UNIVERSITY OF WESTERN ONTARIO

LONDON - CANADA



FACULTY of ARTS and SCIENCE



UNIVERSITY COLLEGE
HURON COLLEGE
URSULINE COLLEGE
ST. PETER'S and
CHRIST THE KING COLLEGES
WATERLOO COLLEGE
MUSIC TEACHERS' COLLEGE

ANNOUNCEMENT 1958 - 59

THE VALUE OF A UNIVERSITY

"There are few earthly things more splendid than a University. . . . Wherever a University stands, it stands and shines; wherever it exists, the free minds of men, urged on to full and fair enquiry, may still bring wisdom into human affairs.

"There are few earthly things more beautiful than a University. It is a place where those who hate ignorance may strive to know, where those who perceive truth may strive to make others see; where seekers and learners alike banded together in the search for knowledge, will honour thought in all its finer ways, will welcome thinkers in distress or in exile, will uphold the dignity of thought and learning and will exact standards in these things. They give to the young in their impressionable years the bond of a lofty purpose shared, of a great corporate life whose links will not be loosed until they die. They give young people the close companionship for which youth longs, and that chance of the endless discussion of the themes which are endless, without which youth would seem a waste of time."

—JOHN MASEFIELD, *in an address at the University of Sheffield.*

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THE WHOLE UNIVERSITY

THE FACULTIES, SCHOOLS AND COLLEGES

The University of Western Ontario is composed of the following units: The Faculty of Arts and Science (University College and Music Teachers' College), the Faculty of Medicine, the Faculty of Graduate Studies, the School of Nursing, and the School of Business Administration. Affiliated with the University are the following Arts Colleges: Ursuline College, London; St. Peter's Seminary and Christ the King Colleges, London; Huron College, London; Waterloo College, Waterloo.

A BRIEF HISTORY

Western University, through the efforts of the Bishop of the Diocese of Huron of the Church of England in Canada, received its charter from the Legislature of the Province of Ontario in 1878. In 1923, by Act of the Provincial Legislature, its name was changed from "Western University" to "The University of Western Ontario." By the Act of 1955 its powers were further defined.

The first classes graduated in Arts and in Medicine in 1883.

The Medical School has maintained an unbroken existence since it was first opened. In 1912 control by a joint stock company ceased and it became the Faculty of Medicine, under the direct control of the same Board of Governors as the rest of the University. In 1921 it occupied its present buildings.

The Faculty of Arts, for financial reasons, was forced to close from 1885 to 1895. Revived in the latter year, it was for some time compelled to struggle for existence, but in 1908 its charter was so amended that it became undenominational and was permitted to receive financial assistance from the London City Council. Later, when the student body had increased to such an extent that local finances could not possibly meet the demands, the Province assumed part of the load of current expense. The Kingsmill property, about 260 acres, north of the City of London, was bought, buildings were erected, and the Faculty of Arts was moved to the present location in 1924. In 1943 it was re-named the Faculty of Arts and Science.

The Institute of Public Health was opened in 1912 in a building erected and equipped by the Government of the Province of Ontario and given to the University. In 1917 it became the Faculty of Public Health, the first independent Faculty of Public Health of any University in the British Commonwealth; in 1946 one section of it became a Provincial Laboratory and the other section the University School of Nursing, which moved to the north campus in 1951.

In 1947 a separate Faculty of Graduate Studies was first created although masters' degrees in Arts, Science, Medicine and Business Administration had been conferred for many years.

The School of Business Administration was formally founded in 1950, although Business Administration as a major course had been offered in the Faculty of Arts from 1920 to 1950.

THE LIBRARIES

Since sound learning is impossible without good books, the library is basic in a university. There are two libraries at the University of Western Ontario, the general library and the medical library, as well as special reading rooms in the Science Buildings and the School of Business Administration. All divisions use the Library of Congress system of classification.

The main collection of books, amounting to 185,000 volumes, is housed in the Lawson Memorial Library building, erected in 1934. The Medical School library consists of slightly over 50,000 volumes. Thus the combined libraries now contain approximately 235,000 volumes.

Although this is a fairly large collection, which compares favorably in point of numbers with other university libraries in Canada, the number of volumes is not the best criterion of a library's value. The quality of the books on the shelves, their accessibility and condition, the policy of selection, the number of current literary and scientific journals, and the reading room accommodation are the real standards by which to judge a library. In most of these particulars the University libraries rank high. Few volumes are on the shelves without a good reason. Book purchases are subject to a rigorous selection policy which takes into account both immediate and prospective value. In the general library there is space for nearly three hundred students, and over 300,000 volumes. Third year Honors and all fourth year students registered in the constituent university may secure permits to enter the stacks on the recommendation of their professors.

It is impossible for a university library to make exhaustive collections of all kinds of printed material. In some respects, however, the libraries of the University of Western Ontario are outstanding. The general library is conspicuously rich in Canadiana, Americana, and books relating to Shakespeare. The nucleus of this material came as a gift in 1918 from the late Dr. John Davis Barnett. The Regional Collection of local history contains much material valuable for graduate work in history and economics. There are also important newspaper files, and a large number of early agricultural journals, as well as printed and manuscript sources of the social and religious history of Canada. The Medical School library is particularly rich in medical journals and has an extensive collection in the field of medical history.

THE DEGREES OFFERED

By its charter the University of Western Ontario may confer degrees in Arts, Medicine, Science, Dentistry, Agriculture, Law, Education, Music, Theology, and other branches of learning, upon persons who, having complied with the requirements, are admitted to such degrees by the Senate.

The degrees at present conferred by the University are:

1. Honorary Degrees: *Doctor of Divinity; Doctor of Science; Doctor of Laws; Doctor of Letters; Doctor of Music; Doctor of Civil Law.

2. Degrees by examination: Bachelor of Arts (B.A.); Bachelor of Science (B.Sc.); Bachelor of Engineering Science (B.E.Sc.); Bachelor of Science in Nursing (B.Sc.N.); *Bachelor of Divinity (B.D.); Master of Arts (M.A.); Master of Laws (LL.M.); Master of Science (M.Sc.); Master of Clinical Science (M.Cl.Sc.); Master of Business Administration (M.B.A.); Doctor of Medicine (M.D.); *Doctor of Divinity (D.D.); Doctor of Philosophy (Ph.D.).

The diplomas awarded by the University are:

Diploma in Business Administration; Diploma in Journalism; Diploma in Public Health Nursing (D.P.H.N.); Diploma in Nursing Education (D.N.E.); Diploma in Nursing Service Administration (D.N.S.A.); Music Graduate in Paedagogy (Mus. G. Paed.).

*The University confers these degrees only on the rcommendation of an affiliated college which has a Theological Faculty. The degree of Doctor of Divinity by examination is under the jurisdiction of the Board of Theological Colleges of the Church of England in Canada.

The Board of Governors

Ex officio Members:

THE CHANCELLOR, THE PRESIDENT, THE VICE-PRESIDENT, HIS WORSHIP THE MAYOR OF LONDON, THE WARDEN OF THE COUNTY OF MIDDLESEX.

Appointed Members:

By The Lieutenant-Governor-in-Council: MR. W. L. DUFFIELD, MR. E. P. DIGNAN, LIEUT.-COL. D. B. WELDON, M.C., COL. W. H. HEMPHILL

By the London City Council: LIEUT.-COL. GORDON INGRAM, LIEUT.-COL. J. E. SMALLMAN, HON. LIEUT.-COL. J. GORDON THOMPSON, CAPT. JOSEPH JEFFERY, Q.C.

By the Board of Governors: MR. LOUIS L. LANG, MR. C. F. STEVENS, COL. GEORGE W. LITTLE, DR. A. R. FORD.

By the Alumni Association: MR. HAROLD R. NEWELL, DR. J. T. BOWMAN.

Officers of the Board

LIEUT.-COL. GORDON INGRAM,	*Chairman*
LIEUT.-COL. D. B. WELDON,	*Vice-Chairman*
MR. ROSS B. WILLIS,	*Secretary*

The Senate

Officers of the Senate:

The President and Vice-Chancellor (Chairman), the Vice-President (Vice-Chairman), the Registrar (Secretary).

Ex officio Members:

The Chancellor, the Dean of each Faculty and School of the University, the Principal of University College, the Principal of Music Teachers' College, the Principal or other head of each affiliated college, the Chairman of the Board of Governors, the Librarian, the Director of the Summer School and Extension Department, the Director of the French Summer School, the President of the General Alumni Association (or his deputy).

Elected or Appointed Members:

Ten representatives of the General Alumni Association.

Six representatives of the City of London (three appointed by the City Council, two by the Board of Education, and one by the Separate School Board).

Four representatives, to be elected from their own number by the Principals of the Secondary Schools in the fourteen counties of Western Ontario listed below.

The following number of representatives of each Faculty and School of the University (in addition to its Dean): The Faculty of University College - three; the Faculty of Medicine - two; the Faculty of Graduate Studies - one; the School of Nursing - one; the School of Business Administration - one.

One representative of each of the following:
The Board of Governors; each affiliated college which offers a degree-program; each City Council and each County Council in the Counties of Brant, Bruce, Elgin, Essex, Grey, Huron, Kent, Lambton, Middlesex (except the City of London), Norfolk, Oxford, Perth, Waterloo and Wellington; the Graduates of each affiliated college.

UNIVERSITY OFFICERS

(Date of first appointment is given. Unless otherwise stated, the degrees are from the University of Western Ontario.

Visitor

His Honor, the Lieutenant-Governor of Ontario, Toronto, Ontario

Chancellor

Richard G. Ivey,
Q.C., LL.D. 1955

President and Vice-Chancellor

George Edward Hall,
B.S.A., Toronto, M.S.A., *ibid.*, M.D., *ibid.*, Ph.D., *ibid.*, D. ès Sc., Laval; F.R.S.C. 1944

Vice-President and Dean of Graduate Studies

Ronald Alexander Allen,
B.A., Toronto, M.A., *ibid.*, Ph.D., Chicago. 1923

Dean of Men

Thomas Leslie Hoskin,
B.A., M.A., Northwestern. 1945

Dean of Women

Leola Ellen Neal,
B.A., M.A., Ph.D., Toronto. 1933

Comptroller

Ross Baxter Willis,
B.A., M.A. 1939

Librarian

James John Talman,
B.A., M.A., Ph.D., Toronto, F.R.S.C. 1939

Physician

Richard John Bowen,
B.A., M.D. 1956

Registrar

Helen M. B. Allison,
B.A., M.A., Minnesota. 1924

Director of Extension and Summer School Department

Star Floyd Maine,
B.A., B.D., Victoria, M.A., Chicago, Ph.D., *ibid.* 1926

Assistant Librarians

Lillian Rea Benson,
B.A. 1934

Kate M. Gillespie,
B.A., McGill. 1922

John P. McLaughlin,
B.A., *Queen's*; Ph.D., London. 1957

Assistant Registrar

Margaret P. May,
B.A. 1945

Curator of the Museum of Indian Archaeology

Wilfrid Jury,
D.ès L., Montreal. 1932

Honorary Curator of the Jeffery Stamp Collection

John Howard Crocker,
M.P.E., Springfield; LL.D. 1930

FACULTY OF ARTS AND SCIENCE

Dean

Frank Stiling, M.A., Ph.D.

UNIVERSITY COLLEGE

(London, Ontario)

Principal

Frank Stiling, M.A., Ph.D.

Secretary of the Faculty

Professor J. A. Bruce, M.A., Ph.D.

Representatives on the University Senate

Professors J. A. Gunton, M.A., Ph.D. (until 1959), G. R. Magee, M.S., Ph.D. (until 1958), E. E. Reilly, B.S.A., M.S., F.R.S.A. (until 1960).

Representatives on the Athletic Directorate

Pofessors D. A. McLarty, Ph.D., J. W. Burns, M.Sc.
Mary Gillespie, M.A., G. H. Reavely, M.A.

UNIVERSITY COLLEGE FACULTY

1957-58

(The year of first appointment in the University is given. Unless otherwise indicated, the degrees have been granted by this University)

BOTANY

Professor:

Anson Robertson Walker, B.A. Queen's, M.A. Toronto, Head of the Dept. 1925

Associate Professors:

Wilbert Ezekiel McKeen, M.Sc., Ph.D. Toronto 1957
Duncan Archibald McLarty, B.A., Ph.D. Columbia 1943
David George Wilson, B.A. Toronto and Queen's, M.A. Queen's, Ph.D. Wisconsin 1956

Assistant Professor:

Frankland Shaw Cook, B.A. and Ph.D. Toronto 1952

Honorary Lecturers (Part-time):

Wolfgang Albert Andreae, M.Sc. and Ph.D. McGill 1956
Ralph Anthony Ludwig, B.S.A. and M.Sc. Alberta, Ph.D. McGill 1954
William Harold Minshall, B.S.A. Toronto, M.Sc. and Ph.D. McGill 1951

Instructor:
John K. Johannesen, Diploma, Royal Agricultural College, Copenhagen (Plant Culture) 1950

Preceptor:
Clara Winifred Fritz, M.Sc. McGill, Ph.D. Toronto 1957

Demonstrators:
Clarence Madhosingh, M.Sc. British Columbia,
Grant Edward Tayler, B.Sc. 1956
Irmgard Messmer, Dipl. Agr. Hohenheim, M.Sc. Wisconsin;
Jean McL. Wright (Mrs.), B.A. British Columbia 1957

BUSINESS ADMINISTRATION
(Members of the School of Business Administration)

Associate Professors:
Arthur Gordon Huson, B.Sc. (Econs.) London 1953
John Jacob Wettlaufer, B.A. and M.B.A. 1950

Assistant Professor:
Donald Hammond Thain, M.B.A. and D.B.A. Harvard 1956

Lecturers:
Richard Kirwan Ferguson, B.Sc. State U. of Iowa; Diploma (Bus. Ad.) 1956
Richard John Hobbs, B.A.; M.S. Columbia 1957
Charles Bernie Johnston, B.A. and M.B.A. 1957

CHEMISTRY

Professors:
John Aberdeen Gunton, B.A. and M.A. McMaster, Ph.D. Illinois, Head of the Dept. 1923
James Wendel Burns, B.Sc. New Brunswick, M.Sc. Queen's 1922
Christian Sivertz, B.A.Sc. British Columbia, M.Sc. and Ph.D. McGill 1926
Hubert Martin, M.Sc. and D.Sc. London, Honorary (part-time) 1951

Associate Professors:
Kenneth William Hunten, B.A. Bishop's; B.Sc., M.Sc. and Ph.D. McGill 1928
Frederick Lewis Maitland Pattison, B.A., M.A. and Ph.D. Cambridge (on leave 1957-58) 1948
James Keith Watson, B.A. and M.A. McMaster, M.A. and Ph.D. Toronto 1937

Assistant Professor:
Armas John Sukava, B.Sc. and M.Sc. Manitoba, Ph.D. McGill 1954

Lecturer:
Walter Colston Howell, B.Sc., M.Sc., and Ph.D. 1957

Instructors:
Howard Wesley Baldwin, B.A. and M.A. Saskatchewan 1957
Robert Harris Pallen, B.Sc. Sir George Williams; M.Sc. (part-time) 1957

Honorary Lecturers:
- Charles R. Engel, D.Sc. Swiss Fed. Inst. Tech. 1951
- Elvin Y. Spencer, M.Sc. Alberta, Ph.D. Toronto 1951
- David Milroy Miller, B.Sc. and M.Sc. Alberta, Ph.D. McGill 1955
- George Denis Thorn, B.Sc. Alberta, M.A. Queen's, Ph.D. McGill 1956

Demonstrators:
- Robert Benson, B.A.Sc. British Columbia 1957
- Ronald Chalk, B.A. 1957
- Lu-Chi Hsu, B.Sc. Taipei 1957
- James Kirkland, B.A.Sc. British Columbia 1957
- Donald J. McKenney, B.Sc. 1957
- Socrates Papadopoulos, Dip. Athens 1957
- Lewis Larry Perelmutter, B.Sc. McGill 1957
- Harsharan Singh, B.Sc. Delhi 1956

Fellows and Scholars:
- Colin McArthur, B.Sc. 1957
- John S. McIntyre, B.Sc. 1957
- Donald McLean Graham, B.Sc., M.Sc.; Ph.D. Brooklyn Poly. Inst. 1957

CLASSICS
(Greek and Latin)

Professors:
- John Danby Ralph, B.A. Queen's, Ph.D. Chicago, Head of the Dept. 1925
- Robert Edward Kingsdown Pemberton, M.A. Oxon. 1926

Associate Professor:
- Alfred Ernest Raymond, B.A.; M.A. Toronto, Ph.D. Chicago 1944

ECONOMIC AND POLITICAL SCIENCE

Professors:
- Mark Keith Inman, B.A. Acadia, M.A. and Ph.D. Harvard, Head of the Dept. 1929
- Walter Bennett Harvey, B.A., M.A. and LL.B. Manitoba, Ph.D. Chicago 1938
- Edward Ernest Reilly, B.S.A. Toronto, M.S. Wisconsin; F.R.S.A. 1926

Associate Professor:
- David Ivor, B.A. and M.A.; Ph.D. London 1946

Assistant Professor:
- Grant Louis Reuber, B.A.; A.M. and Ph.D. Harvard 1957

Lecturers:
- Kenneth John Duncan, B.A. and M.A. Toronto 1954
- John Joseph Madden, B.A. Manitoba, M.A. Toronto 1957

Lecturers (part-time):
- John Rowland William Gwynne-Timothy, B.A. and M.A. Toronto, D. Phil. Oxon. 1953
- Arthur Gordon Huson, B.Sc. (Econ.) London, Barrister at Law 1953

Instructors:
- John Edgar Kersell, B.A. and M.A. Queen's (on leave) 1954
- Steve Gabriel Peitchinis, B.A. and M.A. 1955

ENGINEERING SCIENCE

Professor:

Lyman Stuart Lauchland, B.A.Sc. and M.A.Sc. Toronto, Head of the Dept. 1954

Assistant Professors:

John Edward Kendall Foreman, B.A.Sc. Toronto, M.M.E. Cornell 1956
Allan Theodore Olson, B.Sc. Queen's, M.Sc. Birmingham 1957
Mellor Procter Poucher, B.Sc., M.Sc. and D.I.C. London 1954

Lecturer:

William Harry Davis, B.A.Sc., O.L.S. Toronto 1957
Richard Charles Quittenton, B.A.Sc., M.A.Sc., Ph.D. Toronto (part-time) 1958

Demonstrators (part-time):

John David Adams, B.Eng. McGill 1957
Gordon Harold Joseph Boisseau, B.A.Sc. Laval 1957
George Waugh Hudson, B.Eng. McGill 1957
Michiel Rudolf Leenders, B.Sc. Alberta 1957

ENGLISH

Professors:

Carl Frederick Klinck, B.A.; M.A. and Ph.D. Columbia, (Canadian Literature) 1928
Alfred Brandon Conron, B.A. and M.A.; A.M. and Ph.D Harvard, D.S.O.; Chairman of the Dept. 1946
Malcolm Hugh Murdoch MacKinnon, B.A., M.A. and Ph.D. Toronto 1946
Edwin John Pratt, C.M.G., M.A. and Ph.D. Toronto; Litt.D., LL.D., D.C.L., D.Litt.; F.R.S.C.; Visiting Prof. (part-time) 1957

Associate Professor:

George E. Buckley, B.A. Mt. Allison, M.A. Columbia 1946

Assistant Professors:

William Eric Duncan Atkinson, B.A. Cantab., Ph.D. Chicago 1945
John Whichello Graham, B.A. Manitoba, M.A. and Ph.D. Toronto (on leave) 1949
John Reidy, M.A. and Ph.D. London 1949
Philip Coate Stratford, B.A.; *D. de l'U. de Paris* 1956
Ross Greig Woodman, B.A. British Columbia, M.A. Manitoba, Ph.D. Toronto 1950

Lecturers:

Ronald Gordon Nudell Bates, B.A. and M.A. Toronto 1956
Hugh Reid MacCallum, B.A. and M.A. Toronto 1955
Ian Arnold McDonald, B.A. Sask., M.A. Northwestern 1948
Clifford Earle Sanborn, B.A. and M.A. Toronto 1948
Frank Stiling, B.A. McMaster; M.A.; M.A. and Ph.D. Michigan (part-time); Dean of Arts and Science; Principal of University College 1928

Instructors:

Betty Bandeen, B.A.; M.A. and Ph.D. Radcliffe 1957
Paul Duncan Fleck, B.A. 1956
James R. Scott, B.A. Toronto (part-time) 1948
Philip Linden, B.A. (part-time) 1957

Graduate Assistants (part-time):

Eugene Benson, B.A. National Univ. of Ireland 1957
Patricia C. M. Robinson, B.A. 1957
Waldo William Ryerson, B.A. 1957

For **FRENCH**, see **ROMANCE LANGUAGES**

GEOGRAPHY

Professor:

Edward Gustav Pleva, B.A., M.A. and Ph.D. Minnesota, Head of the Dept. 1938

Associate Professor:

Robert Wilfred Packer, B.A. and M.A. Cantab., F.R.G.S. 1949

Lecturer:

Osmund Per Langtvet, C.Phil. Oslo 1953

Instructors:

Paul Martin Louis Bruer, B.A.; M.A. Illinois (part-time) 1955
Charles Frederick John Whebell, B.A., M.Sc. 1957

Preceptor:

Stephen Roussel Byles, B.A. Toronto 1953

Graduate Assistants:

Jeanne Mary Saunders, B.A. London 1956
Robert Bean, B.A.; William Ferguson, B.A.; Burk Frebold, B.A. Carleton; Donald Lloyd, B.A.; Philip Smith, B.A.; Charles Wilson, B.A. 1957

GEOLOGY AND GEOPHYSICS

Professor:

George Harold Reavely, B.A. and M.A., D.I.C. London, Head of the Dept. 1928

Associate Professors:

George Gordon Suffel, B.Sc. and M.Sc. Queen's, Ph.D. Stanford 1946
Aleksis Dreimanis, N.Nat.Sc. Riga 1948
Robert James Uffen, B.A.Sc. and M.A. Toronto; Ph.D.; P.Eng. (Head of Geophysics) 1950

Assistant Professor:

Charles Gordon Winder, B.Sc.; M.Sc. and Ph.D. Cornell 1953

Lecturer:

Gary McGregor Boone, B.A. Bowdoin, M.A. Brown 1957

Preceptor:
A. M. Reid, B.Sc. St. Andrews 1957

Graduate Demonstrator:
Ram Gopal Agarwal, B.Sc. Banaras, M.A. Toronto 1956

GERMAN

Professor:
Herbert Karl Kalbfleisch, B.A.; M.A. New York, M.A. and Ph.D. Michigan; Head of the Dept. 1931

Assistant Professor:
Shalom Weyl, *Staats-examen*, Cologne, M.A. McGill, Ph.D. Toronto 1946

Lecturers:
Ronald Alexander Allen, B.A. and M.A. Toronto, Ph.D. Chicago, (part-time); Dean of Graduate Studies; Vice-President of the University 1923
Herbert Lehnert, Ph.D. Kiel (part-time) 1957

For **GREEK**, see **CLASSICS**

HEALTH

The University Physician:
Richard John Bowen, B.A., M.D. 1955

For **HEBREW**, see Huron College

HISTORY

Professors:
Wallace Klippert Ferguson, B.A.; M.A. and Ph.D. Cornell; Litt.D., Head of the Dept. 1956
Hartley Munro Thomas, B.A. Queen's, M.A. and Ph.D. Harvard 1931

Associate Professor:
Walter Balderston, B.A. and Ph. D. Cornell 1945

Lecturers:
John Rowland William Gwynne-Timothy, B.A. and M.A. Toronto, D. Phil. Oxon. 1953
John Purves McLaughlin, B.A. Queen's, Ph.D. London; Assistant Librarian 1957

Instructor:
William Herbert Stockdale, A.B. and M.A. Alabama, Ph.D. New York 1956

Lecturers (part-time):
Star Floyd Maine, B.A.; B.D. Victoria, M.A. and Ph.D. Chicago, Director of Extension and Summer School Dept. 1926
Alfred Ernest Raymond, B.A.; M.A. Toronto, Ph.D. Chicago 1944
James John Talman, B.A. and M.A.; Ph.D. Toronto; F.R.S.C.; University Librarian 1939

For **HOME ECONOMICS**, see Ursuline College

For **ITALIAN**, see **ROMANCE LANGUAGES**

JOURNALISM

Professor:
John Leslie Wild, B.A., Head of the Dept. 1947

Associate Professor:
Isabel Turnbull Dingman (Mrs. J. J.), B.A. and M.A. Manitoba 1948

Lecturers (part-time):
Thomas Hugh Bremner 1957
Randolph John Churchill 1946
John Kerr Elliott, B.A. 1946
Arthur Rutherford Ford, B.A. and LL.D. Toronto 1946
Orlo Miller 1953
Earl Hubert Slater, B.A. Toronto, Barrister-at-Law, Osgoode 1951
James John Talman, B.A. and M.A.; Ph.D. Toronto; F.R.S.C.; University Librarian 1939
C. Robert Turnbull 1952

For **LATIN**, see **CLASSICS**

LIBRARY SCIENCE

Lecturers (part-time):
Olga Bishop, B.A. and M.A. Mt. Allison, B.Pub. Admin. Carleton, A.M.L.C. Michigan 1953
Jeanne Carroll 1956
Barbara Findlay, A.L.A. 1956
Barbara Gene Luce, B.A.; B.L.S. McGill 1957
John Purves McLaughlin, B.A. Queen's, Ph. D. London; Assistant Librarian 1957
James John Talman, B.A. and M.A.; Ph.D. Toronto; FR.S.C.; University Librarian 1939

Assistants:
Jenny Threadgold (Mrs. L.), B.A. Dublin 1956
Margaret Pauline Ann Williams, B.A. Univ. College of Wales, A.L.A. 1957

MATHEMATICS AND ASTRONOMY

Professors:
Gordon Richey Magee, B.A.; M.S. and Ph.D. Chicago, Head of the Dept.
Randal Hudie Cole, B.A.; M.A. and Ph.D. Wisconsin 1940
Arthur Woods, B.A. and M.A. Queen's 1920

Assistant Professors:
Barron Brainerd, S.B. Mass. Inst. of Tech., M.S. and Ph.D. Michigan 1957
William Wehlau, A.B. and Ph.D. California 1957

Lecturers:
Arwell Evans, B.Sc. Swansea, M.Sc. Wales 1954
John A. Mereu, B.A.; F.S.A. Society of Actuaries (part-time) 1957

Instructors:
William Herbert Adamson, B.A. and M.A. Queen's 1956
Douglas Albert Clarke, B.A. 1957

For **MODERN LANGUAGES**, see **ROMANCE LANGUAGES**

PHILOSOPHY

Professor:
Allison Heartz Johnson, B.A. Mt.Allison, M.A. and Ph.D. Toronto; F.R.S.C.; Head of the Dept. 1937

Assistant Professors:
John Andrew Bruce, B.A. and M.A.; Ph.D. London 1952
Perry Ronald Robinson, B.A. and M.A.; Ph.D. London 1954

Lecturers:
Wilbert Cameron Henry, B.A. and M.A. 1952
Harold Joseph Johnson, B.A. Alfred, Ph.D. Chicago 1950

Instructors:
Peter Adam Angeles, B.A. and M.A. Columbia 1956
John Whitney Davis, A.B., A.M., Ph.D. Boston 1957

Graduate Assistants:
John Ralph Hicks, B.A. 1956
Hugh John McIntyre, B.A. 1957
Richard Grattan Virene, B.A. 1956

PHYSICAL AND HEALTH EDUCATION

Professor:
Willard Joseph L'Heureux, B.A.; M.A. Michigan, Head of the Dept. 1950

Assistant Professors:
Elfrida Berzins (Mrs.), M.M. Riga 1952
John Russell Fairs, B.Sc.; M.A. Columbia 1947

Lecturers:
Edgar DeArmon, B.Sc. Northeastern State Teachers' 1957
John Arthur Faulkner, B.A. and B.P.H.E. Queen's, M.S. Michigan 1956
John Pius Metras, Director of Intercollegiate Athletics (Special Lecturer) 1935
Michael Yuhasz, B.A.; M.S. Illinois 1954

Lecturers (part-time):
Theodore Henry Coffey, D.P.E. Harvard, MD.C.M. Queen's 1948
William John Pillsworth, B.A.; M.A. New York 1951

Instructors:
Patricia Demaray, B.A. 1957
Helen Vieno Korri, B.A. 1956
Murray McNie 1933

PHYSICS

Professors:

Austin Donald Misener, B.A. and M.A. Toronto, Ph.D. Cantab.; F.R.S.C.; Head of the Dept. 1949

Ray Leroi Allen, B.A. and M.A. Mt. Allison 1921

Associate Professors:

A.M.I.A.W. Durnford, B.A. and M.A.; Ph.D. Toronto 1930

John Henry Blackwell, B.Sc. Melbourne, M.Sc. and PhD 1947

Eric Brannen, B.A. and M.A. Toronto, Ph.D. McGill 1949

Ralph William Nicholls, B.Sc. and Ph.D. London, A.R.C.S. 1948

Assistant Professors:

Peter Arthur Fraser, B.Sc., M.Sc. Wisconsin; Ph.D. 1956

Eric Harold Tull, B.A.Sc. British Columbia; M.Sc., P. Eng. 1945

Lecturers:

Charles Murray Carmichael, B.Sc. and M.Sc. 1947

John Campbell Forrester MacDonald, B.A. and M.A. British Columbia, Ph.D. Toronto, (Honorary) 1957

Donald Richard Stevenson, B.A.Sc. Toronto, M.S.E. Michigan, Mech.E. and Sc.D. Mass. Inst. of Technology, P. Eng. 1957

Instructor:

James Arthur Fulford, B.Sc. 1956

Research Associate:

David Robinson, B.Sc. and M.Sc. Belfast; Ph.D. 1954

Demonstrators:

George Waugh Hudson, G.Eng. McGill 1955

Merrill Arthur Edwards, B.Sc. New Brunswick; M.Sc.; John William Prothero, B.Sc. 1956

Ram Gopal Agarwal, B.Sc. Banaras, M.A. Toronto; Peter William Manuel, B.Sc.; Rama Chandra Murty, B.Sc. Andhra, M.Sc. and Dip.Lib. Bombay; John Harvey Stockhausen, B.Sc. and M.Sc. (London) Univ. College of the West Indies; Frederick Adam Zelonka, B.A. 1957

Research Fellows and Scholars:

Gerard R. Hebert, B.Sc. Ottawa, M.Sc. British Columbia, M.Sc. Catholic U. of America; Faruq Aziz Khan, B.Sc. and M.Sc. Dacca 1955

Heinrich Froelich, B.Sc. Berlin; Garth Lloyd Olde, M.Sc.; William Hambleton Parkinson, M.Sc.; Edmond Morden Reeves, M.Sc.; Alvin John Surkan, B.Sc. Alberta, M.A. Toronto 1956

Michael Douglas Watson, B.Sc.; Robert Malcolm Ellis, B.A. 1957

For POLITICS, see ECONOMIC AND POLITICAL SCIENCE

PSYCHOLOGY

Professor:

Gordon Haslam Turner, B.A., M.A. and Ph.D. Toronto, Head of the Dept. 1945

Associate Professors:
- Leola Ellen Neal, B.A.; M.A. and Ph.D. Toronto; Dean of Women; (part-time) 1933
- Mary Jean Wright, B.A.; M.A. and Ph.D. Toronto 1946

Assistant Professor:
- John Paul, B.A., M.A. and Ph.D. Toronto 1956

Lecturers:
- Charles Hart Aharan, B.A. and M.A., (Honorary part-time) 1954
- Harold Niel Blackwell, B.A. and M.A.; Ph.D. Toronto (part-time) 1951
- Kingsley George Ferguson, B.A.; M.A. and Ph.D. Toronto (part-time) 1945
- Jaroslav Havelka, M.A. Masaryk, Ph. D. Milan, M.Sc. McGill 1956
- Richard Gene Stennett, B.A. and M.A.; Ph.D. McGill (part-time) 1957

Instructors:
- Morris Modris Schnore, B.A. and M.A.; Ph.D. McGill 1957
- Frank William Ralph Taylor, B.A. and M.A. Toronto 1956

Graduate Assistants:
- Reinhold Riese, B.A.; Douglas James Torney, B.A. 1957

For **RELIGIOUS KNOWLEDGE**, see the Affiliated College section which follows this list

ROMANCE LANGUAGES
(French, Italian, and Spanish)

Professors:
- Robert Warren Torrens, B.S. Dartmouth, M.A. Harvard, Ph.D. Cornell, Head of the Dept. 1944
- Herbert Edward Jenkin, B.A. London, *D.ès L.* Laval; F.R.S.A.; Director of the French Summer School 1929
- William Edwin Collin, *L.ès. L.* Toulouse, M.A. 1923

Associate Professor:
- Frances Kathleen Montgomery, B.A. and M.A.; *D. de l'U. de Paris* 1930

Assistant Professors:
- Lionel Jacques Seymour Metford, B.A. and M.A.; *D. de l'U. de Paris* 1949
- Robert Newton Shervill, B.A.; M.A. North Carolina 1946

Lecturer:
- Norman Adrian Bennetton, M.A. Southern Califarnia, Ph.D. Johns Hopkins 1957

Instructors:
- Maximilian Alvarez, B.A. Valladolid (Spain) 1955
- Bruce Davies, B.A. McMaster, M.A. Harvard 1957
- Jean Cross Newman (Mrs. R.), B.A. McGill, A.M. Radcliffe, *Dra. en Fa.,* Madrid (on leave) 1951
- Basil Peter Seymour, B.A. Oxon., M.A. Toronto 1957
- Moyra Patricia Ann Trainor, B.A. Toronto 1957

Graduate Assistant:
Jack Warwick, B.A. Oxon. 1957

RUSSIAN STUDIES

Instructor:
Helen Isyumov (Mrs. P. N.) B.A. Univ. of Moscow 1956

SECRETARIAL SCIENCE

Professor:
Mary Hamilton Gillespie, B.A.; M.A. Columbia, Head of the Dept. 1935

Assistant Professor:
Elaine Woodrow Chapman (Mrs. C. B.), B.A. 1945

Instructors:
Eleanor Gertrude Strang, B.A. 1957
Roma Lucille Waller (Mrs.), B.A.; M.A. Columbia 1953

Assistant:
Janet Cramer Ward 1956

ZOOLOGY

Professors:
Anthony William Aldridge Brown, B.Sc.F., M.A. and Ph.D., Toronto; M.B.E., Head of the Dept. 1947
Helen Irene Battle, B.A. and M.A.; Ph.D. Toronto 1924
William Alexander Kennedy, B.A. and Ph.D. Toronto; Honorary (part-time) 1957

Associate Professors:
William Wallace Judd, B.A. McMaster; M.A.; Ph.D. Toronto 1950
David Maxwell Scott, B.Sc. and Ph.D. McGill 1951

Assistant Professor:
Robert Harvey Stinson, B.A. McMaster, Ph.D. Toronto 1950

Lecturer:
Thomas Kenneth Richard Bourns, B.A. and M.A. British Columbia, Ph.D. Rutgers 1957

Honorary Lecturers (part-time):
William Chefurka, B.Sc. Manitoba, M.A. Montana State, Ph.D. Harvard (on leave) 1953
Ernest Howard Colhoun, B.S.A. Toronto, Ph.D. Cantab., F.R.E.S. 1956
Robert William Fisher, B.Sc. (Agr.) and Ph.D. McGill 1953
Andrew Hampden Lawrie, B.A. and M.A. Toronto 1957
Hector Alexander Urquhart Monro, B.Sc. (Agr.) and M.Sc. McGill 1951
David Paul Scott, B.Sc. and M.Sc. McGill, Ph.D. British Columbia 1957
John James Tibbles, B.S.A. Toronto, M.Sc. and Ph.D. Wisconsin 1957

Instructor:
Donald Burley McMillan, B.Sc. and M.Sc. 1956

Preceptor:
Barbara Louise Shaw, B.A. Mt. Allison; M.Sc. 1952

Graduate Demonstrators:
Isabel McCracken Allin (Mrs.), B.A. 1942
Kaye Hayashida, B.A. McMaster 1955
Betty Cram Cornish (Mrs.), B.Sc.; Kailash Narain Mehrotra, M.Sc. Banaras; John Purko, B.A. 1956
Aarne Lamsa, B.A. Toronto; Stanley Manax, B.A.; Joan Mortimer, B.Sc. 1957

National Research Council Postdoctorate Fellow:
Lawrence Theodore Threadgold, B.A. and Ph.D. Dublin 1956

MUSIC TEACHERS' COLLEGE
(London, Ontario)
(Founded and affiliated in 1945; in 1956 it became a constituent college of Arts)

Principal
Clifford Poole

Professors:
Clifford Poole, Principal and Co-Head of the Piano Department 1949
Margaret Parsons Poole, Co-Head of the Piano Department 1949
Alfred Rosé, B.A., Head of the Voice Department 1948

Assistant Professor:
Clifford von Kuster, Mus. Bac. 1951

Lecturers:
John Cook, A.R.C.M., F.R.C.O. 1954
Howard Munn 1953
Earle Terry, M. Mus. 1954
Lillian Wilson 1945

(All Arts subjects required for a General Course degree with Music Options are taught in University College classes.)

