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1989/90

SCARBOROUGH COLLEGE UNIVERSITY OF TORONTO

CALENDAR



1999-1990

University of Toronto

Scarborough College



Calendar

If somebody would give me about two dozen very old elm trees and about fifty acres of wooded ground and lawn — not too near anywhere and not too far from anywhere — I think I could set up a College that would put all the big universities in the shade.

Stephen Leacock

1989/90

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IMPORTANT NOTICES

- I The College reserves the right to change the content of, or to withdraw any course. In such cases every effort will be made to provide equivalent alternative instruction, but this cannot be guaranteed.
- 2 The College also reserves the right to limit the number of students in any course or any section of a course if the number wishing to take the course should exceed the resources available.
- 3 The College reserves the right to alter the fees and other charges described in the Calendar.
- 4 A separate Calendar is published by the Faculty of Arts and Science and by Erindale College. Students are reminded that Scarborough College is a separate faculty of the University and that rules covering students at Scarborough College may differ from those in the Faculty of Arts and Science.
- 5 It is the responsibility of students to see that their academic programmes meet the College's regulations in all respects.
- 6 ACADEMIC OFFENCES ARE A SERIOUS MATTER. See page 42.
- 7 The College has a fire safety plan. Copies are available from Physical Plant Services (\$303).

This is Scarborough College



Scarborough College, a constituent college of the University of Toronto, was established 25 years ago to provide for the rapid growth of demand for undergraduate education foreseen for the later 1960's. Since that time it has grown from a modest beginning of ten evening classes in a local high school to a thriving campus which attracts some 3500 full-time and 1500 part-time students each year; it has a faculty of 220 and offers more than 700 different courses.

The first full-time Scarborough students, 191 in all, enrolled in September 1965. Classes were held on the University's St. George campus that fall pending completion of the first building on the new Scarborough Campus. This first phase, which comprised the Science and Humanities wings, was opened in January 1966 and won immediate notice internationally for its striking architecture. Official opening ceremonies, presided over by the Honourable William Davis, then Minister of Education and later Premier of Ontario, were held later in the fall.

Another new building, the R-wing, was opened in 1973, providing much needed additional classroom and office space, as well as a gymnasium and sports facilities. The first student village townhouse residences were also opened in 1973, with a second stage completed in 1985, bringing the total number of residence spaces available on the Scarborough Campus to 394. A further 142 spaces will become available in 1990 with the construction of the West Village.

In 1982, the Vincent W. Bladen Library was added to the R-wing. Today, more than 200,000 books are available on its shelves, as well as thousands of maps and periodicals, and in its media centre, recordings and fine art slides. The most recent addition to the physical plant of the College is the Soil Erosion research facility built on the west side of the campus and opened in the spring of 1989.

While Scarborough was originally an integrated part of the University's Faculty of Arts and Science, in 1972 it became a separate Arts and Science division of the University of Toronto. This enabled the College to take on more responsibility for developing its own curriculum. Students enrol in either Specialist, Major or College Programmes and can proceed to either a three or four year degree. The College was the first in the University to adopt a credit system so that students may complete the degree requirements at a rate of their own choosing. Part-time studies have always been an important component of the College and a range of evening and summer courses are offered to cater to this demand. A growing number of scholarships and awards are available and are listed later in this publication. In 1975, the only formal co-operative programme at the University was started at Scarborough, the Co-operative Programme in Administration. Two additional co-operative programmes were added in 1984; one in Arts Administration, the other in International Development Studies. A fourth cooperative programme, in Computer Science and Physics, was added in September 1988. Other special programmes offered at the Scarborough Campus include Neurosciences, Terrain and Environmental Earth Sciences (Geology), and the Interdisciplinary Programme in Humanities.

The training of graduate students and the carrying out of basic research by the faculty has always been a mandate of the College. From their early beginnings by a small group of newly-appointed faculty, these activities have flourished in the last

quarter of a century. Scarborough faculty make an important contribution to the School of Graduate Studies through courses taught both here and on the St. George campus. An infrastructure to support graduate training and research has developed as seen most tangibly by the well-appointed research laboratories and the high level of technical services. These features as well as the relatively small size of the College and the diversity of faculty foster an ideal environment for intellectual pursuits both at the undergraduate and graduate level.

Scarborough students have full and up-to-date resources available on their campus, such as the excellent library, laboratory and computer facilities, residences and recreational facilities. They may also, as full members of the University of Toronto, take advantage of all the resources of the University as a whole. On the Scarborough Campus, they can take part in or simply enjoy concerts and drama presentations. Many distinguished guests come to the College to give lectures in the Snider series, and the prestigious Watts lecture series has attracted such notable names as Lester Pearson, Raymond Moriyama, Hans Kung, and David Suzuki.

