineering Course).—Class I.—Phelan; Anderson and Jackson, equal; Fellows and Loutti:, equal; Gliddon; Canning and Eaton, equal; Bishop, Vineberg, Thompson. Class II.—Kirby, Salamis, Hill, Acton, Vaughan; Macdonald and Whelen, equal. Class III.—Clerk, Kennedy.

# METALLURGICAL LABORATORY (THESIS).

Fourth Year.-Class I.-Penney. Class II.-None. Class III.-None.

# ORE DRESSING LABORATORY.

Fourth Year.—Class I.—Gilbert and White, equal; Douglas and Edwards and Emery and Erlenborn and Henry, equal. Class II. —Bradley and Dyer, equal; Lee. Class III.—Mooney, Jue.

#### PHYSICAL LABORATORY.

Fourth Year.—Class I.—Dawson. Class II.—Standish. Class II.— None.

Second Year .- Class I .- Taber and Weldon, equal. Class II .- Bissell : Binmore and Grant, equal; Carlyle and Wonham, equal; Clarke and Fry and Lorin and Woolward, equal; Brooks and Farquharson and Pevzner and Wain, equal; Bonneville and Fraser and Tatley, equal; Brown (G. B.) and Bush and Hanington and King and Messenger, equal; Banfill and Boronow and Dobson and Ford and Gnaedinger (A. L.) and McCallum and Wilder and Wilson (S. H.), equal; Anderson and Carson and Desbarats and Gnaedinger (P. E.) and McDougall and McTaggart and Notman and Parker, equal; Armstrong and Bastable and Biggar and Cartwright and Wilson (J. M.), equal; Morrisette and Taylor (J. E.) and Tucker, equal; Bradfield and Glen and Gordon and McLennan, equal. Class III .- Buchanan and Clark and Fisk and Gurman and Hastings and Nesbitt, equal; Mitchell and Murphy (A. G. S.) and Wait, equal; Duff and Eager, equal; Foss and Holt and Jandrew and MacGregor and Spratt, equal; Evans and Mackenzie (G. H.) and Mott and Ramsey and Thompson, equal; Ahern and Crawford and MacKeen and Wilson (H. A.), equal; Davis and Macrae, equal; Bethune and Cousineau and Drummond and Elliot and Loebel and Quinlan and Ross (D. R.), equal; Fotheringham and Gaboury and Holcomb and Holmes and Kirsh and Macnaughton and Munro and Turton and Wheeler, equal; Benett and Hamilton and Williams and Wright, equal; Jenks and Kyle and Reiffenstein, equal; Morrison and Reed, equal; Simons; Cromwell and Scott, equal; Dineen and Humes and Kerr and Lawrence and Macoun and Murphy (E. Justin) and Normandin and Reeve and Ross (J. H. D.) and Schleifstein and St. Germain and Taylor (E. P.), equal.

First Year.—Class I.—Larose, Toole; Cooper (P. E.) and Lewis and Harbert, equal; Faith; Binns and Johnson, equal; Buller and Chisholm and Legg and Moore, equal; Cregeen and Downs and Shier and Stephen and Morin (C. A.), equal; Jackson and Wood and Culpeper, equal. Class II.—Eadie and Finley and Foss (D. B.) and Peters and Radley and Taylor (C. W.) and Terrance (E. H.), equal; Gamble and Graham and Laidley and Matheson and Plow and Raginsky and Reaper and Ross (M. V.) and Simpson (R. L.) and Streadwick and Whittemore, equal; Armstrong and Bleau and Bradshaw (G. R.) and Brisbane and Rosk, equal; Carpenter and Gordon and Harvey and Layne and Ross (A. E.) and Smith, equal; Craik and Crain

and Davis and Gegg and Griffith and Held and Munro (D. J. B.), equal; Antliff and Jerrom and Kingan and Maclaren (A. B.) and Lawrence (A. R.), equal; Champion and Kennedy and Macaulay and Pelletier and Raskin and Timmis and Turnbull (A. R.), equal; Brough and Elkington and McCaw and Mills and Patton, equal; Bishop (E. G.) and Buffam and Dickinson and Dormer and Fagan and McLagan and Powell (A. T.) and Rochester and Sherwood and Willis, equal; Bieler and Brodeur (J. C.) and Desbarats and Foster and Mulligan and Olive and Roquet, equal; Ball and Campbell (D. H.) and Clark and Cross and Dalrymple and Denis and Evans and Foss (L. J.) and Gilbert and Herman and LeBaron and McKindsey and MacLaren (A. R.) and Macpherson and Munro (G. H.) and Webster and Wilson (H.), equal; Currier and Finlayson and McNaughton and O'Heir and Scott (J. M.) and Stirling, equal; Allan (D. H.) and Allan (J. M.) and Caldwell and Cornell and Desloover and Grant and McMeans and Martin and Read and Rhind and Winter and Zybach, equal; Livingstone and Mignault and Oliver (C. J.) and Oliver (J. H.) and Parsons and Powell (F. E.), equal. Class III .- Bloomfield and Goldberg and Mallison and Owens and Roughsedge and White (G. L. W.), equal; Patterson (T. B.); Berry and Bradshaw (F. W.) and Hamilton and Hunten and Kyle and Macnutt and Moran (T. M.) and Murphy (M. P.) and Smallhorn, equal; Baillie and Brodeur (J. P.) and Brumell and Davies and Lawrence (F. S.) and MacCallum and McDermott and Miller, equal; Abbott-Smith and Bishop (J. G.) and Cuttle and Lemieux and Parrott and Snyder, equal; Adams and Blackall and Dupuis and Emo and Gaudet and Leitch and Scott (L. J.) and White (C. P.) and Yorston, equal; Ambridge and Baxter and Braithwaite and Katz, equal; Cope and Hamel and McKyes and MacLaren (J. N.) and Simpson (J. C.), equal; Davidson (S. C. K.) and Holden and Moseley, equal; Liersch and McCracken and McEwen, equal; Taschereau; Ahern and Smeaton and Taylor (J. E.), equal; Nutting and Robinson and Stone and Tallon, equal; Hambly and Turnbull (K. H.), equal; Fleming and Paterson (A. P.) and Salter and Taylor (M. B.), equal.

#### STRENGTH OF MATERIALS LABORATORY.

Third Year.—Class I.—Anderson, Jelly, Cunningham; Cuddy and Johnston, 'equal; Louttit; Green and Macphail, equal; Brow; Fortin and Gould, equal; Congleton and Lantz and Muir, equal. Class II.—Palmer and Warriner, equal; Canning, Harrison; Bain and Winslow, equal; Mitchell; Watson and Weldon, equal; Fellows and Fowler, equal; Copping; Phelan and Saunders and Vineberg, equal; Hall and Jackson and Mawdsley and Maxwell, equal; Thompson; Farmer and Perriton, equal. Class III. -Acton; Calkin and Gliddon, equal; Dewar and Hannan and McIntyre and Purcell, equal; Forbes and McCurdy and Perrault, equal; Brault and Eaton and Kay, equal; Davis (Samuel) and Gardner and Giles and Lordly, equal; Smith (R. H.) and Stroud and Whelen, equal; Challenger and Irving and Macdonald and Macfarlane and O'Sullivan and Smith (D. W.) and Tansley and Wilson (J. K.), equal; Clossey and Croft and Salamis, equal; Durant and Farnsworth and Lewis and Nutter, equal; Cromwell and Kennedy and Loy, equal; Gibbs and Goodwin and Hurtubise and Langstroth and Livingstone, equal; Clerk and Gauthier and Hill and O'Halloran and Rochester (G. H.), equal; Hyndman and Jordan, equal; Cockfield and Robertson, equal.

#### MACHINE DESIGN.

- Fourth Year (Electrical Engineering Course).—Class I.—Schippel, Dunbar. Class II.—Creighton, Dawson; Code and Hacker, equal; Arbuckle, Thompson, Windsor. Class III.—Roberton, Pope, Stewart; Parnell and Wiggs, equal.
- Fourth Year (Mechanical Engineering Course).—Class I.—Chisholm and Elderkin, equal. Class II.—Shrimpton, McNicoll, Shapter, Kirkpatrick, Scott, Mackenzie (B. H. T.), Twinberrow. Class III.—Macpherson and Smith (E. H.), equal; Vessot, Rutherford (A. B.), Rutherford (W. J.).
- Third Year.—Class I.—Gould, Congleton, Anderson, Gliddon, Acton, Jackson, Canning; Fellows and Langstroth and Winslow, equal; Macdonald and Phelan, equal. Class II.—Eaton and Louttit, equal; Maxwell, Vineberg, Whelen, McCurdy; O'Halloran and Thompson, equal; Mooney, Macfarlane. Class III.—Perriton, Kennedy; Hall and Smith (D. W.), equal; Durand and Kirby, equal; Bishop, Farnsworth, Hill, Salamis.

#### MANUFACTURING PLANT DESIGN.

Fourth Year.—Class I.—Mackenzie. Class II.—Vessot, Rutherford (A. B.), Rutherford (W. J.). Class III.—None.

#### MAP PROJECTIONS.

Third Year.—Class I.—Fortin. Class II.—Gardner and Macphail, equal; Farmer, Cunningham; Brault and O'Sullivan, equal; Gauthier and Robertson, equal; Perrault, Hannan; Lewis and Watson, equal. Class III.—Hurtubise, Ferguson, Loy.