HURON COLLEGE
(London, Ontario)
(Founded in 1863)

Principal
The Reverend W. R. Coleman, M.A., D.D.

Registrar
The Reverend J. Grant Morden, B.A., B.D., S.T.M.

ST. PETER'S AND CHRIST THE KING COLLEGES
(London, Ontario)
(Founded in 1912; affiliated in 1923)

Rector
Rt. Rev. A. P. Mahoney, P.A., V.G., LL.D.

Dean of Arts
The Reverend L. A. Wemple, B.A., Ph.L.

Registrars
The Reverend W. F. Simpson, M.A. and the Reverend E. P. LaRocque, M.A.

URSULINE COLLEGE
(London, Ontario)
(Affiliated in 1919)

Dean
Mother Marie, M.A., Ph.D.

Registrar
Mother M. Marina, B.A.

WATERLOO COLLEGE
(Waterloo, Ontario)
(Affiliated in 1925)

President
J. Gerald Hagey, B.A., LL.D.

Dean
The Reverend Lloyd H. Schaus, M.A., B.D.

Registrar
Nayda M. Schultz, B.A.

FACULTY MEMBERS OF THE AFFILIATED COLLEGES

(The year of first appointment in the University is given. Unless otherwise indicated, the degrees have been granted by this University. "H" designates Huron College, "P" St. Peters' and Christ the King College, "U" Ursuline College, and "W" Waterloo College.)

For **BOTANY**, see **SCIENCE**

BUSINESS ADMINISTRATION

Associate Professor:
- Herman Olaf Johan Overgaard (W), B.A. *Manitoba* M.S. Columbia — 1947

Lecturers:
- Ronald Buddell (W), B.A. Queen's, C.P.A. (part-time) — 1954
- Alton Westwood Joseph Craig (P), B.Comm. St. Dunstan's; M.B.A. — 1957

For **CHEMISTRY**, see **SCIENCE**

CLASSICS

Assistant Professors:
- Frank Hartley Allen (H), M.A. and B.D. Oxon. — 1957
- James Allan Stewart Evans (W), B.A. Toronto, M.A. and Ph.D. Yale — 1955
- Arthur Bernard Little (W), B.A. and B.D.; M.A. Toronto, S.T.M. and S.T.D. Chicago Lutheran Seminary — 1954

Lecturers:
- Fergus Joseph Patrick Laverty (P), B.A. — 1942
- Mother M. St. Catherine (U), B.A. — 1945

Instructor:
- Joseph Peter Finn (P), B.A.; Ph.D. Catholic U. of America — 1953

ECONOMIC AND POLITICAL SCIENCE
(Economics, Politics, and Sociology)

Professor:

Mother M. St. Michael (U), A.T.C.M.; B.A.; M.A. Catholic U. of America, Ph.L. and Ph.D. Laval 1938

Associate Professors:

Francis Geoffrey Waddington Adams (W), BA. and M.A. Toronto, Ph.D. Chicago 1953

Herman Olaf Johan Overgaard (W), B.A. Manitoba, M.S. Columbia 1947

Assistant Professors:

George Frederick Durst (W), B.A. and B.D.; M.A. Toronto 1951

Max D. Stewart (W), B.A. and B.Comm. Alberta, M.A. Toronto 1956

Mother M. Rosanna (U), A.T.C.M.; B.A.; M.A. Catholic U. of America; Assistant Registrar, Ursuline College 1935

Lecturers:

Ignatius John Adel-Czlowiekowski (P), LL.M. Lemberg (Poland), Ph.D. Fribourg (Switzerland) 1958

Reverend T. L. McManus (U), B.A.; J.C.L. 1948

Instructor:

Eleanor Graves Torrens (Mrs. R. W.) (U), A.B. and M.A. North Carolina 1945

ENGLISH

Professors:

Eleanor Croysdale Jared (H), M.A. Toronto, Ph.D. Radcliffe 1930

Flora Roy (W), B.A. and M.A. Sask. 1948

Associate Professor:

James McNab Clark (W), B.A. and M.A. Manitoba 1948

Lecturers:

Anna Margaret Evans (Mrs. W. D.) (W), B.A.; M.A. Toronto 1935

Stanley Edward McGuire (P), B.A.; M.A. Toronto 1956

John Nicol (W), B.A. and M.A. Toronto 1957

George Elmore Reaman (W), B.A. Toronto, Ph.D. Cornell 1954

James MacLeod Sandison (W), B.A. and M.A. British Columbia 1957

Nayda Schultz (W), B.A., (part-time) 1956

William Francis Simpson (P), B.A. and M.A. 1935

David George Taylor (H), B.A. and M.A. Toronto 1956

Instructors:

Mother Mary Agnes (U), B.A.; M.A. Toronto 1939

Mother M. Corona (U), B.A.; M.A. Notre Dame 1957

Mother M. St. Catherine (U), B.A.; M.A. Detroit 1945

Fritz Maximilian Gerhard Wieden (P), B.A.; (part-time) 1955

Mark Joseph Wildgen (P), B.A.; Ph.L. Laval, S.T.L. Angelicum (Rome) 1949

GEOGRAPHY

Associate Professor:

Herman Olaf Johan Overgaard (W), B.A. Manitoba, M.S. Columbia 1947

Assistant Professor:
George Frederick Durst (W), B.A. and B.D.; M.A. Toronto 1951

For GEOLOGY, see SCIENCE

GERMAN

Assistant Professors:
J. Wilhelm Dyck (W), A.B. Bethel, M.A. Missouri, Ph.D. Michigan 1957
Kurt Nabert (W), B.A. and M.A. Toronto 1951

Lecturer:
Harald Scholler (W), Ph.D. Marburg 1957

Instructor:
Mother Mary Agnes (U), B.A.; M.A. Toronto 1939

HEBREW

Professor:
Roland Kenneth Harrison (H), B.A.; M.Th. and Ph.D. London; Registrar of Huron College 1949

Lecturer:
Ragnar C. Teigen (W), B.A. Concordia, B.Th. Luther Theological Seminary, M.Th. Princeton 1956

HISTORY

Professors:
John Lanceley Henderson (H), B.A., B.D., D.D. 1957
Mother M. Mercedes (U), B.A. and M.A. 1930
John Gordon Rowe (H), B.A. and B.D. Harvard, M.A. and Ph.D. Toronto; Dean of Residence at Huron College 1955

Associate Professor:
Francis Geoffrey Waddington Adams (W), B.A. and M.A. Toronto, Ph.D. Chicago 1953

Assistant Professor:
George Frederick Durst (W), B.A. and B.D.; M.A. Toronto 1951

Lecturers:
Paul Eugene Crunican (P), B.A.; M.A. Toronto 1956
Anna Margaret Evans (Mrs. W. D.) (W), B.A.; M.A. Toronto 1935
John Kevin Anthony Farrell (P) (U), B.A. and M.A.; Ph.D. Ottawa 1957

Instructor:
James Patrick Ryan (P), B.A. Ottawa

HOME ECONOMICS

Professor:
Mother M. Dominica (U), B.A. and M.A. Toronto 1945

Associate Professor:
Mother M. St. Dominic (U), B.Sc. Marywood 1946

Instructors:
Mother M. Victoria (U), B.Sc. Chestnut Hill 1949
Isabel Park (U), B.A. and M.A. Toronto 1947

LIBRARY SCIENCE

Lecturers:

Anthony Joseph Durand (P), B.A. and M.A.; Ph.L. and Ph.D. Laval 1939
John Lanceley Henderson (H), B.A., B.D., D.D. 1957
Doris Irene Lewis (Mrs. M. E.) (W), B.A. Toronto 1949
Mother M. Rosanna (U), A.T.C.M., B.A.; M.A. Catholic U. of America 1935

Instructor:

Eleanore Catherine Donnelly (U), BA.; B.L.S. Toronto 1941

MATHEMATICS

Professor:

Ralph Gordon Stanton (W), B.A., M.A., Ph.D. Toronto 1957

Assistant Professor:

Alice Marie Metzger (W), B.A.; M.A. Queen's 1954

Lecturers:

John Joseph Bensette (P), B.A.; M.A. Detroit 1955
John Keith Oddson (W), B.A.Sc. Toronto 1957
Peter Ponzo (W), B.A.Sc. Toronto 1957

Instructor:

Mother M. Carmelita (U), B.A.; M.A. Notre Dame 1955
Blair Gray (H), B.A. Queen's (part-time) 1957

MUSIC

Lecturers:

George Alexander Black (H), B.A. and M.A. Toronto, Church Music 1956
Ulrich Leupold (W), Ph.D. Berlin, Director of Music in Waterloo College 1945

PHILOSOPHY

Professors:

Anthony Joseph Durand (P), B.A. and M.A.; Ph.L. and Ph.D. Laval 1939
William Sparkes Morris (H), B.A. Bristol, Ph.D. Chicago 1955
Lester Albert Wemple (P), B.A.; Ph.L. Angelicum (Rome); Dean of Christ the King College 1934

Associate Professor:

Mother M. St. Michael (U), A.T.C.M., B.A.; M.A. Catholic U. of America, Ph.L. and Ph.D. Laval 1938

Assistant Professor:

Robert Bruce Langen (W), B.A. and M.A. Toronto 1955

Lecturers:

Otto William Heick (W), A.B. and D.D. Wittenberg, B.D. Hamma Divinity School, A.M. and Ph.D. Nebraska 1947
Charles Hanly (H), B.A. Toronto 1957
John Frederick Little (W), B.A., B.D., Th.M. Princeton Theological Seminary, M.A. Princeton 1958

Instructors:

Leo James Flynn (U) (P), B.A.; S.T.D. Angelicum (Rome), S.S.L. Biblical Institute 1936

Arnold Francis Loebach (U) (P), B.A.; J.C.L. Catholic U. of America 1950

William Joseph Ring (P), B.A.; Ph.L. Laval 1951

Mark Joseph Wildgen (U) (P), B.A.; Ph.L. Laval, S.T.L. Angelicum (Rome) 1949

PHYSICAL EDUCATION

Lecturers:

Jean Grace Briggs (W), B.A. and M.A. Toronto 1956

Carl Andrew Totzke (W), B.A. 1954

Instructors:

Paul Eugene Crunican (P), B.A. and M.A. Toronto 1956

Helen Vieno Korri (U), B.A. 1956

PSYCHOLOGY

Associate Professors:

William Harold Bexton (W), B.A. McMaster, M.A. Sask., Ph.D. McGill 1954

Mother M. St. Michael (U), A.T.C.M., B.A.; M.A. Catholic U. of America 1938

Assistant Professor:

Douglas Campbell Fraser (W), B.Sc. Glasgow, M.Sc. Cambridge, M.A. and Ph.D. Edinburgh 1957

Lecturers:

Joseph Peter Finn (P), B.A.; Ph.D. Catholic U. of America 1953

Thomas R. Harris (H), B.A. Toronto, B.D. Union Theological Seminary, M.A. Columbia 1957

Henry Wilkes Wright (W), B.A. and Ph.D. Cornell, LL.D. Manitoba 1953

Instructors:

Mother M. Carmelita (U), B.A.; M.A. Notre Dame 1955

William Joseph Ring (P), B.A.; Ph.L. Laval 1951

Mark Joseph Wildgen (P), B.A.; Ph.L. Laval, S.T.L. Angelicum (Rome) 1949

RELIGIOUS KNOWLEDGE

Professors:

James Joseph Carrigan (U), B.A.; S.T.L. and S.T.D. Montreal 1948

William Robert Coleman (H), B.A. and M.A. Toronto, B.D. and D.D. Wycliffe, S.T.M. Union Theological Seminary, F.R.S.A.; *Principal of Huron College* 1952

Associate Professor:

Mother M. St. Michael (U), A.T.C.M., B.A.; M.A. Catholic U. of America, Ph.L. and Ph.D. Laval 1938

Assistant Professors:

Frank Hartley Allen (H), MA. and B.D. Oxon. 1957

John Grant Morden (H), B.A. Toronto, B.D. Wycliffe, S.T.M. Union Theological Seminary 1957

Lecturers:
John Joseph Bensette (P) (U), B.A.; M.A. Detroit 1955
Paul Eugene Crunican (P), B.A.; M.A. Toronto 1956
Eugene Philip LaRocque (P), B.A.; M.A. Laval 1956
Lloyd Henry Schaus (W), B.A. and B.D.; M.A. Columbia, Dean of Waterloo College 1947

Instructor:
Mother M. Carmelita (U), B.A.; M.A. Notre Dame 1955

ROMANCE LANGUAGES
(French, Italian, and Spanish)

Professors:
Mother Marie (U), B.A. and M.A.; Ph.D. Toronto 1925
William Francis Simpson (P), B.A. and M.A. 1935

Associate Professors:
Mother M. Rosanna (U), A.T.C.M., B.A.; M.A. Catholic U. of America 1935
James Bernard Sanders (W), B.A. and M.A. Manitoba, *D. de l'U. de Paris* 1954

Assistant Professors:
Jean Grace Briggs (Mrs. T.) (W), B.A. and M.A. Toronto 1956
James Cuthbert McKegney (W), B.A.; M.A. Oregon 1955
Dorothea Walter (Mrs. C.) (W), B.A. and M.A. Queen's 1957

Lecturers:
George Alexander Black (H), B.A. and M.A. Toronto 1957
Eugene Philip LaRocque (P), B.A.; M.A. Laval 1956
Dante Anthony Lenardon (P) (U), B.A. and B.Ed. Alberta, M.A. Toronto 1956

SCIENCE
(Botany, Chemistry, Geology, Physics, and Zoology)

Professor:
Bruce Weyler Kelley (W), B.A. Queen's, M.Sc. Chicago 1946

Assistant Professor:
Harold Kenneth Ellenton (W), B.Sc.; M.A. Toronto 1952

Lecturers:
Theodore Louis Batke (W), B.A.Sc., M.A.Sc., Ph.D. Toronto 1957
Geoffrey Power (W), B.Sc. Durham 1957

SECRETARIAL SCIENCE

Assistant Professor:
Winnifred Elvy Beno (W), B.A. 1947

Lecturers:
Marion Burgess (W), B.A. 1955
Esther Jane Brandon (W), B.A. 1956

For **SPANISH**, see **ROMANCE LANGUAGES**

For **ZOOLOGY**, see **SCIENCE**

Calendar for 1958

JANUARY						
S	M	T	W	T	F	S
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12	13	14	15	16	17	18
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FEBRUARY						
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MARCH						
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APRIL						
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MAY						
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JUNE						
S	M	T	W	T	F	S
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JULY						
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AUGUST						
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SEPTEMBER						
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OCTOBER						
S	M	T	W	T	F	S
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19	20	21	22	23	24	25
26	27	28	29	30	31	.

NOVEMBER						
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DECEMBER						
S	M	T	W	T	F	S
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14	15	16	17	18	19	20
21	22	23	24	25	26	27
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Calendar for 1959

JANUARY						
S	M	T	W	T	F	S
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4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

FEBRUARY						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28

MARCH						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	31	.	.	.	.

APRIL						
S	M	T	W	T	F	S
.	.	.	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	.	.

MAY						
S	M	T	W	T	F	S
.	.	.	.	.	1	2
3	4	5	6	7	8	9
10	11	12	13	14	15	16
17	18	19	20	21	22	23
24	25	26	27	28	29	30
31	.	.	.	.	.	.

JUNE						
S	M	T	W	T	F	S
.	1	2	3	4	5	6
7	8	9	10	11	12	13
14	15	16	17	18	19	20
21	22	23	24	25	26	27
28	29	30	.	.	.	.

JULY						
S	M	T	W	T	F	S
.	.	.	1	2	3	4
5	6	7	8	9	10	11
12	13	14	15	16	17	18
19	20	21	22	23	24	25
26	27	28	29	30	31	.

AUGUST						
S	M	T	W	T	F	S
.	.	.	.	.	.	1
2	3	4	5	6	7	8
9	10	11	12	13	14	15
16	17	18	19	20	21	22
23	24	25	26	27	28	29
30	31	.	.	.	.	.

SEPTEMBER						
S	M	T	W	T	F	S
.	.	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	.	.	.

OCTOBER						
S	M	T	W	T	F	S
.	.	.	.	1	2	3
4	5	6	7	8	9	10
11	12	13	14	15	16	17
18	19	20	21	22	23	24
25	26	27	28	29	30	31

NOVEMBER						
S	M	T	W	T	F	S
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18	19	20	21
22	23	24	25	26	27	28
29	30	.	.	.	.	.

DECEMBER						
S	M	T	W	T	F	S
.	.	1	2	3	4	5
6	7	8	9	10	11	12
13	14	15	16	17	18	19
20	21	22	23	24	25	26
27	28	29	30	31	.	.

ACADEMIC CALENDAR

1958

July 7, Monday	Summer Session begins.
August 7 and 8, Thursday and Friday	Supplemental examinations (Faculty of Arts and Science).
August 16, Saturday	Summer Session examinations end.
September 1, Monday	Last day for receiving applications and certificates for the Winter Session.
September 22, Monday	Conference of the Faculty (all Arts and Science Colleges).
September 23, Tuesday	Registration of new students from Brant, Elgin, Essex, Lambton, Middlesex and Oxford counties; physical examinations of the same students.
September 24, Wednesday	Registration of new students from other centres; physical examinations of the same students. Official welcome of new students.
September 25, Thursday (8.30 to 12.00; 1.00 to 4.00)	Registration of second, third and fourth year students in Arts and Science, from Brant, Elgin, Essex, Lambton, Middlesex and Oxford counties. *Prescribed Orientation meetings for new students.*
September 26, Friday (8.30 to 12.00; 1.00 to 4.00)	Registration of second, third and fourth year students in Arts and Science, from other centres.
September 29, Monday	Lectures begin for all Arts and Science students (graduate and undergraduate. Graduate students may attend classes without registering until October 2nd).
October 2, Thursday	Registration of Graduate students from all Faculties.
October 13, Monday	Thanksgiving Day, holiday.
October 14, Tuesday	Last day for the enrolment of full-time students, graduate or undergraduate.
October 24, Friday	Autumn Convocation; meeting of the University Senate.
November 11, Tuesday	Remembrance Day ceremony.
November 15, Saturday	Last day for changes in registration.
December 12, Friday	Meeting of the University Senate.
December 20, Saturday	Christmas vacation begins.

1959

January 5, Monday	Lectures resume.
January 19, Monday	Second term begins in the Faculty of Arts and Science.
February 7 and 14, Saturday	Graduate Record Examinations for Senior students who wish to take them.
March 6, Friday	Founders' Day ceremonies.
March 27, Friday	Good Friday; University buildings closed.
April 18, Saturday	Second term classes close, in the Faculty of Arts and Science.
April 25, Saturday	Arts and Science examinations begin.
May 9, Saturday	Arts and Science examinations end.
May 29, Friday	Meeting of the University Senate.
May 30, Saturday	Spring Convocation.

FEES

Fees are paid in full on registration day, but if necessary they may be divided after consultation with the Comptroller, into two instalments payable on the first day of each term. The extra charge for this division is $5.00. Students must pay their fees as above before attending any lectures or examinations, except by permission of the Dean of the Faculty and the Comptroller. No student shall be recommended for any diploma or degree until his tuition fees and other accounts owed to the University are paid.

Students registering in the constituent University in any year and then transferring during the same year to an affiliated college will be charged by the University, on such transfer, a minimum penalty of $50.00.

Students transferring from an affiliated college to the University under similar circumstances will be charged by the University the full annual fee for the year, regardless of the date of the transfer.

The Board of Governors reserves the right to amend fees after the printing of this list.

Annual Tuition and Prescribed Accessory Fees

For FULL-TIME intramural undergraduate students

(this annual sum includes registration, regular examination and graduation fees, laboratory and microscope charges, University College Council, University Concert Series, Athletic Association, Thames Hall facilities and Students' Health Insurance and Health Service fees, for the following courses):

All first year students (except Engineering)	$385.00
Engineering	460.00
Students in second and subsequent years in Honors courses in the Humanities and the Social Sciences (excluding Business Administration, Mathematics and P.H.R.E.)	345.00
Students in second and subsequent years in all other courses	385.00

For PART-TIME Students

Tuition—Intramural, each course including examination (laboratory fees extra)	$ 50.00
Tuition—Correspondence, *Extension, Summer School, each course, including examination	55.00
Half-course	27.50
Tuition—non-credit (non-refundable), each course	15.00
Laboratory and microscope fees, each science	10.00

Examinations

(Payable at time of application for any of the following):

Supplemental, each paper $5.00, maximum	$ 15.00
Presiding fee at an outside centre, each half-day	5.00
Graduate Record Examination (institutional plan)	5.00
Aptitude Test, at date other than regular testing-period	6.00
Special examination, at date other than May or August, each paper	15.00

Late Registration

For intramural students only (waived only when a medical certificate of serious illness is presented)	5.00

Certificates

Evaluation of non-Canadian certificates for admission	$ 2.00
Transcript of record, each copy	1.00

Degrees and Diplomas

Degree of B.D.	$ 24.00

(The fees for all other degrees and diplomas are included in the annual tuition and prescribed accessory fees.)

STUDENT EXPENSES

A statement of annual expenses can at best be approximate; purely personal items (*e.g.*, laundry, clothes) are not included in the summary below and in other items individual tastes may vary. The following is a suggestion only:

Tuition and incidental fees	$345.00 to $ 460.00
Board (32 weeks)	480.00 to 600.00
Books and supplies	60.00 to 80.00
	$885.00 to $1,140.00

*Payable in full during the first week in November; $1 extra is charged for each course if fees are divided into two instalments.

EXPLANATION OF COURSE-NUMBERS

A course-number which is lower than 10 is equal in weight and difficulty to a Secondary Grade XII (Ontario) course in the same subject.

Preliminary year* courses are numbered between 10 and 19; they are equal in weight and difficulty to Secondary School Grade XIII (Ontario) courses in the same subjects.

First year general courses* are numbered betwen 20 and 29, second year* between 30 and 39, third year* between 40 and 49.

Second year honors courses are numbered between 200 and 299, third year between 300 and 399, fourth year between 400 and 499.

A course-number followed by –a is given in the first term only; followed by –b, in the second term only; followed by –x, in an affiliated college only.

A half course is one which meets less than two hours a week throughout the academic year, or less than four hours a week in one term.

*In the United States and in many parts of Canada, these should be regarded as freshman, sophomore, junior and senior year courses, respectively, following Junior Matriculation or High School graduation. In Ontario, a General Course degree requires only three years following Senior Matriculation (Grade XIII) standing.

COURSES

A first year student enters Junior Group 1 OR Junior Group 2 OR one of the specialized courses (II-VIII on pages 35-39).

Explanation of the Junior Group Plan: The purpose of the Junior Group is to offer one year of basic general education for students who come from a variety of secondary schools, and to postpone a freshman's choice of a course until the end of his first year. Then he is more likely to choose his subsequent course wisely than if his decision is made while he is still in High School, because during his first year he may study subjects not available in his High School. At the end of his Junior Group, he may take the second year of the General Course OR the second year of one of the Honors courses (see pages 40-55).

I. THE GENERAL COURSE

Junior Group 1 (the First Year for those who prefer Mathematics and Science)

Requirements for Admission*: Grade XIII or equivalent standing in English, another language, Mathematics (Algebra, Geometry, Trigonometry and Statics), Physics and Chemistry, with an average of 60%. If a student wishes to study Biology as his major subject of concentration, he may present Botany or Zoology intsead of Trigonometry and Statics.

Subjects

Chemistry 20
English 20
Physics 20
Three ** of: Botany 20, Geology 20, Mathematics 24, Zoology 20
Half courses in English 29, Health Lectures, Library Science, and Physical Education

Junior Group 2 (the First Year for those who prefer Arts or Business Administration)

Requirements for Admission*: Grade XIII or equivalent standing in English, another language, Latin or Mathematics (two of Algebra, Geometry, Trigonometry and Statics), and three additional examinations, with an average of 60%.

Subjects

English 20
French 20 or another language at the 20 level
Latin 20 or Math. 20 or a Natural Science at the 21-29 level
Two of: Economics 20, History 20, Philosophy 20
One ** of: Business 20, Economics 20, Geography 20, History 20, Journalism 20, Math. 20, Music 20, Phil. 20, Psychology 20, another language, another science.
Half courses in English 29, Health Lectures, Library Science, and Physical Education

*If it is permitted by the Admissions Committee, a deficiency in one subject of Grade XIII may be made up in the first year, by the completion of an appropriate university course. It is advisable, however, to clear such a condition in a Summer Session, rather than to carry it as an extra subject in a busy winter session.

**A student may not be able to obtain the options he prefers, especially if he registers late.

THE GENERAL COURSE

The next step is to decide whether to enter the second year of the General Course or the second year of an Honors Course (see pages 40-55). The General Course requires two more years for completion and leads to a B.A. degree. The Honors Course requires three more years and leads to an Honors B.A. or an Honors B.Sc. degree, as well as permitting specialization in one or two subjects.

If a student enters the second year of the General Course, he must select a Major and a Minor subject of concentration from Division A (the Humanities), Division B (the Social Sciences) or Division C (Mathematics and the Natural Scences). See pages 34-35 for a complete list of the subjects in each Division.

Second Year General (Course A)

(open to students who have completed Junior Group 1)

Subjects

French 20 or another language at the 20 level
Economics 20
One option from the Major subject (presumably from Division C)
One option from the Minor subject (presumably from Division A or B)
One option* from English, 32, 36, 38, 45, 49), History 36, Philosophy 30 or 32, Psychology 30
One more option from the Major subject, or a senior option from any Division in which another is needed.

*All four subjects must be taken ultimately; if one of them is selected as a Minor subject, another ought to be taken as the sixth subject in the second year.

Second Year General (Course B)

(open to students who have completed Junior Group 2)

Subjects

One option from the Major subject
One option from the Minor subject
*English 32 or 36 or 38 or 45 or 49
**Two subjects not previously selected from: Economics 20, History 20 or 36, Philosophy 30, Psychology 20, a laboratory course in Natural Science
Another option from the Major subject, or a senior option from any Division in which another is needed.

*This course may be counted as a Major or a Minor option in English. The student majoring in English must limit himself to two Senior English courses in the second year.

**All five subjects must be taken ultimately; if Philosophy 20 was not selected in the Junior Group, Philosophy 30 must be studied in one of the two final years.

Third Year General (Course A)

The courses not selected previously from: Senior English (32 or 36 or 38 or 45 or 49), History 36, Philosophy 30 or 32, Psychology 30
Two options from the Major subject
One option from the Minor subject

Note: It may be necessary to take one more option to meet the requirements in Division A or B. Work from Division D may be taken only as an extra course.

Third Year General (Course B)

A laboratory course in Natural Science (unless both courses from Division C have been done, in which case a Senior option may be selected from any Division in which one is needed)
Two options from the Major subject
One option from the Minor subject
One option from Senior courses in any Division in which another is needed.

General Regulations Regarding the Junior Groups

1. A student who may wish to enter an Honors Course should consult the program of his proposed course before selecting his options in Junior Group 1 or 2.
2. No Grade XIII or Senior Matriculation standing is to be allowed to substitute for a natural science in a Junior Group.
3. No course numbered betwen 1 and 9 may be counted toward a degree unless followed by a second course in the same subject. Not more than one course from those numbered between 10 and 19 may be counted toward a degree in the General Course.
4. If any course has been taken in a Junior Group, it may be counted once only toward a degree and will not count also in any subsequent year of any course.

The General Course

General Regulations Regarding Major and Minor Subjects

1. A Major subject consists of three or four (but not more than four) "Senior" options offered by one Department. A Minor subject consists of two "Senior" options from another Department.

2. When a student enters the Second Year of the General Course, he must select a Major and a Minor subject of concentration from the Humanities (Division A), the Social Sciences (Division B) or the Natural Sciences and Mathematics (Division C).

3. See pages 34-35 for a complete list of subjects in each Division.

4. After a student has selected his Major subject, he must consult with the Head of that Department concerning his choice of options. The Heads of some Departments will permit a few General Course students to do some Honors work.

5. The Major and the Minor subject may not be selected from the same Division, nor from Division D.

6. Either one or two Major options may be taken in the second year. Two Major options must be taken in the final year.

7. In the two final years, 60% must be obtained in six courses out of eleven, including an average of 60% in the Major options.

General Regulations Regarding the Whole Course

1. The Department of Education of Ontario accepts a degree in the General Course as the academic qualification for a High School Assistant's Certificate, Type B, for teaching in the elementary or secondary schools of Ontario.

2. At least three Senior courses must be taken from the Humanities (Division A) and three Senior courses from the Social Sciences (Division B). Two courses (one a laboratory science course) must be taken from Division C. If any courses are taken from Division D, only two will count toward a degree in this General Course.

3. No more than five courses may be taken from one Department.

4. Sometime before graduation in the General Course, there must be included in every program:

   Economics 20
   History 20 or 36
   A senior course in English, to be selected from 32, 36, 38, 45, 49
   Another language at the 20 level
   A laboratory course in a natural science
   Philosophy 20 or 30 (Philosophy 30 or 32 for Science students)
   Psychology 20 (or Psychology 30 for Science students)

5. Eight of the eleven courses of the two final years must be "Senior" courses numbered between 30 and 499. At least six of them must be taken at this University; transfer credit from other colleges or universities cannot cancel this minimum of six senior courses.

6. In the two final years, 60% must be obtained in six courses out of eleven, to meet the requirements for graduation. The average in the work of the final year is also important.

DIVISION A (The Humanities)

AT LEAST FOUR COURSES ARE TO BE SELECTED (three of which must be Senior Courses).

Junior Courses (numbered between 1 and 29)	Senior Courses (numbered between 30 and 499)
Classics (Greek 1, 10, 20, 29, Latin 1, 10, 20)	Classics (Greek 30, 39, 40, Latin 30, 39, 40)
English 20	English 32, 36, 38, 45, 49, (39, 46 under specific conditions)
German 1, 10, 20 (5 and 15 for Science students)	German 22, 30, 40, 45, etc.*
Hebrew 1-10 (or 1 and 10), 20	Hebrew 200, 30 (300), 40 (400)
Music 10, 20 or 20S	Music 30
Philosophy 20	Philosophy 30, 31, 35, 36, 42, 43, 44, 47, 48, etc.* or **
Romance Languages (French 10, 20, Italian 1, 10, 20, Spanish 1 and 10 or 1-10, 20)	Romance Languages (French 30, 40, 48, 270 or 271, 290, etc.*, Spanish 30, 31, 40, 41, 250, 360*
Russian 1, 10, 20 (if there is sufficient demand)	

DIVISION B (The Social Sciences)

AT LEAST FOUR COURSES ARE TO BE SELECTED (three of which must be Senior Courses).

Junior Courses (numbered between 1 and 29)	Senior Courses (numbered between 30 and 499)
Economic and Political Science (Economics 20, Sociology 20)	Economic and Political Science (Economics 30, 33, 46, 257, 351a, 351b, 355, 360, 363, 450,453, 455, Politics 32, 34, 42, 44, 351b, 452, 462b, Sociology 30, 38, 39, 40)
Geography 20	Geography 30 (330), 35 (335), 39 (239), 40 (440), 41 (441), 44 (444), 45 (445)
History 14, 20	History 31, 33, 35, 36, 44, 354b or 356a, and 30 (see the conditions below)***
Psychology 20	Psychology 30, 35, 36, 38, 39, 46, 48, 49 (30 is for Science students only, and 38 is only for those who have had 35)

DIVISION C (The Natural Sciences and Mathematics)

AT LEAST TWO COURSES ARE TO BE SELECTED (one of which must be Laboratory Science).

Junior Courses (numbered between 1 and 29)	Senior Courses (numbered between 30 and 499)
Biological Science 21 (Botany or Zoology section)	Botany 31a, 32b, 33a, 36b, 43b, etc.*
Botany 20	Chemistry 32, 33, 44, 46
Chemistry 20	Mathematics 30, 32, 33, 34, 35, 45
Geology 20 or 21	Physics 31, 41, etc.*
Mathematics 20, 24, 29 (Astronomy)	Zoology 30, 34, 37, 41, 43, 45
Physics 20	
Physical Science 21 (Chemistry or Physics section)	
Zoology 20, 21	

*Honors courses by permission of the Head of the Department.
**In the affiliated colleges, Philosophy 30x-36x, 42x-47x.
***History 30 may not be taken by anyone who has credit for History 20 or 36.

DIVISION D (Other Subjects)

These subjects may not be used as Major or Minor subjects and NOT MORE THAN TWO COURSES may be counted toward a General Course degree.