As part of the University's Breakthrough fund-raising campaign, Scarborough College plans to raise funds to build a cultural centre which will provide a facility for drama, music, and public events for use by both the College and the surrounding community.

In 1989/90, the Scarborough Campus will be celebrating the 25th anniversary of its founding. With its fine buildings and excellent faculty and staff, Scarborough College provides a rewarding and welcoming environment for all its students.



Academic Calendar/Summer Session 1989

March 15	Last day for new students to apply for admission to the Univer-
	sity for the Summer Session for courses beginning in May (Y, A,
	F and H courses).
April 17	Registration begins
May 12	Last day to register for Y, A, F and H courses.
May 15	Last day for new students to apply for admission to the Univer-
	sity for the Summer Session for courses beginning in July (B and S courses.) While applications will be accepted after this
	date where possible, the University cannot guarantee that a
	decision will be made on such applications before the com-
	mencement of classes.
May 15	Classes for Y, A, F and H courses begin.
May 19	Last day to add Y, A, F or H courses.
May 22	Victoria Day. University closed.
June 9	Last day to withdraw without academic penalty from A or F
-	courses.
June 23	Last day of classes in A and F courses on the St. George and
	Erindale Campuses. Last day for submission of term assign-
	ments in St. George and Erindale Campus courses. H and Y
	courses continue to meet.
June 26-June 30	Final examinations in A and F courses on the St. George and
June 30	Erindale campuses. Last day of classes in A and F courses at Scarborough College.
Julie 30	Last day for submission of term assignments in these courses.
	Final examinations, if required, will be held in a class period of
	the last week.
June 30	Last day to register for B and S courses.
July 3-July 7	Reading Week (St. George) for H and Y courses.
July 3	University closed for Canada Day holiday.
July 4	Classes for B and S courses begin.
July 7	Last day to add B or S courses.
July 21	Last day to withdraw without academic penalty from Y or H
11 20	courses.
July 28	Last day to withdraw without academic penalty from B or S courses.
August 7	Civic holiday. University closed.
August 11	Last day of classes for Y, B, H and S courses on the St. George
riagast 11	and Erindale campuses.
August 14-August 18	Final examinations in Y, B, H and S courses on the St. George
•	and Erindale campuses.
August 18	Last day of classes in Scarborough College courses. Last day
	for submission of term assignments. Final examinations, if
	required, will be held in a class period of the last week.
August 31	Last day to request conferment of degree at the Fall Convoca-

Academic Calendar/Winter Session 1989/90

1989

March 20 April 7 June 1	Pre-registration begins for returning students. Last day for returning students to pre-register. Last day for new students to apply for admission to the University for the courses beginning in September. While applications will be accepted after this date where possible, the University cannot guarantee that a decision will be made on such applications before the commencement of classes.
June 19	Course changes for pre-registered students and course selection for other students begin.
September 4	Labour Day. University closed.
September 11	Classes for Y. A. F and H courses begin.
September 22	Last day to add Y, A, F or H courses.
October 9	Thanksgiving Day. University closed.
November 3	Last day to withdraw without academic penalty from F or A courses.
November 15	Christmas Examination Schedule published.
December 8	Last day of classes in the first term. Last day for submission of term assignments in F and A courses.
December 11-December 22	2 Term test and final examination period.

January 8	Classes for B and S courses begin.
January 19	Last day to add B or S courses.
February 15	Last day to request conferment of degree at the June Con- vocation.
February 16	Last day to withdraw without academic penalty from Y or H courses.
February 19-February 23	Reading Week - no classes held.
March 2	Last day to withdraw without academic penalty from B or S courses.
March 15	Annual Examination Schedule published.
April 12	Last day of classes; no tests or examinations may be held until the beginning of the examination period. Last day for submission of term assignments for Y, H, B or S courses.
April 13	Good Friday. University closed.
April 23-May 11	Final examination period.
	mai examination period.
June 4	University Spring Convocations are likely to begin.

Officers of the **University of Toronto** 1989/90

Chancellor

The Honourable J.B. Aird, O.C., Q.C., B.A., LL.D., D.Litt.S.

President

G.E. Connell, B.A., Ph.D., Ll.D., F.R.S.C.

Chairman, Governing Council Joan R. Randall, B.A.

Vice-President and Provost

J.E. Foley, B.A., Ph.D.

Vice-President - Research

J.F. Keffer, Ph.D., P.Eng.

Vice-President - Human Resources

A.C. Pathy, B.A.Sc.

Secretary of the Governing Council

J.G. Dimond, B.A., M.A., Ph.D

Officers of Scarborough College 1989/90

Principal

G.R. Williams, B.Sc., Ph.D. D.Sc. (Liverpool) F.R.S.C.

Associate Dean (Academic)

M.E. Irwin, M.A., Ph.D.