## MAPPING.

Second Year .- Class I .- Gnaedinger (P. E.) and Holt, equal; Mac-Keen and Notman, equal; McLennan and Macrae, equal; Fraser and Kirsh, equal; Bastable; Burman and Mitchell (J. M.) and Morrisette and Taber, equal. Class II .- Carson and Grant and Wain, equal; Perry and Wiggs, equal; Biggar and Loebel and Munro, equal; Bissell and Bonneville and Hanington and Mc-Dougall and Tucker, equal; Gnaedinger (A. L.) and King and Lorin and McTaggart and Weldon, equal; Buchanan and Holmes and Messenger and Pevzner, equal; Armstrong and Banfill and Brooks and Desbarats and Ford and Murphy (A. G. S.), equal; Carlyle and Clark and Dobson and Hamilton (P. D. P.) and Normandin and Woolward, equal; Brown (G. B.); Ahern and Eager and Foss and Fry and Simons, equal; Anderson and Gaboury and Gordon and Humes and Nesbitt, equal; Cousineau and Duff and Friedman and Hastings and MacNider and Reed and Reiffenstein and Spratt and Tatley, equal; Bush and Jandrew and Lawrence and Macnaughton and Morris and Murphy (E. J. O.), equal; Holcomb; Boronow and Clarke and Fisk and Kerr and Quinlan and Reid and Ross (D. R.) and St. Germain, equal. Class III .- Brown (E. V.) and Crawford and Evans and Hunter and Wilson (S. H.), equal; Bradfield and Cartwright and Wheeler and Wonham, equal; Glen and Wright, equal; Farquharson and Kyle and Luke and Mott and Watt, equal; Jenks and Mackenzie (G. H.) and Martin and Parker, equal; Chorney and McGlashan and MacGregor, equal; Pfeiffer; Drummond and Newman and Taylor (E. P.) and Wilson (H. A.) and Wilson (J. M.), equal; Fotheringham and Wait, equal; Ramsey; Morrison and Turton and Wilder, equal; Cromwell and Murphy (E. Justin), equal; Benett; Johnson and Reeve and Ross (J. H. D.), equal.

## MATERIALS OF CONSTRUCTION.

Second Year.—Class I.—Desbarats and Holt, equal; Tatley and Taylor (J. E.), equal; Bastable and Brooks and Woolward, equal; McTaggart and Weldon, equal; Wilder, MacKeen, Bush; Ahern and Biggar and Binmore and Bissell and Dobson and Grant and Mitchell (J. M.), equal. Class II.—Parker and Wright, equal; Coughlan and Holmes, equal; Evans and Lorin, equal; Carlyle and Mott and Munn, equal; Hanington and McDougall, equal; Bonneville and Ford and Jandrew, equal; Banfill and McLennan, equal; Crawford and Jenks, equal; Ross (J. H. D.) and Benett and MacGregor and Messenger, equal; Gordon and Humes and Morrisette and Taber, equal; Carson and Clark and Lawrence and Wain, equal; Harling and Hastings, equal; Gaboury and Murphy (E. J. O.), equal. *Class III*.—Bradfield and Buchanan and Gnaedinger (P. E.) and Macrae and Palmer and Pevzner, equal; Wilson (H. A.); Brown (G. B.) and Fraser and Kyle and Nesbitt, equal; Fisk and Wilson (S. H.), equal; Eager and Foss and Reiffenstein, equal; Reid, Boronow and Hamilton (P. D. P.) and Kerr and Macnaughton and Notman, equal; Drummond and Farquharson and Reed, equal; King and Simons, equal; Brown (E. V.); Munro and Wonham, equal; Anderson and Midgley and Normandin, equal; Spratt; Armstrong and Cromwell, equal; Chorney and Dineen and Gurman and Loebel and MacGlashan and Quinlan and Ross (D. R.) and Taylor (E. P.) and Williams, equal.

### MATHEMATICS.

#### ALGEBRA.

First Year .- Class I .- Culpeper, Moore, Harbert; Faith and Kennedy, equal; Larose and Oliver (J. H.), equal; Laidley, Layne; Hunten and Rochester, equal; Crain and Toole, equal. Class II .--Munro (D. J.), Craik; Cregeen and Stephen, equal; Binns and Bleau and Buller and Foss (D. B.), equal; Eadie; Ambridge and Davies and Gegg and Yorston, equal; Buffam and Pelletier, equal; Lewis; Bloomfield and Gordon and Radley, equal; Bradshaw (G. R.) and Cooper (P. E.) and Grant and Macaulay and White (G. L. W.) and Wood, equal; Bishop (E. G.) and Brodeur (J. C.) and McKindsey and Powell (A. T.), equal; Brisbane and Cooper (H. C. D.) and Peters and Ross (M. V.) and Smallhorn and Tallon and Willis, equal; Armstrong and Baxter and Finlayson and McNaughton and Roquet, equal; Allan (J. M.) and Brodeur (J. P.) and Caldwell and Davis and Downs and Dupuis and Finley and Horsey and LeBaron and Legg and Livingstone and McLagan and Matheson and Mills and Munn and Munro (G. H.) and Terrance (E. H.) and Turnbull (A. R.) and Webster, equal. Class III .- Bieler and Blackall and Desbarats and Desloover and Graham and Sherwood, equal; Cross and Held and Mulligan, equal; Johnson and Lemieux and Parsons, equal; Gaudet and Griffith and Lawrence and Whittemore, equal; Ball and Chisholm and Fagan and Smith, equal; Cuttle and Herman and McCracken and Mc-Leod and Macpherson and Patterson (T. B.), equal; Brough and Harling and Holden and Katz and McDermott and Mac-Laren (A. R.) and Read and Taschereau, equal; Davidson (S.

C. K.); Bishop (J. G.) and Campbell (D. H.) and Clark and Maclaren (A. B.) and Simpson (R. L.), equal; Abbott-Smith and Gamble and McCaw and Mallison and Morin (C. A.) and Powell (F. E.) and Raginsky and Renouf and Scott (L. J.) and Timmis, equal; Adams and Dormer and Rorke, equal; Kingan and McMeans and Zybach, equal; Denis and McDonald and Stone and Streadwick, equal; "Amos and Antliff and Berry and Bradshaw (F. W.) and Carpenter and Cox and Currier and Dalrymple and Dickinson and Evans and Fleming and Foss (L. J.) and Foster and Goldberg and Hamilton and Harvey and Holcomb and Hutchison and Jackson and Jerrom and Leitch and Murphy (M. P.) and Oliver (C. J.) and Owens and Parrott and Patton and Raskin and Reaper and Scott (J. M.) and Simpson (J. C.) and Snyder and Stirling and Taylor (C. W.) and Taylor (M. B.) and Winter and Wylde, equal.

#### ANALYTIC GEOMETRY.

Second Year .- Class I .- Taber; Bonneville and McTaggart and Mott, equal; Cartwright; Chorney and Clarke (E. L.), equal; Hastings; Fisk; Bradfield and Dobson and Weldon, equal; Brooks and Fraser and Murphy (A. G.) and Parsons, equal; Bissell and Kerr, equal. Class II .- Armstrong and Binmore and Carlyle and Farquharson and Morrisette, equal; Loebel, Hanington; Biggar and Lawrence and McLennan, equal; Desbarats and Wonham, equal; Glen and Kyle, equal; Bush and Jandrew and Normandin, equal; Johnson and Tatley and Wilson (S. H.), equal; Evans and Ford and Ramsey and Wilder and Woolward, equal; Ross (J. H. D.); Carson and Grant and Taylor (J. E.), equal; Banfill and Clark (G.) and Drummond and McCallum, equal. Class III .- Buchanan and Holt and Reed, equal; Fotheringham and Messenger, equal; Brown (G. B.) and Eager and McDougall and Murphy (Justin), equal; Cousineau, Parker; Crawford and Pevzner, equal; Lorin and Munro and Taylor (E. P.) and Tucker, equal; Fry; Foss and Holmes and Reid, equal; Bastable and Brown (E. V.) and MacGregor and MacNider and Thompson, equal; Benett and Kirsh and Simons and Spratt, equal; Anderson and Boronow and Cromwell and Gordon and Hamel and King and MacKeen and Mackenzie (G. H.) and Macoun and Patterson and Root and Schleifstein and Scott and Wain, equal.

#### CALCULUS.

Third Year.—Class I.—Anderson; Canning and Eaton, equal; Vineberg, Bishop, Thompson, Fellows. Class II.—Gliddon, Jackson. Class III.—Acton, Salamis, Hill. Second Year .- Class I .- Taber, Bush; McTaggart and Mott, equal; Dobson; Weldon and Wilson (J. M.), equal; Brooks; Kyle and Morrisette, equal; Carson. Class II .- Biggar and Crawford and Harris and Messenger, equal; Brown (E. V.), Bonneville, Holmes; Carlyle and Tatley, equal; Cartwright and Gurman, equal; Binmore and Bissell and Clarke and Cousineau and Murphy (A. G. S.) and Wonham, equal; Martin, Bradfield; Hastings and Taylor (J. E.), equal; Desbarats and Wain, equal; Eager and Woolward, equal; Banfill. Class III .- Gordon and Loebel and McLennan and Parker and Patterson and Ross (J. H. D.), equal; Boronow and Gnaedinger (A. L.) and Lawrence, equal; Grant and Johnson and Pevzner and Spratt, equal; Armstrong, Farquharson; Evans and Hanington, equal; Clark and Root and Salter, equal; Fraser, Lorin; MacGregor and Mackenzie (D. G.) and Normandin and Quinlan and Reed and Simons, equal; Duff and Elliot and Mackenzie (G. H.), equal; Macrae; Drummond and Fry and Kerr and McDougall, equal; Bastable and Brown (G. B.) and Gnaedinger (P. E.) and Macnaughton and Reiffenstein, equal; Benett and Chorney and Fisk and Glen and Hamel and Holt and Humes and Notman and Reid and Tucker and Wright, equal.