Junior Courses (numbered between 1 and 29)	Senior Courses (numbered between 30 and 499)
Business Administration 20	Business Administration 250
Home Economics 23, 24, 25, 26	Journalism*
Journalism 20	Physical Ed. 251, 253, 258, 352, 366
Military Studies	Religious Knowledge (in the affiliated Colleges) 30x, 31x, 32x, 37x, 40x, 42x, 43x, 44x, 47x
Physical Ed. 20	
Religious Knowledge (in the affiliated colleges) 10x, 20x, 21x	
Secretarial Science (not available for General Course students; those who have transferred from Secretarial Science to the General Course may count their two best courses from Secretarial Sc. 28, 29, 30, 36, 37, 38, 39)	

II. GENERAL COURSE WITH SECRETARIAL SCIENCE OPTIONS

Requirements for Admission: Secondary School Graduation Diploma, and Grade XIII or equivalent standing (with an average of 60%) in English, another language (French preferred), Latin or Mathematics (two papers), and three papers from Biology, Geography, History, Music, Physics, Chemistry, another language.

The Department of Education of Ontario accepts a degree in this course as the academic qualification for High School Assistant's Certificate, Type B, for teaching in the elementary or secondary schools of Ontario.

Enrolment is limited and students are admitted on the quality of their secondary school certificates. The course is available at both University and Waterloo Colleges.

Students must obtain credit for all of the first year before beginning any second year work.

First Year

Subjects	*Subjects*
Business 20	A survey course in Science
English 20, 29	One of: French 20, German 10 or 20, Spanish 20
Health Lectures	Secretarial Science 28, 29
Library Science	
Physical Education	

Second Year

Economics 20	One of: French 33, German 20 or 30, Spanish 30, 31
English 35	Secretarial Science 30, 37, 38, 39
Philosophy 30 or Psychology 20	

Third Year

English 32 or 38 or 49	One of: French 43, German 30, or 40, Spanish 40, 41
History 31	
Secretarial Science 47, 48, 49	

III. PRE-THEOLOGICAL GENERAL COURSE

Requirements for Admission: Secondary School Graduation Diploma, and Grade XIII (or equivalent) standing in English; History; and six papers, including a language, from: Latin, French, German, Spanish, Mathematics (at least two of Algebra, Geometry, Trigonometry and Statics) and Science. An average of 60% is required. See also the Preliminary Year in Huron College, p. 94.

NOTE: Students who plan to enter professional Schools of Social Work must include Economics 20, Politics 32, Psychology 20 and Sociology 20 in their Arts programs.

*Honors Courses by permission of the Head of the Department only.

This course is open to students of any denomination and is offered in Huron College and University College.

It leads to the degree of Bachelor of Arts and is the normal requirement for admission to a three-year course in Theology. If, however, a prospective Theological student wishes to take another course leading to a General or an Honors degree, this Pre-Theological General Course is not prescribed. In such case, the student should include Greek 1x, 25x and 35x among his undergraduate options.

Course-numbers followed by "x" indicate a subject approved by the University and taught by Huron College only.

First Year

Subjects	*Subjects*
English 20	Philosophy 20
Greek 1x	Psychology 20
History 20	Half-courses in:
Mathematics 20 or a Natural Science at the 21-29 level	English 29, Health Lectures, Library Science and Physical Education

Second Year

Economics 20	Religious Knowledge 30x
English 32	One of: History 31, 36, 44, Psychology 36, 46, 48, 49
Greek 25x	
Philosophy 30	

Third Year

Subjects	*Subjects*
English 38	One of: Philosophy 31, 36, 42, 47
Greek 35x	Two of: Hebrew 1-10x, History 31, 36, 44
Religious Knowledge 40x	Psychology 36, 46, 48, 49

IV. GENERAL COURSE WITH HOME ECONOMICS OPTIONS

Requirements for Admission: Secondary School Graduation Diploma (page 105).

This course leading to a Bachelor of Arts degree in Home Economics is offered jointly by University College and Ursuline College. University College students in the course will take all their classes at University College except in Home Economics; Ursuline College students will take all their science courses in University College.

University College does not admit students to the Preliminary Year, which is taught only in Ursuline College.

After the completion of the course, students may take dietetic interne training in institutions approved by the Canadian Dietetic Association for professional standing.

Students who have obtained 60% or more in the work of the final year may, if they enter the High School Assistants' Course of the Ontario College of Education, elect the supplementary course offered for Intermediate Home Economics certificates.

Home Economics and Chemistry courses must be taken in the order and the year designated.

First Year

Requirements for Admission: Either the Preliminary Year in Ursuline College, or Grade XIII or equivalent standing in English, another language, Latin or Mathematics (any two of Algebra, Geometry, Trigonometry and Statics) or Music*, and Botany, Chemistry and Zoology, with an average of 60% and with 60% in each Science course.

Subjects	*Subjects*
Botany 36b	Religious Knowledge 20x (for Ursuline College students only)
Chemistry 32a	Zoology 24a
English 20	Half courses in English 29, Health Lectures, Library Science and Physical Education
French 20 or German or Spanish 20	
Home Economics 23x, 24x, 25x 26x	

*Grade VIII Performance and Grade II Theory.

Second Year

Chemistry 33
Economics 20
English 32 or 36 or 38
Home Economics 30x, 31x, 32x, 33x
Psychology 20

Third Year

Chemistry 46
Home Economics 40x, 41x, 42x, 45bx, 46x, 47x, 48x

V. GENERAL COURSE WITH MUSIC OPTIONS (See Music Teachers' College)

VI. PREMEDICINE

Requirements for Admission: Grade XIII standing in English and Mathematics (Algebra and Geometry), French or German or Latin, Chemistry and Physics, Botany or Zoology or Trigonometry and Statics, with an average of 60%.

This University is not merely offering a training in Medicine as a technology, nor is it requiring a full academic degree for admission to Medicine. In common with most universities it has adopted a compromise course, which insists on some cultural background.

The Faculty of Medicine believes that while the science of Medicine is built on the physical and biological sciences, the art of Medicine is dependent on the humanities and the social sciences. For this reason these courses are rightly included as stepping stones and not merely as hurdles. When a medical student realizes this fact, he will derive greater benefit in medicine and a broader outlook on life in general, which is essential if he is to be successful in the broadest sense.

First Year

Subjects	*Subjects*
Chemistry 20	Two options from:
English 20, 29	Botany 20
Health Lectures	Economics 20
Library Science	Geography 20
Physical Education	History 30
Physics 20	Mathematics 24
Zoology 20	Philosophy 20
	Sociology 20

Second Year

Chemistry 203M, 204M	One option from:
English 33M	Botany 31a, 36b (to follow 20)
Mathematics 35	Geography 30 (to follow 20)
Physics 204M	History 31 (to follow 30)
Psychology 30	Philosophy 30 (or another senior Philosophy option)
Zoology 200M	Physics 251 (if Math. 24 is complete)
	Sociology 30 (to follow 20)
	Politics 32 or 42 (to follow Economics 20)

On the completion of this program, those accepted by the Admissions Committee of the Faculty of Medicine must be prepared to register with the College of Physicians and Surgeons, and to submit a birth certificate for this purpose.

Any students who are not accepted for admission to Medicine proper may proceed, if their records are satisfactory, to one of the Honors Science courses, or to the General Course with Science options. On completion of the Honors third year or the General Course final year, they may again apply for admission to the Faculty of Medicine.

Please see the Announcement of the Faculty of Medicine for the four years of Medicine proper, leading to the M.D. degree.

VII. DEGREE COURSES IN NURSING

Leading to the degree of Bachelor of Science in Nursing (B. Sc. N.)

COURSE A

Requirements for Admission: Secondary School Graduation Diploma and Grade XIII (or equivalent) standing in English, another language (French preferred) Latin or Mathematics (any two of Algebra, Geometry, Trigonometry and Statics), Botany, Chemistry and Zoology, with an average of 60%, and with 60% in each Science course.

Part A: One academic year in the Faculty of Arts and Science:

Subjects	*Subjects*
Botany 36b	Psychology 20
Chemistry 32a	Zoology 24
Sociology 20	Half courses in English 29, Health Lectures, Library Science and Physical Education
English 20	
A second language at the 20 level	

Part B: The completion of Diploma requirements in a Hospital School of Nursing where there is a course that is in all its details approved by a Committee of which the Dean of the School of Nursing is a Convener.

Part C: One academic year in the Graduate Division of the School of Nursing of this University. The student may choose the Public Health Nursing or the Nursing Education or the Nursing Service Administration option. She must inform the Dean of the School of Nursing by June 30th of the option she has chosen for her final year's work.

No conditions may be carried from Part A to Part B, or from Part B to Part C of this course, without the written permission of both the Dean of the School of Nursing and the University Registrar.

COURSE B

(For Graduate Nurses Only)

Requirements for Admission:

(1) Secondary School Graduation Diploma and Grade XIII (or equivalent) standing in English, one language (preferably French), and any five additional papers. Equivalent standing includes first year college courses available for adult special students over twenty-one years of age.

(2) Proof of graduation from a hospital School of Nursing in which the program of education and clinical experience is approved by a committee of which the Dean of the School of Nursing is Convener.

(3) Proof of registration as a graduate nurse in good standing.

(4) The completion of one academic year in one of the specialized professional programs (Public Health Nursing or Nursing Education or Nursing Service Administration) in this University's School of Nursing. Applicants who hold certificates or diplomas of specialized professional study at another University are required to complete one term (or semester) of study in this University's School of Nursing in addition to the Arts and Science subjects of the degree course.

Subjects	*Subjects*
English 20	Three options from: English 36 or 38 (if English 20 has been passed), Geography 20, History 30, 31, Journalism 20, 260, 355, 460, Philosophy 42, Politics 42, Psychology 20, 48, 49, Sociology 20, 30, 38
A second language at the 20 level	
Physical Science 21 (Chemistry section) or Zoology 21	
Half courses in English 29, Library Science, and Physical Education	

VIII. Engineering Science

Requirements for Admission: Grade XIII or equivalent standing in English, another language, Algebra, Geometry, Trigonometry and Statics, Physics and Chem-

istry, with an average of 60%, and with an average of 66%, preferably, in the mathematical and science subjects.

The course in Engineering Science is designed to provide the academic basis for the profession of engineering. Emphasis is placed on the study of mathematics, physics, chemistry, the engineering sciences, and the analysis and synthesis of engineering systems and structures.

The course leads to the degree of Bachelor of Engineering Science (B. E. Sc.).

Construction of the Engineering Science Building was started in January 1958 and will be completed before the beginning of the 1959-60 academic year.

The size of the first year class is limited, and selection will be made according to the qualifications of the applicants.

First Year

Subjects

Chemistry 20
Engineering Science 20, 21
English 20
Geology 20
Mathematics 27
Physics 20
and half courses in English 29, Health Lectures, Library Science and Physical Education

Second Year

Chemistry 200
Economics 20
Engineering Science 200, 201, 202, 203, 204, 205
Mathematics 277
Physics 254, 255

Third Year

One option in the humanities or the social sciences
Engineering Science 300, 301, 310, 313

Group A:
See a separate sheet

Group B:
Enginering Science 304, 307, 308, 309

Mathematics 377
One of the following groups of courses:

Group C:
Engineering Science 302, 303
Physics 356, 359 (part)

Group D:
Engineering Science 303, 307
Physics 356, 359 (part)

Fourth Year

One option in the humanities or the social sciences

Group A:
Not given in 1958-59

Group B:
Engineering Science 403, 407, 408, 409, 416

Engineering Science 411, 412, 413,
One of the following groups of courses:

Group C:
Engineering Science 404, 405, 406
Physics 476, 477, 479 (part)

Group D:
Engineering Science 400, 401, 402, 403, 410

HONORS COURSES

1. The first year of an Honors Course is Junior Group 1 or 2, page 31.
2. The purpose of the Junior Group is to offer one year of basic general education to students who come from a variety of secondary schools, and to postpone a freshman's choice of course until the end of his first year. He is then more likely to choose wisely than if his decision is made while he is still in the secondary school, because during his first year in college he will study subjects not available in High School.
3. The length of an Honors Course is four years past Grade XIII or equivalent standing.

4. The Honors Courses in Biology, Chemistry, Chemistry and Physics, Geology and Physics (including Geophysics and Radio Physics) lead to the degree of Bachelor of Science (B.Sc.). The other Honors Courses lead to an Honors Bachelor of Arts degree.
5. The Department of Education accepts a degree in an Honors Course as the academic qualification for a High School Assistant's Certificate, Type B, for teaching in the elementary and secondary schools of Ontario. Some Honors Courses lead to Type A Certificates for High School Specialists, and these are indicated at the top of each of these courses.
6. A student expecting to enter an Honors Course should consult the program of his proposed course before selecting his options in Junior Group 1 or 2. If the proper options are selected, the Junior Groups lead to the Second Year of the following Honors Courses:

Junior Group 1

Biology
Chemistry
Chemistry and Physics
Geography
Geology
Geophysics
Mathematics
Mathematics and Physics (Mathematics Major)
Philosophy
Physics and Mathematics (Physics Major)
Psychology
Radio Physics

Junior Group 2

Business Administration (alone, or with Secretarial Science)
Classics
Economic and Political Science
English (alone, or with French or German or History or Latin or Philosophy)
French (with German or Latin or Spanish)
Geography
German (with English or French)
History (alone, or with English)
Journalism
Mathematics
Modern Languages (French and German, or French and Spanish)
Philosophy
Physical and Health Education
Psychology

Biology

Requirements for Admission: Junior Group 1, page 31, with an average of at least 60% in the Science subjects, and not less than 60% in Botany 20 and 60% in Zoology 20.

This course satisfies the academic requirements for the High School Assistant's Certificate, Type A, Science, of the Department of Education of Ontario.

Second Year

Subjects	*Subjects*
Botany 250	Physics 204
Chemistry 200	Zoology 250
German 5 or Russian 1	One of: Economics 20
Mathematics 35	English 32 or 35
	Philosophy 20
	Psychology 30

Third Year

For admission to the Third Year an average of 60% in the Biology of the Second Year, and an average of 60% in all other subjects, is required.

Botany 352a	Zoology 337, 350
Chemistry 303	Three of: Botany 354, 361, Zoology 354, 360b
German 15 or Russian 10	

Fourth Year

For admission to the Fourth Year an average of 60% in the Biology of the Third Year and an average of 60% in all other subjects is required.

(a) Botany Option

Botany 453a, 453b or 454b, 460, 461a, 466b, 452 (optional)	French 45
Chemistry 406	German 45 or Russian 45
	Zoology 455

(b) Zoology Option

Botany 453a or 453b or 466b	German 45 or Russian 45
Chemistry 406	Zoology 452, 453, 454, 455, 456, 460
French 45	One of: Zoology 462, 470

Business Administration

Requirements for Admission: Group 2, page 31, with at least 60% in Economics and 60% in Business.

This course leads to a Bachelor of Arts degree in Honors Business Administration.

Credit is given by the Institute of Chartered Accountants and by the Certified Public Accountants Association of Ontario for work done in this course.

Second Year

Subjects	*Subjects*
Business 250 (Accounting)	Two courses (or the equivalent) from
English 35	English 32, 36, 38, French 20, 30,
Two of:	33, 43, History 31, 35, 44, Philosophy
Economics 230, 257, 333, 346	30 or 32, Psychology 20, 49, Spanish
Politics 232	20, 30, 31.
Econ. Geog. 239	

Third Year

Admission to the Third Year (in the School of Business Administration) is by permission of the Dean. 60% in Business 250 and an average of 60% in the other subjects of the Second Year are required, without conditions in any subjects of the first two years, unless exceptional circumstances are given exceptional treatment by the Dean.

Information concerning Graduate Courses in Business Administration and additional information concerning undergraduate courses will be found in the School of Business Administration Announcement. A copy may be obtained from the Registrar on request.

Business Administration and Secretarial Science

Requirements for Admission: Group 2, page 31, with at least 60% in Economics and Business.

This course, with the addition of Penmanship and Methods, satisfies the academic requirements for the High School Assistant's Certificate, Type A, in Commercial Subjects, of the Department of Education of Ontario.

Second Year

Subjects	*Subjects*
Business 250 (Accounting)	Economics 257, 333
Geography 39	Secretarial Science 28, 29, 36

Third Year

For admission to the Third Year an average of 60% in Second Year Business and Secretarial Science is required, and an average of 60% in all other subjects.

Business 351 (Marketing) and 357 (Control)	English 35
	Secretarial Science 37, 38, 39

Fourth Year

For admission to the Fourth Year an average of 60% is required in the Business and Secretarial Science of the Third Year, and an average of 60% in all other subjects.

Business 456 (Commercial Law and Documents of Commerce) and 460b (Auditing)	Economics 46 or English 32 or 44 or 49
	History 30 or 31 or 44 or Philosophy 30
	Secretarial Science 47

Students who do not wish to qualify for the High School Assistant's Certificate, Type A, Commercial Subjects, may substitute for Business 460b either Business 461 (Retailing) or 471 (Advertising).

Chemistry

Requirements for Admission: Group 1, page 31, with an average of at least 60% in Science and Mathematics courses and not less than 60% in Chemistry, and an average of 60% in Physics and Mathematics.

This course satisfies the academic requirements for the High School Assistant's Certificate Type A, Chemistry and Physics, of the Department of Education of Ontario, if Botany and Zoology are selected in Junior Group 1 and either Botany or Zoology in the second year. It leads to the degree of Bachelor of Science.

Second Year

Subjects	*Subjects*
Chemistry 200, 251, 252, 253	Physics 255
French 10 or German 5 or Russian 1 or Spanish 1-10	Botany 250 or Geology 261 or Math. 254 or Zoology 250

Third Year

For admission to the Third Year an average of 60% is required in the Chemistry of the Second Year, and an average of 60% in all other subjects.

Chemistry 351, 353, 354	Physics 254
German 15 or Russian 10	English 35 or Philosophy 32

Fourth Year

For admission to the Fourth Year an average of 60% is required in the Chemistry of the Third Year, and an average of 60% in all other subjects.

Subjects	*Subjects*
Chemistry 451, 452, 453, 454, 458, 359	Two of: French 45, German 45, Russian 45, Spanish 45
Physics 456 or Chemistry 406	

Chemistry and Physics

Requirements for Admission: As for Honors Chemistry.

This course satisfies the academic requirements for the High School Assistant's Certificate, Type A, Physics and Chemistry, of the Department of Education of Ontario. It leads to the degree of Bachelor of Science.

Second Year

Subjects	*Subjects*
Chemistry 200, 252, 253	Mathematics 254
French 10 or German 5 or Russian 1 or Spanish 1-10	Physics 251, 254, 255

Third Year

For admission to the Third Year an average of 60% is required in the Chemistry and Physics of the Second Year, and an average of 60% in all other subjects.

Chemistry 351, 353, 354	Mathematics 264 or Physics 250 or 351
German 15 or Russian 10	Physics 353, 366

Fourth Year

For admission to the Fourth Year an average of 60% is required in the Chemistry and Physics of the Third Year, and an average of 60% in all other subjects.

Chemistry 452	Two of: French 45, German 45, Russian 45, Spanish 45
English 44 or Philosophy 32	
Physics 456	

Either Chemistry or the Physics Option below:

CHEMISTRY OPTION	PHYSICS OPTION
Chemistry 451, 453, 454, 458, 459	Physics 454, 455, 457, 458, 459

Classics

Requirements for Admission: Group 2, page 31, with an average of 60% in Latin 20 and 60% in Greek 20.

This course satisfies the academic requirements for the High School Assistant's Certificate, Type A, Classics, of the Department of Education of Ontario.

Second Year

Subjects	*Subjects*
English 32	Greek and Latin 257
French 20 or German 20 or Hebrew 20	Latin 230, 250, 251
Greek 230, 250, 251	

Third Year

For admission to the Third Year an average of 60% is required in the Greek and Latin of the Second Year, with 60% in English.

English 45	Latin 340, 350, 351, 352
Greek 340, 350, 351, 352	

Fourth Year

For admission to the Fourth Year an average of 60% is required in the Greek and Latin of the Third Year, with 60% in English.

Greek 450, 451, 452, 453, 457	Latin 450, 451, 452, 453, 457

Economic and Political Science

Requirements for Admission: Junior Group 2, page 31, with at least 60% in Economics.

Notes: (1) At least one course in Natural Science or Mathematics, one in History, one in Psychology, and one in Sociology are required for an Honors degree in Economic and Political Science.

(2) History 30 may not be selected if History 20 has been taken.

Second Year

Subjects	*Subjects*
Economics 230, 257	One of:
Politics 232	Mathematics 20, 24, 230, a Natural Science not chosen previously, another option approved by the Dept. of Economics
English 35	
Business 250	
One of: History 30, Psychology 20, Philosophy 30 (if Philosophy was not chosen previously), Sociology 220	

Third Year

For admission to the Third Year an average of 60% is required in the Economics courses of the Second Year, and an average of 60% in all other subjects.

Subjects	*Subjects*
Economics 333, 355	Options (continued):
Three courses (or the equivalent) from: Economics 346, 351a, 351b, 354, 360, 363, Politics 334, 342, 351b, Sociology 330, 338	Math. 20, 24, 33, 230, 345, 350, Philosophy 31, 44, Politics 334, 342, 351b, Psychology 20 or 46, Sociology 338, Spanish 20, 30, 31, another option approved by the Dept. of Economics.
Two courses from: Business 351 (Marketing), 354 (Production Management), English 44, French 30, 33, Geography 39, German, 20, 30, History 30, 31, 44, 257,	

Fourth Year

For admission to the Fourth Year an average of 60% is required in the Economics courses of the Third Year and an average of 60% in all other subjects.

Subjects	*Subjects*
Economics 450, 453, 460	Options continued:
Politics 334 or 452	Mathematics 455, Politics 444a, 462b, Psychology 48, 49, Sociology 440, 478, other options approved by the Dept. of Economics
Two courses (or the equivalent) from: Economics 455, Geography 45,	

English and French

Requirements for Admission: Group 2, page 31, with 60% in English 20 and in French 20.

This course is accepted by the Department of Education of Ontario as academic qualification for the High School Assistant's Certificate, Type A, English and French.

Second Year

Subjects	*Subjects*
English 254, 270, 280 French 270, 271, 290 Greek 29	German 290 or Latin 230, 250, or *Spanish 230 or 340, 231

*Students who begin Spanish in the University will take Spanish 20 in the second year and defer Greek 29 and Spanish 231 until the third year.

Third Year

For admission to the Third Year an average of 60% is required in the English and French of the Second Year, and an average of 60% in all other subjects.

English 356, 360, 373
French 380, 381
History 35

Fourth Year

For admission to the Fourth Year an average of 60% is required in the English and French of the Third Year, and an average of 60% in all other subjects.

English 459, 480; 436 or 438
French 450, 490, 491, 499

English and German

Requirements for Admission: Group 2, page 31, with at least 60% in English 20 and in German 20. History 20 must be chosen as an option in the Junior Group.

This course is accepted by the Department of Education of Ontario as academic qualification for the High School Assistant's Certificate, Type A, English and German.

Second Year

Subjects	*Subjects*
English 254, 270, 280 German 290, 291 History 36	One of: French 270, Greek 20, Latin 230, 250, Politics 32, Russian 10, Spanish 20 or 230

Third Year

For admission to the Third Year an average of 60% is required in the English and German of the Second Year and an average of 60% in all other subjects.

English 356, 360, 373
German 333, 390, 391
One of: Economics 20, French 380, Latin 340, or 350, 352, Greek 30, Philosophy 30, Russian 20, Spanish 230 or 340

Fourth Year

For admission to the Fourth Year an average of 60% in the English and German of the Third Year, and an average of 60% in all other subjects.

English 459, 480; and 436 or 438
German 420, 480, 481

English and History

Requirements for Admission: Junior Group 2, with 60% in English 20 and in History 20. *Students are strongly advised to take a course in Philosophy in their* first or second year.

This course is accepted by the Department of Education of Ontario as academic qualification for the High School Assistant's Certificate, Type A, in English and History, provided that the student takes English 373 and two courses in Geography. These three courses could be taken in the second and third years.

Second Year

Subjects	*Subjects*
English 254, 280	One foreign language option
History 236, 257	Economics 20 or Philosophy 30 or a second language or a social science course

Third Year

For admission to the Third Year an average of 60% is required in the English and History of the Second Year, and an average of 60% in all other subjects.

English 32, 356	A social science course or a second language
History 35, 331	
A foreign language option	Another option approved by all the Departments concerned

Fourth Year

For admission to the Fourth Year an average of 60% is required in the English and History of the Third Year, and an average of 60% in all other subjects.

English 438, 459, 480 History 444, 452, 460

English and Latin

Requirements for Admission: Junior Group 2, page 31, with 60% in English 20 and 60% in Latin 20.

This course is accepted by the Department of Education of Ontario as academic qualification for the High School Assistant's Certificate, Type A, English and Latin.

Second Year

Subjects	*Subjects*
English 254, 270, 280	Latin 230, 250, 251
Greek 29	French 270 or Greek 20 or Greek 230 and 250 or German 20 or 290
History 257	

Third Year

For admission to the Third Year an average of 60% is required in the English and Latin of the Second Year, and an average of 60% in all other subjects.

English 356, 360, 373 Latin 340, 350, 351, 352
History 35

Fourth Year

For admission to the Fourth Year an average of 60% is required in the English and Latin of the Third Year, and 60% in History.

English 459, 480; and 436 or 438 Latin 450, 451, 452, 453

English and Philosophy

Requirements for Admission: Junior Group 2 (including History), page 31, with 60% in English 20 and 60% in French 20 or German 20 or Latin 20.

Course B is accepted by the Department of Education of Ontario as academic qualification for the High School Assistant's Certificate, Type A, English. For this certificate, French is the language preferred by the Department of Education.

COURSE A

Second Year

Subjects	*Subjects*
English 254, 270	Two courses of options approved by the Heads of the two major Departments
Philosophy 230, 231	

Third Year

For admission to the Third Year an average of 60% is required in the English and Philosophy of the Second Year, and an average of 60% in all other subjects.

English 356, 360	Two courses of options, to be selected as in the Second Year
Philosophy 336, 347	

Fourth Year

For admission to the Fourth Year an average of 60% is required in the English and Philosophy of the Third Year, and an average of 60% in all other subjects.

English 280, 459, 480

Philosophy 457, 448, and one of: 443, 456, 462, 466

COURSE B (Language Option)

Second Year

Subjects	*Subjects*
English 254, 270, 280 Philosophy 230, 231	French 270, 271 or German 290, 291 or Latin 230, 251

Third Year

For admission to the Third Year an average of 60% is required in the English and Philosophy of the Second Year, and an average of 60% in all other subjects.

English 356, 360, 373
French 380 or German 390 or Latin 340, 250

Philosophy 347, 335

Fourth Year

For admission to the Fourth Year an average of 60% is required in the English and Philosophy of the Third Year, and an average of 60% in all other subjects.

English 459, 480; and 436 or 438

Philosophy 336, 457, 448

English Language and Literature

Requirements for Admission: Junior Group 2, with 60% in English 20 and an average of 60% in History 20, Geography 20 and a foreign language, or an average of 60% in the two languages taken. The student who has History 20 and Geography 20 will enter Sequence A; the student with two languages in the Junior Group will enter Sequence B. Philosophy 20 is strongly advised as a Junior Group option.

This course is accepted by the Department of Education of Ontario as academic qualification for the High School Assistant's Certificate, Type A (English).

Second Year

Subjects	*Subjects*
English 254, 270, 280 Greek 29 or English 441 or English 45a History 36	*Sequence A*: History 257 and French 30 or German 30 or Latin 30 or Greek 30 *Sequence B*: Two of: French 270, German 290, Latin 230, 250, Greek 230, 250

Third Year

For admission to the Third Year an average of 60% is required in the English of the Second Year, and an average of 60% in all other subjects.

English 356, 360, 373, 436

Sequence A:
History 31 or 35
Geography 35

Sequence B:
French 380, or German 390, or Latin 340, 352, or Greek 340, 352
One of: History 31, History 35, Philosophy 30, Geography 35, Geography 45, French 48, or an Honors course in a second foreign language

Fourth Year

For admission to the Fourth Year an average of 60% is required in the English of the Third Year, and an average of 60% in all other subjects.

English 438, 459, 463, 470, 480

Sequence A:
History 460

Sequence B:
French 490, or German 480, or Latin 450, 452, or Greek 452

French and German

(See Modern Languages and Literatures)

French and Latin

Requirements for Admission: Group 2, page 31, with at least 60% in French 20 and 60% in Latin 20.

This course is accepted by the Department of Education of Ontario as academic qualification for the High School Assistant's Certificate, Type A, French and Latin. In this course three years, or the equivalent, of Greek or German must be taken.

Second Year

Subjects	*Subjects*
English 35	German 20 or Greek 20
French 270, 271, 290	Latin 230, 250, 251, 257

Third Year

For admission to the Third Year an average of 60% is required in the French and Latin of the Second Year, and an average of 60% in all other subjects.

French 380, 381	History 30 (or 36, if History 20 has been chosen in the Junior Group)
German 30 or Greek 30	Latin 340, 350, 351, 352
Greek 29	

Fourth Year

For admission to the Fourth Year an average of 60% is required in the French and Latin of the Third Year, and an average of 60% in all other subjects.

French 450, 490, 491, 499	Latin 450, 451, 452, 453

French and Spanish

(See Modern Languages and Literatures)

Geography

Requirements for Admission: Junior Group 1 (page 31) or Junior Group 2 (page 31) with an average of at least 60% in the subjects taken.

This course is accepted by the Department of Education of Ontario as academic qualification for the High School Assistant's Certificate, Type A, Geography, providing the options marked by an asterisk are selected. It leads to a Bachelor of Arts degree.

Second Year

Subjects	*Subjects*
Geography **20, 239	Division A subjects:
Mathematics 35	Economics 20
One course (or the equivalent) from:	German 5 or Russian 1 or Spanish 1-10
Botany 33a, Economics 257, History *20 (if not chosen previously) or *36, Mathematics 24, Zoology 43, Sociology 20	Psychology 30
	Division B subjects:
	Botany 20
	Geology 20
Division A or Division B (A follows Junior Group 1, B follows Junior Group 2)	Philosophy 30 or one additional year's work in a modern foreign language

**Anyone who has taken Geography 20 in Junior Group 2 will repeat it with additional assignments for Honors standing or will take instead one course of options from those listed.

Third Year

For admission to the Third Year an average of 60% is required in the Geography of the Second Year (20 and 239), and an average of 60% in all other subjects.

Subjects

English 35
Geography 330, 335
Geology 256
History 31
Mathematics 29
Politics 232

Subjects

One course (or the equivalent) from:
German 15 or Russian 10, *History 36, Philosophy 30 (if not chosen previously), Politics 342, Sociology 348, or a second year option not already chosen

NOTE: Students who intend to continue into graduate studies are advised to begin work in a second foreign language in the third year, if they have not done so earlier. Consult the Department of Geography for advice on this subject.

Fourth Year

For admission to the Fourth Year an average of 60% is required in the Geography of the Third Year (330 and 335), and an average of 60% in all other subjects.

Economics 351a
French 45 or German 45 or Russian 45 or Spanish 45
Geography 440, 444, 445 (any two)
Geology 367
History 44
One course (or the equivalent) from:
Economics 300
English 38 or 49

Options continued:
Geology 263
Philosophy 47
Politics 462b
Psychology 36 or 49
Zoology 453
Second or Third Year options not already chosen

NOTE: Students in Fourth Year Honors Geography shall attend all graduate seminars in Geography to which they have been invited.

Geology

Requirements for Admission: Junior Group 1, page 31, or First Year Engineering Science, with an average of 60% in the Science subjects and not less than 60% in Geology 20.

This course leads to a Bachelor of Science degree.

Consult the department head regarding options in the various years.

During the second week of the first term, the department will conduct a field trip of one week's duration, in which all Third and Fourth Year students are required to participate. The cost of each trip will not exceed fifty dollars, it is hoped.

Second Year

Subjects

Chemistry 200
Geology 251, 252, 256, 263
German 5 or Russian 1

Subjects

Physics 204
One of: Botany 20, Mathematics 254, Zoology 250

Third Year

For admission to the Third Year an average of 60% is required in the Geology of the Second Year, and an average of 60% in all other subjects.

Business 20 or Economics 20 or Philosophy 30 or Sociology 30
Geography 30

Geology 351, 354, 355, 363, 365, 367
German 15 or Russion 10

Fourth Year

For admission to the Fourth Year an average of 60% is required in the Geology of the Third Year, and an average of 60% in all other subjects.

French 45
Geology 458, 460
Three of: Geology 452, 454, 463, 465

One of:
Psychology 31, Politics 32, Psychology 30 or any non-science option not taken in the third year.

History

Requirements for Admission: Junior Group 2, page 31, with 60% in History and an average of 60% in English, one other language, and either Economics or a second language.

This course is accepted by the Department of Education of Ontario as the academic qualification for the High School Assistant's Certificate, Type A, History, if the options marked by an asterisk are taken.

Second Year

Subjects	*Subjects*
Business 20 or Philosophy 30	History 236, 257
Economics 20* (or English 35 if Economics 20 has been chosen previously)	Two of: French 30, German 30, Greek 30, Latin 30, Spanish 20 or 30, Geography 20*

Third Year

For admission to the Third Year an average of 60% is required in the History of the Second Year, and an average of 60% in all other subjects.

Geography 239	Economics 333* or English 280, 254, or Literature courses in two foreign languages, to be arranged
Geography 335* or Psychology 20	
History 35, 331, 333, 354b, 356a	

Fourth Year

For admission to the Fourth Year an average of 60% is required in the History of the Third Year, and an average of 60% in all other subjects.

Economics 450a	Geography 445*, or Economics 450b and Politics 452b, or Economics 346 or 453, or English 32 or 38 or 45 or 49, or Literature courses in two other languages to be arranged
History 444, 452, 455 or 460	
Politics 232, 452a	

Journalism

Requirements for Admission: The completion of Junior Group 2 with Journalism 20 (60%), Economics 20 and Philosophy 20.

Notes: (1) Students following B sequence must elect a subject of concentration within one department, with the written permission of the head of department. Students shall complete at least five courses offered by that department, at least three of them at Honors level. B sequence students may revert to A sequence at the end of the second year, but students continuing in B sequence may not change their field of concentration.

(2) Transfer students from other colleges or courses must include Journalism 20 in the second year of the Honors course if it has not been taken previously; 60% is required in it.

(3) Optional courses must be approved by the Journalism department. Courses within the B sequence subject of concentration must be approved by the department concerned and by the Journalism department.

Second Year

Subjects	*Subjects*
Journalism 250, 260, 270	*Sequence A*:
Politics 32	Business 20 or Sociology 20
Psychology 20	*Sequence B*:
English 35*	One course in subject of concentration
Sequence A or Sequence B	

Third Year

For admission to the Third Year, an average of 60% is required in the Honors subjects, and an average of 60% in all other subjects.

*If English is is elected as the subject of concentration, a student may substitute an Honors course in English for English 35.

Journalism 351, 355, 365, 375
History 31 or 331
Politics 42
Sequence A or Sequence B

Sequence A:
Geography 239
An optional course
Sequence B:
Two courses in subject of concentration (at least one to be at Honors level)

Fourth Year

For admission to the Fourth Year, an average of 60% is required in the Journalism subjects of the Third Year, and an average of 60% in all other subjects.