Associate Dean (Research & Academic Services)

C.K. Govind, B.Sc., M.Sc., Ph.D.

Chair, Division of Humanities

R.P. Thompson, M.A., Ph.D.

Chair, Division of Life Sciences

I.W. Gurd. B.A., Ph.D.

Chair, Division of Physical Sciences

J.M. Perz, B.A.Sc., M.A.Sc., Ph.D.

Chair, Division of Social Sciences

J.R. Miron, B.A., M.A., M.Sc., Ph.D.

Registrar

D.J. Perry, B.S.B.A.

Dean of Students in Residence

G.P. Nagel, B.A., M.A., Ph.D.

Librarian

J.L. Ball, M.A., Dip.Lib, A.L.A.

Director of Cooperative Programmes

A.N. Sheps, M.A., Ph.D.

Director of Administration,

P.S. Phillips, B.A., C.A.

Faculty of Scarborough College

Division of Humanities

Centre for University Studies in Language

U. Lesser-Sherman, M.A., Ph.D. (Penn), Senior Tutor and Co-ordinator of C.U.S.L.

Classics

J. Warden, M.A. (Cantab.), Professor and Associate

A. Boddington, B.A. (Oxon.), Associate Professor J.H. Corbett, M.A., Ph.D. (Toronto), Associate

M.E. Irwin, M.A., Ph.D. (Toronto), Associate Professor I.R. McDonald, B.A. (Alberta) Ph.D. (N. Carolina), Associate Professor

Drama

M.Q. Schonberg, M.A., Ph.D. (Toronto), Associate

English

J.M.R. Margeson, M.A., Ph.D. (Toronto) Professor

W.J. Howard, M.A., S.T.B. (Toronto), Ph.D. (Leeds), Professor

H. Jackson, M.A., Ph.D. (Toronto) Professor R.M. Brown, M.A., Ph.D. (New York), Associate

M.C. Cuddy-Keane, M.A., Ph.D. (Toronto) Associate Professor

J. Kay, M.A. (Glasgow), M.A., Ph.D. (Pennsylvania), Associate Professor

A.J.G. Patenall, M.A. (McGill), Ph.D. (Birmingham), Associate Professor

M.S. Tait, M.A., Ph.D. (Toronto), Associate Professor A.C. Thomas, M.A., Ph.D. (Toronto), Associate Professor

E.P. Vicari, M.A., Ph.D. (Toronto), Associate Professor

M. Gadpaille, M.A. (Western Ontario), Ph.D. (Toronto), Assistant Professor

K. Theil, M.A., Ph.D. (Yale), Assistant Professor

Fine Art

M. Gervers, M.A. (Poitiers), Ph.D. (Toronto),

G. Scavizzi, M.A., Ph.D. (Turin), Professor M.C. Shaw, M.A., Ph.D. (Bryn Mawr), Associate

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L. Carney, M.A. (Columbia), Assistant Professor

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J. Hoogstraten, B.F.A. (Manitoba), Senior Tutor A. Brannen, M.A. (New Mexico), B.F.A. (York), Tutor

G.F.R. Trembley, L.és L. (Montpellier), Ph.D. (Yale), Professor Emeritus

C.B. Bertrand-Jennings, L.es L. (Paris), Ph.D. (Wayne State), Professor

L.E. Doucette, B.A. (London), Ph.D. (Brown), Professor

W.J. Bancroft, M.A. (Manitoba), Ph.D. (Harvard), Associate Professor

J.A. Curtis, M.A., M.Phil. (Toronto), Associate Professor

W.J. Kirkness, M.A. (Auckland), Ph.D. (de Besançon), Associate Professor

L.B. Mignault, B.A. (Toledo), Ph.D. (Colorado), Associate Professor

S. Mittler, M.A. (Toronto), Ph.D. (Strasburg), Associate Professor

P.C. Moes, M.A., B.L.S., Ph.D. (Toronto), Associate Professor

C. Besnard, M.A., Ph.D. (Nancy), Senior Tutor

C. Evans, M.A. (Rochester), Ph.D. (Toronto), Senior

F. Mugnier-Manfredi, M.A. (Lyon), Ph.D. (Grenoble), Senior Tutor

German

H. Ohlendorf, A.M., Ph.D. (Stanford), Associate

H. Wittmann, M.A., Ph.D. (Mass.), Associate Professor

U. Lesser-Sherman, M.A., Ph.D. (Penn.), Senior Tutor and Co-ordinator of C.U.S.L.

History

J.S. Moir, M.A., Ph.D. (Toronto), D.D. (Presb. College, Montreal). Professor Emeritus

M. Eksteins, B.A. (Toronto), B.Phil., D.Phil. (Oxon.). Professor

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L.J. Abray, M.A. (McMaster) M.Phil., Ph.D. (Yale), Associate Professor