#### GEOMETRY.

First Year.-Class I.-Lewis, Radley; Culpeper and Laidley, equal; Moore (R. A.); Cooper (P. E.) and Macaulay and Turnbull (A. R.), equal; Kennedy and Layne and Oliver (J. H.), equal; Crain and Rochester and Yorston, equal; Cregeen and Griffith, equal; Mills; Gordon and Webster, equal; Craik and Faith, equal; Downs and Finley and Willis, equal; Powell (F. E.) and Rorke, equal; Scott (J. M.); Gaudet and Harbert and Hunten and Larose and Read (D. E.) and Roquet, equal. Class II .- Champion and Davies and McNaughton and Matheson, equal; Ambridge and Buller and Horsey and Steven and Tallon and Wilson (H.), equal; Davis and Morin (C. A.), equal; Denis and Foss (D. B.) and Gegg and Powell (A. T.), equal; Allan (J. M.) and Armstrong and Brough and Finlayson and Mulligan and Smith and Whittemore, equal; Baxter and Parsons, equal; McMeans and Simpson (J. C.), equal; Johnson and Pelletier and Ross (M. V.), equal; Bieler and Bloomfield and Brisbane and Legg and Simpson (R. L.), equal; Bleau and Moran and Sherwood and Stethem and Taschereau and Timmis (H. G.), equal; Adams and Clark (H. L.) and LeBaron, equal; Blackall and Davidson (S. C. K.) and Desloover and Held and McCaw and Macpherson and Taylor (M. B.), equal; Brodeur (J. C.) and Livingstone, equal; Bradshaw (G. R.)

and McLagan and Munn and Munro (D. J.) and Patterson (T. B.) and Wood, equal; Lawrence and Munro (G. H.) and Smallhorn and Streadwick and Terrance (E. H.), equal; Binns and Bishop (E. G.) and Macduff and Macnutt and Scott (L. J.) and Snyder and Zyback, equal; Holden and MacLaren (A. R.), equal; Cooper (H. C. D.) and Eadie and Fagan and Gilbert and Grant and Renouf, equal; Carpenter and De Salaberry and Herman and Patton, equal; Bradley and Dalrymple and Lea and Shier, equal; Graham and Maclaren (A. B.), equal; Foss (L. J.) and Hambly and Oliver (C. J.), equal; Dormer and Gamble, equal; Berry and Leitch and McCracken and Peters and Toole, equal; Abbott-Smith and Jerrom and Mallison and Plow, equal; Bradshaw (F. W.) and Gauthier and Jackson and Stirling and Wilson (P. R.), equal; Buffam and Harvey and Kingan and McEwen and McKindsey and Russell and Stone and Timmins (L. H.) and White (G. L. W.), equal; Antliff and Baillie and Bishop (J. G.) and Bouillon and Brodeur (J. P.) and Campbell (D. H.) and Currier and Cuttle and Goldstein and McDermott and MacLaren (J. N.) and Miller and Mulkins and Murphy (M. P.) and Murray and Newman and O'Shea and Raginsky and Rhind and Ross (A. E.) and Roughsedge and Smeaton and Wylde, equal; Amos and Caldwell and Cox and Desbarats and Dickinson and Echlin and Elkington and Goldberg and Hamilton and Hutchison and Katz and Kyle and McDonald and Strong and Taylor (C. W.), equal.

## MECHANICS.

- Third Year.—Class I.—Canning and Congleton, equal; Anderson, Cunningham, Phelan. Class II.—Gliddon, Bishop, Fortin; Brault and McCurdy and Sloves, equal; Eaton and Wilson, equal; O'Sullivan and O'Halloran, equal. Class III.—Watson, Gould, Farnsworth, Farmer, Langstroth; Gauthier and Maxwell and Thompson, equal; Macdonald; Gardner and Lewis and Mooney, equal; Winslow, Macfarlane; Fellows and Hall, equal; Hill and Kirby and Salamis, equal.
- Second Year.—Class I.—Mott, Weldon; Eager and Gurman, equal; Hastings; Biggar and Kyle and McTaggart and Patterson, equal. Class II.—Banfill and Tatley, equal; Gordon, Messenger, Dobson; Brooks and Evans, equal; Brown (E. V.) and Carson, equal; Carlyle and Harris, equal; Cartwright, Clark; Bush and Taber, equal. Class III.—Binmore and Clarke and Duff and Mackenzie (D. G.) and Morrisette and Woolward, equal; Chorney and Desbarats and Ross (J. H. D.) and Taylor (E. P.), equal; Taylor (J. E.); Brown (G. B.) and Fraser

and Lorin, equal; Crawford and Farquharson and Loebel and Wain and Wonham, equal; Macrae and Parker, equal; Elliot and Kirsh, equal; McDougall and MacKeen, equal; Bonneville; Bastable and Ford and Grant and Lawrence, equal; Armstrong and Foss and Mackenzie (G. H.) and Spratt, equal; Boronow and Cousineau and Jandrew, equal; Holmes and MacGregor and Simons and Thompson and Wilson (J. M.), equal; Hanington; Bissell and Cloutier and Hamilton (P. D. P.) and Mc-Lennan and Wilson (H. A.), equal.

First Year .- Class I .- Buller and Gordon and Hunten and Kennedy and Larose, equal; Culpeper and Laidley, equal; Moore and Toole, equal; Cross, Yorston; Baxter and Foss (D. B.), equal; Layne; Ambridge and Bloomfield and Finley and Matheson, equal. Class II .- Craik and McNaughton, equal; Smith; Cooper (H. C. D.) and Macaulay and Oliver (J. H.) and Read (D. E.), equal; Bieler and Legg and Lewis and Radley and Turnbull (A. R.), equal; Faith and Stephen and Stone, equal; Bradshaw (G. R.) and Wood, equal; Grant; Cregeen and Sherwood, equal; McKindsey and Ross (M. V.), equal; Davis and Denis and Griffith and Simpson (R. L.), equal; Armstrong and Bishop (E. G.) and Maclaren (A. B.) and Scott (J. M.) and Webster, equal; Buffam and Cooper (P. E.) and Davies and MacLaren (A. R.) and Munro (D. J. B.), equal. Class III .- Reid (H. E.) and Smallhorn and White (G. L. W.), equal; Powell (A. T.) and Renouf and Tallon, equal; Blackall and Cuttle and Finlayson and Hamilton and Holden, equal; Clark and Dalrymple and LeBaron and Rochester and Willis, equal; Mc-Lagan and Simpson (J. C.), equal; Binns and Brisbane and Crain and Gaudet and Horsey and Peters and Timmis (H. G.), equal; Eadie and Raginsky, equal; Chisholm and Lawrence and Wylde, equal; Parsons and Patton and Roquet, equal; Brodeur (J. C.); Antliff and Caldwell and Dupuis and Foss (L. J.) and Gauthier and Harbert, equal; Allan (J. M.) and Cope and Desloover and Jackson and Miller and Rorke and Terrance (E. H.), equal; Evans and Graham and Lea and Scott (L. J.) and Streadwick, equal; Adams and Amos and Baillie and Bleau and Bradshaw (F. W.) and Brough and Carpenter and Champion and Desbarats and Downs and Elkington and Fleming and Gilbert and Harling and Harvey and Herman and Hutchison and Livingstone and McCaw and Macduff and McLeod and Macpherson and Mills and Moran (T. M.) and Morin (C. A.) and Munn and Oliver (C. J.) and Owens, and Patterson (T. B.) and Pelletier and Powell (F. E.) and Sherrard and Shier and Stephen and Stirling, equal.

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#### TRIGONOMETRY.

First Year .- Class I .- Larose, Kennedy, Yorston, Crain; Layne and Moore and Rochester, equal; Oliver (J. H.), Culpeper; Craik and Davies, equal; Pelletier; Ambridge and Laidley and Lewis and Turnbull (A. R.), equal; Gordon; Cregeen and Stephen and Webster, equal; Dalrymple and Hunten and Radley, equal. Class II .- Wood; Brodeur (J. C.) and Grant, equal; Buller; Buffam and Rorke and Willis, equal; McLagan and Smith, equal; Faith and Matheson and Munro (D. J.), equal; Bloomfield and Cooper (P. E.), equal; Read (D. E.) and Foss (D. B.), equal; Bleau and Denis and Harbert and LeBaron and MacLaren (A. R.) and Mills and Roquet, equal; Eadie; Binns and Johnson and Macaulay and Peters and Ross (M. V.), equal; Bradshaw (G. R.) and Fagan and Gaudet and Horsey and McKindsey and Powell (A. T.) and Tallon and Toole and White (G. L. W.), equal. Class III .- Baxter and Bradshaw (F. W.) and Cooper (H. C. D.) and Jackson and Moran (T. M.) and Terrance (E. H.), equal; Bieler and Brodeur (J. P.) and Clark and Legg and McNaughton and Smallhorn, equal; Brisbane and Simpson (J. C.) and Taylor (M. B.), equal; Allan (J. M.) and Blackall and Finley and Graham and Held, equal; Caldwell and Carpenter and Davis (W. W.) and Finlayson and Macnutt and Scott (J. M.), equal; Currier and Gauthier and Morin (C. A.) and Reid (H. E.), equal; Adams and Armstrong and Champion and Gamble and Mulligan, equal; Abbott-Smith and Amos and Desbarats and Desloover and Griffith and Murray and Nutting and Patton and Sherwood and Whittemore, equal; Ball and Berry and McLeod and McMeans and Renouf and Zybach, equal; Cross and Dickinson and Dupuis and Patterson (T. B.) and Scott (L. J.) and Stethem, equal; Brough and Cox and Davidson (S. C.) and Elkington and Taylor (C. W.) and Timmis (H. G.), equal; Downs and Fleming and Gegg and James and MacLaren (A. B.) and Paterson (A. P.) and Simpson (R. L.) and Stone and Streadwick, equal; Bishop (E. G.) and Chisholm and Cope and Cuttle and Davidson (W. M.) and Dormer and Gilbert and Harling and Harvey and Lea and Lemieux and McCaw and Macpherson and Mallison and Oliver (C. J.) and Owens and Powell (F. E.) and Shier and Snyder and Taschereau and Winter, equal.