Politics 351b
History 44 or 444
Journalism 451, 455, 460
Sequence A or Sequence B

Sequence A:
History 36
Two courses of options
Sequence B:
Two Honors courses in subject of concentration

See also the Diploma Course in Journalism for graduates of other courses, page 55.

Mathematics

Requirements for Admission: Junior Group 1, page 31, with an average of 60% in the Science and Mathematics subjects, and at least 60% in Mathematics;

OR

Junior Group 2, page 31, with at least 60% in Mathematics 20.

This course leads to the Bachelor of Arts degree, and to Type A, High School Assistant's qualification, if Algebra, Geometry, Trigonometery and Statics have been completed in Grade XIII and if Mathematics 353 is selected.

Second Year

Subjects
Mathematics 230, 232, 234, 264
German 5
Three options (not previously selected) from:
Economics 20, 30, English 35, History 36, Philosophy 230, 231

Subjects
Options (continued)
Politics 32, Psychology 30, a laboratory course in Natural Science at the 20-29 level

Third and Fourth Years

Identical with the Honors Mathematics Major, or with the Actuarial Science Major, of the Honors Mathematics and Physics Course which follows.

Mathematics and Physics

Requirements for Admission: Junior Group 1, page 31, with an average of 60% in the Science and Mathematics subjects, and at least 60% in Mathematics and 60% in Physics.

Second Year

Subjects
German 5
Mathematics 230, 232, 254, 264

Subjects
Physics 250, 254, 255

Note:

In the two final years of this course, a student may select one of five Major studies:

The Honors Mathematics Major, leading to the B.A. degree (see page 51).
The Honors Actuarial Science Major, leading to the B.A. degree (see page 51).
The Honors General Physics Major, leading to the B.Sc. degree (see page 53).
The Honors Geophysics Major, leading to the B.Sc. degree (see page 53).
The Honors Radio Physics Major, leading to the B.Sc. degree (see page 54).

All five Major studies are accepted by the Department of Education as academic qualification for the High School Assistant's Certificate, Type A, in Mathematics (from the B.A. courses) or in Mathematics and Physics (from the B.Sc. courses).

For admission to the two final years of each Major plan, an average of 60% is required in the Honors Courses of the previous year, and an average of 60% in all other subjects.

Honors Mathematics Major
and
Honors Actuarial Science Major

(1) In the Third and Fourth Years of each of these Major studies there is a principal sequence of three required Mathematics courses, augmented by four other courses for a minimum requirement of seven courses a year. An average of 60% in the Honors Mathematics of the Second and Third Years is required for admission to the Third and Fourth Years, respectively.

(2) Courses marked with asterisks are compulsory for Actuarial Science students, who are prepared to write three preliminary examinations sponsored by the Society of Actuaries. The first two examinations may be written at the end of the Second Year, and the third at the end of the Fourth Year. Examinations of the Society of Actuaries are held about May 15th and may be written in London. Applications to write the preliminary examinations must be received by March 15th.

Third Year

Subjects	*Subjects*
German 15 Mathematics 350, 351, 356 Two of: Mathematics 345, 353* (required for the Type A Certificate), 359, 363*, 364, Physics 350, 351, 353	One course (not previously selected) from: Economics 20, 33, English 35 or 44, History 36, Politics 32, Psychology 30, a laboratory course in Natural Science at the 20-29 level, Philosophy 30 or 230 or a senior course in Philosophy

Fourth Year

Mathematics 450, 452, 456 Three of: Mathematics 455, 458, 459, 460, 463*, 470, Physics 456, 457 One course (not previously selected) from:	French 45 and German 45 combined, Economics 30, 33, 363, History 30 (if neither 20 nor 36 has been selected previously), Politics 34, a senior course in Philosophy or Psychology or English.

For the Honors Physics Major (leading to the B.Sc. degree) see page 53.

For the Honors Radio Physics Major (leading to the B.Sc. degree) see page 54.

Modern Languages and Literatures

Requirements for Admission: Junior Group 2, page 31, with at least 60% in French 20 and in German or Spanish.

This course is accepted by the Department of Education of Ontario as the academic qualification for the High School Assistant's Certificate, Type A, French and German, or French and Spanish.

Second Year

Subjects	*Subjects*
English 35 French 270, 271, 290 German 290, 291 or *Spanish 230 or 340, 231, 250 or 360	Greek *29 At least one course in a foreign language not chosen as a major.

*Students who begin Spanish in the University and who wish to major in Spanish will take Spanish 20 in the Second Year and will defer Spanish 231 and Greek 29 until the Third Year.

Third Year

For admission to the Third Year an average of 60% is required in the French and in the German or Spanish of the Second Year, and an average of 60% in all other subjects.

French 380, 381	History 30
German 333, 390, 391 or Spanish 340 or 230, 341, 360 or 250	At least one course in the minor foreign language of the Second Year

Fourth Year

For admission to the Fourth Year an average of 60% is required in the French and in the German or Spanish of the Third Year, and an average of 60% in all other subjects.

Subjects	*Subjects*
French 450, 490, 491, 499	One course in the minor foreign language continued from the Third Year
German 420, 480, 481 or Spanish 450, 451, 460	

Philosophy

(This course is offered in University College only)

Requirements for Admission: The completion of any Junior Group or of the first year of any of the pre-Theological General Courses with at least 60% in English and 60% in each of five other subjects.

Second Year

Subjects	*Subjects*
English 32 or 38 or History 257	Philosophy 230, 231
A Natural Science 21 not chosen previously	At least two courses from options approved by the Department of Philosophy.

Third Year

For admission to the Third Year an average of 60% is required in the Philosophy of the Second Year, and an average of 60% in all other subjects.

Philosophy 336, 347	Two courses from options approved by the Department of Philosophy
Philosophy 335, or 350	
A course in Psychology	

Fourth Year

For admission to the Fourth Year an average of 60% is required in the Philosophy of the Third Year, and an average of 60% in all other subjects.

Philosophy 443, 448, 456, 457, 462, 466	One course from options approved by the Department of Philosophy

Physical and Health Education

Requirements for Admission: Junior Group 2, page 31, with an average of 60% in the subjects taken in the University. Psychology 20 must be selected in Junior Group 2, and Zoology 21 should be selected if Botany and Zoology have not been studied successfully in Grade XIII.

This course leads to the Honors B.A. degree and to High School Assistant's Certificate, Type A, for teaching in the secondary schools of Ontario.

Second Year

Subjects	*Subjects*
English 35	One option beginning a connected course in the Humanities, the Social Sciences, or the Natural Sciences, to be approved by the Head of the Department.
English 39	
Psychology 36	
Zoology 24	
Physical and Health Education 251, 253, 258	

Third Year

For admission to the Third Year, an average of 60% is required in the Honors courses of the Second Year, and an average of 60% in all other subjects.

Subjects

Normal Nutrition (Home Economics) 31x (lectures only)
One of: Sociology 20, Psychology 49, Philosophy 30
Physical and Health Education 351, 352, 354, 366

Subjects

First Aid (if not taken previously)
Two options, if continuing the courses of the Second Year, to be approved by the Head of the Department

Fourth Year

For admission to the Fourth Year, an average of 60% is required in the Honors subjects of the Third Year, and an average of 60% in all other subjects.

Physical and Health Education 451, 453, 454, 456, 457

Two options, continuing the courses of the Third Year, to be approved by the Head of the Department

Physics and Mathematics

(Honors General Physics Major)

Requirements for Admission: Junior Group 1, page 31, with an average of 60% in the Science and Mathematics subjects, and at least 60% in Mathematics and 60% in Physics.

This course is accepted by the Department of Education of Ontario as the academic qualification for the High School Assistant's Certificate, Type A, Mathematics and Physics. It leads to the Degree of B.Sc.

Second Year

Subjects

German 5
Mathematics 230, 232, 254

Subjects

Physics 250, 251, 254, 255

Third Year

For admission to the Third Year an average of 60% is required in the Honors courses of the Second Year, and an average of 60% in all other subjects.

German 15
Mathematics 356

Physics 350, 351, 353, 356, 359

Fourth Year

For admission to the Fourth Year, an average of 60% is required in the Mathematics and Physics of the Third Year, and an average of 60% in all other subjects.

French 45
German 45
Physics 454, 455, 456, 457, 458, 459

One of: Economics 20, English 32 or 35, Psychology 30, Philosophy 32

Physics and Mathematics

(Honors Geophysics Major)

Requirements for Admission: Junior Group 1, page 31, including Geology 20 and Mathematics 24, with 60% in Mathematics, 60% in Physics, and an average of 60% in all the Mathematics and Science subjects.

This option leads to the degree of B.Sc.

Second Year

Subjects

Geology 261
German 5

Subjects

Mathematics 230, 254
Physics 250, 251, 254, 255

Third Year

For admission to the Third Year an average of 60% is required in the Honors Courses of the Second Year, and an average of 60% in all other subjects.

Chemistry 200
Economics 20
Geology 351
German 15
Physics 350, 353, 356, 359

Fourth Year

For admission to the Fourth Year an average of 60% is required in the Honors Courses of the Third Year and an average of 60% in all other subjects.

French 45
Geology 452, 455, 465
German 45
Philosophy 30
Physics 351, 455, 456, 458

Physics

(See Chemistry and Physics, Geophysics, Physics and Mathematics, Radio Physics)

Psychology

(This course is offered in University College only)

Requirements for Admission: Group 1 or 2, page 31, with an average of at least 60%. Zoology should be selected as an option in the Junior Group.

Second Year

Subjects	*Subjects*
English 35 or 44	Zoology 30 (21 must be taken instead, if Zoology has not been completed in the Junior Group, or in Grade XIII)
Philosophy 30	
Psychology 234, 235, 236	
One other course approved by the Dept. of Psychology	

Third Year

For admission to the Third Year an average of 60% is required in the Psychology of the Second Year, and an average of 60% in all other subjects.

Psychology 337, 338, 339, 349, 355
Two optional courses approved by the Dept. of Psychology

Fourth Year

For admission to the Fourth Year an average of 60% is required in the Psychology of the Third Year, and an average of 60% in all other subjects.

Psychology 444, 446, 448, 459
Three optional courses approved by the Dept. of Psychology

Radio Physics

(The Radio Physics Major of the Honors Physics and Mathematics Course)

Requirements for Admission: Junior Group 1, page 31, with an average of 60% in the Science and Mathematics subjects, and at least 60% in Mathematics and 60% in Physics.

(1) This course is accepted by the Department of Education of Ontario as the academic qualification for the High School Assistant's Certificate, Type A, Mathematics and Physics. It leads to the degree of B.Sc.

(2) The purpose of this course is to provide students with sufficient theoretical and practical background to enable them, as graduates, to occupy responsible technical positions in the various branches of the radio industry, including frequency modulation, television and radar; in communications generally; in the field of industrial electronics; and in development and research laboratories.

Second Year

Subjects	*Subjects*
German 5	Physics 250, 251, 254, 255
Mathematics 230, 232, 254	

Third Year

For admission to the Third Year an average of 60% is required in the Honors Courses of the Second Year, and an average of 60% in all other subjects.

Economics 20 or Philosophy 32
German 15
Mathematics 356
Physics 351, 370, 376, 377, 379

Fourth Year

For admission to the Fourth Year, an average of 60% is required in the Honors Courses of the Third Year, and an average of 60% in all other subjects.

French 45
German 45
Physics 455, 456, 457, 458, 476, 477, 479

DIPLOMA COURSE

Journalism

Requirements for Admission: Graduation from a recognized college, with a degree in some field other than Journalism.

Candidates for the Diploma in Journalism will take the prescribed courses and do special assignments in reporting, writing and editing.

An average of 60% in this one-year course is required for the Diploma.

Subjects

Journalism 260, 351, 355, 365, 375, 400, 455, 460

DESCRIPTION OF COURSES

BOTANY

20. **Introductory Botany:** For students of the General Course, Group 1; the general principles of Botany. **To qualify for the Honors Courses in Biology a student must obtain 60 per cent. in Botany 20.**

2 lectures, 3 laboratory hours a week.

21. **Biological Science (Botany Section):** The fundamental principles of biology with stress on the cell as a unit, the origin and preservation of the individual and the race, the mode of inheritance, and the applications of biology to social and economic problems. This course is illustrated by examples from zoology as well as botany.

2 lectures and 2 laboratory hours a week.

31a. **Plant Diseases and Fungi:** The recognition of poisonous and edible fungi and the identification, cause and control of common plant diseases. 2 lectures, 4 laboratory hours a week, one term.

Prerequisites: Botany 33a and 32b, or 20, or 21 (60%, or Zoology 21 (60%).

32b. **Plant Culture:** The elementary principles of plant growth, propagation and care, with particular reference to plants of the garden and home.

3 lectures, 3 laboratory hours a week, one term.

Prerequisites: Botany 20 or 21 (60%) or Zoology 21 (60%).

33a. **Plant Ecology:** The relationship between plants and their surroundings, including the recognition and classification of common plants.

2 lectures, 4 laboratory hours a week, one term.

Prerequisites: same as for 32b.

36b. Elementary Bacteriology: The common economic organisms in reference to: Water, food supplies, public health and civic problems. Prescribed for second year students in Home Economics: optional for others.

Prerequisites: as in 31a. 2 lectures, 4 laboratory hours a week.

43b. Plant Taxonomy: The recognition and classification of the common garden and field plants with special reference to adaptations to environment and distribution.

2 lectures, 4 laboratory hours a week, one term.

Prerequisite: Botany 31a or 32b or 33a.

Honors Courses

250. The Vascular Plants: The morphology, anatomy and development of the Pteridophyta and Spermatophyta, stressing the Seed Habit.

Prerequisite: Botany 20. 2 lectures, 3 laboratory hours a week.

337. Historical Biology: See Zoology 337. 2 hours a week.

352a. Plant Physiology: The function and reactions of plants and their organs. 2 lectures, 6 laboratory hours a week, one term.

Prerequisite: Botany 250.

354b. Cytology: A study of the structure and functions of cells and tissues, including the techniques of preparing materials for cytological studies. 2 lectures, 6 laboratory hours a week, one term.

Prerequisite: Botany 250.

361. Mycology and Plant Pathology: Plant diseases and classification, morphology and structure of the fungi.

Prerequisite: Botany 250. 1 lecture, 2 laboratory hours a week.

452. Advanced Plant Physiology: Special emphasis on biochemical and physical reactions in plants. Optional for fourth year Honors and graduate students. 2 lectures and 6 laboratory hours a week, one term.

453a. Plant Ecology: The structure of vegetation and its relation to the environment. 2 lectures, 6 laboratory hours a week, one term.

Prerequisite: Botany 250.

453b. Systematic Botany and Taxonomy: The principles of taxonomy and the identification and distribution of plants.

2 lectures, 6 laboratory hours a week, one term.

Prerequisite: Botany 453a.

454b. Plant Anatomy: The anatomy and histology of the Pteridophyta and Spermatophyta, including some Palaeobotany. Optional for fourth year Honors and graduate students.

2 lectures, 6 laboratory hours a week, one term.

Prerequisite: Botany 352a.

455. Genetics: See Zoology 455. 2 hours a week.

460a. **Cryptogamic Botany, Algae:** The morphology, evolution and classifications of the Algae.

2 lectures, 6 laboratory hours a week, one term.
Prerequisite: Botany 352a.

460b. **Cryptogamic Botany, Origin of a Land Flora:** General consideration of the evolution of land plants based largely on the studies of the liverworts and mosses.

2 lectures, 6 laboratory hours a week, one term.
Prerequisite: Botany 460a.

461a. **Advanced Mycology and Plant Pathology:** A continuation of 361, with special emphasis on groups of economic importance.

2 lectures, 6 laboratory hours a week, one term.
Prerequisite: Botany 361.

466b. **Bacteriology:** The culture, classification and life histories of selected groups of bacteria. 2 lectures, 6 laboratory hours a week, one term.
Prerequisite: Botany 361 or 461a.

BUSINESS ADMINISTRATION

20. **Introduction to Business Organization:** 3 hours a week.

250. **Fundamentals of Accounting:** 3 hours a week.

CHEMISTRY

20. **General Chemistry and Qualitative Analysis:** For Junior Group 1.
2 lectures, 3 laboratory hours a week.

21. **Physical Science 21 (Chemistry Section):**
2 lectures and 2 laboratory hours a week.

32. **Quantitative Analysis:** For Home Economics, Nursing and General Course students. 2 lectures, 3 laboratory hours a week.
Prerequisite: Chemistry 20 or 21.

33. **Organic Chemistry:** For Home Economics and General Course students. 2 lectures, 3 laboratory hours a week.
Prerequisite: Chemistry 20 or 21.

44. **Physical Chemistry:** For General Course students.
2 lectures, 3 laboratory hours a week.
Prerequisites: Chemistry 32.

46. **Biochemistry and Food Analysis:** For Home Economics and General Course students. 2 lectures, 3 laboratory hours a week.
Prerequisites: Chemistry 32 and 33.

Honors Courses

The student in Honors Chemistry or Honors Chemistry and Physics may be required to write a comprehensive examination at the end of the fourth year.

200. Elementary Physical Chemistry: For students in Honors Chemistry, Chemistry and Physics, Biology, Geology; chemical principles.
2 lectures, 3 laboratory hours a week.

203M. Organic Chemistry: For prospective medical students.
2 lectures (both terms) and 3 laboratory hours (one term) a week.

204M. Physical Chemistry: For prospective medical students.
2 lectures (both terms) and 3 laboratory hours (one term) a week.

251. Treatment of Experimental Data: For students in Honors Chemistry. 1 lecture, 2 laboratory hours a week.

252. Quantitative Analysis: For students in Honors Chemistry and Honors Chemistry and Physics.
First term: 1 lecture, 3 laboratory hours a week;
Second term: 1 lecture, 6 laboratory hours a week.

253. Elementary Organic Chemistry. 1 hour a week: half course.

303. Organic Chemistry: For Honors Biology students.
2 lectures, 3 laboratory hours a week.
Prerequisite: Chemistry 20.

351. Inorganic Chemistry: A survey of the more common elements with emphasis on electronic structure.
1 lecture, 3 laboratory hours a week.

353. Intermediate Organic Chemistry: For students in Honors Chemistry and Honors Chemistry and Physics. Lectures and laboratory exercises dealing with carbon compounds. 2 lectures, 4 laboratory hours a week.
Prerequisites: Chemistry 20, 200, 253.

354. Intermediate Physical Chemistry: For students in Honors Chemistry and Physics. A systematic derivation of the principles which govern reactions in chemical systems.
2 lectures, 3 laboratory hours a week.
Prerequisites: Chemistry 200 and either Chemistry 251 or Physics 251.

406. Biochemistry: For Honors Biology students.
Prerequisites: Chemistry 200, 303. 2 lectures, 3 laboratory hours a week.

451. Advanced Inorganic Chemistry: Chemistry of the less familiar elements. Selected topics: nature of solutions, co-ordinate compounds, radiochemistry. 2 hours a week.

452. Advanced Analytical Chemistry—Instrumental Analysis: theory and practice. 1 lecture, 3 laboratory hours a week.

453. Advanced Organic Chemistry:
Prerequisite: Chemistry 353. 3 lectures, 3 laboratory hours a week.

454. Advanced Physical Chemistry: Thermodynamics and Kinetic Theory of Matter. 3 lectures, 3 laboratory hours a week.
Prerequisite: Chemistry 354.

458. **Seminar:** Presentation of papers on topics selected from the current chemical journals, dealing with the more recent and fundamental developments of the science; prescribed for fourth year Honors Chemistry students and desirable for all students majoring in Chemistry. Half course.

459. **Research:** Special topics and laboratory methods in the field of the student's individual interest. The second term will be devoted to a research problem upon which a report will be required as a senior thesis.
6 hours a week

ECONOMICS

20. **Introduction to Economics:** The elementary economic concepts; production, exchange, consumption and distribution of wealth; money and banking; business cycle; full employment; labor problems; public finance; international trade; government regulation. 3 hours a week.

30. **Economic Theory:** An intensive course in economic analysis and policy. 3 hours a week.
Prerequisite: Economics 20 or permission of the instructor.

33. **Money and Banking:** Part 1. Monetary systems, characteristics and functions of money; banking organization and practice; central banking in Canada, United States and England; other financial institutions; the principles and mechanism of international payments.

Part 2. The development of short run economics, contemporary monetary theories and policies; international monetary problems.
Prerequisite: Economics 20. 3 hours a week.

46. **Labor Problems:** The study of labor movements, the forms of labor organization, economic problems of labor in relation to national economy, labor legislation, methods of dealing with labor disputes, the social aspects of industrial relations. 2 hours a week

Honors Courses

Economics 230, 333 and 346 are identical respectively with 30, 33 and 46, except that additional assignments will be required in the Honors courses.

257. **Economic History of (i) Europe:** The economic foundations from antiquity, the developments of the Middle Ages, Mercantilism, the Industrial Revolution, *laissez faire* and Economic Nationalism.

(ii) North America: A survey of the geographical and historical conditions which have given rise to the current economic problems of the United States and Canada. 2 hours a week.

351a. **International Economics:** International values, foreign exchange, free trade and protection, commercial treaties, quotas and exchange controls.
3 hours a week, one term: half course.

351b. **International Trade Theory:** Selected topics in the theory of international trade, including the use of offer curves, the theory of tariffs, international movements of factors, and the balance of payments mechanism.
Prerequisite: Economics 30 or 300.
3 hours a week, one term; half course.

354. **Agricultural Economics:** The role of agriculture in an expanding economy; analysis of agricultural markets, and a study of the special problems of the agricultural sector; evaluation of government programs to assist agriculture. **2 hours a week.**

355. **Statistical Methods:** The application of statistical methods to Economics; graphic methods and tabulation; frequency distributions; measures of central tendency and deviation; probability; the normal curve; correlation; reliability and validity; time series; index numbers.

3 hours a week.

360. **National Income Analysis:** A critical evaluation of theories of national income determination; the role of business and government in promoting stability; theory of economic growth and development.

Prerequisites: Economics 20, 33, or the consent of the instructor.

2 hours a week.

363. **Public Finance:** The economic theory of public revenues, expenditures and debt, and the application of public finance in the Canadian economy; the incidence, equity and economic effects of various forms of taxation; fiscal policy; inter-governmental financial relationships.

2 hours a week.

450. ***History of Economic Thought:*** (a) A survey of the history of economic theory, including the neo-classical school; (b) Seminars in modern economic theory. 3 hours a week.

453. **Monetary and Fiscal Policy:** Business cycles, booms and depressions; governmental expenditures, revenues, borrowing and debt structures; the shifting and incidence of taxation; government activities and financial policies. 3 hours a week.

Prerequisite: Economics 33 or the permission of the instructor.

455. **Mathematical Economics:** (a) Mathematical formulation of economic theory; an introduction to dynamic models and their solution; (b) the use of linear systems in economic analysis; an introduction to Input Output analysis and Linear Programming.

Prerequisites: Economics 230, Mathematics 24, or the consent of the instructor. **3 hours a week.**

460. **Modern Economic Theory (non-Monetary):** An intensive course in selected current theories of value, production and distribution, under conditions of pure and monopolistic competition. 2 hours a week.

ENGINEERING SCIENCE

20. Mechanics I. **2 lectures a week.**

21. Engineering Graphics I. **1 lecture, 6 laboratory hours a week.**

200. Mechanics of Materials I. **2 lectures a week.**

201. Electric Circuits I. **2 lectures a week.**

202. Mechanics II. **2 lectures a week, first term.**

Eng 477 Numerical Analysis & Design – 2

203.	Mechanical Analysis and Design I.	2 lectures a week, second term.
204.	Engineering Graphics.	1 lecture a week.
205.	Problems.	4 laboratory hours a week.
300.	Thermodynamics.	2 lectures a week.
301.	Fluid Mechanics.	2 lectures a week.
302.	Electric Circuits II.	2 lectures a week.
303.	Electric Machines I.	2 lectures a week.
304.	Electric Machines and Electronics.	2 lectures a week.
307.	Mechanics of Materials II.	2 lectures a week.
308.	Structural Analysis and Design I.	2 lectures a week.
309.	Surveying I.	2 lectures a week.
310.	Mechanical Analysis and Design II.	2 lectures a week.
311.	Engineering Materials.	1 lecture a week.
313.	Laboratories and Problems:	
	Group B	12 laboratory hours a week.
	Groups C and D	9 laboratory hours a week.
400.	Heat Engineering.	2 lectures a week.
401.	Heat Engines I.	2 lectures a week.
402.	Heat Engines II.	2 lectures a week.
403.	Fluid Mechanics and Machines.	2 lectures a week.
404.	Electric Machines II.	2 lectures a week.
405.	Electric Power Systems.	2 lectures a week.
406.	Electric Control Systems.	2 lectures a week.
407.	Structural Analysis and Design II.	2 lectures a week.
408.	Soil Mechanics.	2 lectures a week.
409.	Municipal and Highway Engineering.	2 lectures a week.
410.	Mechanical Analysis and Design III.	2 lectures a week.
411.	Laboratories and Problems:	
	Groups B and D	12 laboratory hours a week.
	Group C	6 laboratory hours a week.
412.	Engineering Practice.	2 lectures a week
413.	Project and Seminar.	2 laboratory hours a week.
416.	Surveying II.	2 laboratory hours a week.

ENGLISH

Notes:

(1) Detailed descriptions of the following courses may be obtained from the office of the Department of English (Room 114A, Arts Bldg.) or from the Registrar's Office.

(2) All courses in English scheduled for two hours a week may meet for additional hours at the discretion of the instructor.

10. **General Literature and Composition:** Selected short stories and poems, one novel, one play by Shakespeare, and a study of composition (one hour a week); essays will be written and discussed with the instructor. Not offered in University College. 3 hours a week.

Survey of English Lit:

20. **General Literature and Composition:** Selections from the works of Chaucer, Shakespeare, Jonson, Donne, Milton, Dryden, Pope and Swift, and a study of composition (one hour a week); essays will be written and discussed with the instructor. 3 hours a week.

29. **Speech:** The introductory course. 1 hour a week; half course.

No student will be admitted to any of the following courses until he has successfully completed English 20.

32. **Literature of the Nineteenth Century:** Selected works by Wordsworth, Coleridge, Shelley, Keats, Byron, Arnold, Tennyson, Browning, Newman, Huxley, Pater and other writers; two novels are included. 3 hours a week.

33M. **General Literature and Composition:** For prospective medical students only; similar to English 35. 2 hours a week.

35. **General Literature and Composition:** Selected essays, plays and narrative prose from English literature and (in translation) from Greek literature; essays and exercises in composition will be required. This course is not offered for credit in the General Course. 3 hours a week.

36. **Drama:** A study of the works of such modern dramatists as Ibsen, Chekhov, Shaw, O'Neill and Eliot, against the background of Classical and Renaissance drama. 3 hours a week.

38. **Literature of the United States and Canada (English):** Selected works by American authors from Franklin to Faulkner and by Canadian authors from Haliburton to Page. 3 hours a week.

39. **Speech: The Advanced Course.** 2 hours a week.

41. **Creative Writing:** The use of language as art and communication in the recognized creative writing forms; emphasis is placed on analysis of work submitted during the course. Apply to the Dept. of English for admission to this course. 1 hour a week: half-course.

44. **General Literature and Composition:** Similar to English 35 but on a more advanced level. The reading consists of selected works of poetry, prose and fiction. More, Arnold, Huxley and D. H. Lawrence are included. (For students in the final year of some Honors and professional courses.) 2 hours a week.

45. **Comparative Literature:** A course of reading in English or in English translations of some of the great books of Western civilization from Homer to T. S. Eliot, with particular emphasis on the growth of epic, drama and fiction. 3 hours a week.

46. Dramatics: Play Direction. An introductory course, with instruction in directing and acting, and participation in acting exercises and a final production. 2 hours a week.

49. Recent Literature in English: Selected poetry of Hopkins, Yeats, Frost, Eliot and Auden; one novel by each of Forster, Joyce, Faulkner, Koestler, Wolfe; one play by Christopher Fry. 3 hours a week.

Honors Courses

Comprehensive Examinations will be held at the end of the fourth year of all courses in English Honors.

254. Criticism: and a general introduction to English studies. 2 hours a week.

270. Literature of the Romantic Revival (1780-1832). 2 hours a week.

280. Renaissance Literature, Non-Dramatic (1500-1660). 3 hours a week.

356. English Drama to 1642: with particular reference to the plays of Shakespeare. 3 hours a week.

360. Literature of the Victorian Period (1832-1900). 3 hours a week.

373. Introduction to Early English and the History of the Language. 3 hours a week.

436. Modern British and American Drama. 3 hours a week.

438. American and Canadian Literature (English-Canadian only). 3 hours a week.

441. Creative Writing. 1 hour a week: half-course.

459. Recent Literature in English. 3 hours a week.

463. Old and Middle English Literature: with special emphasis on *Beowulf* and Chaucer. 2 hours a week.

470. English Tutorial: Methods of research in English; advanced bibliography. Prescribed for final year students in all Honors English courses. 1 hour a week: half course

480. Restoration and Eighteenth Century Literature (1660-1780). 2 hours a week.

FRENCH

General course students may, with the consent of the Head of the Department, elect some Honors courses as optional credits toward graduation.

10. Intermediate French: Grammar, dictation, translation, oral practice. Not offered in University College. 3 hours a week.

Prerequisite: Grade XII French.

20. Advanced French: Introduction to French literature, grammar, translation, oral practice. 3 hours a week.
Prerequisite: French 10 or Grade XIII French.

22. French Conversation: Systematic oral practice for those students who wish to develop fluency in speaking French.
Prerequisite: French 20. 2 hours a week: half course.

30. Outline of French Literature: Origins to 1789 A.D.
Prerequisite: French 20. 3 hours a week.

33. Commercial French: Business correspondence, simple transactions, selected reading. For students in Secretarial Science, optional in Business Administration. 3 hours a week.
Prerequisite: French 20.

40. Outline of French Literature: From 1789 A.D. to the present time. 3 hours a week.
Prerequisite: French 30.

43. Commercial French: Advanced transactions, reading. For students in Secretarial Science. 3 hours a week.
Prerequisite: French 33.

45. Scientific French: Reading of Scientific French from textbooks and journals, supplemented by individual reading in the special field of study of each student. 1 hour a week: half course.
Prerequisite: French 10 or Grade XIII French.

48. French-Canadian Literature: Lectures and reading on the historical and cultural background and the philosophical and literary contributions of French Canada. 3 hours a week.
Prerequisite: French 20.

Honors Courses

All students in Honors Courses will take a comprehensive examination at the end of their final year.

270. French Literature of the Renaissance and Classical Periods: Study of representative literature of the sixteenth and seventeenth centuries; reading, lectures, discussion and reports. 3 hours a week.
Prerequisite: Junior Group 2.

271. Prose Composition, Phonetics.
Prerequisite: Junior Group 2. 1 hour a week: half course.

290. French Civilization and Culture: (Origins to 1789); survey of the most significant French cultural achievements and a study of the background which produced them; lectures, reading, reports. 2 hours a week.
Prerequisite: Junior Group 2.

380. The Literature of the Eighteenth Century and French Civilization and Culture: The second part of the course will complete French 290, covering the period 1789 to the present; lectures, reading, discussion, reports in French. 3 hours a week.
Prerequisite: French 270.

381. Prose Composition, Phonetics and Conversation.
Prerequisite: French 271. 3 hours a week.

An equivalent course is given also at Trois-Pistoles, P.Q., during July and August. For full details see special bulletin.

450. Mediaeval French: Reading of Old French, historical grammar, history of mediaeval literature; reading, lectures.
Prerequisite: French 380. 1 hour a week: half course.

490. The Literature of the Nineteenth Century: Lectures, reading and reports. 3 hours a week.
Prerequisite: French 380.

491. Advanced Composition, Grammar and Phonetics.
Prerequisite: French 381. 3 hours a week.

An equivalent course is given also at Trois-Pistoles, P.Q., during July and August. For full details see special bulletin.

499. Contemporary French Literature: Study of some typical examples of the novel and drama of the twentieth century; reading, lectures, reports.
Prerequisite: French 380. 2 hours a week.

GEOGRAPHY

20. Elements of Geography: The earth as the home of man; the elements of the physical and cultural landscape with special reference to their world patterns. 2 lectures and 2 hours practical work a week.

30. Advanced Physical and Cultural Geography: Studies of the environmental factors, meteorology, climatology, geomorphology, hydrology, vegetation and soils; their interrelationships; techniques of measurement and classification, including air photographs and map projections.
2 lectures and 2 hours practical work a week.
Prerequisite: Geography 20.

35. World Regional Geography: A systematic survey of the major natural and political regions of the world.
2 lectures and 2 hours practical work a week.
Prerequisite: Geography 20 or 39, or equivalent.

39. Geography of World Resources and Industries: Trade Routes and Centres: The world's physical resources; their nature, utilization, and transportation. 3 lectures a week.

40. Problems in Geography: A survey of historical geography, political geography, and the philosophical foundations of modern geography.
3 lectures a week.
Prerequisites: Any two of Geography 20, 30, 35, 39.

41. Cartography: Scales and projections, map making, surveying on the ground and from the air, official and professional maps, cartographic specialties This course was formerly Geography 541. 3 hours a week.

44. **Geography of Mexico and the United States:** Systematic survey of the human geography of the two countries. 3 lectures a week.

Prerequisite: Geography 20 or 39, or equivalent.

45. **Geography of Canada: The Natural Wealth of Canada and its Conservation:** The geographic basis of human occupance in Canada. Conservation of natural resources. 3 lectures a week.

Prerequisite: Geography 20 or 39, or equivalent.

Honors Courses

Geography 239, 330, 335, 440, 441, 444, and 445 are identical with 39, 30, 35, 40, 41, 44 and 45 respectively. Students who elect Honors courses will cover additional material and be held strictly to the University regulations of Honors standards.

GEOLOGY

20. **Introductory Course in Geology:** Minerals and rocks; geological processes and their results; structure of the earth; practical application of geology; fossils and their use; an outline of the earth's history. Laboratory work will consist of the study of specimens of the more common rocks and minerals, typical fossil specimens, the interpretation of geological maps, sections and topographical maps. Field trips.

2 lectures, 2 laboratory hours a week.

21. **Geological Science:** A survey of the Geological Sciences; the relation of Geology to the other sciences, and its economic significance, with emphasis on topics of local interest. 2 lectures, 2 laboratory hours a week.

Honors Courses

251. Mineralogy and Elementary Petrology:

First part: the crystallo-chemical basis of mineral formation reached through a survey of the principles of crystallography and a study of the physical and chemical properties of minerals. The laboratory consists of practice in mineral identification.

Second part: a brief introduction to the basic principles and hypotheses of origin of igneous, sedimentary, and metamorphic rocks. Megascopic description, classification, and identification of important rock types of the earth's crust. 2 lectures and 4 laboratory hours a week.

256. **Drafting and Surveying:** The principles and techniques of surface and mine surveying with stress on the use of the plane table; precision of measurements and theory of errors; practice on surface and underground surveying. The principles of lettering and drafting and the preparation of simple geologic plans and mine sections.

1 lecture, 5 laboratory hours a week.