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E.W. Dowler, A.M. (Harvard), Ph.D. (London School of Economics), Associate Professor

J.P.B. Kenyon, M.A., Ph.D. (Toronto), Associate Professor

J.L. Pearl, M.A., Ph.D. (Northwestern), Associate Professor

I.R. Robertson, M.A. (McGill), Ph.D. (Toronto), Associate Professor

A.N. Sheps, M.A., Ph.D. (Toronto), Associate Professor

Humanities

- P.R. León, M.A., Ph.D. (Cornell), Professor C.V. Ponomareff, M.A., Ph.D. (Toronto), Professor J. Warden, M.A. (Cantab.), Professor and Associate
- W.J. Bancroft, M.A. (Manitoba), Ph.D. (Harvard), Associate Professor
- W.C. Graham, M.A., Ph.D. (Toronto), Associate Professor
- I. R. McDonald, B.A. (Alberta), Ph.D. (N.Carolina), Associate Professor
- S. Mittler, M.A. (Toronto), Ph.D. (Strasburg), Associate Professor
- H. Ohlendorf, A.M., Ph.D (Stanford), Associate Professor
- D.P. Schafer, M.A. (Toronto), Associate Professor M.Q. Schonberg, M.A., Ph.D. (Toronto), Associate
- R. Skyrme, B.A., M.Litt. (Bristol), M.A., Ph.D., (Michigan) Associate Professor
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- C. Evans M.A. (Rochester), Ph.D. (Toronto), Senior
- K. Godde, B.A. (McGill), M.A. (New York), Ph.D. (Toronto), Senior Tutor

Italian

- A. Franceschetti, Dott. in Lett. (Padua), Ph.D. (Columbia), Professor
- D. McAuliffe, A.B. (St. Peter's, New Jersey), Ph.D. (New York), Associate Professor
- S. Mittler, M.A. (Toronto), Ph.D. (Strasburg), Associate Professor
- J.A. Campana, B.A., M.A., Ph.D. (Toronto), Senior Tutor

Linguistics

- R.I. Binnick, M.A., Ph.D. (Chicago), Professor D.M. James, M.A. (Cornell), Ph.D. (Michigan), Associate Professor
- I.D. Woods, B.A. (Bowdoin Col.), Ph.D. (Mass.), Associate Professor

Music

J. Mayo, G.T.C.L. (Trin. Coll. London) M.A., Ph.D. (Toronto), Assistant Professor

Philosophy

- P.W. Gooch, M.A., Ph.D. (Toronto), Professor J.H. Sobel, M.A. (Iowa State), Ph.D. (Michigan), Professor
- R.P. Thompson, M.A., Ph.D. (Toronto), Professor and Chair
- D.B. Cook, M.A., Ph.D. (Toronto) Associate Professor W.C. Graham, M.A., Ph.D. (Toronto), Associate Professor
- G.P. Nagel, B.A., M.A. (Simon Fraser), Ph.D. (Cantab.), Associate Professor
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Women's Studies

- C.B. Bertrand-Jennings, L.és L. (Paris), Ph.D. (Wayne State), Professor (French)
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- M. Latta, M.A., Ph.D. (Toronto), Associate Professor (Anthropology)
- J. Boddy, M.A. (Calgary), Ph.D. (UBC), Assistant Professor (Anthropology)

Division of Life Sciences

Biology

- F.A. Urquhart, B.A., M.A., Ph.D. (Toronto), **Professor Emeritus**
- I.R. Brown, B.Sc. (Carleton), Ph.D. (Texas), Professor C.K. Govind, B.Sc. (Rhodes), M.Sc. (Natal), Ph.D. (Manitoba), Professor
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- G.R. Williams, B.Sc., Ph.D., D.Sc. (Liverpool), F.R.S.C., Professor
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- G.F. Israelstam, B.Sc. (Witwatersrand), Ph.D. (Univ. College London), Associate Professor
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- J. M. Eadie, B.Sc. (Western), M.Sc. (Queen's), Ph.D. (B.C.), Assistant Professor
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Psychology

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- M.C. Smith, B.A. (Toronto), Ph.D. (MIT), Professor J. Bassili, B.A. (McGill), Ph.D. (Cornell), Associate
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- (Toronto) Associate Professor A. Kukla, A.B., M.A., Ph.D. (UCLA), Associate
- Professor
- C.M. MacLeod, B.A. (McGill), Ph.D. (Washington), Associate Professor
- N.W. Milgram, B.A. (U.Cal.), M.A., Ph.D. (McGill), Associate Professor
- G.O. IVY, B.A. (Drew), Ph.D. (Irvine), Assistant
- G.A.J. Heighington, B.A. (Toronto), Senior Tutor. D. A. Bors, B.A. (Florida), M.A. (Regina), Ph.D. (Toronto) Tutor