## MECHANICAL DRAWING.

Third Year (Electrical Engineering Course).-Class I.-None. Class II.-Fellows, Gliddon, Jackson; Eaton and Thompson, equal; Phelan, Kennedy; Kirby and Vaughan, equal; Anderson. Class III.—Vineberg, Bishop; Macdonald and Salamis, equal; Louttit, Canning; Clark and Hill and Whelen, equal; Tison, Acton.

Third Year (Mechanical Engineering Course).—Class I.—Maxwell. Class II.—McCurdy, Winslow; Congleton and Perriton, equal; O'Halloran; Farnsworth and Mooney, equal; Macfarlane, Gould. Class-III.—Langstroth, Wilson; Hall and Jenckes and Smith (D. W.), equal; Durant and Wilkins, equal.

First Year .- Class I .- Cooper (P. E.); Kotsonas and Larose, equal; Moore; Kingan and Lewis, equal; Layne, Stephen; Crain and Rorke, equal; Harvey and Powell (A. T.), equal; Macaulay; Hunten and Matheson, equal. Class II .- Chisholm and Craik and Herman and Terrance (E. H.) and Velasco, equal; Johnson and Oliver (J. H.), equal; James, Munro (D. J. B.); Laidley and Maclaren (A. B.) and Reaper and Shier and Wood, equal; Eadie and Kennedy and McNaughton and Smith, equal; Champion and Cregeen and Legg and Patton and Peters, equal; Adams and Binns and Bloomfield and Currier and Liersch and McKyes and Munro (G. H.) and Raginsky and Streadwick, equal; Ambridge and Armstrong and Faith and Patterson (T. B.) and Read, equal; Allan (J. M.) and McKindsey, equal; Owens and Raskin and Roquet and Whittemore, equal; Brisbane and Livingstone and Morin (C. A.) and Reid and Willis, equal; Cuttle and Foss (D. B.) and Macnutt and Oliver (C. J.) and White (C. P.), equal; Buffam and Fagan and Hamilton and Jerrom and McLagan and Murray and Pelletier and Powell (F. E.), equal; Bieler and Bradshaw (G. R.) and Cope and Cornell and Culpeper and Dalrymple and Dickinson and Gilbert and Gordon and Harbert and Leitch and Russell and Scott (J. M.) and Sherwood and Webster, equal. Class III .-Abbott-Smith and Brough and Elvidge and Gaudet and McCaw and Stirling, equal; Gamble and McDermott and Mills and Moseley and Murphy (E. J. O.) and Wylde, equal; Carpenter and Desloover and Elkington and Evans and Finley and Fleming and Goldberg and Grant and McMeans and Stethem and Timmis and White (G. L.), equal; Baxter and Buraschi and Downs and Mulligan and Radley and Toole, equal; Baillie and Ball and Blackall and Davies and Jackson and Katz and Mulkins and Rochester and Taschereau, equal; Allan (D. H.) and Antliff and Berry and Bradshaw (F. W.) and Caldwell and Foster and Holden and Lawrence and MacLaren (J. N.) and Olive and Roughsedge and Simpson (J. C.) and Smallhorn and Snyder and Taylor (M. B.), equal; Buller and MacLaren (A. R.) and Murphy (M. P.) and Parsons and Torrance (J. F.) and Winter, equal; Clark and Cox and Dormer and Gegg and Graham and Held and MacCallum and Martin (C. K.) and Miller and Parrott and Ross (A. E.), equal; Anderson and Bishop (E. G.) and Campbell (D. H.) and Davidson (S. C. K.) and Rhind and Ross (M. V.) and Yorston, equal; Braithwaite and Griffith and McDonald and Wilson (H.), equal; Brodeur (J. C.) and Brodeur (J. P.) and Echlin and Emo and Kyle and Moran (T. M.) and Scott (L. J.) and Smeaton and Zybach, equal; Bishop (J. G.) and Denis and Desbarats and Gauthier and Lea and Nutting and Paterson (A. P.), equal; Lemieux and Mignault and Plow and Tallon and Timmins (L. H.), equal; Bleau and Brumell and Campbell (A. T.) and Dupuis and Hambly and Hutchison and Morrin (J. J.) and Poulin and Simpson (R. D.) and Stone, equal. Unranked.—Biggar, Cross, LeBaron, McLennan, Turnbull (A. R.), Wilson (S. H.).

### MECHANICAL ENGINEERING.

- Third Year (General Course) .- Class I .- Green, Jelly; Bain and Jackson and Louttit, equal; Bishop and Vineberg, equal; Brow; Fortin and Macphail, equal. Class II .- Johnston and Lantz, equal; Cuddy and Goodwin, equal; Anderson and Eaton and Fellows, equal; Dewar and Farmer and Gliddon, equal; Cunningham and Gould and Weldon, equal; Canning and Sloves, equal; Mawdsley and Millidge, equal; Copping and Gardner and Saunders, equal; Croft and Mitchell, equal; Phelan and Warriner, equal; Acton and Kennedy and Lordly and Palmer and Thompson, equal; Cockfield and Salamis, equal; Hannan, Macdonald; Clerk and Forbes and Whelen, equal. Class III .--Calkin and Harrison, equal; Clossey, Hill, Cambron; Hyndman and Irving and Vaughan, equal; Loy and Shotwell, equal; Cromwell and McIntyre, equal; Gibbs and Giles, equal; Purcell; Challenger and Gauthier, equal; Kirby and Nutter and O'Sullivan, equal; Davis (S. H.), Watson; Brault and Muir and Stroud, equal.
- Third Year (Mechanical Engineering Course).-Class I.-Congleton, McCurdy; Langstroth and Maxwell, equal; Macfarlane, Winslow. Class II.-Wilson, O'Halloran; Durand and Hall, equal; Wilkins. Class III.-Mooney, Smith (D. W.), Farnsworth, Jenckes, Ward.

### MECHANICS OF MACHINES.

Fourth Year.—Class I.—Elderkin, Scott. Class II.—Chisholm, Mc-Nicoll, Mackenzie; Shapter and Smith (E. H.), equal; Kirkpatrick. Class III.—Vessot, Macpherson, Shrimpton, Rutherford (A. B.), Twinberrow, Rutherford (W. J.).

- Third Year.—Class I.—Canning, Anderson, Congleton, Phelan, Louttit, McCurdy, Jackson, O'Halloran, Gliddon. Class II.—Fellows, Bishop, Maxwell; Acton and Eaton, equal; Mooney, Vineberg; Gould and Thompson, equal; Langstroth. Class III.—Kirby, Macfarlane; Hall and Whelen, equal; Salamis, Kennedy, Hill, Jenckes, Macdonald, Smith (D. W.), Wilkins, Wilson.
- Second Year .- Class I .- Biggar and McTaggart, equal; Bush and Crawford, equal; Mott and Weldon, equal; Wilson (J. M.), Gurman; Desbarats and Taylor (E. P.), equal; Bissell and Hanington, equal. Class II .- Dobson; Banfill and Carlyle and Grant, equal; McLennan, Bastable, Murphy (A. G. S.); Brooks (E. V.) and Gordon and Taber, equal; Brown and Duff and Fraser, equal; Hamilton and Hastings and Ross (J. H. D.), equal; Armstrong and Carson and Clark and Macnaughton and Spratt and Tatley, equal; Morrisette and Wain and Woolward, equal; Bonneville and Clarke and Eager and Elliot, equal; Anderson and Parker, equal; Cousineau and Fisk and Messenger and Mitchell and Wilder, equal; Brown (G. B.) and Buchanan and Coughlan and Holmer, equal. Class III .--Farquharson and Kyle, equal; Bradfield and Gnaedinger (P. E.) and McCallum, equal; Jandrew and Lawrence, equal; Wright; Evans and Foss, equal; Boronow and Holt and Humes and McGregor and Martin, equal; King and Mac-Keen, equal; Wilson (S. H.); Reiffenstein; Glen and Loebel and Macrae, equal; McDougall; Chorney and Gnaedinger (A. L.) and Norman, equal; Ahern and Benett and Cloutier and Drummond and Gooch and Kirsh and McGlashan and Mackenzie (G. H.) and Munro and Murphy (E. J. O.) and Normandin and Reid and Ross (D. R.) and Salter and Simons and Thompson and Tucker and Wonham, equal.

#### METALLURGICAL CALCULATIONS.

Third Year.-Class I.-Jordan, Harrison. Class II.-Nutter. Class III.-Fowler, Henderson.

### METALLURGICAL COLLOQUIUM.

Fourth Year.—Class I.—Penney. Class II.—None. .Class III.—None. Third Year.—Class I.—Jordan; Fowler and Nutter, equal; Harrison. Class II.—Clossey and Henderson, equal. Class III.—None.

## METALLURGICAL LABORATORY AND METALLOGRAPHY.

Fourth Year.-Class I.-DeCew and Taylor, equal; Smith (D. T.). Class II.-Hobart. Class III.-Kearns.