261. **Mineralogy:** The crystallo-chemical basis of mineral formation, as in Geology 251, but offered for Honors science students not enrolled in Honors Geology. Individual problems in crystal chemistry and geochemistry. 5 hours a week.

263. **Historical Geology:** The significant events in the geologic history of the earth and its inhabitants, combined with a general discussion of the geology of Canada. Laboratory periods will include map work, examination of fossils, and field trips.

Prerequisite: Geology 20 or 21. 2 lectures, 2 laboratory hours a week.

351. **Optical and Descriptive Mineralogy:** The principles of optics as applied to the identification of minerals; the study of about 150 rock-forming mineral species, with practice in their identification in hand specimen and in thin section. 2 lectures, 3 laboratory hours a week

354. **Origin and Formation of Mineral Deposits:** The origin of mineral deposits and a study of the principal processes involved in their formation, with a brief mention of prominent examples. Laboratory time will be devoted to readings on the theory of ore deposition as well as to the acquisition of the technique of polished section preparation and examination

1 lecture, 2 laboratory hours a week

355. **Structural Geology:** Primary and induced structures in igneous, sedimentary and metamorphic rocks; the physical properties of rocks and the effects of stress application; the interpretative value of various minor structures; relations between structure and topography; earth's structure and mountain building. Laboratory work will include the interpretation of geologic structures from maps. 2 lectures, 2 laboratory hours a week

363. **Invertebrate Paleontology:** First half—the study of fossils in biological succession with concentration on classification, morphology and ecology; second half—index fossils and their geologic ranges.

2 lectures, 3 laboratory hours a week

365. **Precambrian Geology of the Canadian Shield:** General geology of the Shield, with studies of type areas and some of the principal mining districts. Particular attention is paid to current problems and controversies

1 lecture, 1 hour class-study a week: half course

367. **Glacial and Pleistocene Geology:** Glaciers and their work; glacial and extraglacial deposits, their structure and landscape forms; Pleistocene stratigraphy, especially of eastern North America, and the development of Glacial Lakes; economic aspect of Pleistocene deposits. Laboratory work will consist of field trips, studies of collected materials, map exercises, readings and discussion of reference papers. 4 hours a week.

452. **Petrography and Petrology:** The principles and theories of igneous and metamorphic rock genesis; stress is laid on diversification in igneous magmas; the classification of rocks is discussed, with practice in rock identification, particularly in thin section.

2 lectures, 3 laboratory hours a week

454. **Economic Mineral Deposits:** The occurrence and production of ores of the principal metals, with a study of outstanding examples, especially in Canada. Laboratory works consists of (a) a series of reports based on selected reading from original sources and (b) studies of specific ore deposits or problems, with emphasis on the examination of ores under the microscope. 1 lecture, 5 laboratory hours a week

458. **Senior Research and Field Report:** A report on geological field work carried on by the student, including the results of laboratory investigation and a study of available literature. One and one-half courses.

460. **Seminar:** Presentation and discussion of papers on various geological subjects; informal discussion of topics of current geological interest 2 hours a week: half course

463. **Sedimentation and Stratigraphy:** The derivation, transport, deposition and lithification of sediments; the environment, in particular shallow marine conditions; the principles of correlation and the facies concept applied to important Paleozoic and Mesozoic sections in Canada. Laboratories include a problem in stratigraphic paleontology, the analyses of sediments, and map interpretations. 2 lectures, 2 laboratory hours a week.

465. **Geophysics:** An introductory course in the various geological problems associated with gravity, magnetism, seismology, radioactivity, and the internal constitution of the earth, with applications to geophysical exploration. 2 lectures, 2 laboratory hours a week.

GERMAN

1. **Elementary German:** The work of Grade XII (Middle School) or its equivalent is covered. 3 hours a week.

5. **Elementary Scientific German:** The elements of German grammar with the reading of easy scientific German. Prescribed for second year Honors science students. 3 hours a week.

5M. **Elementary Scientific German:** The elements of German grammar with the reading of easy medical German. Offered for medical students. 1 hour a week: half course.

10. **Intermediate German:** The work of Grade XIII (Upper School) or its equivalent is covered. 3 hours a week.

Prerequisite: Grade XII German or German 1.

15. **Intermediate Scientific German:** The reading of scientific works in German and a review of basic grammatical constructions as an aid to reading. Prescribed for third year Honors science students.

Prerequisite: German 5 or Grade XII German. 2 hours a week.

20. **Advanced German:** Translation from modern literary German, grammar, dictation, conversation. 3 hours a week.

Prerequisite: Grade XIII German or German 10.

22. **Conversation:** Systematic oral practice for students who wish to develop fluency in speaking German. 2 hours a week: half course.

Prerequisite: German 10 or German 20 or permission of the Department.

30. **Outline of Modern German Literature:** From Romanticism to the present. 3 hours a week.

Prerequisite: German 20.

40. **Outline of Classical German Literature.** 3 hours a week.
Prerequisite: German 30.

45. **Advanced Scientific German:** The reading of scientific works in German from textbooks and journals, supplemented by individual reading in the special field of study of each student. Prescribed for fourth year Honors science students. 1 hour a week: half course.
Prerequisite: German 15 or Grade XIII German.

Honors Courses

All students in Honors Courses will take comprehensive examinations at the end of their final year.

290. **German Romanticism.** 3 hours a week.
Prerequisite: Junior Group 2.

291. **Grammar, Conversation, Composition, Phonetics.**
Prerequisite: Junior Group 2. 2 hours a week.

333. **Middle High German Language and Literature:** An introduction to Germanic philology. 2 hours a week

390. **German Realism.** 3 hours a week

391. **Grammar, Conversation, Composition.**
Prerequisite: German 291. 2 hours a week.

420. **Contemporary German Literature.** 2 hours a week.

480. **German Classicism.** 3 hours a week.

481. **Grammar, Conversation, Composition.** 2 hours a week.
Prerequisite: German 391.

GREEK

1. **Elementary Greek:** A preparatory course for those who wish to begin the study of Greek at the University. 3 hours a week.

10. Plato, Selected Dialogues; Colson's *Greek Reader Part VIII;* composition, sight translation. 3 hours a week.
Prerequisite: Grade XII Greek or Greek 1.

20. Plato, *Crito;* Euripides, *Alcestis;* Xenophon, *Oeconomicus;* Demosthenes, *In Cononem;* composition, sight translation. 3 hours a week.
Prerequisite: Greek 10 or Grade XIII Greek.

29. **Greek Literature in English Translation:** A survey of Greek literature for those without a reading knowledge of Greek.
1 hour a week: half course.

30. Plato, *Apology;* Aristophanes, *Clouds;* Homer, selections from the *Iliad* and the *Odyssey;* lectures on the social, religious and political life of Athens in the fifth century, B.C.; composition, sight translation.
Prerequisite: Greek 20. 3 hours a week.

40. Aeschylus, *Prometheus Vinctus;* Euripides, *Medea;* Sophocles, *Oedipus Tyrannus, Antigone;* lectures on the theatre and the development of the drama; composition, sight translation. 3 hours a week.
Prerequisite: Greek 30.

Honors Courses

Comprehensive examinations will be set for all Honors students at the end of the fourth year.

Sight translation is an integral part of each of the courses in Greek Authors.

230. Plato, *Apology;* Aristophanes, *Clouds, Wasps;* public, social and political life of Athens in the fifth century, B.C.
Prerequisite: Group 2 including Greek 20. 2 hours a week.

250. **The Greek Epic:** Selections from the *Iliad and the Odyssey.*
Prerequisite: Group 2, including Greek 20. 1 hour a week: half course.

251. **Syntax and Composition:**
Prerequisite: Group 2, including Greek 20. 1 hour a week: half course.

257. **Ancient Civilizations:** The Near-East, Greece and Rome. Identical with Latin 257 and History 257. 3 lectures a week.

340. **Greek Tragedy:** Sophocles, *Oedipus Tyrannus, Antigone;* Aeschylus, *Prometheus Vinctus;* Euripides, *Medea.* Lectures on the theatre and the drama.
Prerequisite: Greek 230. 2 hours a week.

350. **I: Introduction to the Greek Historians:** Herodotus.
II: The Attic Orators: Lysias and Demosthenes.
Prerequisite: Greek 230. 2 hours a week.

351. **Syntax and Composition:** 1 hour a week: half course.
Prerequisite: Greek 251.

352. **Introduction to Greek Philosophy:** Plato, *Republic, I-IV.*
Prerequisite: Greek 230. 1 hour a week: half course.

450. **The Greek Historians:** Thucydides.
Prerequisites: Greek 340, 350. 2 hours a week.

451. **Syntax and Composition:** 1 hour a week: half course.
Prerequisite: Greek 351.

452. **Greek Philosophy:** Plato, *Republic, V-X;* Aristotle, *Ethics, I, II, IV, X.* 3 hours a week.
Prerequisites: Greek 340, 350.

453. **Reading Course in Greek:** To be taken with Latin 453.
Prerequisites: Greek 340, 350. 3 hours a week, one term: half course.

457. **Greek and Roman History:** Lectures, readings and reports. Prescribed for students in Honors Classics and optional with the consent of the instructor for other qualified students. Identical with Latin 457.
2 hours a week.

HEALTH

General Medical Knowledge: Lectures on mental health, communicable diseases and immunization, essential anatomy, physiology, minor and common diseases of the respiratory, cardio-vascular, alimentary, urino-genital and nervous systems; First Aid. Prescribed for all students in their first intramural year. One hour a week for nine weeks.

HEBREW

(available only in Huron and Waterloo Colleges)

1-10. Grammar: Text of *Genesis* 1-3, I *Kings* 17. 5 hours a week.

20. Grammar and Syntax: Text of *Obadiah, Jonah, Amos, Isaiah* 1-6, *Haggai.* 3 hours a week.

Prerequisite: Hebrew 1-10.

30. Principles of Hebrew Poetry: *Psalms* 1, 16, 23-28, 80-84, 90-95, 121-134, *Proverbs* 1-5, *Job* 38-41; Old Testament archaeology.

Prerequisite: Hebrew 20. 3 hours a week.

40. Aramaic: Brown, *Aramaic Methods,* part I and II; exercises, grammar, syntax, pointing; translation of Old Testament Aramaic sections; Old Testament history and religion. 3 hours a week.

Prerequisite: Hebrew 30.

HISTORY

14. History of the Americas: A study of the rise and growth of the various American nations and their relations with one another, against their respective geographical, economic and cultural backgrounds. Not offered in University College. 3 hours a week.

20. Mediaeval, Renaissance and Reformation History: Continental Europe from the Fall of the Roman Empire to the close of the Council of Trent. Lectures, prescribed reading and essays. 3 hours a week.

30. The Development of Western Civilization and Thought: A survey of the development of western civilization and thought from the breakdown of the Roman Empire to the Peace Settlement following World War I. This course may not be taken by any student who has credit for 20 or 36, or for former courses numbered 21, 45 or 46. 3 hours a week.

31. History of Canada: Lectures, prescribed reading and at least three essays. A survey from the from the beginning of the French Regime to the present. 2 hours a week.

33. The British Empire and Commonwealth: A survey of overseas expansion of Britain, the development of self-government in the colonies, the evolution of the Empire, the Commonwealth from 1867 to 1947, and the contemporary Commonwealth. Lectures, prescribed reading and essays. 2 hours a week.

35. History of England: A lecture and reading course on the political and cultural development of England from the Roman Conquest to 1837. Prescribed for students in Honors History. 2 hours a week.

36. **Modern European History:** From the Religious Peace of Augsburg, 1555, to the fall of the First German Republic, 1934. Lectures, prescribed readings and essays. 3 hours a week.

44. **History of the United States:** The colonial period (general survey only), the Revolution, and political and social history to the present. 3 hours a week.

Honors Courses

236. **Modern History (1555-1934):** For details see History 36. Honors students will be required to do special reading and reports.
Prerequisite: Junior Group 2. 3 lectures and a seminar a week.

257. **Ancient Civilizations.** The Near East, Greece and Rome. Identical with Latin 257 and Greek 257. 3 hours a week, lectures and seminars.

331. **History of Canada:** A survey from the beginning of the French Regime to the present. 2 lectures and a seminar a week.

333. **The British Empire and Commonwealth:** For details see History 33. Honors students will be required to do special reading and reports in this course. 3 hours a week, lectures and seminars.

354b. **History of Latin America.** 3 hours a week, lectures and seminars: half course.

356a. **History of International Relations:** 1918 to the present. 3 hours a week, lectures and seminars: half course.
Prerequisite: History 236.

444. **History of the United States:** See History 44; prescribed for students of the fourth year in the Honors Course in History. 3 lectures and a seminar a week.

452. **History of European Society and Institutions:** In the first term Continental Europe to 1648 will be studied. In the second term the course deals primarily with the social and constitutional history of England to 1660 and emphasizes the use of documents. Lectures and seminars. 3 hours a week.

455. **British Political Parties:** The rise of the Tory and Whig parties; the Revolution of 1688; the Tory Reaction in the reign of Anne; the "Reign of the Whigs", the experiment in personal government of George III; the disruption of the old Whig Party; the new Tory Party under Pitt; the growth of Parliamentary Reform and Free Trade; Peel and Liberal Conservatism; Disraeli and Democratic Toryism; Gladstone and Modern Liberalism; the Irish Parliamentary Party; the Unionist Party; the Labor-Socialist Party. Not offered in University College. Lectures and seminars. 3 hours a week.

460. **The Transition from Medieval to Modern Civilization:** A survey of the economic, social, political, cultural and religious developments of the period of the Renaissance and the Reformation, from about 1300 to about 1600. Lectures, reading reports and seminars. 3 hours a week.

HOME ECONOMICS

23x. Applied Art: Fundamentals of design and color as applied to the home; modern handicraft suitable for use in home and school.

2 hours a week.

24x. Home Nursing and First Aid: Care of the sick; emergency treatment; bandaging; symptoms and isolation of disease. Essays and practical problems. 1 hour a week: half course.

25x. Household Administration: A study of general principles of home construction, choice of sites, house designs, cost of dwelling, selection of home equipment and planning the work in the home.

2 hours a week: half course.

26x. Physiology: A lecture course dealing with the structure and functions of the various parts of the human body.

2 hours a week: half course.

30x. Clothing: A study of textiles; problems in clothing construction.

1 lecture, 3 laboratory hours a week.

31x. Normal Nutrition: Normal requirements of the body; the optimum diet; food nutrients and their functions; deficiencies.

2 lectures a week, both terms; 2 laboratory hours a week, one term.

Prerequisites: Home Economics 26x.

32x. Foods: The principles of cookery and food preparation and the scientific theory underlying them. 1 lecture, 3 laboratory hours a week.

33x. Interior Decoration: Elements of interior decoration and design.

1 hour a week, half course.

Prerequisite: Home Economics 23x.

40x. Clothing and Designing: Art of costume and personal appearance; history of costume; pattern designing; care of fabric; problems in clothing construction. 2 lectures, 3 laboratory hours a week.

Prerequisite: Home Economics 30x.

41x. Advanced Nutrition: Nutritional needs during infancy; the preschool child; the adolescent. Modifications of the normal diet to meet specific dietary needs during diseases. Preparation of foods for these diets.

2 lectures a week, both terms; 2 laboratory hours a week, one term.

42x. Foods: Food science and experimental cookery.

1 lecture, 3 laboratory hours a week.

Prerequisite: Home Economics 32x.

45bx. Economics of the Household: Marketing and consumer education; family income; budgeting. 2 hours a week: half course.

46x. Demonstration Techniques: Meal service.

1 afternoon a week in second term: half course.

47x. Nutrition: Seminars and reports on recent findings in nutrition.

Prerequisite: Home Economics 31x. 1 hour a week: half course.

48x. **Institutional Management:** Discussion of equipment; organization and administration of food services; quantity cookery; field projects.
2 lectures a week, 3 laboratory hours one term.
Prerequisite: Home Economics 32x.

ITALIAN

1. Elementary Italian: Grammar, oral practice, reading of simple texts. 3 hours a week.

10. Intermediate Italian: Review of grammar, reading of contemporary Italian, oral practice. 3 hours a week.
Prerequisite: Italian 1 or its equivalent.

20. Outline of Italian Literature and Civilization: Composition, reading, history of literature. 3 hours a week.
Prerequisite: Italian 10 or Grade XIII Italian.

30. Study of the 'Trecento' in Italy: Readings in Dante, Petrarch and Boccaccio, history of literature. 3 hours a week.
Prerequisite: Italian 20.

JOURNALISM

Note: Students should be proficient in typewriting by the beginning of the second year.

20. Introduction to Journalism: A survey of mass communication media, forms and styles of journalistic prose, reporting methods.
3 hours a week.

Honors Courses

250. Interpretive News Writing and Reporting: Reporting specialized fields, public affairs, social, economic and political news.
6 hours a week.

260. Law for Journalists: Basic principles of the common law with special emphasis on access to news, legal guarantee and limits of freedom of the press; defamation; contempt of court and copyright.
1 hour a week: half course.

270. Pictorial Journalism: Principles of news photography; picture editing; the photo-story; magazine illustration; layout; engraving process. Not a course in photography. 2 hours a week: half course.

351. Newspaper Production: Newsroom organization; copy editing; page makeup; survey of the mechanical phases of newspaper production.
3 hours a week.

355. History of Journalism: A survey of the development of journalism in the British Isles, United States and Canada. 2 hours a week.

365. Editorial Writing: Editorial policy; the editorial and the background article; research methods; editorial page feature; the signed column; ethical standards of the press. 1 hour a week: half course.

375. **Feature and Magazine Article Writing:** Feature writing for newspapers; magazine article writing, including a study of marketing and manuscript preparation. 2 hours a week.

400. **Newswriting and Reporting:** For students registered in the Diploma course in Journalism. Writing for mass communication; the forms and style of journalistic prose; reporting methods; news evaluation; interpretive reporting. 9 hours a week.

451. **Communication Problems:** Semantics, propaganda, seminars on problems in special fields. 3 hours a week.

455. **Radio News and Documentary Writing:** Comparative study of newspaper and radio writing and news treatment; preparation of newscasts; documentary news broadcasts; radio interviewing; the actuality broadcast. 3 hours a week.

460. **Foreign News Editing and Reporting:** An intensive study of dispatches and background material from areas prominent in the news. 2 hours a week.

LATIN

1. **Elementary Latin:** A preparatory course for those who wish to begin the study of Latin at the University. 3 hours a week.

10. Selections from Latin Prose and Poetry; composition and sight translation. 3 hours a week.

Prerequisite: Grade XII Latin.

20. Pliny, *Letters;* Virgil, *Aeneid VI;* composition; sight translation.

Prerequisite: Latin 10 or Grade XIII Latin. 3 hours a week.

30. Catullus; Virgil, selections from the *Bucolics* and *Georgics;* selections from Horace (*Odes*) and the Elegiac Poets; composition and sight translation.

Prerequisite: Latin 20. 3 hours a week.

39. **Latin Literature in English Translation:** A survey of Latin Literature for those without a reading knowledge of Latin. 1 hour a week: half course.

40. Virgil, *Aeneid I-VI;* Horace, *Satires, Epistles;* Juvenal, *Satires;* composition, sight translation. 3 hours a week.

Prerequisite: Latin 30.

Honors Courses

Comprehensive examinations will be set for all Honors students at the end of the fourth year.

Sight translation is an integral part of each of the courses in Latin Authors.

230. Catullus; Virgil, selections from the *Bucolics* and *Georgics;* selections from Horace (*Odes*) and the Elegiac Poets. 2 hours a week.

Prerequisite: Group 2, including Latin 20.

250. Cicero, *De Amicitia.* 1 hour a week: half course.
Prerequisite: Group 2, including Latin 20.

251. Syntax and Composition: 2 hours a week.
Prerequisite: Group 2, including Latin 20.

257. Ancient Civilizations: The Near-East, Greece, Rome. Identical with History 257 and Greek 257. 3 lectures a week.

340. Virgil, *Aeneid I-VI;* Horace, *Satires* and *Epistles;* Juvenal, *Satires.*
Prerequisite: Latin 230. 2 hours a week.

350. Cicero: the history of his life and times; *De Officiis III, Pro Archia, Philippic II, Letters.* 2 hours a week.
Prerequisites: Latin 230, 250.

351. Syntax and Composition: 1 hour a week: half course.
Prerequisite: Latin 251.

352. Roman Comedy, with an introduction to historical Latin Grammar. 1 hour a week: half course.
Prerequisites: Latin 230, 250.

450. Roman Historians, with special reference to Livy and Tacitus.
Prerequisites: Latin 340, 350, 352. 2 hours a week.

451. Syntax and Composition: 1 hour a week: half course.
Prerequisite: Latin 351.

452. Lucretius, *I-III* (Selections), *V;* Virgil, *Aeneid, VII-XII;* Quintilian X; Horace, *Satires I, 4, 10; Ars Poetica.* 2 hours a week.
Prerequisites: Latin 340, 350, 352.

453. Reading Course in Latin: to be taken with Greek 453.
Prerequisites: Latin 340, 350, 352.
3 hours a week, one term: half course.

457. Greek and Roman History: Lectures, readings and reports. Prescribed for students in Honors Classics and optional with the consent of the instructor for other qualified students. 2 hours a week.

LIBRARY SCIENCE

The Use of Books and Libraries: Lectures and exercises on the use and arrangement of the card catalogue, standard reference books, bibliography, periodicals and periodical indexes. Prescribed for all students in the first year. 1 hour a week: half course.

Text-book: Campbell and Welling, *Library Science for Canadians.*

MATHEMATICS AND ASTRONOMY

10. College Algebra: Not offered in University College.
2 hours a week.

Algebra, Geom. & Trig — 3.
separate 3*

12. **Analytic Plane Geometry:** Not offered in University College. 2 hours a week.

18. **Plane Trigonometry:** Not offered in University College. 3 hours a week, one term; half course.

20. **Principles of Mathematics:** An introduction to university mathematics and some modern points of view in the foundations of mathematics. 3 hours a week.

Prerequisite: Grade XIII Mathematics (any two papers), or equivalent mathematical maturity.

Text-book: Allendoerfer and Oakley, *Principles of Mathematics* (McGraw-Hill).

24. **Calculus:** A first course. 3 hours a week.

Prerequisites: Grade XIII Algebra, Geometry, and Trigonometry, or Mathematics 10, 12, 18.

27. **Calculus:** For first year Engineering Science.

Prerequisites: Grade XIII Algebra, Geometry, Trigonometry. 4 hours a week.

Text-book: Sherwood and Taylor, *Calculus* (Prentice-Hall).

29. **Descriptive Astronomy:** Systems of coordinates; identification of stars and constellations; the solar system; normal, variable and binary stars; structure of our galaxy; other galaxies; observations with the 10-inch refractor of the Hume Cronyn Observatory. 2 hours a week.

33. **Mathematics of Investment:** Interest and discount, annuities certain; amortization and sinking funds, bonds and bond prices, capitalized cost, elementary probability theory with applications to life insurance and life annuities. 2 hours a week.

Prerequisite: Grade XIII Algebra.

Text-book: Simpson, Pirenian, Crenshaw, *Mathematics of Finance,* Third Edition (Prentice-Hall).

35. **Statistics:** Fundamental concepts of statistics with applications; nature and scope of statistical methods. 2 hours a week.

Text-book: Wilks, *Elementary Statistical Analysis* (Princeton University Press).

Honors Courses

Note: For Mathematics 30, 32, 34, see Mathematics 230, 232, 234.

230. **Algebra I:** Determinants and matrices, complex numbers, theory of equations.

Prerequisite: Mathematics 20 or 24. 2 hours a week.

Text-book: Murdock, *Linear Algebra for Undergraduates* (Wiley).

232. **Analytic Geometry:** First term, the general conic and pencils of conics; second term, geometry of three dimensional space. 3 hours a week.

Prerequisite: Mathematics 20 or 24.

Text-books: Magee, *Advanced Conic Sections* (mimeographed).
Olmsted, *Solid Analytic Geometry* (Appleton-Century).

234. Calculus. 4 hours a week.
Prerequisite: Mathematics 20.

254. Calculus. 3 hours a week.
Prerequisite: Mathematics 24.

264. Ordinary Differential Equations. 2 hours a week.
Prerequisite: Mathematics 20 or 24.

277. Calculus and Differential Equations: For second year Engineering Science. 3 hours a week.
Text-book: Sherwood and Taylor, *Calculus* (Prentice-Hall).

345. Probability and Statistics I. 3 hours a week.

350. Algebra II: Introduction to Modern Algebra. 2 hours a week.

351. Synthetic Geometry: Metric and projective geometry of two dimensional space. 2 hours a week.

353. Investment and Life Contingencies I. 2 hours a week.
Text-book: Jordan, *Life Contingencies* (Society of Actuaries).

356. Analysis I. 3 hours a week.
Text-book: Rudin, *Principles of Mathematical Analysis.*

359 Astronomy: Descriptive and mathematical. 2 hours a week.

363. Numerical Analysis. 2 hours a week.
Text-book: Milne, *Numerical Calculus* (Princeton University Press).

364. Introduction to Partial Differential Equations. 3 hours a week.

377. Engineering Mathematics: For third year Engineering Science students. 3 hours a week.

450. Algebra III. 2 hours a week.
Text-book: Van der Waerden, *Modern Algebra* (Ungar).

452. Analytic Projective Geometry. 2 hours a week.

455. Statistics II. 3 hours a week.

456. Analysis II. 3 hours a week.
Text-book: Titchmarch, *Theory of Functions* (Oxford Press).

459. Astrophysics: An introduction to the study of binary stars, stellar atmospheres, stellar structure and interstellar matter. Practical problems in the analysis of astronomical data relating to these topics will be included. 2 hours a week.

460. Introductory Topology. 2 hours a week.

463. Life Contingencies II. 2 hours a week.
Text-book: Jordan, *Life Contingencies* (Society of Actuaries).

468. Vector and Tensor Analysis. 2 hours a week.

470. **Foundations of Mathematics:** Historical background and philosophical aspects of mathematics; abstract postulational systems; foundations of geometry, algebra, and analysis. 2 hours a week.

MILITARY STUDIES

Students may offer themselves for training in one of the three Armed Services, the University Naval Training Divisions, the Canadian Officers' Training Corps, and the RCAF University Squadron. Suitable candidates in each service will be trained for commissioned rank.

Military Studies count as a half course towards a degree in Senior Group B of the General Course in Arts.

Auxiliary officers and other ranks, enrolled in degree courses, will obtain credit for Military Studies when they have served for three years, including summer training, and have attended eighty percent. or more of their lectures and parades.

MUSIC

Three courses in Music permit students of the University to expand their knowledge of music and improve their performance. Application should be made to the Principal of University College to ascertain where these options will be counted in Junior Group 2, in Senior Group B, and in Honors and specialized courses. Substitution for a prescribed subject in any year of an Honors course must have the concurrence of the head of the Department concerned.

Through auditioning, the professor in charge of each course in Music will assess each candidate's prerequisite and outline the nature of the assignments for the year. The subjects presented are theory, history of music and applied music, i.e. lessons in piano, voice or violin, etc. Two of the three subjects must be chosen in order to obtain college credit. Whenever private lessons are involved, tuition fees will be the student's responsibility.

10. **History of Music:** Music in the ancient world, in the early Church, in the Middle Ages, in the Renaissance; the introduction to the baroque; the 17th and 18th centuries; Bach and Handel.

Theory, first course: Elementary Rudiments and Harmony; knowledge of major and minor scales, time signatures, intervals, embellishments, primary triads, cadences, phrase and sentence structure as demarcated by cadence. 2 hours a week.

20S. **Music Education:** to be offered only in the Summer Session. It is an option toward a General Arts degree. 10 hours a week.

20. **History of Music:** Haydn, Mozart, Beethoven, Schubert, the early Romantic composers, Mendelssohn, Schumann, Berlioz, Chopin and piano music, Liszt, the predecessors and contemporaries of Wagner.

Theory, second course: Harmony, chord connection, primary and secondary triads, realization of figured bass, harmonization of melody, study of two and three-part song forms and sonatina. 2 hours a week.

30. **History of Music:** The later Romantics; Brahms, Wolf, Strauss; Cesar Franck; Bruckner, Mahler; Nationalism in Music; the musical impressionists; Debussy, Ravel; the 20th century.

Theory, third course: Harmony: seventh chords, non-chord tones, simple modulations, study of Sonata-Allegro form. 2 hours a week.

For additional Music Courses, see page 97.

PHILOSOPHY

Note: A student who has not chosen Philosophy 20 as a Junior Group option is required to take Philosophy 30 or 32 (for Science students) for a General Course degree. Philosophy 20 is not a prerequisite for 30, although 20 followed by 30 is a suitable sequence.

20. **Philosophy and Human Problems:** This course is concerned with ethical, logical, aesthetic, religious, educational and political types of problems. Its purpose is to help students to understand what is involved in these problems and to appreciate some of the solutions provided by the great thinkers of the past and present. (This course is for freshmen.) 3 hours a week.

30. **Basic Philosophical Literature:** A critical survey of a selected group of Philosophical classics, ancient and modern. 3 hours a week.

31. **Logic and Problems of Knowledge:** First term—Logic: meaning and definition, formal logic, verification of knowledge and scientific method; second term—Problems of Knowledge, with particular reference to religion. 2 hours a week.

32. **Philosophical Theory:** Readings in selected philosophical classics, with an emphasis on those which form the background of scientific theory. (This course should not be selected by those who are taking or have taken Philosophy 20 or 30.) 2 hours a week.

35. **Aesthetics:** A story of aesthetic theory, criticism, and general theory of value. 2 hours a week.

36. **Ancient Philosophy:** A survey of the principal developments from the Presocratics (600 B.C.) to Plotinus (250 A.D.) and of their contributions to our cultural heritage. Primary emphasis will be placed on the critical reading of selected original sources. 2 hours a week.

42. **Introductory Ethics:** A critical inquiry into the possibility and nature of ethical standards, the methods by which they may be known, and their applications to concrete problems of personal and social morality. 2 hours a week.

43. **Philosophy of Religion:** The nature of religion; the growth of religious experience; important types of religious philosophy. 2 hours a week.

44. **Principles and Problems of Philosophy:** Philosophical problems, related to the special interests of members of the class, will be discussed. 2 hours a week.

Prerequisites: Two courses in Philosophy and the consent of the Head of the Department.

47. **Early Modern Philosophy:** A critical examination of basic philosophical literature from the 16th, 17th and 18th centuries. 2 hours a week.

48. **Contemporary Philosophy:** A critical study of the following 20th century philosophers: Dewey, Bergson, Whitehead. There will also be an examination of logical positivism and existentialism. 2 hours a week.

Honors Courses

The following courses are identical with the Pass courses indicated, except that additional assignments will be required: 231 (31), 335 (35), 336 (36), 347 (47), 443 (43), 444 (44), 448 (48).

230. **Basic Philosophical Literature:** An examination of the principal problems and issues, methods and attitudes, theories and solutions, terms and concepts, of philosophy, as exemplified in selected philosophical classics. For Honors students in any department. 3 hours a week.

350. **Philosophical Texts:** An examination of specified source materials in Greek and Modern Philosophy; critical works will also be studied. 2 hours a week.

456. ***Seminar in Plato and Aristotle.***
Prerequisite: Philosophy 336. 2 hours a week.

457. **Modern Philosophy:** Later modern philosophy with particular emphasis on the philosophy of the 19th century. 2 hours a week.
Prerequisite: Philosophy 347.

462. **Ethics:** A critical study of moral problems and theories. The course will be based on readings selected from the classics of ethical literature from Aristotle to the present. 2 hours a week.

466. **Mediaeval Philosophy:** A survey of the principal currents in philosophy from the breakdown of classical culture to the Renaissance (350 A.D. to 1500). Primary emphasis will be placed on the critical examination of representative works. 2 hours a week.
Prerequisite: Philosophy 336.

PHYSICAL AND HEALTH EDUCATION

10. **Prescribed Program:** The curriculum is divided into two sessions (fall and winter). Each undergraduate student entering the University will elect one activity in each of the two sessions, in order to fulfill the requirements of this course. All new students are also required to take a swimming proficiency test. The non-swimmer and beginning swimmers will enrol in the beginning swimming course in the fall session.

Fitness Tests: New students may be granted the privilege of exemption from one or more of the session's activities by passing proficiency examinations in the sports offered.

Activities Available:

(1) *Aquatic*: Beginning and advanced swimming; lifesaving;
(2) *Recreational*: Badminton; squash; tennis; golf; handball;
(3) *Team*: Soccer; volleyball;

(4) *Combatives*: Wrestling; personal defense; (men only);
(5) *Athletic and acrobatic*: Tumbling; apparatus; track and field;
(6) *Fitness and developmental*: Physical fitness; prescribed exercises. Hours by arrangement: half course.

Honors Courses

251. Team Games, Individual and Dual Activities: for men—football, group games, basketball, aquatics, track and field, officiating, volleyball, gymnastics, badminton; for women—archery, track and field, group games, volleyball or basketball, badminton, folk dancing, square and ballroom dancing, swimming, gymnastics.
2 lectures and 4 laboratory hours a week.

253. School Health Education (Methods and Materials): An approach to intelligent planning for healthful living; the study of personal health from the standpoint of Biology and Psychology; community and institutional public health; methods and materials needed to teach school health.
2 lectures a week.

258. History of (and Introduction to) Physical, Health, and Recreation Education: Development of these three sections of education; their inter-relationship in modern society; their connection with learning; the social significance of competitive games and sports; contemporary developments through public and private agencies. 3 lectures a week.

351. Team Games, Individual and Dual Activities: for men—football, track and field, hockey, folk and square dancing, soccer, basketball, aquatics, gymnastics; for women—tennis, golf, group games, volleyball or basketball, folk dancing, modern dancing, swimming.
1 lecture and 4 laboratory hours a week.

352. Organization and Administration of Physical and Health Education including Athletics: Staff, curriculum, budget, finance and purchasing, care of equipment, class organization, records, reports and facilities; the scheduling and management of athletic contests. 2 lectures a week.

354. Functional Human Anatomy:
1 lecture and 1 laboratory hour a week: half course.

366. Methods and Materials: A theory and laboratory course designed to acquaint the student with the program of physical education, selection of activities, planning, sources of materials and evaluation; analysis of materials in fundamental, individual and dual games, rhythmics, gymnastics, and team games. 3 lectures a week (laboratory as required).

451. Team Games, Individual and Dual Activities: for men—football, track and field, sports development exercises, gymnastics, aquatics, basketball, wrestling, baseball, stunts and tumbling; for women—two team sports, specialized training and experience in coaching, two individual or dual sports, and electives. 1 lecture and 4 laboratory hours a week.

453. Corrective Physical Education (including Care and Prevention of Athletic Injuries): Essential facts of human anatomy and physiology, as

they pertain to corrective exercise; the under-developed or handicapped child; the care and prevention of athletic injuries; practical laboratory experience in clinical centres. 1 lecture, 2 laboratory hours a week.

454. **Physiology of Exercise and Kinesiology:** Trends of investigations of the physiology of physical activity, with implications for physical and health education; the science of bodily movements; the principal types of muscular exercise; analysis of complex movements into their simplest elements. 2 lectures a week (laboratory as necessary).