Division of Physical Sciences

Astronomy

- P.P. Kronberg, B.Sc., M.Sc., (Queens), Ph.D. (Manchester), Professor
- R.G. Carlberg, B.Sc., (Saskatchewan), M.Sc., Ph.D. (U.B.C.), Associate Professor
- C. Dyer, B.Sc., M.Sc., Ph.D., Associate Professor

Chemistry

- A.J. Kresge, B.A. (Cornell), Ph.D. (Illinois), Professor R.A. McClelland, B.Sc., Ph.D., Professor
- T.T. Tidwell, B.S. (Georgia Inst. Tech.), Ph.D. (Harvard) Professor
- A. Walker, B.Sc., Ph.D. (Nottingham), Associate Professor
- R. Morris, B.Sc. (Waterloo), Ph.D. (U.B.C.), Associate Professor
- D.J. Donaldson, B.Sc. (Carleton), M.Sc. (McGill), Ph.D (Carleton), Assistant Professor
- S. Fraser, B.A. (Oxford), Ph.D (Cambridge), Assistant Professor

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- A. Verner, M.Sc., M.Eng., Senior Tutor
- N.E. Mitchell, B.Sc. (Guelph), Tutor
- W. Restivo, B.Sc., Tutor
- L. Teo B.Sc., B.Ed., (Singapore), Tutor

Computer Science

- W.H. Enright, B.Sc. (British Columbia), M.Sc., Ph.D., Professor
- A. Mendelzon, B.S., M.S.E., M.A., Ph.D., (Princeton), Associate Professor
- C. Dyer, B.Sc., M.Sc., Ph.D., Associate Professor
- J. von zur Gathen, Ph.D. (Zurich), Associate
- V. Hadzilacos, B.A. (Princeton), Ph.D. (Harvard), **Assistant Professor**
- G. Hirst, B.A., B.Sc., M.Sc. (Anu, U.B.C.), Ph.D. (Brown U.), Assistant Professor
- G.J. Cupit, B.Sc. (U.B.C.), Senior Tutor
- E.C. Peek, M.A., Ph.D. (Western Ontario), Senior
- R. Thomas, B.Ed., (Ohio), Senior Tutor M. Horrigan, B.Sc., M.A., M.Sc., Tutor

Geology

- J.A. Westgate, B.Sc. (Reading), Ph.D. (Alberta), Professor
- N. Eyles, B.Sc. (Leicester), M.Sc. (NFLD), Ph.D. (East Anglia), Associate Professor
- K.W.F. Howard, B.Sc., M.Sc. Ph.D. (Birmingham), Associate Professor
- G.L. Moltyaner, M.Sc., Ph.D. (USSR), Adjunct Professor

Mathematics

- E.W. Ellers, Ph.D. (Hamburg), Professor
- J. Friedlander, B.Sc., M.A. (Waterloo), Ph.D. (Penn. State), F.R.S.C., Professor
- S. Halperin, B.Sc., M.Sc., Ph.D. (Cornell), FRSC, Professor
- E. Mendelsohn, B.Sc., M.Sc. (Manitoba), Ph.D. (McGill), Professor
- R.W. Sharpe, M.Sc., Ph.D. (Yale), Professor
- J.B. Wilker, B.Sc., M.A. (British Columbia), Ph.D.,
- R.O. Buchweitz, Ph.D. (Hanover), Associate
- J. Scherk, D.Phil., (Oxford), Associate Professor
- P. Selick, B.Sc., M.Sc., Ph.D. (Princeton), Associate
- L. Haddad, L.Sc.(Libanaise), M.Sc., Ph.D. (Montreal), **Assistant Professor**
- S. Chawla, B.A. (Delhi), M.Sc. (McMaster), Senior
- D. Hall, B.Sc., Senior Tutor
- E. Moore, M.A. (Memorial), Ph.D., Senior Tutor
- H.S. Rosenthal, B.Sc. (C.U.N.Y.), Senior Tutor
- N. Shalaby, M.A. (York), Tutor
- D. Shum, Ph.D. (Carlton), Tutor

Physics

- H.C. Corben, M.A., M.Sc. (Melbourne) Ph.D. (Cantab), Professor Emeritus
- E. Fawcett, M.A., Ph.D. Professor
- A. Griffin, M.Sc. (British Columbia), Ph.D. (Cornell), Professor
- A. Jacobs, B.A.Sc., B.Sc. (Waterloo), Ph.D. (Illinois),

 Professor
- J.D. King, B.A., Ph.D. (Saskatchewan), Professor
- M.J.G. Lee, M.A., Ph.D. (Cantab), Professor P.I. O'Donnell, B.Sc., Ph.D. (Glasgow), Professor
- J.M. Perz, B.A.Sc., M.A.Sc., Ph.D. (Cantab), Professor
- S. Quick, M.Sc., Ph.D. (Windsor), Senior Tutor
- G. Lorincz, B.Sc., M.Sc., Tutor