Third Year.-Class I.-Fowler; Harrison and Nutter, equal; Jordan. Class II.-Clossey, Henderson. Class III.-None.

## METALLURGICAL MACHINERY AND DESIGN.

# Fourth Year .- Class I.- None. Class II.- Penney. Class III .- None.

#### METALLURGY.

- Fourth Year.—Class I.—Erlenborn, Penney. Class II.—Gilbert, Henry, Emery; Edwards and Lee, equal; White. Class III.—Bourret and Karnes, equal; Douglas and Dyer, equal; Bradley.
- Fourth Year (Metallurgical Engineering Course).—Class I.—None. Class II.—Penney. Class III.—None.
- Third Year (Chemistry and Chemical Engineering Courses).—Class I.—Timmerman; Cuddy and Harris and Jelly and Johnston, equal. Class II.—Calkin; Copping and Green and Mitchell and Thomson, equal; Lantz and Smith (R. H), equal; Cockfield and Mackenzie, equal; Cohen, Stroud. Class III.—Lordly, Forbes; Cambron and Challenger and Patterson and Rochester (G. H.) and Shotwell, equal; Yates; Giles and Irving and Warriner, equal; Goodwin; Abbott-Smith and Croft and McIntyre and Purcell, equal.
- Third Year (Mining Engineering and Metallurgy Courses).—Class I.— Mawdsley, Dewar, Brow. Class II.—Palmer, Nutter, Bain, Harrison, Tansley, Weldon, Jordan, Cromwell; Henderson and Fowler, equal. Class III.—Saunders, Davis (S.), Wells, Livingstone, Gualtieri and Scriver, equal.

### MINE MAPPING.

Third Year.—Class I.—Weldon, Dewar, Mawdsley, Davis (Samuel), Armstrong, Cromwell, Livingstone. Class II.—Saunders, Scriver, Palmer, Brow, Tansley. Class III.—Bain, Rochester (L. B.), Wells, Gualtieri.

### MINERAL ANALYSIS.

Fourth Year.—Class I.—Emery and Erlenborn, equal. Class II.— Henry, Gilbert, Edwards, Dyer. Class III.—Bradley, Jue, White, Bourret.

#### MINERALOGY.

Third Year.—Class I.—Timmerman, Bain, Armstrong, Henderson, Johnston. Class II.—Green; Brown and Cromwell and Saunders, equal; Croft; Jelly and McIntyre, equal; Calkin and Cohen and Mawdsley and Weldon, equal; Harrison; Clossey and Lantz, equal; Purcell; Smith (R. H.) and Warriner, equal. Class III.—Thomson; Davis (Samuel) and Forbes and Giles and Wells, equal; Fowler and Goodwin and Nutter, equal; Cockfield; Lordly and Shotwell, equal; Challenger and Gualtieri and Kay, equal; Copping and Livingstone, equal; Cambron and Irving and Mackenzie (D. G.), equal; Gibbs and Jordan and Scriver and Stroud and Tansley, equal.

#### MINERALOGY (DETERMINATIVE).

Third Year.—Class I.—Saunders, Bain, Armstrong; Tansley and Croft, equal; Cromwell and Mawdsley, equal; Smith (R. H.), Jordan, Scriver; Green (F. G.) and Lordly, equal; Fowler and Jelly and Livingstone and Wells, equal; Johnston and Thomson and Timmerman and Weldon, equal; Goodwin and Harrison, equal; Dewar. Class II.—Brow; Copping and Giles, equal; Davis (S.) and Gualtieri, equal; Calkin, Kay; Hyndman and McIntyre, equal; Lantz and Rochester (G. H.), equal; Challenger and Clossey and Forbes, equal; Shotwell; Cuddy and Stroud, equal; Warriner; Cohen and Harris and Irving, equal; Cambron. Class III.—Nutter, Purcell; Gibbs and Yates, equal; Rochester (L. B.) and Henderson, equal; Patterson, Cockfield, Mackenzie, Abbott-Smith.

#### MINING COLLOQUIUM.

Fourth Year.—Class I.—Dyer. Class II.—Douglas and Lee, equal; Bourret and Edwards and Erlenborn and Gilbert and Henry, equal; Bradley and Emery and Karnes and White, equal. Class III.—Jue.

### MINING ENGINEERING.

- Fourth Year.—Class I.—Erlenborn, Edwards. Class II.—Gilbert, Henry, Douglas, Bourret, Mooney, Emery. Class III.—Bradley, Lee, Dyer, White, Karnes, Jue.
- Third Year.—Class I.—Mawdsley, Bain, Saunders, Weldon, Rochester. Class II.—Dewar, Brow, Tansley, Cromwell, Davis (Samuel). Class III.—Nutter, Jordan, Wells, Harrison, Gualtieri, Scriver, Livingstone; Clossey and Fowler, equal.

### MINING FIELD SCHOOL.

Fourth Year.—Class I.—Erlenborn and Henry, equal. Class II.— Edwards; Bradley and Jue, equal. Class III.—Karnes.

## MINING MACHINERY AND DESIGN.

Fourth Year.—Class I.—Douglas and Edwards, equal; Erlenborn. Class II.—Henry; Emery and Gilbert, equal; Bradley and White, equal. Class III.—Lee, Dyer, Bourret, Karnes.

### MUNICIPAL ENGINEERING.

Fourth Year.—Class I.—Eadie. Class II.—Austin, Robertson, Wickenden, Powell. Class III.—Lindsay; Davies and Deneau and Macklin, equal; Elder; Betournay and Ferrier, equal; Mac-Ewen, Mahaffy; Cole and Hart, equal; Ross (B.), Seath, Mc-Phail.

## ORE DEPOSITS AND ECONOMIC GEOLOGY.

Fourth Year.—Class I.—Armstrong, Penney; Emery and Gilbert, equal. Class II.—Edwards, Henry, Douglas, Dyer. Class III. —Erlenborn; Bourret and Karnes, equal; Lee; Bradley and White, equal.

#### ORE-DRESSING.

Third Year (Chemical Engineering Course).—Class I.—Jelly. Class II.—McIntyre, Green (F. G.). Class III.—Purcell, Copping, Cambron, Kay, Croft.

## ORE-DRESSING (COMPLETE COURSE).

Third Year (Chemical Engineering Course).—Class I.—Harris. Class II.—Lordly. Class III.—Shotwell.

## ORE-DRESSING AND LABORATORY.

Third Year (Metallurgical and Mining Engineering Courses and Metallurgy Course).—Class I.—Bain, Saunders; Brow and Dewar and Palmer and Weldon, equal. Class II.—Davis (Samuel), Mawdsley, Harrison; Cromwell and Nutter, equal; Jordan and Tansley, equal; Wells. Class III.—Scriver, Henderson, Fowler, Rochester (L. B.).

## ORE DRESSING AND MILLING.

Fourth Year.—Class I.—Gilbert, Douglas. Class II.—Henry, Edwards, Mooney, Erlenborn, Lee. Class III.—Bradley, Emery; Dyer and White, equal; Bourret, Karnes, Jue. Unranked.—Penney.

#### ORE DRESSING LABORATORY (THESIS WORK).

Fourth Year.—Class I.—Gilbert and White, equal; Douglas and Edwards and Emery and Erlenborn and Henry, equal. Class II.—Bradley and Dyer, equal; Lee. Class III.—Bourret, Mooney, Jue.

### PETROGRAPHY (ADVANCED).

Fourth Year.—Class I.—Bradley, Gilbert. Class II.—Emery. Class III.—Douglas.

#### PETROGRAPHY AND LABORATORY.

Fourth Year.—Class I.—Edwards and Gilbert, equal. Class II.— Erlenborn, Henry, Douglas, Emery, Bradley, Bourret. Class III.—Lee, Dyer; Karnes and White, equal.

#### PHYSICS.

- Fourth Year.-Class I.-None. Class II.-Standish. Class III.-Parnell.
- Second Year .- Class I .- Mott, McTaggart. Class II .- Desbarats, Weldon; Bonneville and Murphy (A. G. S.), equal; Brooks; Carlyle and Cartwright, equal; Bush, Holt; Ahern and Clark and Clarke and Dobson and Taylor (J. E.), equal; Biggar and Carson, equal; Morrisette and Tatley, equal; Armstrong and Farquharson and Hanington and Taber and Taylor (E. P.) and Wilson (J. M.) and Woolward, equal; Messenger and Wonham, equal. Class III .- Wilder, Grant; Eager and Gordon and Hastings and Loebel and Ross (J. H. D.), equal; Wilson (H. A.); Brown (E. V.) and Fraser and Macrae, equal; Bissell; Benett and Duff and Jandrew, equal; Gurman and Reid and Spratt, equal; Binmore and Coughlan and Cousineau and Glen and MacGregor, equal; Evans and Lawrence and Thompson and Wright, equal; Boronow and Bradfield and Crawford and Ford and Gnaedinger (P. E.) and Kerr and Munro and Parker, equal; Bastable and Drummond and Kyle and McLennan, equal; Anderson and Banfill and Gnaedinger (A. L.) and Holmes and MacKeen and Macnaughton and McDougall and Midgley and Reed and Patterson and Scott and Simons and Tucker and Wain, equal.
- First Year .- Class I .- Buller, Larose, Bieler and Layne, equal; Yorston, Kennedy, Turnbull (A. R.), Cregeen, Toole, Hunten, Sherwood. Class II .- Taylor (J. E.); Laidley and Radley and Roquet and Stephen, equal; Moore, Armstrong and Tallon, equal; McNaughton; Craik and Faith and Webster and Wood, equal; Allan (J. M.) and Bloomfield and Harbert and McLagan, equal; Desloover and Moran (T. M.) and Willis, equal, Abbott-Smith and Finlayson and Oliver (J. H.) and Rochester, equal; LeBaron and MacLaren (A. R.) and Pelletier, equal; Denis and Graham and Grant and Matheson and Morin (C. A.) and Paterson (T. B.) and Simpson (R. L.), equal; Gordon. Class III .- Lewis; Bradshaw (F. W.) and Crain and Cross and Gegg and McMeans and Peters and Read and Ross (M. V.) and Streadwick, equal; Fagan and Smallhorn and Stirling and Whittemore, equal; Binns and Blackall and Buffam and Cuttle and Finley and Johnson and Smith and Terrance (E. H.),