456. **Seminar:** Presentation, discussion and analysis of current physical education problems; the aims, objectives, and scope of the physical education program; supervised observation. 3 hours a week.

457. **Tests and Measurements:** The study of tests in Physical Education; their construction and application; statistical techniques applied to the interpretation of tests and measurements.

3 lectures a week (laboratory as required).

PHYSICS

20. **Mechanics and Heat:** A survey prescribed for students intending to major in some branch of science: demonstrations and laboratory exercises covering the following principal topics: systems of measurement; laws of uniformly accelerated motion; elementary analytic statics; rotational motion; simple harmonic motion; hydrostatics and hydrodynamics; surface tension; viscosity; osmosis; thermometry; temperature and its effects; gas laws; calorimetry; change of state; vapor pressure; hygrometry; elementary kinetic theory; first and second laws of thermodynamics, reversible cycles.

2 lectures, 3 laboratory hours a week.

21. **Physical Science:** Lectures and lecture demonstrations designed (1) to present an historical review of the development of the physical sciences, with emphasis on principles rather than facts; (2) to develop some of the practical applications of physical science in the modern world; (3) to outline the present trends in science. Optional in Junior Group 2 and in Senior Group B. 2 lectures, 2 laboratory hours a week.

31. **General Physics:** An extension of Physics 20 and 21; the laws and principles of light, sound, electricity, magnetism and thermionics.

2 lectures a week, both terms; 3 laboratory hours a week, first term.

41. **Modern Physics:** (i) a review of the laws and theories of classical physics; (ii) the development of physical science from the late 19th century to the present, with particular emphasis on atomic phenomena.

Prerequisites: Physics 20 or 21 and Mathematics 24 (this may be taken contemporaneously). 3 lecture hours a week.

Honors Courses

204. **General Physics:** Elementary Electricity and Optics including elementary geometrical and physical optics, current electricity, static electricity, magnetism and electro magnetism.

2 lectures, 3 laboratory hours a week.

204M. **General Physics:** An extension of Physics 20, prescribed for the students who have been selected by the Admissions Committee of the Faculty of Medicine for admission to the second year premedical course; the laws and principles of light, sound, electricity, magnetism and thermionics.
2 lectures, 3 laboratory hours a week, first term:
2 lectures a week, second term.

250. **Mechanics:** An introduction to vector calculus, with applications to mechanics; the theory of vibrations and waves; dimensional analysis.
2 lectures a week.

251. **Theory of Measurements:** Lectures and practical work on methods of treating data obtained in the laboratory, so as to obtain the greatest amount of useful information. The course includes a discussion of the basic ideas of probability, of chance distributions, and of precision indexes.
3 lectures and laboratory hours a week.

254. **Light and Sound:** Elementary geometrical and physical optics, and elementary sound. 2 lectures, 3 laboratory hours a week.

255. **Electricity and Magnetism:** The principles of electricity and magnetism, including an introduction to electrical measurements.
2 lectures, 3 laboratory hours a week.

350. **Dynamics and Properties of Matter:** Some aspects of properties of matter, damped and perturbed harmonic motion, central orbits, and the theory and application of the Lagrangian and Hamiltonian equations of motion. 3 lectures a week.

351. **Methods of Mathematical Physics I:** An introduction to the methods of solution of the common partial differential equations of physics, in the simple co-ordinate systems and under various boundary conditions. The eigenvalue and eigenfunction approach is emphasized, and in particular the physical applications of Fourier series are considered in detail.
3 lectures a week.

353. **Heat and Thermodynamics:** A treatment of the laws of thermodynamics, heat engines, reversible cycles, change of state, radiation, kinetic theory of gases, with applications to various fields of physics, including surface tension and elasticity. 2 lectures a week.

356. **Electronics:** Similar to 376. 2 lectures a week.

359. **Laboratory:** Designed to give training in the techniques of advanced physics. 9 laboratory hours a week: double course.
For Engineering students, 3 laboratory hours a week: half course.

366. **Electronics:** Similar to 376 but with the addition of one term of laboratory work. 2 lectures a week, both terms,
3 laboratory hours a week, second term.

370. **Dynamics:** The first term of Physics 350, including Vector Analysis and generalized coordinates.
3 lectures a week, first term: half course.

376. **Electronics:** A treatment of the underlying principles of the emission of electrons and of their behaviour in high vacuum tubes, gaseous tubes, cathode ray tubes and other devices; an analysis of rectifier circuits and of amplifiers. 2 lectures a week.

377. **Circuit Analysis:** An introduction to electric circuit analysis commencing with simple transient problems but chiefly concerned with the steady-state A.C. method. Impedance and admittance concepts, vector diagrams, resonance, systematic analysis of multi-branch networks and the specialised results of linear 4-terminal systems are considered in detail. Emphasis throughout is placed on communications rather than power aspects. 3 lectures a week.

379. **Laboratory:** Experiments on the elementary theory of vacuum tubes, the transient analysis of simple circuits, and elementary A.C. phenomena. Electrical measurements at audio and radio-frequencies. Design, and construction of power-supplies, audio amplifiers, attenuators and filters. Solution, by students in class, of problems arising from Physics 376 and 377. 9 laboratory hours a week: double course.

454. **Optics:** An advanced treatment of theoretical and applied optics. 2 lectures a week.

455. **Electromagnetic Theory:** A vector treatment of the theory of the static and dynamic electromagnetic fields, based on the fundamental experiments. 2 lectures a week.

456. **Atomic and Nuclear Physics.** A course designed to give a thorough knowledge of the fundamental particles and of the experimental basis for modern concepts of atomic and nuclear structure. 2 lectures a week.

457. **Introductory Quantum Mechanics:** The course stresses the physical ideas behind the wave-particle duality and probability interpretation, thus leading to Schroedinger's wave equation and its solution for tunnelling phenomena, Hydrogen atom, and other problems. 2 lectures a week.

458. **Seminar:** Preparation of papers and reports: reading of historical essays and of articles from current magazines. Prescribed for fourth year students and optional for all students in the Mathematics and Physics course. 1 hour a week: half course.

459. **Laboratory:** Designed as an accompaniment to the lecture work of the fourth year. Emphasis is laid upon individuality of work and resourcefulness. As far as possible, training is given in research methods. 12 laboratory hours a week: double course.

476. **Methods of Mathematical Physics II:** Transient analysis of linear networks containing lumped and distributed parameters by Laplace and Fourier transformation methods. The description of networks in terms of poles and zeros and an introduction to the modern methods for the systematic synthesis of passive and active networks. 2 lectures a week.

477. **Communication Circuits:** A study of the principles and applications of oscillatory circuits, modulators, detectors, etc., together with an analysis of transmission line and antenna design. 2 lectures a week.

479. **Laboratory:** Designed as an accompaniment to the lecture work of the fourth year Radio Physics Option. 12 hours a week: double course.
For Engineering students: 6 hours a week: full course.

POLITICS

32. **Introduction to Political Science:** (a) The state, its origin, form and activities, and the working of democratic governments, particularly those of the United Kingdom, Canada, the United States, and France.
(b) A critical study of Socialism, Communism and Fascism.
3 hours a week.

34. **Elements of Political Theory:** An analysis of the principal concepts of politics, especially democratic politics.
Prerequisite: Politics 32 or instructor's permission. 3 hours a week.

42. **Canadian Government and Politics:** A study of Canadian Federal, Provincial and Municipal Government, Federalism and Political Parties.
3 hours a week.

44a. **American Government and Politics:** A study of American institutions of government and American political processes.
Prerequisite: Politics 32 or History 44 or instructor's permission.
3 hours a week: half course.

Honors Courses

Politics 232, 334, 342 and 444a are identical respectively with 32, 34, 42 and 44a, except that additional assignments will be required in Honors courses.

351b. **International Relations:** The problems arising from the absence of world government; economic harmonies and conflicts; Nationalism, Militarism, Imperialism, the causes of war and the efforts to avoid it; diplomacy, arbitration, the World Court, International Law, and the United Nations.
3 hours a week, one term: half course.

452. **Western Political Thought:** (a) The development of Western political ideas from the ancient Greeks to modern Liberalism.
(b) Current political issues. Democracy and Totalitarianism, Nationalism and Internationalism, Individualism, Collectivism and the theory of groups. The impact of recent trends in philosophy and psychology.
3 hours a week.

462b. **Public Administration:** An analysis of the structure, management and control of modern civil services.
Prerequisite: Politics 32. 3 hours a week: half course.

PSYCHOLOGY

In University College, Psychology 20 or 30 is ordinarily prerequisite to all other courses in psychology.

20. **Introduction to Psychology:** Contemporary psychological methods and tendencies; intelligence and intelligence testing; memory and the learning process; motivation; feeling and emotion; sensation and perception; types of thinking; personality. 3 hours a week.

30. **Principles and Methods:** A discussion of the motives, emotions, and intellectual abilities of human beings; special emphasis on the effective use of these factors in private and social activities. **Open only to Science and Premedical students who have neither had nor are taking Psychology 20.**
3 hours a week.

35. **Experimental Psychology I:** An elementary course designed to introduce the student to standard laboratory techniques in psychology; emphasis is placed upon learning, aesthetic judgment, motor aptitudes; a brief introduction to statistics. 2 lectures, 2 laboratory hours a week.

36. **Child Psychology:** Child development; native equipment; learning; character and personality development; child management and family relationships. 2 hours a week.

38. **Experimental Psychology II:** A laboratory study of such processes as sensation, perception, reaction times, emotions and the higher thought processes. 2 lectures, 2 laboratory hours a week.

39. **Problems in Clinical Psychology:** A clinical approach to behavior problems including a discussion of the historical development of clinical psychology; current problems and the role of research; theoretical frames of reference; diagnostic and psychotherapeutic methods. 2 hours a week.

46. **Applied Psychology:** The applications of psychological principles to problems in education and industry. 2 hours a week.

48. **Abnormal Psychology:** A consideration of abnormal activities in sensation, perception, memory, emotion, thought and behavior; mental deficiency; the causes and symptoms of the psychoneurotic disorders; some reference to major mental disorders; psychotherapeutic techniques including hypnosis and psychoanalysis; spiritism and extrasensory perception.
2 hours a week.

49. **Social Psychology:** The activities of living beings in response to their social environment. The conditioning of personality by the family and other groups; types of prejudice; leadership and prestige in social life; the mob; mental epidemics; propaganda; public opinion. 2 hours a week.

Honors Courses

Offered in University College only.

The following courses are identical with the Pass courses indicated, except that additional assignments will be required: 235 (35), 236 (36), 338 (38), 339 (39), 349 (49), 446 (46), 448 (48).

234. **Historical Introduction to Psychology:** A study of persistent problems in the history of psychology and an introduction to the traditional systems of psychology: Structuralism, Functionalism, Behaviorism, Gestalt Psychology, and Psychoanalysis. 2 hours a week.

337. **Theory and Construction of Mental Tests:** Discussion of basic considerations in mental measurement; description and evaluation of typical measuring instruments and their uses; consideration of persistent problems in the field of mental measurement. 2 hours a week.

355. **Statistics:** The application of common statistical procedures to psychological data. 2 hours a week.

444. **Contemporary Psychology:** A critical examination of the theories of representative modern and contemporary psychologists. 2 hours a week.

459. **Research Problems:** A seminar course in which students will select topics for special investigation. 3 hours a week.

For **RELIGIOUS KNOWLEDGE** courses, see the affiliated colleges.

RUSSIAN

(It is not planned to offer all the following courses in 1958-59. Students who wish to take any of them should give their names to the Principal of University College.)

1. **Elementary Russian:** A beginning course; pronunciation, grammar, dictation, translation, oral practice. 3 hours a week.

10. **Intermediate Russian:** Grammar, dictation, translation, composition and conversation. 3 hours a week.

Prerequisite: Russian 1.

20. **Advanced Russian:** Special problems of grammar, translation, conversation, composition. 3 hours a week.

Prerequisite: Russian 10.

29. **A Survey of Russian Literature:** for those without a reading knowledge of Russian. 1 hour a week: half course.

30. **Outline of Russian Literature:** Nineteenth and Twentieth centuries. 3 hours a week.

Prerequisite: Russian 20.

45. **Scientific Russian:** The reading of scientific texts and articles in Russian. For Honors Science Students. 1 hour a week: half course.

Prerequisite: Russian 10.

SECRETARIAL SCIENCE

Students are warned that the difficulty of adjusting timetables makes it impossible for those who are unable to pass the final tests of each year to take general Arts subjects of a succeeding year in conjunction with their Shorthand and Typewriting. Therefore, students who fail to pass in one or more of their subjects are faced with the possibility of having to lose an entire year.

28-29. **Shorthand and Typewriting:** Pitman's Shorthand: theory; speed up to 60 words a minute, and typed transcription of notes. Touch system of typewriting; care of machine; letter styles; copying from manuscript and printed matter; centering; accuracy; and timed tests. 12 hours a week.

30. **Accounting and Bookkeeping:** Prescribed for Secretarial Science students. The course provides practical and basic applications of accounting relating to the sole proprietorship form of business organization, as well as to the partnership and corporate types of organization. 2 hours a week.

36. **Business Mathematics:** Prescribed for Honors students in Business Administration and Secretarial Science. It provides practical and basic applications of methods relating to such calculations as inventory and turnover, depreciation, distribution of overhead, taxes, insurance, annuities and many other kinds of typical business calculations. 2 hours a week.

37. **Office Practice:** The foundation of the work in Office Practice is laid in the third year. Lectures are given on office methods, and actual duties are undertaken in the Secretarial Science Office. 3 hours a week.
Prerequisites: Secretarial Science 28-29.

38-39. **Shorthand and Typewriting:** Shorthand speed up to 100 words a minute; typed transcription of notes; typewriting from manuscript; tabulation; carbon copies; telegrams; financial statements; methods of duplicating; accuracy and timed tests. 12 hours a week.
Prerequisites: Secretarial Science 28-29.

47. **Office Practice:** The responsible duties of the various members of an office staff and the operation of modern office equipment are undertaken by the fourth year students. Units of work are assigned in rotation. Lectures are given on secretarial duties, office organization, the administration of services, the problem of office personnel. 15 hours a week: double course.
Prerequisites: Secretarial Sciences 37, 38, 39.

48-49. **Shorthand and Typewriting:** Shorthand speed up to 130 words words a minute; typed transcription of notes; typewriting speed up to 60 words a minute; typing from advanced copy (technical matter, foreign languages) and from dictation. 10 hours a week.
Prerequisites: Secretarial Science 38, 39.

SOCIOLOGY

20. **Introduction to Sociology:** The study of human origins and the analysis of prehistoric and primitive cultures and societies including technology, kinship systems, property, law, religion, problems of cultural change. 3 hours a week.

30. **Sociological Theory:** The study of culture, personality and society, with emphasis on the development of a systematically related body of analytical concepts. 2 hours a week.

38. **Social Development of Canada:** An examination of processes, problems and theories of social change, using Canadian geographic, economic, religious and historical data for analysis. 2 hours a week.

40. **Social Pathology:** The study of personality disorganization and maladjustment from the point of view of sociology; the problems of poverty, physical and mental deficiency, alcoholism, insanity, delinquency and crime; social change and social disorganization, the pathology of social groups and classes, the pathology of economic and cultural relations. 2 hours a week.
Prerequisite: Sociology 20 or 30 or the consent of the instructor.

Honors Courses

Sociology 220, 330, 338 and 440 are identical respectively with 20, 30, 38 and 40, except that additional assignments will be required in Honors Courses.

478. **Advanced Sociological Theories and Methods:** The historical development of social thought; the application of scientific methods in social research; the analysis of social structures and social relations.
2 hours a week.

SPANISH

1-10. **Elementary Spanish:** Grammar, translation, dictation, oral practice. 5 hours a week.

20. **Advanced Spanish:** Grammar review, composition, translation, oral practice. 3 hours a week.

Prerequisite: Spanish 1-10 or Grade XIII Spanish.

22. **Conversation:** Systematic oral practice for developing fluency in speaking Spanish. 2 hours a week: half course.

Prerequisite: Spanish 1-10.

45. **Scientific Spanish:** Reading of Scientific Spanish from journals, supplemented by individual reading in the special field of study of each student. 1 hour a week: half course.

Prerequisite: Spanish 1-10 or Grade XIII Spanish.

Note: **Spanish 30, 31, 40, 41 are identical with 230, 231, 340, 341, respectively.**

Honors Courses

All students in Honors Courses will take a comprehensive examination at the end of the final year.

230. **Spanish Drama** since the 17th Century; lectures, reading, discussion, reports. 2 hours a week.

Prerequisite: Spanish 20.

231. **Phonetics, Prose Composition, Conversation.**

Prerequisite: Spanish 20. 2 hours a week.

250. **Latin-American Civilization:** An historical survey of Latin-American Culture; the modern Spanish-American novel; lectures, reading, reports. 2 hours a week.

Prerequisite: Spanish 20.

340. **Modern and Contemporary Spanish Prose:** Lectures, reading, discussion, reports. Not offered in 1958-59. 2 hours a week.

Prerequisite: Spanish 20.

341. **Commercial and Industrial Spanish:** Grammar, advanced composition, reading. 2 hours a week.

Prerequisite: Spanish 231.

360. **Spanish Civilization:** An historical survey of Spanish culture; lectures, reading, reports. Not offered in 1958-59. 2 hours a week.

Prerequisite: Spanish 20.

450. **Spanish Lyric Poetry:** Lectures, reading, discussion.

Prerequisites: Spanish 340 and 360. 2 hours a week.

451. **Mediaeval Spanish:** Study of phonology, morphology, reading of Old Spanish, history of mediaeval literature; reading, lectures, reports.
Prerequisite: Spanish 341. 3 hours a week.

460. **Spanish Literature of the Golden Age:** Lectures, reading, reports.
Prerequisites: Spanish 340 and 360. 3 hours a week.

ZOOLOGY

20. **Introductory Zoology:** The principles of animal biology as illustrated by a study of the structure and physiology of particular forms. To qualify for the Honors Courses in Biology a student must obtain at least 60% in this course. 2 lectures, 3 laboratory hours a week.

21. **Biological Science:** The fundamental principles of biology with stress on the cell as a unit, the origin and preservation of the individual and the race, the mode of inheritance, and the applications of biology to social and economic problems. This course is illustrated by examples from the botanical as well as the zoological field.

Open to students in any year. Those who obtain 60 per cent. in this course may select options for further study in Botany and Zoology.
2 lectures and 2 laboratory hours a week.

23S. **Biological Field-Studies:** Ontario trees, shrubs, birds, water life, insects, from the point of view of economic importance, conservation, scientific identification. Summer School only. 11 hours a week: half course.

24. **Mammalian Zoology:** The anatomy (first term) and physiology (second term) of the mammals. For students in the Nursing, Home Economics (first term only), and Physical Education courses.
2 lectures and 3 laboratory hours a week.
Prerequisite: Zoology of Grade XIII or Zoology 21.

30. **Senior Mammalian Zoology:** The anatomy and physiology of the mammals. Students who have received credit in Zoology 24 will not be permitted to take Zoology 30.
2 lectures and 3 laboratory hours a week.
Prerequisite: Zoology 20 or 21.

34. **Vertebrate Histology:** An introduction to the microscopic structure and development of tissues and organs.
Prerequisite: Zoology 24 or 30. 1 lecture, 3 laboratory hours a week.

37. **History of Biology:** The history of discoveries in biology and the development of biological thought. 2 lectures a week.
Prerequisite: Zoology 20 or 21 and one other college course in Zoology.

41b. **Entomology:** The biology and economic importance of the insects, and in addition the spiders, mites, crustacea and other arthropods.
Prerequisite: Zoology 20 or 21 (60%).
2 lectures, 4 laboratory hours a week, one term.

43. Animal Ecology: Effects of environmental factors; distribution of animals; animal communities; population dynamics. Given in alternate years, next in 1958-59. 2 lectures a week.

Prerequisite: Zoology 24 or 30.

45. Principles of Genetics: The principles of Mendelian genetics and the chromosome theory, illustrated by lectures and the practical performance of simple breeding experiments. 2 lectures a week.

Prerequisite: Zoology 20 or Zoology 21 (60%).

Honors Courses

200M. Comparative Vertebrate Zoology and Introductory Embryology: Comparative structure and function of vertebrate organ systems; introductory embryology. For prospective Medical students.
2 lectures, 3 laboratory hours a week.

250. Invertebrate Zoology: The anatomy and biology of representative invertebrate animals and the general classification of the group.

Prerequisite: Zoology 20. 1 lecture, 3 laboratory hours a week.

337. History of Biology: The history of discoveries in biology and the development of biological thought. 2 lectures a week.

350. Comparative Vertebrate Zoology: The biology, origin, and evolution of the classes of vertebrates; an introduction to some principles of evolution. 2 lectures, 3 laboratory hours a week.

Prerequisite: Zoology 250.

354. Vertebrate Histology: An introduction to the microscopic structure and development of vertebrate tissues and organs.
1 lecture and 3 laboratory hours a week.

360b. Entomology: The biology and economic importance of the insects, and in addition the spiders, mites, crustacea and other arthropods.
2 lectures and 4 laboratory hours a week: second term.

452. Comparative Physiology: A comparison of the function of the organs and organ systems in selected invertebrate and vertebrate types.

Prerequisite: Zoology 350. 1 lecture and 3 laboratory hours a week.

453. Animal Ecology: Effects of environmental factors; distribution of animals; animal communities; population dynamics. 2 lectures a week.

454. Embryology: Principles of development as illustrated by selected invertebrate and vertebrate types.

Prerequisite: Zoology 354. 1 lecture and 3 laboratory hours a week.

455. Principles of Genetics: The principles of Mendelian genetics and the chromosome theory, illustrated by lectures and the practical performance of simple breeding experiments. 2 lectures a week.

Prerequisite: Zoology 350.

456. Laboratory Technique: A practical course in standard laboratory procedures, including microtechnique, photomicrography, and preparation of illustrations. 3 laboratory hours a week: half course.

460. **Insect Taxonomy:** The principles and historical development of insect taxonomy, and the classification of specimens by means of keys and monographs. 3 laboratory hours a week: half course.

462. **Cellular Physiology:** A study of general physical and chemical principles involved in the functioning of the animal cell.

Prerequisite: Zoology 354. 1 lecture and 3 laboratory hours a week.

463. **Biological Field Studies:** An obligatory course of study of living organisms in their field environment. The student should be prepared to report in September one week in advance of registration, and to meet part of his expenses for travel and subsistence. Prescribed but non-credit.

470. **Vertebrate Taxonomy:** Classification and distribution of vertebrates, and the study of Canadian vertebrates in the laboratory.

1 lecture and 3 laboratory hours a week.

THE SUMMER SCHOOL AND EXTENSION DEPARTMENT

The Summer School and Extension Department offers four types of courses which count towards the Bachelor of Arts degree:

(1) **Lecture Courses.** In numerous centres in Southwestern Ontario courses are conducted by members of the University Faculty. Attendance at these satisfies part of the residence requirements.

(2) **Tutorial Courses.** In several centres in Northern Ontario there are tutorial classes planned and supervised by members of the University Faculty, but taught by local tutors, who are college graduates. These courses use the correspondence material, in part, and do not satisfy the residence requirements.

(3 **Correspondence Courses.** In some subjects (not including Science, Mathematics, Psychology, Business Administration and the elementary work in languages) correspondence courses are available.

Students in these classes write the regular examinations and their papers are marked by members of the University Faculty.

(4) **Summer School Courses.** On the campus in London there is a Summer School extending for six weeks from July 7th to August 16th. The credit subjects offered in the Summer School are mainly those listed in the announcement as belonging to the General Course. Some Honors courses in English, Geography and Mathematics are available each summer for graduate students who wish to earn Type A certificates for secondary school teaching.

A student enrolled in the Summer School, Correspondence and Extension Department may take as many as five courses a year (two in a Summer Session and three during a Winter Session). Any student who wishes to take more courses than the maximum mentioned must petition the Academic Standing Committee for permission.

A candidate for a degree must attend this University for one academic year and two Summer Sessions or for FIVE Summer Sessions. This re-

quirement is reduced to a minimum of one Winter Session or THREE Summer Sessions by attendance at Extension lecture classes held by this University, or by the transfer of credit from an approved college or university.

Complete information about the Summer School and about Extension work is contained in the Handbook of the Summer School and Extension Department. This may be obtained by applying to the Director of the Summer School and Extension Department or to the Registrar.

TROIS-PISTOLES SUMMER SCHOOL FOR FRENCH, ENGLISH AND PAINTING, TROIS-PISTOLES, PROVINCE OF QUEBEC

In 1958 the School will operate from July 3rd to August 20th inclusive. Although formal instruction is given in Phonetics, Composition, etc., the emphasis is on the spoken language.

For the bulletin concerning the above and the Painting course apply to the Director of the Trois-Pistoles Summer School, McIntosh Building, or to the University Registrar, Stevenson Hall.

THE PRELIMINARY YEAR IN THE AFFILIATED COLLEGES

The Preliminary Year program in the affiliated colleges is designed for those who have completed Grade XII (Ontario) or equivalent standing, including Latin or Mathematics or Music and one language besides English, but who have not completed Grade XIII or equivalent standing in six papers, including three complete subjects.

Adult Special students (twenty-one years of age, or over, and away from formal education for at least two years) have special admission requirements and are required to prove, by college aptitude tests, that they have the ability to do college work successfully.

Please consult the Registrar of one of the affiliated colleges, or the Registrar of the University, regarding the subjects to be studied in the Preliminary Year in an affiliated college, to qualify for admission to a three-year General Course or a four-year Honors Course in Arts. There is no Preliminary Year program available in any college of this University to qualify a student for admission to Premedicine or Engineering Science or pure Science courses.

HURON COLLEGE

(London, Ontario)

(For Faculty and Administrative Officers, see p. 21)

THE PRE-THEOLOGICAL GENERAL COURSE

Requirements for Admission: The Secondary School Graduation Diploma (Grade XII) and Grade XIII standing in English, History and three others, including a language, from the following: Latin, French, German, Spanish, Mathematics (any two) and Science. The Pre-Theological Preliminary Year may be taken in lieu of the Grade XIII requirements by those students who qualify to take these special one-year courses (see above).

This course leads to the degree of Bachelor of Arts and is the normal requirement for admission to the three-year course leading to the title of L.Th. from Huron College. If, however, a student wishes to take another course leading to a General or an Honors degree, Huron College will give its consent. In such case, the student should include Greek 1x, 25x and 35x in his undergraduate program.

Course numbers followed by "x" indicate a subject approved by the University and taught by Huron College only.

First Year

Subjects	*Subjects*
English 20	Philosophy 20
Greek 1x	Psychology 20
History 20	Half courses in:
Mathematics 20 or a Natural Science at the 21-29 level	English 29, Health Lectures, Library Science and Physical Education

Second Year

Economics 20	Religious Knowledge 30x
English 32	One of: History 31, 36, 44
Greek 25x	Psychology 36, 46, 48, 49
Philosophy 30	

Third Year

English 38	One of: Philosophy 31, 36, 42, 47
Greek 35x	Two of: Hebrew 1-10x, History 31, 36, 44
Religious Knowledge 40x	Psychology 36, 46, 48, 49

Courses offered only at Huron College and not listed elsewhere in the University Calendar. Math 23 · Mathematics of Investment 2.

Greek

1x. New Testament Greek for Beginners. 3 hours a week.

25x. Readings in Hellenistic Greek. 3 hours a week.

35x. Select Passages: in the Pastoral and Catholic Epistles, to be read and studied in the Greek Testament. 2 hours a week.

Religious Knowledge

10x. Christian Behavior and Social Action: Introduction to the basic principles. 2 hours a week.

30x. The Religious Ideas of the Bible: This study will be divided equally between the Old and New Testaments and will aim at a deepened understanding of the fundamental principles of Biblical religion. 2 hours a week.

40x. An Introduction to the Philosophy of Religion: A study of the history of the major living world religions, as studied in their basic literature. General problems of philosophy of religion. The problem of revelation and of a philosophy of the Christian religion. 2 hours a week.

MUSIC TEACHERS' COLLEGE

(London, Ontario)

(For Faculty and Administrative Officers, see p. 21)

GENERAL COURSE WITH MUSIC OPTIONS

(leading to the degree B.A.)

Requirements for Admission: (1) Satisfactory results in audition test; (2) Grade XIII standing with an average of 60% in English, French, Latin or Mathematics

(any two), Music* and one other paper, preferably History, or the completion of equivalent Preliminary Year courses in an approved college or university.

If the Admission Committee approves, a student may be admitted conditioned in one subject.

Notes:

(1) This course offers two options: Music C or Music T. Music C is a performer's course, while Music T is a pedagogy course for private teachers and for teachers of music in the elementary and secondary schools. Students in Music T will major in instrumental or vocal performance or theory. Music T will consist also of lectures in pedagogy, repertoire, choral conducting, teaching materials and methods. Students in Music C will stress performance and will have more practice periods and correspondingly less work in pedagogy than students in Music T.

(2) As this course is a combination of Arts subjects and Music, it is conceivable that a student might have finished the required Arts subjects without reaching the required standard in the Music courses. In such case, the required standard in music may be attained extramurally under the guidance of the College.

(3) Both courses satisfy the academic requirements for admission to the Type B (High School Assistant) Certificate of the Department of Education of Ontario. Those students who hold, in addition to the degree of Bachelor of Arts, the diploma of Music Graduate in Pedagogy (Mus. G. Paed.) will be admitted to the High School Assistants' Course, Type A, in Vocal Music, at the Ontario College of Education. Those students who do not hold this diploma will be admitted if they make application to take the Supplementary Music Option at the Ontario College of Education, to the Elementary Vocal Option, the Elementary Instrumental Option, or both, if the instructor deems them qualified for such admission.

(4) One subject from the options is to be continued consistently throughout the course. Students who expect to attend the Ontario College of Education should select Geography and History as their options (Geography *or* History in the second year).

(5) A student who enters the University with Senior Matriculation German will do German 20, 30, 40 as his prescribed or his optional language.

First Year

Subjects	*Subjects*
English 20	Options (continued)
French 20 or German 1	History 20, Mathematics 20,
Italian 1 (prescribed for vocal students)	Philosophy 20, Psychology 20, a second language
Music 25C or 25T	Half courses in: English 29, Health
One of: Economics 20, Geography 20	Lectures, Library Science and Physical Education

Second Year

English 32	Two of: Economics 30, Geography 35,
French 30 or German 10	History 36, Mathematics 24,
Italian 10 (prescribed for vocal students)	Philosophy 30, Politics 32, Psychology 20 or 36, a second language
Music 35C or 35T	

Third Year

English 36	Economics 46, Geography 45, History 31,
French 40 or German 20	44, Italian 20 or another language,
Music 45C or 45T	Philosophy 35 or 48, Politics 42,
For vocal students, one of the following options; *for all other students,* two options:	Psychology 20 or 49

*Grade VIII Practical and Grade II Theory; or Grade IV Theory.

MUSIC

15T. Piano: Pedagogy — piano technique; teaching repertoire — beginners and Grades I, III, V, VII; practice teaching; repertoire—demonstrations and discussions; private lessons; development, through the Studio Club, of critical faculties and playing experience.

Voice: Vocal production and its fundamental laws; practical applications; simple songs in English; Italian diction applied to singing; simple Italian repertoire.

Harmony: Basic chord connections through elementary modulations (2 lectures a week); aural training in Solfege (2 laboratory periods a week). Class presentation gives training in teaching methods.

25T. Piano: Teaching repertoire — Grades II, IV, VI, VIII; an extension of Music 15T in practice teaching, repertoire, private lessons, and Studio Club.

Voice: A continuation of technical elementary practice, with the use of increasingly difficult material; emphasis on sight singing; introduction to repertoire study in French; French diction applied to singing; study of operatic numbers; recitative singing and introduction to Oratorio pieces.

Harmony: A continuation of Music 15T through augmented chords; simple composition (2 lectures a week); aural training in Solfege (2 laboratory periods a week).

35T. Piano: A continuation of assigned parts of Music 25T; private lessons; recital performance; concerto performance with orchestra, ensemble playing; Studio Club.

Voice: Development of technical prowess; increasing emphasis on fluency and tone modulation; reading of modern English songs; beginning of the study of German Lieder; German diction applied to singing; study of some operatic repertoire.

Counterpoint: Two-part through free three-part; analysis of contrapuntal compositions, including Fugue (2 lectures a week).

45T. Piano: Private lessons; Studio Club.

Voice: Difficult technical studies and exercises; memorized repertoire of songs in the original languages by Schubert, Schumann, Brahms, Wolf, Strauss and Mahler; Debussy, Faure, Duparc; modern repertoire in English; operatic arias and ensembles.

Form: Song forms through Sonata-Allegro. (2 lectures a week, first term).

Harmonic Analysis: Classic and romantic compositions, with emphasis on the increasing chromaticism of the late 19th and early 20th centuries. (2 lectures a week, second term). Prerequisite: the permission of the Principal.

ST. PETER'S SEMINARY AND CHRIST THE KING COLLEGES

(*London, Ontario*)

(*For Faculty and Administrative Officers, see p. 21*)

St. Peter's College consists of the Philosophy division of St. Peter's Seminary, for candidates for the priesthood, and Christ the King College, an Arts College for lay students.

In addition to the course in Honors Philosophy shown below, taught mainly in St. Peter's College, the General Course and some Honors courses are available at the College of Christ the King. All laboratory courses in Science are taught entirely in University College.

Honors Course in Philosophy

Requirements for Admission: The Secondary School Graduation Diploma (page 105) and Grade XIII standing with an average of 60% in English, another language, Latin or two Mathematics, and three other papers; or the Preliminary Year (page 94).

This course leads to the degree of Bachelor of Arts. It is accepted by the Department of Education of Ontario as academic qualification for the High School Assistant, Type B, Certificate.

First Year

Subjects	*Subjects*
English 20	At least one course of options approved by the Registrar and the Dept. of Philosophy
Philosophy 250x, 251x, 257x, 260x	
A second year foreign language	Half courses in English 29, Library Science and Physical Education

Second Year

English 32 or 36 or 38	At least one course of options approved by the Registrar and the Dept. of Philosophy
Philosophy 351x, 352x, 357x, 358x	

Third Year

English 32 or 36 or 38 or 49 (one not previously chosen)	At least one course of options approved by the Registrar and the Dept. of Philosophy
Philosophy 450x, 451x, 452x, 457x	

Latin

25x. Introduction to Mediaeval Latin: Cicero, *De Amicitia;* St. Ambrose, *Hymns and Homilies;* St. Augustine, *Confessions;* a comparative study of the thought and style of Cicero and St. Augustine; syntax and composition. 3 hours a week.

35x. Survey of Mediaeval Latin: From the death of St. Augustine to the 12th Century; lectures on Latin style and culture of the period; syntax and composition. 3 hours a week.

45x. Survey of Mediaeval and Renaissance Latin: From the 12th Century to the present; lectures on Latin style and culture; syntax and composition. 3 hours a week.