Statistics

- M. Evans, B.Sc. (Western Ontario), M.Sc., Ph.D.,
 Associate Professor
- S. Chawla, B.A. (Delhi), M.Sc. (McMaster), Senior Tutor

Division of Social Sciences

Anthropology

- T.F.S. McFeat, B.A. (McGill), M.A., Ph.D., FRSC, (Harvard), Professor Emeritus
- F. D. Burton, B.Sc., M.A. (NYU), Ph.D. (CUNY),
 Professor
- M. Lambek, B.A. (McGill), M.A., Ph.D. (Michigan), Associate Professor
- M. Latta, B.A. (Kansas), M.A., Ph.D. (Toronto),
 Associate Professor
- L. Sawchuk, B.A., M.A. (Manitoba), Ph.D. (Toronto),
 Associate Professor
- H.B. Schroeder, B.A. (Penn. State), Ph.D. (Columbia), Associate Professor
- R.W. Shirley, M.A. (Stanford), Ph.D. (Columbia),
 Associate Professor
- J. Boddy, B.A. (McGill), M.A. (Calgary), Ph.D. (UBC), Assistant Professor
- G.S. Gillison, B.A. (McGill), Ph.D. (CUNY), Assistant Professor
- D. A. Herring, B.A., M.A., Ph.D. (Toronto) Assistant Professor

Commerce

- R.R. Serpkenci, B.B.A. (Bosphorus and Middle East Technical), M.B.A. (Oklahoma and Kansas), Ph.D. (Oklahoma), Assistant Professor
- A. Stawinoga, B.A. (Toronto), M.B.A. (York, Canada), C.M.A., Assistant Professor
- R. Wolfe, B.A. (McGill), M.Sc. (PL.) (University of Toronto), Ph.D. (M.I.T.) Assistant Professor
- T. Litovitz, B. Comm. (Toronto), C.A., M.B.A. (York, Canada) Senior Tutor

Economics

A. Berry, B.A. (Western), Ph.D. (Princeton), Professor D.E. Campbell, B.A. (Queen's), Ph.D. (Princeton), Professor

- J. Cohen, B.A. (Columbia), M.A., Ph.D. (California), Professor
- S. K. Howson, B.A., M.Sc. (London), M.A., Ph.D. (Cambridge), Professor
- M. Krashinsky, S.B. (M.I.T.), M. Phil., Ph.D. (Yale), Associate Professor
- W. Milne, B.A. (Victoria, B.C.), M.A. (Toronto), Ph.D. (Penn.), Associate Professor
- I.C. Parker, B.A. (Manitoba), M.A. (Toronto), Ph.D. (Yale), Associate Professor
- M. Devereux, B.A., M.A. (Dublin), Ph.D. (Queen's)
 Assistant Professor
- S. Horton, B.A., M.A. (Cambridge) Ph.D. (Harvard)

 Associate Professor
- D. Trefler, B.A. (Toronto), M.A. (Cambridge), Lecturer

Geography

(Toronto), Professor

- R.B. Bryan, B.A. (Dublin), Ph.D. (Sheffield), Professor B. Greenwood, B.Sc., Ph.D. (Bristol), Professor J.R. Miron, B.A. (Queen's), M.A. (Penn.), M.Sc., Ph.D.
- E. Relph, B.A., M. Phil. (London), Ph.D. (Toronto), Professor
- M.F. Bunce, B.A., Ph.D. (Sheffield), Associate
- A.G. Price, B.Sc. (Wales), M.Sc., Ph.D. (McGill),
 Associate Professor
- R.H. Paterson, B.A. (Laurentian), M.A., Ph.D. (York, Canada), Assistant Professor
- A.M. Sawchuk, B.A. (Manitoba), M.A. (Manitoba), Ph.D. (McMaster), Assistant Professor

Political Science

- S.J. Colman, M.A. (Oxon.), Professor Emeritus E.G. Andrew, B.A. (British Columbia), Ph.D. (London), Professor
- R. Manzer, B.Ed. (New Brun.), M.A. (Oxon.), Ph.D. (Harvard), Professor
- R. Sandbrook, B.A. (Carleton), M.A. (Toronto), D. Phil. (Sussex). FRSC. Professor
- R.S. Blair, M.A. (Glasgow), M.A. (Toronto), Associate
- M.W. Donnelly, B.Sc., M.A., Ph.D. (Columbia),
 Associate Professor
- J. Esberey, B.Ed., B.A. (West. Australia), B.Sc. (London), M.A., Ph.D. (Toronto), Associate Professor
- A. Rubinoff, A.B. (Allegheny), M.A., Ph.D. (Chicago), Associate Professor
- G. Skogstad, B.A., M.A. (Alberta), Ph.D. (British Columbia), Associate Professor
- S. Solomon, B.A. (McGill), M.A., Ph.D. (Columbia), Associate Professor
- J. Teichman, B.A., M.A., Ph.D. (Toronto), Assistant Professor