equal; Adams and Baxter and Dalrymple and Davis and Munro (D. J. B.), equal; Harling and Scott (J. M.), equal; Ambridge and Culpeper and Herman and Katz and Legg, equal; Bleau and Brisbane and Foss (D. B.) and Mills and Owens, equal; Ahern and Brough and Clark and Friedman and Horsey and Powell (A. T.) and Rorke, equal; Jerrom; Bishop (J. G.) and Dupuis and Macaulay and Patton, equal; Cooper (P. E.) and Davidson (S. C. K.) and Downs and Eadie and Gaudet and Griffith and McCracken and Macpherson and Stone and Timmis, equal; Evans and Gilbert and Lemieux and McCaw and Mc-Kindsey, equal; Berry and Carpenter and Champion and Foster and Dickinson and Hutchison and Stethem and Taschereau and Taylor (M. B.) and White (G. L. W.), equal; Braithwaite and Campbell (D. H.) and Davies and Elkington and Goldberg and Hambly and Lawrence (A. R.) and Livingstone and Macnutt and Mallison and Simpson (J. C.) and Winter and Wylde and Zybach, equal.

#### POWER PLANT DESIGN.

Fourth Year.—Class I.—Shrimpton. Class II.—McNicoll, Chisholm, Elderkin, Vessot, Kirkpatrick, Mackenzie; Macpherson and Rutherford (A. B.), equal. Class III.—Smith (E. H.), Scott, Twinberrow, Rutherford (W. J.), Shapter.

### RAILWAY ENGINEERING.

- Third Year (No. 93).—Class I.—Cunningham and Fortin, equal; Gardner, Brault, Macphail, Watson. Class II.—O'Sullivan; Lewis and Loy, equal; Hannan, Hurtubise, Perrault, Farmer. Class III.—Gauthier, Muir.
- Third Year (No. 92).—Class I.—Cunningham, Fortin, Watson, Macphail; Gardner and Gauthier, equal. Class II.—Farmer, Hannan, O'Sullivan, Loy, Perrault and Muir. Class III.—Brault and Lewis, equal; Hurtubise, Robertson, Ferguson.

#### SHOP METHODS.

Second Year.—Class I.—Holt, Holmes, Ross (J. H. D.), McLennan; Biggar and Weldon, equal; Mott, Desbarats; Hanington and McKeen and Mitchell (J. M.) and Munro and Spratt, equal; Bush and Taber, equal; Bastable and Woolward, equal; Bonneville and Lawrence, equal; Brooks and Carlyle and Glen and Mackenzie (G. H.) and Morrisette, equal; Grant and Notman, equal; Armstrong and Carson and Jandrew and Ross (D. R.) and Salter, equal; Ahern and Hastings, equal; Bradfield and Wait, equal; Kyle; Benett and Gordon and Normandin and Simons and St. Germain and Wilder, equal; Crawford and Drummond and Fisk and Ford and Taylor (E. P.), equal; Boronow and Dobson and Humes and Kerr and Turton, equal; Banfill and Lorin and McCallum and Martin and Root and Tatley, equal; Bissell and Fry and Jenks and Murphy (E. J. O.) and Tucker, equal; Cartwright and Clark and Macrae and McTaggart and Munn and Parker and Wilson (S. H.), equal; Brown (G. B.); Evans and Wilson (H. A.), equal; Fotheringham and McNider and Sherrard and Wain, equal; Hamel and Loebel, equal; Gnaedinger (P. E.) and MacGregor and Messenger and Midgley, equal; Cousineau and Cromwell and Gaboury and Reid, equal; Eager and Macnaughton and Murphy (Justin) and Wilson (J. M.), equal. Class III .- Fraser and King, equal; Foss and Gnaedinger (A. L.) and Ramsey, equal; Buchanan and Chorney and Friedman and Wright, equal; Harling and Reiffenstein, equal; Anderson and Pevzner, equal; Reed and Williams, equal; Renouf and Wheeler, equal; Nesbitt, Macoun; Quinlan and Reeve, equal; MacGlashan, Kirsh; Gurman and Turley, equal; Holcomb and Morrison, equal.

First Year .- Class I .- Hunten, Kennedy, Harbert, Antliff, Craik, Allan (J. M.); Carpenter and Hamilton and Stephen, equal. Class II .- Moore; Buller and Faith and Read and Rorke and Wood, equal; Champion, Turnbull (A. R.), Willis; Armstrong and Bradshaw (F. W.) and Oliver (C. J.), equal; Bloomfield and Eadie and Macaulay and McNaughton and Mills and Terrance (E. H.), equal; Baxter and Crain and Cregeen and Dickinson and Griffith and Kingan and Radley and Toole, equal; Culpeper and Finley and Layne and Maclaren (A. B.) and Matheson and Oliver (J. H.) and Pelletier and Powell (A. T.) and Timmis (H. G.) and Webster and White (C. P.), equal; Caldwell and Davidson (S. C. K.) and Downs and Munro (D. J. B.) and Murray and Patton and Streadwick, equal; Anderson and Brough and Finlayson and Grant and Harvey and Jackson and Peters and Wilson (H.), equal; Bieler and Buffam and Gordon and James and Larose and McCaw and Ross (M. V.) and Taylor (C. W.) and White (G. L. W.), equal; Brisbane and Evans and Hambly and Horsey and Lewis and McKindsey and McKyes and Owens and Reid and Rochester and Whittemore, equal; Adams and Braithwaite and Cooper (P. E.) and Davies and Denis and Herman and Johnson and Leitch and McLagan and Rhind and Taylor (M. B.), equal; Holden and Raginsky and Smith, equal. Class III .- Berry and Cox and Dalrymple and Fagan and Gegg and Jerrom and McEwen and McMeans and Patterson (T. B.) and Roughsedge, equal; Ambridge and Cuttle and Elkington and Elvidge and Miller and

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Moran (T. M.) and Plow and Scott (J. M.) and Shier and Snyder and Stirling and Stone and Yorston, equal; Bradshaw (G. R.) and Campbell (D. H.) and Chisholm and Lea and LeBaron and Legg and MacLaren (A. R.) and Mulligan and Parsons and Salter and Tallon and Taylor (J. E.) and Wylde, equal; Dormer and Foss (D. B.) and Gilbert and McCracken and Mallison and Mignault and Morrin (J. J.) and Paterson (A. P.) and Reaper and Velasco and Zybach, equal; Binns and Bishop (E. G.) and Brodeur (J. C.) and Cross and Davis and Desbarats and Laidley and Lemieux and Robinson and Roquet and Taschereau and Winter, equal; Morin (C. A.) and Nutting and Ross (A. E.), equal; Abbott-Smith and Ball and Brumell and Dupuis and Gauthier, equal; Allan (D. H.) and Bishop (J. G.) and Currier and Lawrence and Smeaton, equal; Bleau and Foster and McDermott and Murphy (E. J. O.) and Powell (F. E.) and Smallhorn and Stethem, equal; Blackall and Clark and Dobson and Parrott and Scott (L. J.) and Sherwood, equal; Livingstone and Macnutt and Moseley and Simpson (R. L.) and Starr and St. Germain, equal; Baillie and Cope and Goldberg and MacCallum and Raskin, equal; Campbell (A. T.) and Graham and Kyle and Murphy (M. P.) and Russell, equal; MacLaren (J. N.); Brodeur and Buraschi and Gamble and Hutchison and Katz and McDonald and Macpherson and Munro (G. H.) and Poulin, equal.

### SHOP PROCESSES AND MANAGEMENT.

Third Year.—Class I.—Congleton, Gould, Gliddon, O'Halloran, Maxwell. Class II.—Macfarlane, Durant, Smith (D. W.), Mooney. Class III.—Jenckes and Wilkins, equal; Perriton, Hall, Mc-Curdy, Farnsworth.