Philosophy

20x. An Introduction to Philosophical Problems: Along with an historical approach, the solutions to various philosophers are assessed at their true value. 3 hours a week.

30x. **A Critical Reading of some of St. Thomas' Writings:** concerning Metaphysics, Ethics and Rational Psychology. 3 hours a week.

44. **Social Philosophy:** the philosophy of marriage or the philosophy of education. 2 hours a week.

250x. **Psychology: Dynamology:** Vegetative powers; sensation and perception; internal senses; feeling and emotion; reflex behavior; intellectual operations; the unconscious; abnormal phenomena; the faculty theory and modern psychological research. 3 hours a week.

251x. **Formal Logic:** The operations of intellect. Conception: the idea; the term; categories and predicables; definition and division. Judgment: assertion and negation; the proposition; conversion of the proposition. Reasoning: deduction and induction; the rules, modes and figures of syllogisms; fallacies. 2 hours a week.

257x. **The History of Pre-Christian Philosophy:** A survey of philosophy in the Orient and in the Graeco-Roman world from its beginnings to the neo-Platonism of the early Christian period. 2 hours a week.

260x. **Natural Philosophy:** An introduction to Aristotelian philosophy by a close study of the *De Principiis Naturae* of St. Thomas. The aim of the course is to show how the mind is led, from the study of motion in general and its principles, to natural motion, the four causes and the problem of chance and fortune. Attention will also be given to Substance and Accident, the primary accident of Quantity, and finally to the main divisions of the sciences and the interrelation of philosophy and experimental science. 2 hours a week.

351x. **Metaphysics:** An introduction to metaphysics as the science of the first causes of all being. The kinds of causality, and the analogical concept of being as the subject of this science. A defence of the power of the mind to know being as it really is. The transcendental properties of being. Potential and actual being. The ten categories, with emphasis on substance as primary being. The distinction between essence and existence; and between nature and person. 3 hours a week.

352x. **General Ethics:** The last end of man. The norm of morality; law; reason and conscience. Habits and virtues; the role of passion. Right and duty. 3 hours a week.

357x. **History of Philosophy from the time of Christ to 1600 A.D.** 3 hours a week.

358x. **Social Philosophy:** Historical development of social economy to 19th century liberalism; industrial revolution, capitalism, individualism, collectivism; authoritarian and corporative state: origin and forms of civil organization and administration; social functioning of modern economic society; individual and social character of proprietorship, capital and labor; the business cycle: population, vital statistics; international trade, world peace and progress, the common good. 2 hours a week.

450x. **Psychology: The Nature of Man:** Man's soul and its essential qualities; the union of soul and body in man; personality; the origin and the immortality of the human soul. 2 hours a week.

451x. Metaphysics: God, the First Cause: The demonstration by reason of the existence of an uncaused cause of all being; an examination of atheism, agnosticism and pantheism. The divine attributes. An evaluation of the knowledge of God which we have by reason. The divine Intelligence and Will. The relation of God to creatures; Creation, Conservation and Providence. 3 hours a week.

452x. Politics: A study of the political philosophy of Aristotle and St. Thomas, together with a survey of the dominant political theories of our own day. 3 hours a week.

457x. Modern Philosophy: The history of philosophy from the Renaissance to the present day. 3 hours a week.

Religious Knowledge

10x. The Life of Christ: as found in the Gospels. 2 hours a week.

30x. Theology: Rational defence of Christian revelation; the existence of God; the fact of revelation; the Church of Christ; the sources of revelation. 2 hours a week.

37x. Church History: Christian antiquity and mediaeval church history from the birth of Christ to the year 1500 A.D. 2 hours a week.

40x. Theology: A study of revealed truths; God and creation; sin and redemption; supernatural life; the channels of supernatural life. 2 hours a week.

47x. Church History: The Reformation and modern church history from 1500 A.D. to the present day. 2 hours a week.

URSULINE COLLEGE

(London, Ontario)

(For Faculty and Administrative Officers, see p. 21)

The General Courses and some of the Honors Courses are available in Ursuline College. All laboratory courses in Science are taught entirely in University College.

For the outline of the course in Home Economics offered jointly by Ursuline and University Colleges, see page 36. For the descriptions of Home Economics courses, see p. 73.

Philosophy

Philosophy 20 or 30 or 36 is a prerequisite for all General courses in Philosophy, Philosophy 230 for all Honors courses in Philosophy. Students preparing for Social work or other professions may, with permission, select options to suit their needs. Courses scheduled for two hours a week may meet for additional seminars or discussions at the discretion of the instructor.

Ursuline College may cancel a Philosophy course for a year, if the number of students who wish to take it is insufficient.

20x. Introduction to Philosophy: Problems, divisions and method of philosophy; the principles of natural philosophy, metaphysics, epistemology and moral philosophy; an outline of the main tendencies in the history of philosophy; the interrelation of philosophy and experimental science. 3 hours a week.

30x. Basic Philosophical Literature: As in University College. 3 hours a week.

31x. Logic: The three operations of the intellect. Conception: the idea: the term, categories and predicables; definition and division. Judgement: assertion and negation; the proposition; the conversion of the proposition. Reasoning: deduction and induction; the rules, modes and figures of syllogisms; fallacies. Formal as contrasted with symbolic logic; problems of scientific method and certitude. 2 hours a week.

32x. Introductory Ethics: General and individual. 2 hours a week.

33x. Introduction to Metaphysics, Epistemology and Ontology: Problems of being, knowledge, causality and analogy. 2 hours a week.

34x. Political Philosophy: History of ancient, mediaeval and modern political philosophy. The second term's work will cover the philosophical implications of contemporary political movements and principles for world society. 2 hours a week.

35x. Aesthetics: Lectures and seminars on the history of the philosophy of art and the metaphysics of the beautiful; aesthetic problems; aesthetics as the foundation of criticism; art and prudence; the liberal and servile arts; the useful and fine arts. 2 hours a week.

36x. Ancient, Mediaeval and Scholastic Philosophy: with reading from selected texts. 2 hours a week.

42x. Social Ethics: Domestic society: the nature and conditions of marriage; function, rights and duties of family inmates; birth control and population problems. Civil society: the philosophy of the state; the relations between church and state; the community of nations; labor problems. 2 hours a week.

43x. Advanced Metaphysics: Natural theology; comparative religious philosophy. 2 hours a week.

44x. Social Philosophy: The relationship of philosophy to the social sciences: the nature and function of society; freedom, authority, government, the family and the state; historical development of social economy from primitive to modern times; individual and social character of property, capital and labor. 2 hours a week.

47x. History of Modern Philosophy: The transition from Mediaeval to Modern Philosophy; Modern Philosophy; readings from selected basic texts. 2 hours a week.

Honors Courses

The following courses are identical with the Pass courses indicated, except that additional assignments will be required or seminars added: 231 (31), 335 (35), 336 (36), 347 (47), 443 (43).

Because a reading knowledge of Mediaeval Latin will facilitate the reading of Thomistic texts, an intensive course in Elementary Latin will be offered when there is sufficient demand.

When the number of applicants is insufficient to warrant a class, the college reserves the right to cancel the class for the current year.

230x. **Basic Philosophical Literature:** An examination of the principal problems and issues, methods and attitudes, theories and solutions, terms and concepts of philosophy in the light of Scholastic principles; a critical reading of selected philosophical classics is required. 2 hours a week.

350x. **Philosophical Texts:** An examination of specified source materials in Greek, Mediaeval and Modern Philosophy, as well as pertinent critical texts. 2 hours a week.

448x. **Seminar in Contemporary Philosophy.** 2 hours a week.

454x. **Principles and Problems of Philosophy:** Philosophical problems of special interest to the class, evaluated according to pragmatic, idealist and neo-Thomist principles. 2 hours a week.

456x. **Seminar in Plato and Aristotle.** 2 hours a week.
Prerequisite: Philosophy 336.

457x. **Seminar in Modern Philosophy.** 2 hours a week.
Prerequisite: Philosophy 347.

462x. **Ethics:** A critical study of moral problems and theories; a comparative study of the conflicting approaches to ethical problems found in the classics of ethical literature from Aristotle to the present, including Thomistic and neo-Thomist texts. 2 hours a week.

466x. **Seminar in Post-Aristotelian and Mediaeval Philosophy.**
Prerequisite: Philosophy 336. 2 hours a week.

Religious Knowledge

10x. **Motives and Means of Christian Life:** Fundamental dogmas of Christianity, grace, prayer and the sacraments. Lectures, essays, readings. 2 hours a week.

20x. **Christian Ideals of Life:** Charity, personal, social and civic; justice and the commandments; citizenship. Lectures, essays, readings. 2 hours a week.

30x. **Theology of Christ and the Church:** The governing function of the Church; the teaching and sanctifying functions of the Church; Christian apologetics. 2 hours a week.

31x. **History of Liturgy:** Survey of expressions of social consciousness in worship from Apostolic to modern times. Lectures, readings, seminars on the Encyclicals. 1 hour a week: half course.

40x. **Dogmatic Theology:** Introduction to Theology. Study of revealed truths. 2 hours a week.

41x. **Scripture:** *Introduction to the Old and New Testaments.* 1 hour a week: half course.

42x. **Moral Theology.** 2 hours a week.

Sociology

39x. **The Family:** The family as a primary social group; a brief history of family life in Western societies; modern biological, psychological, sociological, economic and ethical views on the family; the ethical basis of family life; the form, unity and object of family life; status in the family; divorce; eugenics and birth-control; the family and the state; the family and economic organization; the training and the education of children; the Christian family. 2 hours a week.

WATERLOO COLLEGE

(Waterloo, Ontario)

(For Faculty and Administrative Officers, see p. 22)

In 1925 the Faculty of Arts of Waterloo College became an affiliated college of the University of Western Ontario. In January, 1930, the right of Waterloo College to proceed with courses leading to the Honors B.A. degree was officially recognized. For information about the General and Honors courses offered by the college, and the fees for the courses, consult the Registrar. The following course is taught in Waterloo College only. It has been approved by the Evangelical Lutheran Seminary of Canada as a prerequisite for the theological course. Pre-theological students are encouraged to substitute Honors Courses, if they desire to do so.

General Course With Pre-Theological Options

Requirements for Admission: Secondary School Graduation Diploma in required subjects (see page 102) and approval of application by the Dean of the Seminary and the Dean of the College.

For the credits to be allowed for certificates in Grade XIII subjects, consult your Registrar.

JUNIOR GROUP

Subjects	*Subjects*
English 10, 20, 29	One of: Greek 1x or 10*, Geography 20, History 14 or 20, Music 10 or 20, Philosophy 20, a foreign language 10 or 20, Religious Knowledge 10x
Library Science	
Physical Education	
Latin 10 or Math. 11 or Music 10	
Math. 20 or Physics 21 or Zoology 21	Two years of work in one of the following languages:
Economics 20	German 1 and 10, or 10 and 20*
History 14 or Geography 20	French 10 and 20
Psychology 20	Latin 10 and 20
History 20	

*No credit is given for a beginner's course in a foreign language until it is followed by a second year of successful work in the same language.

At least one foreign language must be completed at the 20 level.

SENIOR GROUP

Philosophy 30
Geology 20 or 21 or Physics 21 or Zoology 21 (one not taken previously)
Two of: English 32, 36, 38, 49
Two of: History 31, 36, 44
Greek 25x or Politics 32 or 42
Greek 35x or Psychology 36 or 48 or 49
At least three full courses (or the equivalent in half-courses) from: English 39, Geography 20, Hebrew 1x, 10x, Philosophy 31, 42, 43, Psychology 36, 46, 48, 49, Religious Knowledge 31x, 32x, 43x, 44x, Sociology 20

For those courses which University College and Waterloo College offer in common, see the University College section. The following courses are offered in Waterloo College only:

Business

47b. Introduction to Insurance, Estates, and Trusts.
2 hours a week: half course.

Chemistry

11xN. Basic inorganic and organic chemistry, with stress placed on application to physiology and pharmacology. Lectures and laboratory exercises. 3 hours a week.

Greek

For Biblical Greek 25x and 35x, see the Huron College section.

Hebrew

1x. A study of the grammatical forms of Hebrew, and the elements of syntax; written exercises; practice in reading easy Bible passages.
3 hours a week.

10x. Grammar and Syntax: Text of *I Kings,* 17-19, 21-22, *Obadiah, Jonah.* 3 hours a week.

Prerequistie: Hebrew 1x.

Religious Knowledge

10x. Introduction to Biblical Literature. 2 hours a week.

31x. Biblical Literature: A study of the times, life, and teachings of Jesus based on the Gospels. 1 hour a week: half course

32x. Biblical Literature: A study of the foundation and work of the early Christian Church, with special attention to the Acts and to the life and letters of Paul. 1 hour a week: half course.

43x. Biblical Literature: A study of Old Testament history.
1 hour a week: half course.

44x. Biblical Literature: A study of the lives and teachings of the Hebrew Prophets. 1 hour a week: half course.

APPENDIX A — ACADEMIC REGULATIONS

ADMISSIONS

For admission in September of any year, official certificates of High School and any college work must be presented to the Registrar's Office by September 1st (by July 1st for admission to Summer Session). Teachers should present their professional teaching certificates, as well, and veterans should present their discharge records. For the evaluation of non-Canadian certificates a fee of two dollars is charged. This sum must accompany the certificates and is not returnable.

University College requires for admission the Grade XII Diploma and the detailed Grade XIII certificates of the Department of Education of the Province of Ontario, or the equivalent from other Provinces and other countries.

An average of 60% is required in English, Latin or Mathematics (at least two papers), one other language, and three other papers to be selected according to the course a student wishes to enter.

For admission to University College, under crowded conditions, a preference will be given to students who have passed the required number of Grade XIII papers (with 60%) in five years of secondary school work.

A. The affiliated colleges admit students to a Preliminary Year of Arts, but not Science, subjects, on the presentation of a Secondary School Graduation Diploma, or the equivalent, showing satisfactory completion of the following **Grade XII** subjects:

(1) English and History; (2) Latin or Mathematics; (3) One of: Latin, French, German, Spanish or Italian, Greek; (4) One of: Mathematics, Science or Agriculture, *Music, Geography, another language from section (3). No subject may be counted more than once.

B. An applicant presenting **Grade XIII certificates or the equivalent in at least nine papers specified above, with an average of 60%,** together with the full requirements of A, above, may expect to complete one of the General Courses in three years, or an Honors Course in four years.

The Grade XIII subjects are: English (Literature and Composition), Mathematics (Algebra, Geometry, Trigonometry and Statics), History, Latin, Greek, French, German, Spanish, Italian, Physical Science (Physics and Chemistry), Biology (Botany and Zoology), Geography, **Music, ***Mathematics of Investment, Accountancy Practice, Secretarial Practice.

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*For the Music option in Grade XII, the following certificates of a Conservatory of Music will be accepted: Grade VII Practical and Grade II Theory; or Grade III Theory.

**For the Music of Grade XIII, the following certificates of a Conservatory of Music will be accepted: Grade VIII Practical and Grade II Theory; or Grade IV Theory.

***An alternative for Algebra only.

An Admissions Handbook specifies the prescribed and optional subjects, and the standing in those subjects which is advised for admission to each course.

In order to obtain Credit standing in any subject, a candidate must obtain at least fifty per cent. on each subject, not necessarily at one examination. First Class Honors requires at least seventy-five per cent., Second Class Honors sixty-six per cent., and Third Class Honors sixty per cent. of the marks assigned to any subject, with a minimum of fifty per cent. on each paper of that subject.

Admission On Equivalent Examinations

Certificates of having passed Secondary School subjects parallel to Grade XII or Grade XIII subjects named above may be accepted, provided always that the standards of these certificates meet the requirements of this University.

The local examinations formerly conducted by the English and Scottish universities for the School Certificate and the Higher School Certificate are accepted instead of Grade XIII (Senior Matriculation) standing in some subjects, providing those subjects are passed "with Credit" or higher standing.

The General Certificate of Education of England and Wales is accepted in lieu of Grade XIII work, if it shows standing in either five or six subjects, with at least two of these subjects at the Advanced level. English Literature, a language other than English, and either Mathematics or an approved Science must be included.

Admission With Advanced Standing

From Universities

All applications for advanced standing must be accompanied by official certificates from the institution where work has been done, and be presented to the Registrar by July 1st if possible. These official documents must include a certificate of honorable dismissal from the institution last attended. No student may register in the University of Western Ontario if he may not re-register in the institution from which he wishes to transfer.

Admission of Adult Special Students

Students who are over twenty-one years of age, though they may not be able to present qualifications for admission as candidates for degrees, may be admitted to a few courses in the Faculty of Arts and Science, in one of the affiliated colleges which admits on Grade XII standing, if in the opinion of the professors in charge, they are qualified to pursue satisfactorily the courses chosen. These special students must satisfy their professors by regular attendance and attention to the work of their classes. They will not be allowed to advance from year to year in a department without taking the regular exxaminations.

For information about the admission of Adult Special students to University College classes, please consult the Registrar.

APPEALS AND PETITIONS

The Senate has made regulations governing appeals by students. A copy of these regulations may be seen in the Registrar's office. Any student who wishes to petition for special consideration by the Academic Standing Committee should address his letter to the Principal or the Registrar.

ATTENDANCE AT LECTURES

Freshmen and sophomore students are required to attend eighty per cent. of their lecture and laboratory classes.

Any student who, in the opinion of his instructors, is absenting himself too frequently from class or laboratory periods in a course will be reported to his Dean and, on recommendation of the Department concerned and with the permission of the Dean, after due warning has been given by the Dean, shall be debarred from taking the regular examinations in that course.

A candidate for a degree must attend intramural classes of this University for two academic years, or for one academic year and two summer sessions, or for five summer sessions. This requirement is reduced to a minimum of one winter session or three summer sessions by attendance of Extension Lecture classes held by this University or by the transfer of credit from an approved college or University.

CONDITIONS

A student who is permitted by the Admissions Committee to enter a course with one "condition" must remove that condition within two years of his admission.

Students conditioned at the final examinations should attempt to remove their conditions at the supplemental examinations of the next August. If a condition is not removed the whole course must be repeated.

CONDUCT OF STUDENTS

The University of Western Ontario is a private university. In accordance with the University of Western Ontario Act, 1955, the University is governed by the Board of Governors, which is responsible for its property and financial affairs, and by the Senate, which is responsible for its educational policy.

The Board of Governors and the Senate have established the regulations and the conditions of admission to and continuance at the University. The payment of tuition fees, which represent approximately one-third of the cost to the University of a student's education, does not alone entitle the student to membership in the University. As the Senate imposes minimum academic standards so, too, the Board of Governors requires a standard of personal conduct in keeping with the status of a university student. The following regulations must be observed by all students:

1. All students are expected to conduct themselves in a manner becoming scholars and ladies and gentlemen. The University reserves the right

at any time to suspend or dismiss a student whose conduct or academic standing is in its judgment unsatisfactory.

2. Intoxication, or disorder and bad manners arising from the use of alcoholic beverages, are particularly serious offences and may subject the student involved to the penalty of suspension or dismissal from the University.

3. Any student may be placed under discipline when, in the opinion of the Dean of a Faculty or the Dean or Principal of a College or School, his attitude toward his University obligations has been unsatisfactory.

4. A student who is suffering from any illness or physical disability is expected to report it immediately to the University Health Office so that it may have full knowledge thereof, even if he or she is to be treated by physicians outside the University.

5. The Board of Governors grants permission to students to bring cars into the grounds of the University on condition that the University's traffic regulations are obeyed and that the cars are parked in parking areas designated by the Board. This general privilege may be restricted by the Board from time to time as need arises, and will be withdrawn from any student who persistently disobeys the regulations.

6. The Board of Governors reserves the right to establish regulations with respect to dress as well as conduct on the premises of the University.

7. "Hazing" and/or "initiation" of University students is prohibited by virtue of a 1934 resolution of the Board of Governors.

The Board of Governors collaborates fully with the University Students' Council in the interpretation and the enforcement of these regulations.

EXAMINATIONS AND GRADES

General Course

The regular examinations will be held in April and May.

A student who is compelled because of personal illness, or death in his family, to miss a final examination must ask his physician to send the Registrar a medical certificate specifying the dates on which he was unable to be present. His instructors will then be asked for their recommendations.

Students in the General Courses will be ranked in order of merit in each course in six grades, A, B, C, D, E, F. The minimum for Grade A is 75 per cent. of the marks obtainable; for Grade B, 66 per cent.; for Grade C, 60 per cent.; for Grade D, the minimum passing grade, 50 per cent. A mark that falls in Grade E, 40 to 49 per cent., entitles the student to a supplemental, subject to the regulations governing supplementals (see page 105). Grade F, less than 40 per cent., indicates a total failure and the necessity of repeating the course in class.

No student will be admitted to the degree of Bachelor of Arts in the Home Economics, the Secretarial, the Music, or the Pre-Theological Course who has not obtained at least 50% on all the prescribed and elective work

of his course and who has not obtained at least 60% in half the courses of the final two years, including 60% in half the courses of his senior year. In the General Course an average of 60% must be obtained in the Major subject, with 60% in each of six courses out of the eleven required in the Senior Group, in addition to 50% or better in all other courses.

Honors Courses

Candidates in the Honors Courses will be ranked in four classes: Class I—75 per cent. or over; Class II—66 to 74 per cent.; Class III—60 to 65 per cent. An average of Class IV—50 to 59 per cent., in the Honors subjects of the fourth year, with no failure on any examination, will not entitle the candidate to an Honors degree.

Students in an Honors Course, who do not obtain at least third class standing in the Honors subject of the second and third years, with an average of at least sixty per cent. in other subjects, are not permitted to continue in Honors.

Re-examinations

If a student writes more than one examination in a course, the last mark he obtains shall be the only one considered valid.

Comprehensive Examinations

Students entering Honors Courses should observe that the purpose of their college work is not simply the creditable passing of courses, term after term, but the gradual acquisition of a broad and deep knowledge of the chosen subjects and an intelligent appreciation of their bearing upon general knowledge and culture. Various departments of the University College of Arts and Science have introduced comprehensive examinations for Honors students. These examinations, partly oral and partly written, are given at the end of the senior year to cover the broad aspects of the student's Honors Course. They are additional to the course examinations.

Term work

In the subjects of the General and Honors Courses the ratio of term-work marks to examination marks is determined by the teaching staff in each subject. To pass, a student must obtain 50 per cent. in a whole subject, with 50 per cent. in term work and 50 per cent. in examinations.

Term work in a course will not be credited to a student beyond the year in which the course is taken.

Supplementals

A supplemental examination is based on work in which a student has been conditioned (40 to 49 per cent). The examination will be held early in August for those who have been conditioned in any course. (See first paragraph under *FAILURES*.) Students whose grade is F (less than 40 per cent.) in any course may not write a supplemental examination in that subject.

Supplemental examinations will not be allowed any student in more than the equivalent of two full courses.

No supplemental examination will be allowed in Honors subjects.

No supplemental examination will be held within three months of failure.

Special Examinations

A special examination is any examination other than the regular examination in May or August. No special examination may be assigned

except on the recommendation of the head of the department concerned, after consultation with the instructor involved. Students should often be advised to adopt the alternative of repeating the lectures and taking the next regular examination without fee. Whenever possible special examinations will be held during the first full week in September. No special examination will be set within three months of failure.

A student who fails to appear for an examination at the time set in the timetable will not be allowed to write on the examination paper thus missed, but will be required to write a special examination at a time determined by the Registrar after consultation with the department involved.

No General Course student may write special examinations on more than the equivalent of one full course in one academic year. No Honors Course student may write a special examination in any academic year if he has failed in more than one Honors examination paper or has secured less than 35 per cent. on one Honors examination paper.

A special examination may be written only at the college in which a student is registered.

FAILURES

A student who fails to obtain 50 per cent. in the regular or supplemental examination in a subject will not be eligible for re-examination without a further year's attendance at the lectures in the subject in which he has failed. The student must repeat that course, if it is prescribed, the year after failure, no matter what subject or subjects must be postponed.

A student may not take the same course more than twice, except by permission of the Principal and the Head of the Department concerned.

A student shall be required to pass in two-thirds of his approved registration at the Spring examinations; if he fails to do so, he shall repeat and complete successfully, at the Spring examinations, the entire work of his year (not necessarily the same course); a student who fails to satisfy this requirement shall withdraw from his course.

A student who is required to repeat his year's work may petition his Dean or Principal to be allowed to substitute a subject of equivalent weight, at the same year-level, available without clash of timetable, for a subject in which he has obtained sixty-six per cent. or better.

Subjects which depend directly upon the work of a preceding year may not be taken by a student who has failed in the pre-requisites.

A candidate in an Honors Course who, at the examination for the degree of Bachelor of Arts, fails to obtain the requisite average for honors (60), provided he has obtained 50 per cent. in each course of his final year, may, on the recommendation of the Committee on Academic Standing, be awarded a degree in the General Course. The candidate may write a subsequent examination for the Honors degree.

Any student of the two final years who shows an unsatisfactory knowledge of spoken or written English must do additional assignments until his work satisfies his instructors.

GENERAL REGULATIONS

When a student begins a foreign language in the University, no credit towards a degree will be given for the first year of that language unless that year is followed by a second year in the same language. No student may begin two foreign languages in the same year.

A course that is an optional course need not be given unless it is elected by at least five students. Students should be warned that the time-table often limits wide choice of options.

A student may take one course more than the number normally required for the academic year in which he is registered. Permission to take any further course must be obtained from the Committee on Academic Standing. For extra courses taken by permission of this Committee, an extra tuition and laboratory fee will be charged at the usual rate for special students.

LENGTH OF COURSES

In University College

The length of all General or specialized courses in Arts is three years for students with Grade XIII standing in nine papers (see p. 105). In the degree courses in Nursing at least forty-eight months of University and hospital study are required, in addition to Grade XIII standing in nine subjects (see page 38). The Honors Courses require four years, from Grade XIII standing in nine specified subjects. Two years of Premedicine, two years of Business Administration and four years of Engineering Science are also available in University College.

In the Affiliated Colleges

In some of the affiliated colleges Grade XII standing is the entrance requirement (p. 105) and the General Courses and the Honors Courses in Philosophy are four years in length; other Honors Courses are five years. A satisfactory year's work in nine Grade XIII subjects corresponding to the subjects prescribed in the Preliminary year of any course will decrease by one year the length of that course in any college.

REGISTRATION

Junior Groups

All students in Arts and Science must register each year in University College or one of the affiliated Colleges. See page 29 for dates for registration. The late registration fee is five dollars, waived only for a medical certificate of serious illness.

Subject to the admissions requirements (see page 105, Sections A and B), students presenting Grade XII and Grade XIII certificates will register in one of the Junior Groups or one of the specialized courses (pages 35-38).

Senior Group or Honors

Students who have completed a Junior Group may register either in one of the Senior Groups or in an Honors Course for which they have specific prerequisites.

Medical Examination

Each new student in intramural classes in winter sessions, graduate and undergraduate, is required to have a medical examination as part of his enrolment.

A student, on admission each year, by his registration subscribes to the regulations as stated from time to time in the University official announcements.

REGULATIONS GOVERNING TEACHERS' COURSES AND CERTIFICATES

(i) Courses for Teachers

University College offers the General Course for those who for various reasons find it impossible to attend the winter sessions for all the work necessary for a degree in Arts. This course is completely available through the Extension and Summer School Department, but only a small part of it is available by correspondence study.

(ii) Public School Inspectors' Certificates

By agreement with the Minister of Education the work described below satisfies the academic requirements for a Public School Inspector's Certificate.

(1) An Honors Degree in Arts or Science in accordance with the present agreement prescribed for Type A qualifications (see section II below); or

(2) A General Course or a Teachers' Course Degree in Arts with a standard of 66 per cent. on the work of the final year of the course, and with standing in English in any three of the first, second, third and fourth year courses of study.

To meet the requirements of the University, a candidate must, of course, satisfy the attendance regulations for his degree.

For the professional requirements, candidates should consult the Department of Education, Toronto 5, Ontario.

(iii) High School Assistants' Certificates

I. Type B

The academic standing for admission to the course in the Ontario College of Education leading to a High School Assistant's Certificate, Type B, is a degree in Arts or in Science from a British University, based upon courses approved by the Minister of Education.

II. Type A

Subject to the conditions specified below, an Honors degree in Arts or in Science (66 per cent.) is the academic standing for admission to the courses leading to High School Assistant's Certificate, Type A, in Classics, Commercial Subjects, English, English and French, English and German, English and History, English and Latin, French and German or Spanish, Geography, History, Latin and French, Mathematics, Mathematics and Physics, Physical Education, Physics and Chemistry, Science.

For the University of Western Ontario, the courses specified above shall be the Honors Courses as defined in the current Announcement of the Faculty of Arts and Science.

The courses shall extend over at least five years from Grade XII or, as may be determined under the regulations of the University, over four years from Grade XIII standing in four subjects.

Candidates shall attend for at least two full academic years, the third and fourth.

The Minister shall have authority to deal with any case not already covered. The University shall submit to the Minister a recommendation on any case whose merits justify special consideration.

Graduates in general courses who wish to obtain Type A standing should send formal transcripts of their University records to the Ontario College of Education for evaluation.

APPENDIX B — GENERAL INFORMATION

CONCERT SERIES

The cultural life of the University is enhanced by the provision each year of a series of Sunday Nine O'clock concerts by artists of high distinction in their several departments of music. The project is subject to the jurisdiction of the University Students' Commission. Each full-time student in the constituent divisions (Arts and Science, Graduate Studies, Medicine, Nursing and Business Administration) is entitled to admission to all concerts in this series.

HEALTH SERVICES

(i) Physical Examinations

A physical examination by practising physicians under the supervision of the University Health Service is required of students, men and women, graduate and undergraduate, who enroll in this University as intramural students in the winter session for the first time.

The medical examination will be free if taken on scheduled registration days, but a late registration fee of Five Dollars will be charged those students who do not take the examination at that time. **An X-ray examination prescribed for all undergraduate and graduate students will be arranged during January and is free if taken during the period prescribed.**

(ii) Student Health Insurance

The scheme of health insurance was designed for the benefit of students. Its first purpose is to protect any student whose academic year may be jeopardized financially by a serious accident or an acute illness requiring hospitalization. As a student body cannot make a legal contract, the University has made the contract with the Assurance Company. Copies of this contract are given to students at registration and may be obtained from the Health Service Office. Each student should study this contract carefully, as the responsibility for making claims for illness or injury rests entirely on him. All inquiries about insurance and the proper forms to be used for insurance claims should be made in the Health Service Office.

No insurance claims will be paid to any student who has not taken the physical examination.

(iii) Health Service

The purpose of the University Health Service is to supplement the Student Health Insurance. It consists of a clinic where students may consult the University Physician for the diagnosis or treatment of sickness, or for advice. A V.O.N. nurse is present who carries out treatment and does dressings. The Health Service secretary deals with inquiries and assists students with insurance claims.

A student who is taken ill out of clinic hours should call the family physician of those with whom he is residing, or the University Physician for information and/or advice.

A student who is compelled because of personal illness, or death in his family, to miss a final examination must ask his physician to send the

Registrar a medical certificate specifying the dates on which he was unable to be present. His instructors will then be asked for their recommendations.

HOUSING

The students who do not wish to live in residence or who do not apply early enough to be accepted in residence will find the **Housing Bureau** situated in Room 118, Thames Hall, from August 1st to October 15th. Meals may be obtained in Somerville House (the University Dining Hall) and rooms in private homes in the University vicinity.

RESIDENCES

Students who wish to live in residence should apply, preferably six months ahead, to the person specified below, for accommodation in London:

Women—Spencer Hall, where first year University College women are given a preference. Apply to the Dean of Women, in care of the University Post-office, for application form and full details.

Brescia Hall, the Ursuline College residence, R. R. 3, London. Students must enroll in Ursuline College if they wish to live in Brescia Hall. Apply to the Dean.

Men—Both **Christ the King College,** Waterloo Street North, and **Huron College,** R. R. 3, London, have residence accommodation for their own students and for some University men enrolled in other colleges and Faculties. Apply to the Dean of Residence at one of these colleges.

Waterloo College, at Waterloo, Ontario, has residences for both men and women students. Apply to the Registrar before August 31st.

STUDENT ACTIVITIES

For information about Student Government and Organizations, see the Student Handbook, published in November each year. Copies may be obtained, on loan, from the Registrar's Office later in the year, or from the Handbook Editors close to the time of publication. It is a student publication, distributed free of charge to all who pay student government fees.

The name of the University may not be used in any publication without the permission of the Advisory Committee. No class or group of students may engage in any public effort as a body representing the University or any organization within the University, without the permission of the Advisory Committee.

The constitution of any proposed club or society must be approved by the Advisory Committee before such organization can be recognized.

APPENDIX C — BURSARIES, SCHOLARSHIPS, MEDALS AND PRIZES

NOTE: Bursaries require II Class Honors (66%) or better, with some measure of financial need. Scholarships are competitive, requiring a minimum average of 75%.

I. ADMISSION BURSARIES

(i) Dominion-Provincial Student-Aid Bursaries, Type A.

Applications and terms of qualification may be obtained from secondary school principals or the Registrar of the Department of Education of Ontario.

(ii) Leonard Foundation Bursaries

The income of a trust created by the late Lieut-Col. and Mrs. Reuben Wells Leonard, St. Catharines, Ont., will be expended in paying part of the college expenses of selected students at several institutions of Canada, including the University of Western Ontario, for from one to four years.

Application forms may be obtained from Professor J. D. Ralph, Room 208, University College, and must be returned to him by February 15th.

(iii) The Atkinson Charitable Foundation Grade XIII Bursaries

These are available to residents of the Province of Ontario who obtain an average of sixty-six percent. on eight Grade XIII papers, and who need financial assistance to attend a university. Applications should be submitted to the Registrar of the University of Western Ontario by May 1st of the final year in Grade XIII.

(iv) Children of War Dead (Education Assistance) Act

Under the terms of this Act, fees and monthly allowances are provided for the children of veterans whose death was attributable to military service Enquiries should be directed to the nearest District Office of the Department of Veterans Affairs.

II. ADMISSION SCHOLARSHIPS: UNIVERSITY COLLEGE*

Candidates must notify the Registrar of the University of Western Ontario by May 1st (on forms provided on request) of their intention to compete for Scholarships the following June.

1. The following scholarships will be awarded on the results of the Ontario Grade XIII examinations.

2. No scholarship will be awarded unless a candidate obtains an average of First Class Honors (75 per cent.) on the papers involved in the award.

3. Candidates must write all the papers on which an award is based No credits by "recommendation" will be considered.

4. Each candidate must write at least six papers in order to be eligible for competition for any scholarship.

5. The winners of the scholarships must register in University College or Music Teachers' College.

6. Scholarships cannot be deferred. Winners must register for a full year's work beginning the academic session following the award.

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*For information about the admission scholarships available in the affiliated colleges, write the Registrars of those colleges.

7. In order to retain the privileges of these scholarships the winners must maintain a satisfactory degree of proficiency from year to year of their courses.