Sociology

- R.L. James, M.A. (Wayne State) Ph.D. (Oregon), Professor Emeritus
- W.W. Isajiw, B.A. (LaSalle), M.A., Ph.D. (Catholic Univ. of America), *Professor*
- R. O'Toole, B.A. (Leeds), PGCE (London), M.A. (McMaster), Ph.D. (Toronto) Professor

- R. Beals, B.A. (UCLA), M.A., Ph.D. (California),
 Associate Professor
 J-L. de Lannoy, Sc. Soc. (Louvain), Ph.D.
 (California), Associate Professor
- M. Hammond, B.A. (California), M.A., Ph.D. (Toronto), Associate Professor
- J. Hannigan, B.A., M.A. (Western Ontario), Ph.D. (Ohio State), Associate Professor
- J.A. Lee, B.A., M.A. (Toronto), Ph.D. (Sussex),
 Associate Professor
- S. Ungar, B.A. (McGill), M.A., Ph.D. (York, Canada), Associate Professor
- J. Tanner, B.Sc. (Hons.) (University of London)
 PGCE (Leicester School of Education), M.A., Ph.D.
 (University of Alberta) Assistant Professor
- A. Tuzlak, B.A., M.A. (Windsor), Ph.D. (York, Canada), Assistant Professor

Vincent W. Bladen Library

Librarians

- J.L. Ball, M.A., Dip. Lib., A.L.A. A. Gregorovich, B.A., B.L.S.
- M. Kowalsky, B.A., M.L.S.
- L. Le, B.A., M.L.S.
- J. Mendelsohn, B.A., Dip. Ed., Dip. Lib.
- M. Miller, B.A. Hon., M.L.S.
- M. Wiederkehr, Dip. Trad., M.L.S.
- P.H. Yamamoto, B.A., M.S. in L.S.

Admissions

The following is a brief description of the admission policies and procedures of the University of Toronto, Full information may be obtained from:

The Office of Admissions University of Toronto 315 Bloor Street West Toronto, Ontario, M5S 1A3 416-978-2190

Candidates Applying from Ontario Secondary Schools

Admission Requirements for 1989

- 1 Applicants must be eligible to receive the Ontario Secondary School Diploma (OSSD).
- 2 Applicants must present at least six (6) Ontario Academic Credits (OAC's).
- 3 One (1) credit must be English I*/anglais I and another in either Mathematics or a language other than English.
- 4 No more than two (2) OAC's in any one subject will be accepted.
- *To students whose first (native) language is not English:
- a) Those who have studied for *more* than two years in an English language school system must present OAC English
- b) Those who have studied for two years or less in an English language school system must present results from one of the following tests:
 Test of English as a Foreign Language (TOEFL); Michigan English Language Assessment Battery; British Council English Language Testing Examination; Certificate of Proficiency in English (COPE). (This will apply even if the applicant has a credit in OAC English

During the transition from the Ontario Secondary School Honour Graduation Diploma (OSSHGD) to the OSSD, the university will accept a combination of Grade 13 and OAC credits. Note the following restrictions on grade 13 credits:

i) Applicants may not present more than three credits in Mathematics ii) Only one of Family Studies or Accounting will be accepted.

iii) The following courses will not be accepted: Data Processing Law

Marketing and Merchandising

Multidisciplinary Studies Other Arts Studies Other Business Studies Physical and Health Education Secretarial Practice Technological Studies

1972 to present: 6 Grade 13/OAC credits are required.
Before 1972: 7 Grade 13 credits are required.

Prerequisites

Student should choose OACs which will fulfill the prerequisites for university courses they intend to take. These prerequisites are listed at the end of this section and after the description of each course later in the Calendar. The average required for admission varies from year to year, but is expected to be higher than 65%. Students are selected by taking into consideration a wide range of criteria including secondary school marks, distribution of subjects taken, performance in subjects relevant to the academic programme selected, results in senior division prerequisite courses, and supplementary information obtained through the Student Profile.

Other Canadian provinces

Alberta, Manitoba, Nova Scotia, Saskatchewan

- Grade 12

British Columbia

- before 1969: Grade 13 or 1st year University of British Columbia
- 1969 to present: Grade 12 New Brunswick
- before 1970: Grade 13 or 1st year University of New Brunswick
- 1970 to present: Grade 12 Newfoundland
- before 1986: 1st year Memorial University
- 1986 to present: Grade 12 Prince Edward Island
- before 1983: 1st year University of Prince Edward Island
- 1983 to present: Grade 12
 Ouebec
- 12 academic C.E.G.E.P. courses

Admission with Transfer Credit

Students who have completed work at other universities or at other Faculties or Schools of this University may be considered for admission with advanced standing credit. Credit is granted only for work which is considered appropriate for inclusion in an Arts and Science programme at the University of Toronto.