#### SHOPWORK.

- Fourth Year.—Class I.—None. Class II.—Macpherson and Rutherford (A. B.) and Vessot, equal; Shapter, Smith (E. H.), Elderkin, Shrimpton; Chisholm and Kirkpatrick and Rutherford (W. J.), equal; McNicoll and Scott, equal. Class III.— Mackenzie (B. H. T.). Unranked.—Twinberrow.
- Third Year.—Class I.—None. Class II.—O'Halloran; Perriton and Winslow, equal; Farnsworth and Mooney, equal; McCurdy, Maxwell, Wilkins, Macfarlane, Congleton. Class III.—Wilson. Unranked.—Hall, Jenckes, Smith (D. W.), Ward.
- Second Year.—Class I.—Banfill; Bonneville and King and McLennan, equal; Benett and Carson, equal; Bush and Hamilton and Reid and Tucker, equal. Class II.—Grant and Woolward, equal; Bradfield and Carlyle and Ford and Pevzner and Weldon and

Wilson (H. A.), equal; Fisk and Fry and Macnaughton and Taber and Wright, equal; Anderson and Armstrong and Cartwright and Clark and Hastings and Kirsh and Messenger and Notman and Wonham, equal; Brooks and Dosson and Morrisette and Munro and Quinlan and St. German, equal; Ahern and Buchanan and Fotheringham and Hanington and Holcomb, equal; McDougall and Parker and Sprat, equal; Fraser and Gordon and Hamel and Holmes and Kerr and Kyle and Nesbitt and Renouf and Wilson (S. H.), equal; Loebel and Mitchell (J. M.) and Munn and Williams, ecual; Bissell and Reiffenstein, equal; Boronow and Harling and Humes and MacNider and Ross (D. R.), equal; Drummoid and Foss and Friedman and Jandrew and Lorin and Murphy (E. Justin) and Ramsey, equal; Eager and Martin, equal; Cromwell and Mac-Keen and Macrae and Salter and Simons, equal; McTaggart and Murphy (E. J. O.) and Reed and Sherrid, equal. Class III .- MacGlashan and MacGregor and Reeve, equal; Bastable and Gurman and McCallum, equal; Brown (G. B.) and Gnaedinger (P. E.) and Ross (J. H. D.), equal; Gaboury and Wheeler and Wilson (J. M.), equal; Midgey; Biggar and Evans, equal; Gnaedinger (A. L.) and Wait, equal; Cousineau and Dineen, equal; Chorney and Turley, equal; Johnson and Morrison and Turton, equal; Mackenzie (G. H.) and Macoun, equal. Unranked .- Brown (E. V.), Crawford, Holt, Lawrence, Mott, Root, Tatley, Taylor (E. P.), Wilder.

First Year .- Class I .- Owens. Class II .- Downs and Kennedy and Larose and Macnutt and Matheson, equal; Reaper; Craik and Moore and Oliver (J. H.) and Reid, equal; Peters, Stirling; Fagan and Hunten and Jackson and Laidley and Lewis and McCaw and McKyes and Powell (A. T.) and Rorke and Stephen and Wood, equal; Adams and Bloonfield and Champion and Chisholm and Crain and Cuttle and Eadie and Harbert and McDermott and Munro (D. J. B.) and Riskin and Whittemore, equal; Binns and Brisbane and Buller and Cregeen and Finley and Layne and LeBaron and Legg and Liersch and Macaulay and Taylor (C. W.), equal; Carpinter and Cooper (P. E.) and Faith and Harvey and Kingan and McNaughton and Mignault and Pelletier and Plow and Read and Scott (J. M.), equal; Baxter and Caldwell and Grant and MacCallum and McLagan and McMeans and Smith, ecual; Antliff and Blackall and Davies and Hamilton and Holden and Mills and Willis, equal; Dormer and Foss (D. B.) and Foster and Gilbert and Jerrom and Kotsonas and MacLaren (A R.) and Martin and Oliver (C. J.) and Patton and Ross (A. E.) and Ross (M. V.) and Toole and Turnbull (A. R.) and Velasco, equal;

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Bishop (]. G.) and Bradshaw (G. R.) and Cope and Currier and Elkirgton and Evans and Gegg and Griffith and Morrin (J. J.) ard Murphy (E. J. O.) and Rhind and Sherwood and Terrance (E. H.) and Winter and Yorston, equal; Abbott-Smith anl Bieler and Clark and Davidson (S. C. K.) and Dupuis and Gaudet and Gordon and James and Livingstone and Shier and Tallon, equal. Class III .- Allan (J. M.) and Armstrong and Bishop (E. G.) and Buraschi and Desloover and Elvidge and Graham and Held and Johnson and MacLaren (J. N.) and Olive and Scott (L. J.) and White (G. L. W.), equal; Alan (D. H.) and Baillie and Ball and Campbell (D. H.) and Cornell and Cross and Herman and Hutchison and Leitch and Miller and Morin (C. A.) and Mulligan and Parrott and Fadley and Raginsky and Roughsedge and Synder and Stethem and Streadwick, equal; Brodeur (J. C.) and Finlayson and Ioss (L. J.) and Roquet, equal; Bleau and Gamble and Gauther and Lawrence and McEwen and Murphy (M. P.) and O'Her and Patterson (T. B.) and Rochester and Wilson (H.) and Zybach, equal; Brough and Campbell (A. T.) and Davis and Denis and Desbarats and Fleming and Smeaton and Timmis and Torrance (J. F.), equal; Anderson and Cox and Dalrymple and Emo and Horsey and Lemieux and Powell (F. E.) and Simpson (J. C.) and Smallhorn and Taylor (M. B.) and Wyld, equal; Berry and Brumell and Buffam and Mulkins and Nutting and Taschereau, equal; Hambly and Kyle and Mallison and Paterson (A. P.) and Russell and Stone, equal; Katz and Moseley and Murray, equal; Culpeper and Lea and McCracker and McDonald and Moran (T. M.) and Salter, equal; Ambridge and Brodeur (J. P.) and Robinson and Simpson (R. L) and Timmins (L. H.) and Webster, equal; Bradshaw (F. V.) and Dickinson, equal; DeSalaberry and Marcionelli, equal; Parsons, Goldberg.

## STRENGTH OF MATERIALS.

- Fourth Year.—Cass I.—Eadie, Ferrier, Lindsay, Robertson. Class II. —Davies, Ross (B.), Austin. Class III.—MacEwen; Mahaffy and Seath, equal; Betournay and McPhail, equal; LaMontagne and Powel, equal; Cole and Deneau and Greene and Wickenden, equal.
- Third Year.—Class I.—Cunningham and Green, equal; Anderson and Canning, qual; Brow; Fortin and Thompson, equal; Phelan; Maxwell and Palmer and Vineberg, equal; Bain and Cuddy and Saundrs, equal; Gardner and Johnston, equal; Congleton and Farmer, equal. Class II.—Gliddon and Macphail, equal; Gould, Latz; Bishop and Mitchell, equal; Cromwell and Jelly

and Nutter and Sloves and Warriner and Watson, equal; Calkin; Brault and Croft and Fellows and O'Halloran, equal; Jackson and O'Sullivan, equal; Hall and Hannan; equal. *Class III.*—Lordly; Macdonald and Winslow, equal; Challenger, Muir, Eaton; Harrison and McCurdy, equal; Goodwin and Loy and McIntyre and Smith (R. H.), equal; Acton and Forbes and Irving and Livingstone and Mawdsley, equal; Cambron and Lewis and Whelen, equal; Ferguson and Giles and Weldon, equal; Kay; Copping and Dewar and Hyndman and Langstroth and Macfarlane and Perrault and Robertson and Tansley, equal.

## STRUCTURAL DESIGN.

Third Year.—Class I.—Cunningham, Jelly, Gardner; Congleton and Macphail, equal; Fortin, Maxwell; Saunders and Warriner, equal; Macfarlane, Green, Brown. Class II.—Brault and Lantz and Loy and O'Halloran, equal; Palmer; Hannan and McCurdy, equal; Mitchell, Johnston; Davis (Samuel) and Gauthier and Stroud, equal; Challenger and Smith (R. H.), equal; Robertson, Bain; O'Sullivan and Perrault, equal; Croft and Farmer and Harrison and Muir and Weldon, equal; Cockfield and Goodwin and Langstroth and Lordly, equal. Class III.—Cuddy and Hall and Livingstone, equal; McIntyre and Winslow, equal; Watson; Fowler and Giles and Hyndman, equal; Gould; Copping and Lewis, equal; Calkin and Dewar and Mooney, equal; Cromwell and Forbes, equal; Irving and Kay, equal; Ward; Farnsworth and Mawdsley and Wilson, equal; Nutter.

#### SUMMER ESSAYS.

Fourth Year (Chemistry and Chemical Engineering Courses).—Class I.—None. Class II.—Cameron, DeCew; Lafontaine and Mosher and Ross, equal. Class III.—Crowe and Labell and Larose and Parsons, equal; Taylor; Fox and Millar and Rashback, equal.

Fourth Year (Civil Engineering Course).—Class I.—Eadie and Ferrier, equal. Cass II.—Cole and Kelly, equal; Austin and Robertson, equal; Deneau and McEwen, equal; Greene and Seath, equal; Elder, Power. Class III.—None.

Fourth Year (Electrical Engineering Course).—Class I.—Dunbar; Demers and Hacker and Schippel and Windsor, equal. Class II.—Pope, Wiggs, Arbuckle. Class III.—None.

Fourth Year (Mechanical Engineering Course).—Class I.—Vessot; Chisholm and Elderkin, equal. Class II.—Smith, Mackenzie; Kirkpatrick and Macpherson and Scott and Shapter, equal. Class III.—None.

## Fourth Year (Metallurgical Engineering Course).—Class I.—None. Class II.—Penney. Class III.—None.

- Fourth Year (Mining Engineering Course).—Class I.—Douglas, Erlenborn. Class II.—Jue; Henry and White, equal; Bourret and Edwards and Karnes and Mooney, equal; Bradley. Class III.—None,
- Third Year (Chemistry and Chemical Engineering Courses).—Class I.—Johnston. Class II.—Shotwell. Class III.—Smith; Fox and McIntyre and Rashback, equal.
- Third Year (Civil Engineering Course).—Class I.—Cunningham. Class II.—Farmer and O'Sullivan, equal; Gauthier and Watson, equal. Class III.—None.
- Third Year (Electrical Engineering Course).—Class I.—None. Class II.—Vineberg; Demers and Gliddon, equal; Bishop and Fellows and Hill, equal. Class III.—Eaton.
- Third Year (Mechanical Engineering Course).—Class I.—Congleton. Class II.—Cameron and Durant and Langstroth and Mooney and Perriton, equal; McCurdy. Class III.—None.
- Third Year (Metallurgy Course).—Class I.—Fowler. Class II.—None. Class III.—None.
- Third Year (Mining Engineering Course).-Class I.-Weldon. Class II.-Bain. Class III.-Saunders, Livingstone.