Board of Governors' Scholarships

(i) **Two General Proficiency Scholarships** awarded on nine papers:
- (a) English, Mathematics (any two), History, two foreign languages;
- (b) English, Mathematics (Algebra, Geometry, Trigonometry), a language and a science, either Physical (Physics and Chemistry) or Biological (Botany and Zoology).

Total value of each scholarship, $900 ($300 the first year, $200 in each of the next three years).

(ii) **Six Scholarships** awarded on six papers:
- (a) English, Mathematics (any two) and two other papers;
- (b) English, French and German or Greek or Latin or Spanish;
- (c) French, two of German, Greek, Latin, Spanish;
- (d) Mathematics (Algebra, Geometry, Trigonometry), Physics and two other papers;
- (e) Biology, Mathematics (any two) and two other papers;
- (f) Latin, French and German or Greek or Spanish;

Total value of each scholarship, $500 ($300 the first year, $200 the second).

(iii) **A Scholarship for the highest applicant in each Collegiate Institute,** Vocational School and High School, whether Commercial, Agricultural or Academic, in the counties named in the University of Western Ontario Act, 1923, *viz.*, Brant, Bruce, Elgin, Essex, Grey, Huron, Kent, Lambton, Middlesex, Norfolk, Oxford, Perth, Waterloo and Wellington, and all the cities situated therein. The successful applicants must have an average of at least First Class Honors (75 per cent.) in eight papers of the examination written in June of the year of the award, and chosen from the following subjects: English, French, German, Greek, History, Latin, Mathematics, Spanish, Botany, Zoology, Physics, Chemistry, Geography. Total value of each scholarship, $200 (payable the first year).

(iv) **Scholarships for proficiency in single subjects:***

(a) Latin; (b) Greek; (c) English; (d) Mathematics (Algebra, Geometry, Trigonometry); (e) French; (f) German; (g) Biology; (h) Physics and Chemistry; (i) Geography and History. Total value of each scholarship, $100 (payable the first year).

The Harriett M. Giddens Scholarship

One General Proficiency Scholarship for the highest ranking student from the City of London who has not qualified for an award under Sections

*To qualify for one of these Scholarships a candidate must obtain an average of 75 per cent. in six papers.

(i), (ii) or (iii) above. Total value of scholarship, $200 (payable the first year).

(The capital fund for this scholarship was bequeathed to the University by the late Harriett M. Giddens of London.)

The George Williamson Young Memorial Scholarship

One General Proficiency Scholarship for the highest ranking student in Grade XIII English, History, one language, and one other paper. Total value of scholarship, $500 ($300 the first year, $200 the second year).

(The capital fund for this scholarship was bequeathed to the University from the estate of the late George Williamson Young of Port Stanley.)

The Aluminum Company of Canada Scholarship

One General Proficiency Scholarship for the highest ranking student in Grade XIII Physics, Chemistry, Mathematics (any two) and two other papers. Total value of scholarship, $500 ($300 the first year, $200 the second year).

The Ontario Hockey Association Scholarship

An entrance award of one hundred and fifty dollars, the gift of the Ontario Hockey Association, tenable for one year only; the recipient to be selected by the University Scholarship Committee, subject to the general conditions governing admission scholarships.

The London Life Actuarial Scholarship

One General Proficiency Scholarship of $2400 ($600 a year) based on nine papers of Grade XIII, especially on high standing in Mathematics for admission to Junior Group 1 or Junior Group 2. The Scholarship Committee shall select a winner (to be approved by the London Life) from the students who make application for the award and agree to take the actuarial option of the Honors Mathematics or the Honors Mathematics and Physics Course. If the winner fails to maintain First Class Honors he will forfeit the award until he regains that standard; if he withdraws from the actuarial option he will forfeit the award permanently.

The following Admission Scholarships have these stipulations in common:

1. They are based on nine papers of Grade XIII in Ontario (written in the year of the award) or Senior Matriculation results from the other provinces of Canada.

2. Both financial need and academic standing will be considered by the Selection Committee (the Chairman of the Scholarship Committee, the Principal, the Dean of Men, the Dean of Women, and the Registrar). The purpose of the awards is to assist deserving students to obtain a university education.

3. The winners may hold these awards for the duration of their undergraduate courses in this University, if they maintain scholarship standing satisfactory to the University's Scholarship Committee.

4. Applications are due on May 1st, and must be accompanied by a letter from each applicant's secondary school Principal, certifying that he

(or she) is an outstanding student. All applications for these awards will be asked for information about their own contributions toward their education and the amount of help available from family and other sources. Such information will be used only by the Selection Committee and will otherwise be kept entirely confidential.

The General Motors Canadian Scholarships

General Proficiency Scholarships of $200 to $2000 a year, depending on financial need, throughout an undergraduate course. The choice of course is unrestricted. For other stipulations, see Admission Scholarships, above.

The International Nickel Company of Canada Limited Scholarship

One Inco Scholarship of $300 a year, in addition to tuition and incidental fees; limited to students in the field of engineering. For other stipulations, see Admissions Scholarships, above.

The Union Carbide Canada (Limited) Scholarship

One General Proficiency Scholarship of $2,000 ($500 a year). The purpose of the award is twofold: to assist deserving students, interested in a business career, to obtain a Univerity education, and to assure larger numbers of men and women trained in universities for future executive and administrative careers in business and industry. In each recommendation mentioned above (see Admission Scholarships) the Principal should state the applicant's talents for business or industry.

The Scholarships of the Institute of Chartered Accountants of Ontario

Two General Proficiency Scholarships of $1,000 each for the two students entering a Business Administration or Commerce course at any Ontario university, who have the highest standing in their best eight Grade XIII papers, including English Literature, English Composition, and Algebra. The winners may not accept other scholarships and bursaries for their freshman year valued in the aggregate at more than $500.

Application must be made to the Institute of Chartered Accountants of Ontario, 69 Bloor Street East, Toronto 5, before June 20th.

III. UNDERGRADUATE MEDALS (FOR ALL ARTS AND SCIENCE COLLEGES)

These awards are competitive and no application is necessary.

University Gold Medals for competition in the final year of these Honors Courses:

Botany, Business Administration and Secretarial Science, Chemistry, Chemistry and Physics, Classics, English Language and Literature, English and French, English and German, English and Latin, English and Philosophy, French and Latin, Geography, Geology, History, Journalism, Modern Languages (French and German, and French and Spanish), Philosophy, Physical and Health Education, Physics and Mathematics, Psychology, Radio Physics and Mathematics, Zoology.

Governor-General's Medal: Senior Group, General Course.

The Joseph J. and Annie R. Kingston Gold Medal: final year Mathematics, University College.

(Endowed by Dean H. R. Kingston in memory of his parents.)

The London Life Insurance Company Gold Medal: final year Actuarial Mathematics, University College.

Ursuline College of Arts Award: fourth year Home Economics.

The S. F. Glass Awards: Gold Medals for the highest standing in the Honors Economic and Political Science Course, one in Honors Economics and the other in Honors Political Science of the final year.

(Endowed by the estate of the late S. F. Glass of London.)

IV. UNDERGRADUATE SCHOLARSHIPS AND PRIZES (UNIVERSITY COLLEGE)

1. **Unless otherwise specified, these awards are competitive and are assigned by the Scholarship Committee, without the necessity of application.**
2. **The Board of Governors of the University provides the scholarships and prizes in University College, unless other donors are indicated.**
3. **Except for final year awards, these scholarships and prizes will be paid only to students who are in actual attendance and carrying a full year's work in University College.**
4. **Payment is made on October 15th and February 15th.**

Scholarships: For general proficiency in the following:

(a) Junior Group 1: Sixty Dollars.

(b) Junior Group 2:

(i) The F. G. Jewell Scholarship: Fifty dollars; for the highest ranking student who plans to enter one of the professional courses: Honors Business Administration, Business Administration and Secretarial Science, Journalism or Physical and Health Education. Not offered in 1958.

(Given in memory of the late Francis G. Jewell, C.A., former Auditor of the University.)

(ii) The W. J. Roche Scholarship: Fifty dollars; for the highest ranking student who plans to enter one of the Social Science courses: Honors Economic and Political Science, Geography, History or Psychology.

(In honor of the late Hon. W. J. Roche, M.D., LL.D., C.M.G., former Chancellor of the University.)

(iii) The B'Nai Brith Scholarship: Fifty dollars; for the highest ranking student who plans to enter one of the humanities courses: English, Ancient or Modern Languages and Literatures, or Philosophy.

(Given each year by the London Branch of the Order.)

(c) Premedicine: first year: Sixty dollars.

(d) Premedicine: second year: Sixty dollars.

Scholarships: Sixty dollars each for best standing in the following:

SECOND YEAR HONORS COURSES:

Business Administration and Secretarial Science, Chemistry and Physics, Classics, English and French, English and German, English and Latin, English and Philosophy, French and Latin, Geology, Journalism, Modern Languages, Philosophy, Physical and Health Education, Psychology.

THIRD YEAR HONORS COURSES:

Business Administration and Secretarial Science, Chemistry and Physics, Classics, English and German, English and Latin, English and Philosophy, French and Latin, Geology, History*, Journalism, Modern Languages, Philosophy, Physical and Health Education, Psychology.

The J. P. Bickell Foundation Scholarship: Twelve hundred dollars; for a student entering the second year of the Honors Geology course; six hundred dollars the second year, four hundred dollars the third year, and two hundred the final year, if he maintains First Class Honors standing from year to year.

The Johnson's Wax Scholarship: Six hundred dollars a year for a period of three years, to the outstanding man in Junior Group 1 who enters Honors Chemistry or the Chemistry Option of the Honors Chemistry and Physics Course. The selection is to be made by the Scholarship Committee of University College, who may take into consideration the financial need of the applicants; the award is to be announced each Spring, when the Scholarship Committee releases its Spring awards list. If the successful candidate falls below First Class standing in Chemistry or fails to attain reasonably high standing in his accessory subjects, the scholarship shall revert to the top ranking First Class student in the same year provided his financial need warrants his selection.

The Rhoda Ann Rinn Scholarship in English Literature: One thousand dollars, to be awarded on the basis of academic standing in Junior Group 2 to a student in University College who enrols in the second year of Honors English Language and Literature. The winner will be selected by the Scholarship Committee, on recommendation of the Department of English, from applications to be received by the Registrar before May 1st. Five hundred dollars will be payable in the second year, three hundred dollars in the third year and two hundred dollars in the final year, provided the student maintains First or Second Class Honors and remains in the Honors course in English Language and Literature.

(This Scholarship was established as a memorial to his mother, by the late Lionel Harris Rinn, Honors English graduate of this University in 1927.)

The Hon. Edward Blake Scholarship, No. 1: Sixty dollars; for Honors Economic and Political Science, Second Year. Offered in 1959-60.

The Hon. Edward Blake Scholarship, No. 2: Sixty dollars; for Honors Economic and Political Science, Third Year. Offered in 1959-60.

(These two Scholarships were endowed by the late Major Hume Cronyn, K.C., M.P., in memory of his uncle, the Hon. Edward Blake, sometime Premier of Ontario and, later, member of the British House of Commons. These Scholarships will be awarded at the discretion of the Scholarship Committee.)

*In alternate years, next in 1958-9, when the Joseph Henry Marshall Scholarship is not available.

The Joseph Henry Marshall Scholarship: Sixty dollars; for Honors History, Third Year. Open only to Canadian-born students. To be awarded in 1959-60.

(Bequeathed to the University by Mrs. Amy Marshall as a memorial to her late husband, Joseph Henry Marshall, M.P., to commemorate his interest in all phases of Canadian History.)

The Andrew Grant Scholarship, No. 1: Sixty dollars; for Honors Economic and Politcal Science, Second Year. Offered in 1958-59.

The Andrew Grant Scholarship, No. 2: Sixty dollars; for Honors Economic and Political Science, Third Year. Offered in 1958-59.

The Andrew Grant Scholarship, No. 3: Sixty dollars; for Honors Social Science, Second Year.

The Andrew Grant Scholarship, No. 4: Sixty dollars; for Honors Social Science, Third Year.

(These Scholarships were bequeathed to the University by Mrs. Grant as a memorial to her husband, Mr. Andrew Grant, St. Thomas.)

The John Gordon McIntosh Scholarship, No. 1: Sixty dollars for Honors Mathematics and Physics, Second Year.

The John Gordon McIntosh Scholarship, No. 2: Sixty dollars; for Honors Physics, Third Year.

(These Scholarships were endowed by the late Mrs. John Gordon McIntosh, of Winnipeg, in memory of her husband. They will be awarded at the discretion of the Scholarship Committee.)

The Wilhelmina and J. Gordon McIntosh Prize, No. 1: One hundred dollars for highest standing in Honors Business Administration, Second Year; to be held in the third year.

The Wilhelmina and J. Gordon McIntosh Prize, No. 4: Sixty dollars; for Honors Geography, Second Year; to be held in the third year.

The Wilhelmina and J. Gordon McIntosh Prize, No. 5: Sixty dollars; for Honors Geography, Third Year; to be held in the fourth year.

(These prizes were bequeathed to the University by the late Wilhelmina Morris McIntosh, of Winnipeg and London.)

The Famous Players Canadian Corporation Scholarship: Five hundred dollars; to be awarded for high standing in the Journalism subjects of the penultimate year of the Journalism course; the award may be augmented by a waiver of fees of the Trois Pistoles Summer School for a candidate who agrees to attend that Summer Session. For further details of the award and for application forms, apply to the University Registrar not later than April 1st.

The Midland Securities Scholarship: One hundred dollars, for the student with the highest standing in Journalism 20, who enters the Honors Journalism course.

The Albert O. Jeffery Scholarship, No. 1: Sixty dollars; for Honors Biology, Second Year.

The Albert O. Jeffery Scholarship, No. 2: Sixty dollars; for Honors Biology, Third Year.

The Albert O. Jeffery Scholarship, No. 3: Sixty dollars; for Honors Mathematics, Third Year.

(These three Scholarships were bequeathed to the University by the late Mrs. Jeffery as a memorial to her husband, Mr. Albert O. Jeffery, K.C., D.C.L., LL.D., former President of the London Life Insurance Company.)

The Richard and Julia Butler Scholarship: Sixty dollars; for Second Year Honors Botany.

(This Scholarship was bequeathed to the University by the late Mrs. Mary E. B. Moorhouse.)

The A. N. Knowles Scholarship: Sixty dollars; for Honors Chemistry, Second Year.

The J. C. Knowles Scholarship: Sixty dollars; for Honors Chemistry, Third Year.

(The above Scholarships are donated to the University as memorials by Mrs. A. N. Knowles, London.)

The William Wyatt Scholarship, No. 1: Sixty dollars; for Honors English Language and Literature, Second Year.

The William Wyatt Scholarship, No. 2: Sixty dollars; for Honors History, Second Year.

(The capital fund for these Scholarships was bequeathed to the University by the late William Wyatt, of London.)

The Myrtle Rowntree Memorial Scholarship: Sixty dollars; for Honors English Language and Literature, Third Year.

(This Scholarship was established as a memorial to the late Myrtle Martindale Rowntree, a 1919 graduate in Honors English and History, by her brothers and sisters.)

The California Standard Company Scholarship in Engineering: Four hundred dollars, for a student in the Chemical or Mechanical Engineering option of the Engineering Science course, to be chosen by the Scholarship Committee.

The California Standard Company Scholarship in Geophysics: Four hundred dollars, as an aid to the completion of the third or fourth year in Honors Geophysics, Geology, Physics or Mathematics, with a preference for Geophysics. The selection committee is to be the Scholarship Committee. Women and foreign students are only eligible to receive the award subject to the approval of the Company. The Scholarship may revert if the highest-ranking student has any larger award.

The Ontario Hydro Engineering Scholarships: Three awards of three hundred dollars each, for outstanding students in the first and second and third years of the Engineering Science Course.

The Canadian Society of Exploration Geophysicists Scholarship: Three hundred and fifty dollars, to be awarded by the Scholarship Committee to a male student in University College entering the Geophysics major of the second year of Honors Mathematics and Physics, on the basis of high standing in Junior Group 1. Apply to the Registrar before May 1st.

The Kennecott Copper Corporation Minerals Exploration Scholarship: One thousand dollars, to be awarded by the Scholarship Committee to a

male student entering the third or the fourth year of the Geophysics major of the Honors Physics and Mathematics course. Apply to the Registrar by May 1st.

Khaki University and Y.M.C.A. Scholarship: Sixty dollars; for the highest average obtained by an ex-service man or woman, or the son or daughter of an ex-service man or woman, in any year of any course in University College of Arts and Science.

Sir Wilfrid Laurier Memorial Scholarships: Two scholarships, one elementary ($30.00) and one advanced ($50.00); awarded annually for proficiency in French conversation; open only to Canadian-born English-speaking students, or the sons and daughters of naturalized British subjects not of French parentage.

(The capital fund of these Scholarships was the gift of the Women's Liberal Association.)

Bruce County Scholarships: Two, one hundred dollars each, one for the man, one for the woman, from Bruce County who stand highest in any year of any regular course in the University. These scholarships can be held only once by any student: an award won a second time reverts to the student coming next in order of merit.

(These Scholarships were voted by the Council of Bruce County in June, 1945.)

Elgin County Scholarships: Two, one hundred dollars each, one for the man, one for the woman, from Elgin County (excluding the City of St. Thomas) who stand highest in any year of any regular course in the University.

(These Scholarships were voted by the Council of Elgin County in June, 1945.)

Huron County Scholarships: Two, one hundred dollars each, one for the man, one for the woman, from Huron County who stand highest in any year of any regular course in the University.

(These Scholarships were voted by the County Council of Huron County, in 1944, for annual competition among Huron County students in attendance at the University of Western Ontario.)

William C. Benson and Company Prize: Fifty dollars; for the highest standing in the Accounting course of Second Year Honors Business Administration.

Ursuline College Home Economics Prize, No. 1: Twenty-five dollars; for Third Year Clothing (Home Economics 30x).

Ursuline College Home Economics Prize, No. 2: Twenty-five dollars, for Third Year Foods (Home Economics 32x).

W. W. Tamblyn Prize: Seventy-five dollars, for the highest standing in the use of language (English Composition and Public Speaking) at the Junior Group level.

(The capital fund for this prize was bequeathed to the University by the late W. W. Tamblyn of Bowmanville and by his son, the late Professor W. F. Tamblyn of London, formerly Head of the Department of English in this University.)

The International Nickel Company Award in Journalism: A plaque and a portable typewriter for the student completing the Graduate Diploma course in Journalism with the highest average, provided the average is at

least 66%. The award shall be made by the Scholarship Committee on recommendation of the Head of the Department of Journalism.

Legation of Switzerland: Book prizes to students in modern languages, on recommendation of the Departments of Romance Languages and German.

Alumnae Association Prize: Ten dollars; Third Year Canadian History (History 31); only women are eligible for competition.

Gamma Phi Beta Alumnae Jubilee Prize: Ten dollars; Third Year Secretarial Science (Secretarial Science 30, 37, 38, 39).

Chemical Institute of Canada Prize: Twenty-five dollars in books to be awarded to the student with the highest standing in Chemistry in the Honors Chemistry, or Chemistry and Physics, course of the third year.

The Canadian Association of Geographers: Book prize to the graduating student in Honors Geography who has demonstrated the greatest proficiency in this subject.

Scholarships Available for Study at the Summer School for French and English, Trois-Pistoles, Quebec

Applications for the undermentioned scholarships will be received by the Registrar up to April 30th. The winners will be selected by a special committee.

Robert Simpson Company Limited Scholarships: Two; one hundred and fifty dollars each.

Imperial Oil Company Limited Scholarship: One hundred and fifty dollars.

Board of Governors' Scholarship: Sixty dollars.

Prizes Available at the Summer Session in London

For these prizes, see the Summer School pamphlet. Because the awards are made for the highest standing in each subject, it is not necessary for students to file applications for any of them. Cheques will be mailed to prize-winners by October 15th.

V. UNDERGRADUATE BURSARIES

Unless otherwise stated, applications for Bursaries are to be submitted to Dean T. L. Hoskin, Secretary of the Student Loans and Bursaries Committee, by November 1st.

Dominion-Provincial Student-Aid Bursaries, Type B: These bursaries, ranging up to $500 are for second, third and fourth year students with financial need and a record of Grade B, or better, in the university work of the preceding year. Applications are submitted through Dean T. L. Hoskin, Secretary of the Student Loans and Bursaries Committee, by October 10th.

A limited number of Type B Bursaries are also available for students registered in the Faculty of Graduate Studies.

Student-Aid Bursaries from the W. F. Thomas Estate: Grants of $100 to $300 are available for students in financial need, in any year of a degree course. An applicant must be able to give evidence of satisfactory academic achievement. Preference is given to applicants whose residence is in St. Thomas or Elgin County.

Atkinson Charitable Foundation Student-Aid Grants: These awards are made to deserving undergraduates in any year of a degree course. Applicants must be residents of the Province of Ontario, able to give evidence of financial need.

The Bill McKibbon Bursary: Five hundred dollars a year throughout Premedicine and Medicine, provided Grade B standing is maintained. A male student, preferably from southwestern Ontario, is to be selected by the Secretary of the Loans and Bursaries Committee and the donor. Academic standing and personality will count equally in the selection.

(This Bursary is endowed by Dr. Walton McKibbon of Wingham, a Medical graduate of this University, in memory of his son.)

The C. W. Loaring Bursary: One hundred and fifty dollars, for an undergraduate student in any year of Engineering Science at this University, preferably a student from Western Ontario, to be selected by the Student Loans and Bursaries Committee, on the basis of proven academic ability (66% or better) and evidence of financial need.

(This Bursary is the gift of Mr. John W. Loaring, graduate of this University in 1940.)

The London Free Press Journalism Bursary: Five hundred dollars, for a graduate of any Canadian university entering the Diploma Course in Journalism at this University. The Selection Committee (the Head of the Journalism Department of this University, the president of the London Free Press Printing Company or his delegate, and the University Dean of Men) shall base the award on undergraduate record, financial need, character and personality, evidence of aptitude for journalism as a profession and on anticipated ability to improve the status of journalism as a profession. Applications shall be made to the Registrar, University of Western Ontario, not later than August 31st. The first half of the award shall be payable upon registration and the other half at the beginning of the second term.

The Canadian Women's Press Club (London Branch) Bursary: Fifty dollars, for a woman student entering the third or fourth year of the Honors Journalism course.

Huron County Bursaries: Five tuition bursaries up to one hundred dollars a year are available for students who have been residents of Huron County for the past three years. These Bursaries are tenable only in the constituent colleges of this University, and are renewable on the same terms as the Dominion-Provincial Student-Aid Bursaries. Awards will be made by a committee of Huron County representatives, the University Registrar, and the Secretary of the Student Loans and Bursaries Committee.

(These Bursaries were voted by the County Council of Huron County in 1948.)

Perth County Bursaries: Five tuition bursaries of one hundred dollars each, tenable only in the constituent colleges of this University, are awarded to Perth County students (outside St. Mary's and Stratford) on approxi-

mately the same terms as the Dominion-Provincial Student Aid Bursaries, with the possibility of renewal from year to year. The Selection Committee (including the Warden and other representatives of Perth County Council meeting with University Scholarship and Bursaries representatives) may award a maximum of two hundred dollars to a student, depending on the degree of financial need, if the total sum of five hundred dollars a year is not exceeded.

(These awards were voted by the County Council of Perth County, in 1955.)

Y-Mac Club Bursary: One hundred dollars, for a student of Y.M.C.A. background; to be awarded each fall by a special committee of Y.M.C.A., Y-Mac Club and University representatives.

The Undergraduate Women's Organization Bursary: One hundred dollars; for a woman in any year of any course; to be selected by a committee consisting of the Dean of Women, the Registrar, the Secretary of the Loans and Bursaries Committee, and the President and the Chairman of the Undergraduate Women's Organization. Applications must be submitted to the Dean of Women by October 15th.

University Women's Club Bursary: One hundred dollars; for a woman student in her third year or, preferably, her fourth year in any Faculty; it will be awarded on the basis of satisfactory academic standing and some financial need, by a committee consisting of the Dean of Women, the Registrar, and a representative of the University Women's Club of London. Application should be made to the Dean of Women or the Registrar before October 1st.

(This award is made annually by the University Women's Club of London.)

The Olga Alice Miller Bursary: One hundred dollars, for a woman in any year of any course. Applications should be made to the Dean of Women by November 1st. The Selection Committee shall be the Registrar, the Dean of Women, and the Secretary of the Loans and Bursaries Committee.

(This Bursary was established as a memorial to the late Olga Alice Miller, a 1928 graduate in Honors English and History, Assistant Registrar, 1933-51, by her mother Mrs. A. E. Miller and her sister Helen.)

The Procter and Gamble Company of Canada Bursaries: One hundred dollars minimum, to benefit students of good academic standing who are in financial need.

I.O.D.E. (Municipal Chapter) Bursary: One hundred dollars; for a student in pure or applied Science.

I. O. D. E. (William E. Saunders Chapter) Bursary: One hundred dollars; for the student registered in the Botany option who stood highest in Third Year Honors Biology during the preceding session. The bursary may be awarded, under special circumstances, to a student registered in a course other than Botany.

I. O. D. E. (Dr. John Dearness Chapter) Bursary: Seventy-five dollars; awarded annually to a graduate of any Canadian University enrolled at this University in a Mycology course; if there is no graduate candidate with good scholarship and financial need, the award shall be made to an undergraduate student in Botany 461a, under the same conditions.

I. O. D. E. (London Air Force Chapter) Bursary: One hundred dollars; awarded annually by the Scholarship Committee to a student in any branch of Honors Physics, preferably Radio Physics, third year.

I. O. D. E. (Nina Moore Jamieson Chapter) Bursary: One hundred dollars; awarded annually to the student with the highest standing in the Third Year of the Honors course in English and French.

I. O. D. E. (Lord Roberts Chapter) Bursary: One hundred dollars; awarded annually to a woman student enrolled in the final year of the Medical Course or in the Public Health Option of the degree course in Nursing.

I. O. D. E. (The Colonel William Gartshore Chapter) Bursary: One hundred dollars; awarded by the Scholarship Committee to a student in the Humanities.

I. O. D. E. (The Princess Patricia Chapter) Bursary: One hundred dollars; awarded by the Scholarship Committee to a student in the Social Sciences.

I. O. D. E. (The Sir George Ross Chapter) Bursary: One hundred dollars; awarded by the Scholarship Committee to a student in the Humanities or the Social Sciences.

I. O. D. E. (The Colonel G. Eric Reid Chapter) Bursary: One hundred dollars; awarded by the Scholarship Committee to a student in any year of any course.

VI. GRADUATE FELLOWSHIPS, SCHOLARSHIPS AND PRIZES

See the Announcement of the Faculty of Graduate Studies. For detailed information about other graduate fellowships and scholarships available in Canada and elsewhere, consult the following volumes on file in the Registrars' Office:

The Yearbook of Canadian Universities

The Yearbook of the Universities of the Commonwealth

Higher Education in Great Britain and Ireland

The UNESCO International Handbook, **Study Abroad**

The Dominion Bureau of Statistics, **Postgraduate Scholarships and Fellowships open to Canadian Students.**

The Association of American Colleges, **Directory of Fellowships in the Arts and Sciences,** and **A Guide to Graduate Study.**

Institute of International Education, **Handbook on International Study.**

APPENDIX D — MILITARY STUDIES

Students may offer themselves for training in one of the three Armed Services, the University Naval Training Divisions, the Canadian Officers' Training Corps, and the RCAF University Squadron. Suitable candidates in each service will be trained for commissioned rank.

Military Studies count as a half course towards a degree in Senior Group B of the General Course in Arts.

Regular Officer Training Plan (ROTP)

Under the ROTP, undergraduates who are successful applicants are enrolled in the service of their choice, as Naval Cadets in the Royal Canadian Navy, Officer Cadets in the Canadian Army, and Flight Cadets in the Royal Canadian Air Force.

Applicants must be Canadian citizens or British subjects, single and under 21 at commencement of university or college training. If application is made prior to entry at university or college, it should be sent in writing to ROTP Selection Board, National Defence Headquarters, Ottawa, Ontario. If it is delayed until after admission to a university, apply to the representative of your preferred service.

For successful applicants the cost of books, instruments, tuition and other essential fees will be borne by the Department of National Defence. The scale of pay and allowances under this plan is:

(a) During the academic year, pay of $63 a month and subsistence of $65 a month, for a total of $128 a month.

(b) During the period of practical summer training, pay of $63 a month and subsistence provided by the Armed Services.

(c) Aircrew trainees receive $75 a month flying pay while undergoing summer training.

On successful completion of academic and military training, cadets will be promoted to Commissioned Officer rank in the Regular Force. The privilege of release, if desired, will be honored after three years' service as a commissioned officer.

University Naval Training Division (UNTD)

The Royal Canadian Navy intends to secure the majority of its officers from the Universities. Undergraduates with or without previous experience may receive Naval Training through the University Naval Training Divisions (U.N.T.D.) After successful completion of their courses they may obtain commissions in the R.C.N. or the R.C.N.(R).

Applicants for training under the R.O.T.P. for service with the Royal Canadian Navy will train with the U.N.T.D. For further particulars regarding the R.O.T.P., see the details included in the above plan which is applicable to all Services.

The course consists of sixty hours of training during the academic year, for three years, and fourteen weeks of training ashore and afloat for two summers. Cadets may volunteer for additional service. The training during the academic year is designed to prepare the Cadet for the more advanced and concentrated training ashore in the summer. The training afloat provides the practical phase of the courses as well as an opportunity for foreign travel. Students enter enter as Probationary Cadets and in their first year appear before a Cadet Selection Board for promotion to the rank of Cadet.

Pay is at the rate of $210.00 a month. For training during the academic year Cadets are paid one half day's pay for each training period up to a maximum of sixteen days' pay. On entry, uniforms are issued; and for summer training, board, lodging, medical care, dental care, and travelling expenses are provided.

The R.C.N. is hoping to build up a body of well-trained personnel who will be available for special services in cases of emergency. The U.N.T.D. provides the opportunity for obtaining valuable training and instruction useful in peace or war and is the source of over eighty percent. of commissioned Reserve Naval Officers.

Information and application forms are available in the U.N.T.D. office, 113 Thames Hall, University of Western Ontario.

Canadian Officers' Training Corps (COTC)

1. Canadian Officers' Training Corps offers undergraduates an opportunity to qualify for commissions in the Canadian Army, either Regular Army or Militia, through a training program especially designed to meet their requirements.

2. Students are eligible who are:
   (a) Canadian citizens or British subjects resident in Canada. The latter must possess a certificate of a landed immigrant; a student visa is not acceptable.
   (b) Seventeen years of age by January 1st of the year in which the first practical phase of training is commenced; able to complete corps qualification (two summers) before reaching the age limits for the corps chosen; enrolled early enough in the University course to complete qualification to Second Lieutenant (two summers).
   (c) Of a physical standard suitable for the Canadian Army Active Force.
   (d) Following a course of study leading to a recognized degree.

3. Training provided is in two parts:
   (a) Two hours a week of theoretical training in military subjects during the academic year.
   (b) Twelve to twenty-two weeks of practical training during the summer, depending upon length of vacation period and candidate's choice. Training will be as follows:
      (i) First and second years — at Corps Schools of the Canadian Regular Army.
      (ii) Third year—practical leadership in charge of a troop, section or detachment at a Regular Army Unit or camp in Canada or Europe.

4. Students accepted for COTC training are granted the rank of Officer Cadet during the first two years and in the third year are appointed as 2nd Lieutenants. They are eligible for pay of rank ($210 a month)

for every full day of military duty. For this purpose four hours of lectures during the academic year count as one day's duty, as well as each day spent at summer camp up to a maximum of 22 weeks.

5. The Commanding Officer of the UWO Contingent COTC is Lt. Col. R. N. Shervill. Information and application forms are available in the COTC office, Room 117, Thames Hall. Those interested are advised to make application as soon as possible after registration.

RCAF University Reserve Training Plan (URTP)

Under this plan (URTP) students admitted to a squadron are appointed in the rank of Flight Cadet and hold that rank until commissioned as Pilot Officers at the end of the third summer of training. As Flight Cadets and Pilot Officers they are paid at the rate of $210 a month during the summer months and up to sixteen days' pay for attendance at training lctures, one night a week during the academic year.

Winter training consists of approximately 64 hours of parades, lectures and films during each academic year.

Summer training is carried out at RCAF Stations where the Flight Cadets receive formal course training or supervised employment depending on their branch of training. Each year a number of Flight Cadets are selected to take their third summer of training at an overseas unit. Rations, quarters, transportation, uniforms and medical attention are provided free while undergoing summer training.

Upon graduation from University the members of the URTP are promoted to Flying Officer and given the option of service with the Regular Force, the Auxiliary, the Primary Reserve Mobilization Assignment Training Plan, or going into the Supplementary Reserve, where they are on call only in case of national emergency.

Information and application forms are available in the RCAF University Squadron Office, in Room 112, Thames Hall. Those interested are advised to make application as soon as possible after registration (preference is given to first year students).

SUMMARY OF REGISTRATION IN FACULTY OF ARTS AND SCIENCE, 1957-58

Year in Course	University College		Huron College	Ursuline College	Waterloo College	College of Christ the King	St. Peter's College	Music Teachers' College	Totals	
Full-time Students:										
Preliminary* (without Senior Matriculation)		.....	11	31	83	37	4	.....	166	
First*		626	88	49	197	64	22	17	1063	
Second*		590	51	31	83	30	21	11	817	
Third*		349	22	26	55	17	25	5	499	
Fourth**		91	.....	2	10	2	.....	.....	105	
Graduate		79	.....	.....	.....	.....	.....	.....	79	2729
Part-time Students:										
Undergraduate		41	10	21	61	11	5	1	150	
Graduate		21	.....	.....	.....	.....	.....	.....	21	171
										2900
Correspondence	419	.....	.....	.....	.....	.....	.....	.....	419	
Summer School	955	.....	.....	.....	.....	.....	.....	.....	955	
Extension	761	.....	.....	.....	.....	.....	.....	.....	761	2135
TOTALS	2135	1797***	182	160	489	161	77	34		5035
Duplicates										663
										4372

*In the United States and in many parts of Canada, these should be regarded as freshman, sophomore, junior and senior year courses, respectively, following Junior Matriculation or High School graduation. **The students in the Fourth Year have actually spent four years in the University following Senior Matriculation or Grade XIII standing. ***1256 men, 541 women.

SUMMARY OF REGISTRATION IN THE WHOLE UNIVERSITY, 1957-58

Faculty of Arts and Science:	University College Intramural and Music Teachers' College	1831	
	Summer School, Correspondence, Extension, less duplicates	1472	
	Affiliated Colleges	1069	4372
Faculty of Medicine:	Undergraduates (all full-time)	230	
	Graduates (all full-time)	23	253
School of Nursing:	Graduate Nurses (122 full-time, 1 part-time)	123	123
School of Business Administration:	Juniors (third year Honors) (all full-time)	113	
	Seniors (fourth year Honors) (all full-time)	65	
	Graduates (all full-time)	146	324
UNIVERSITY TOTAL ENROLMENT:	(3565 men, 1507 women)		5072

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