#### SUMMER READING.

- Third Year.—Class I.—Timmerman, Cockfield, Lordly, Canning; Jordan and Macfarlane, equal. Class II.—Winslow, Gardner, Phelan, Brow, Acton, Tansley; Harris and Wilkins, equal; Anderson and Macphail, equal. Class III.—Lewis, O'Halloran, Mawdsley; Challenger and Jackson, equal; Hyndman, Cuddy, Fortin, Macdonald; Henderson and Irving and Thompson, equal; Bethune and Brault and Hall and Mackenzie and Maxwell and Purcell and Salamis and Tison and Wilson, equal.
- Second Year.—Class I.—Buchanan, Carlyle. Class II.—Ford and Loebel and Lorin and Turton, equal; Bissell and Tucker, equal; Boronow and Bradfield and McNider, equal; McLennan. Class III.—Davis, Taber; Clark (G. S.) and Fisk and Gnaedinger (P. E.) and Grant, equal; Banfill and Kerr and Mitchell and Murphy (E. J.), equal; Bastable and Bush and Eager, equal; Glen and Gurman, equal; Cousineau and Johnson and Messenger and Morrison and Munro, equal; Morrisette; Brown (E. V.) and Macnaughton and Reiffenstein and Weldon and Wright, equal; Chorney and Fraser and Holcomb and Jenks and Mackenzie and Midgley and Pevzner and Woolward, equal.

## SUMMER SCHOOLS.

- Third Year (Fire Assaying and Metallography).—Class I.—Miller and Timmerman, equal. Class II.—None. Class III.—Henderson (No. 264 only).
- Third Year (Inorganic Qualitative Analysis).—Class I.—Johnston, Lantz, Jordan. Class II.—Calkin and Taylor, equal; Harris, Giles, Fowler, Gould, Irving; Patterson and Smith, equal. Class III.—Cuddy, Challenger; Forbes and Millidge, equal; Yates; Shotwell and Stroud, equal; Goodwin and Purcell, equal; Cambron; Copping and Kay and Nutter, equal; Bethune and Cockfield, equal.
- Third Year (Inorganic Qualitative Analysis Laboratory).—Class I.— Johnston and Jordan and Lantz, equal. Class II.—Bethune and Cuddy and Goodwin and Irving and Smith and Warriner, equal. Class III.—Calkin and Cambron and Challenger and Copping and Fowler and Giles and Gould and Harris and Kay and Millidge and Nutter and Patterson and Purcell and Shotwell and Stroud and Yates, equal; Cockfield and Forbes and Hyndman and Mackenzie and Rochester and Taylor, equal.
- Third Year (Shopwork).—Class I.—Windsor, Winslow. Class II.— Farnsworth; Macfarlane and O'Halloran, equal; McCurdy and Maxwell and Mooney, equal; Jenckes and Perriton, equal; Wilkins, Elliot, Congleton. Class III.—None.

### SURVEYING.

Third Year (Civil Engineering Course).—Cunningham and Macphail, equal. Class II.—Gardner, Fortin, Lewis, Farmer, Watson, Hannan, Brault. Class III.—Muir, Gauthier, Loy, Perrault; Hurtubise and Robertson, equal.

Third Year (Mining Engineering Course).—Class I.—Brow, Bain and Weldon, equal. Class II.—Saunders. Class III.—Dewar and Palmer, equal; Davis (S), Cromwell, Mawdsley.

Second Year.—Class I.—Weldon, McTaggart, Holt; Palmer and Pevzner, equal; Bissell and Perry, equal; Bastable and Murphy (A. G. S.), equal; Bush and Morrisette, equal; Biggar and Desbarats and Dobson and Hanington, equal. Class II.— Bonneville and Duff and Harrison and Morris, equal; Fraser and Mott, equal; Brooks; Ahern and Clark and Holmes and Kyle and Wilder, equal; Carlyle and Carson and Farquharson and Normandin and Spratt and Tatley, equal; Cartwright and Munro, equal; Parker; Banfill and Brown (E. V.) and Eager and Foss and Martin and Taber and Wain, equal; Fisk and Humes, equal; McLennan and Messenger and Notman, equal; Gnaedinger (P. E.) and Gordon and Reiffenstein, equal; Craw-

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ford and Mitchell and Ross (J. H. D.) and Woolward, equal; Bradfield and Loebel and Wilson (S. H.), equal. Class III,-Armstrong and Evans and Grant and Hamilton (P. D. P.) and Lawrence and Lorin, equal; Cousineau and Fry, equal; Clarke and Gnaedinger (A. L.) and Taylor (E. P.) and Wright, equal; Hamel and Reed, equal; Drummond and Ford and Thompson and Wonham, equal; Buchanan and Glen and Hastings and McDougall and Turton, equal; Brown (G. B.) and Holcomb and Nesbitt and Reid, equal; Gurman and Kerr and King and Macnaughton and Wait and Wilson (H. A.), equal; Fotheringham and Jandrew and MacGregor and MacKeen, equal; Anderson and Friedman and Macrae and Morrison and Simons and Wiggs, equal; Brown (L. E.) and Cromwell, equal; Boronow, Macoun; Chorney and Hunter and Luke and Mc-Callum and MacNider and Murphy (E. J. O.) and Quinlan and Ramsey and Wheeler, equal.

## SURVEYING FIELDWORK.

- Third Year.—Class I.—Cunningham, Mawdsley, Macphail, Weldon. Class II.—Hannan, Watson, Dewar, Loy, Edwards, Gardner, Lewis, Fortin; Cromwell and Farmer and Henry and Muir and Saunders, equal. Class III.—Rochester (L. B.), Bradley; Brault and Gauthier, equal; Bain and Davis (S.) and Dyer and Thomson, equal; Brown and Tansley, equal; O'Sullivan; Livingstone and Salamis, equal.
- Second Year .-- Class I .-- Ford; Fisk and Quaile, equal; McTaggart; Brown (L. E.) and Fraser and Hanington, equal; Bissell and MacKeen and Reiffenstein, equal. Class II .- Glen and Wain and Wiggs, equal; Wilson, Davis; Biggar and Fotheringham and Perry, equal; Parker, Kirsh; Bush and Clarke and Dineen and Foss (R. H.) and Gnaedinger (A. L.) and Hamilton (H. J.) and Monsarrat and Notman and Root and Ross (J. H. D.), equal; Gnaedinger (P. E.) and MacGregor and Morrisette and Palmer, equal; Messenger and Woolward, equal; Buchanan and Duff and Mitchell and Murphy (A. G. S.), equal; Brooks and Ouellette, equal; Carson and Clossey and Holcomb and Hurtubise and Kyle and Macrae and McLennan and Watt, equal; Bastable and Eager and Gaboury and King and Loebel and Martin and Tucker, equal; Banfill and Brown (G. B.) and Hamel and Lorin and Pevzner and Wait and Wonhom, equal. Class III .- Bradfield and Evans and Holt and Laing and Mac-Kenzie (G. H.) and Newman and Quinlan and Ross (D. R.) and Scott and Spratt, equal; Brown (E. V.) and Carlyle and Chorney and Clark and Cousineau and Crawford and Fry and

Gurman and Hamilton (P. D.) and Jandrew and Luke and MacGlashan and MacNider and McCallum and Taber and Taylor (E. P.), equal; Bonneville and Grant and Holmes and Mc-Dougall and Morrison and Normandin and Simons, equal; Dobson and Nesbitt and Turton and Weldon, equal; Kerr and Lyall and Ramsey, equa; Boronow and Drummond and Friedman and Gordon and Jenks and Munn and Reid and Wilder and Williams and Wright, equal. Unranked.—Macoun.

#### THEORY OF STRUCTURES.

Fourth Year.—Class I.—Eadie Lindsay. Class II.—Austin and Davies and Robertson, equal; Ferrier and Seath, equal; Cole and Mc-Phail, equal; Greene and Powell, equal; Wickenden. Class III.—Betournay, Mahafly; Deneau and LaMontagne and Mac-Ewen and Ross (B.), equal.

#### THERMODYNAMICS.

- Fourth Year (Mechanical Eigineering Course).—Class I.—Elderkin. Class II.—McNicoll, Chisholm; Shrimpton and Twinberrow, equal; Shapter and Vessot, equal. Class III.—Kirkpatrick; Mackenzie (B. H. T.) and Smith (E. H.), equal; Scott; Rutherford (A. B.) and Rutherford (W. J.), equal; Macpherson.
- Fourth and Third Years.—Class I.—Canning, Dunbar, Congleton, Gliddon, Roberton, Sloves, Anderson, Phelan, Code; Gould and Macfarlane, equal; Jzckson; Vineberg and Hacker, equal; Dawson; Arbuckle and Hall and Thompson (G. M.), equal, Class II.—Schippel, Macdonald, Fellows, McCurdy, Eaton, Thompson (T. C.), O'Halloran. Class III.—Maxwell and Wiggs, equal; Langstroth, Pope, Bishop; Acton and Clerk and Louttit and Mooney and Parnell and Whelen and Windsor, equal.

## WORKS, ORGANIZATION AND ACCOUNTING.

Fourth Year.—Class I.—Elderkin. Class II.—Rutherford (A. B.), Vessot, Smith (E. H.), Mackenzie (B. H. T.), Rutherford (W. J.), Chisholm, Shapter, Kirkpatrick. Class III.—Shrimpton, Macpherson, Scott, McNicoll, Twinberrow.