Admission from Colleges of Applied Arts and Technology

- I Candidates who have completed a one-year CAAT programme (or one year of a two- or three-year CAAT programme) are not eligible for consideration for admission to the first university year unless they have also completed the final academic secondary school year of the jurisdiction in which they attended secondary school.
- Candidates who have completed a two-year CAAT programme (or two years of a three-year CAAT programme) are eligible to be considered for admission to the first year of a degree programme.
 Candidates who have completed a three-year CAAT programme are eligible

to be considered for admission with up

Other Countries

to five transfer credits.

Students who apply for admission on the basis of work completed in other countries should write to the Office of Admissions, outlining their academic qualifications.

Mature Students

Applicants who do not hold the published admission requirements may be considered for admission if:

- 1 they are at least 21 years of age; and
- 2 have been resident in Ontario for at least one year as a Canadian citizen or Permanent Resident; and
- 3 achieve high standing in one preuniversity course.* or
- 4 achieve high standing in two OACs, one of which must be English OAC I**. Students must consult with the Office of Admissions before enroling in any of these courses.
- *Pre-university courses are offered by Woodsworth College of the University of Toronto. English and History are available at the Scarborough campus.
- **The Scarborough Board of Education Continuing Education Division offers OAC credits in English and Geography at the Scarborough Campus.

Senior Citizens

The University admits Canadian citizens and permanent residents who are aged 65 by the first day of term into Arts and Science courses as Special Students. Tuition fees and normal admission requirements are waived. Call the Assistant Registrar - Admissions at 284-3359 for information concerning the application procedure.

Admission as Special Students

Special Students are those registered at Scarborough College but not proceeding towards a degree. Most Special Students have completed degree studies and are taking further courses for purposes of their own.

Admission as Special Students on a Letter Of Permission (Visiting Students)

Students with valid Letters of Permission from other accredited North American universities may register directly at Scarborough College, taking courses for transfer credit at their own home university. Visiting Student status does NOT imply acceptance as either a student proceeding towards a degree or a Special Student. Call (416) 284-3359 for applications.

Application procedures

- Students currently enrolled in an Ontario secondary school should submit applications through their school's guidance office.
- All other applicants should request application forms from the Office of Admissions, giving full details of their educational background and standing.

Applications will be considered from candidates whose qualifications do not meet the normal requirements, but such candidates must offer written evidence of exceptional ability, or of extenuating circumstances.

Applicants who matriculated prior to the current year are advised to telephone or write to the Office of Admissions for information.

Possession of minimum requirements does not guarantee acceptance. Because of limitation of space, preference will be given to

applicants with the best qualifications.

Application deadlines

Applicants are strongly advised to submit application forms as soon as possible and before the following dates:
Admission to the Summer Session
Term I (beginning in May) - March 15
Admission to the Summer Session
Term II (beginning in July) - May 15
Admission to the Winter Session Term I (beginning in Sept.) - June 1
Admission to the Winter Session Term II (beginning in Jan.) - November 15
Overseas applicants should apply at least six weeks before these dates.

Secondary School Prerequisites

The courses below have OAC prerequisites. Students may begin the study of many languages without OAC preparation. Students who already have language skills should contact the Supervisor of Studies about courses appropriate to their level of competence. Specialist Programmes in Commerce and Economics require OAC Calculus.

Scarborough Course	Prerequisite(s)	Recommended Course(s)	
Astronomy A02Y	Algebra & Geometry, Physics	Calculus	
Chemistry A02Y	Chemistry, Calculus		
Computer Science A56H	one OAC in Mathematics		
Computer Science A58H	I Algebra & Geometry, Calculus		
French A10Y	OAC French		
Geology A01Y		Mathematics and Science courses	
Mathematics A04Y	Algebra & Geometry, Calculus		
Mathematics A26Y	Algebra & Geometry, Calculus		
Mathematics A27Y	Calculus, and one of Algebra & Geometry or Finite Mathematics		
Physics A03Y	Calculus Algebra & Geomet Physics		

Note: Students should refer to the Programmes of Study for further information.

Awards

Unless specified the following awards do not require an application; all Scarborough College undergraduate degree students with excellent academic standing are considered. Scarborough students are also eligible for consideration for the general University of Toronto scholarships and bursaries in addition to the awards listed below. A general condition for holding a scholarship is that the student must register at Scarborough College in the following academic year. In addition students who have been awarded a scholarship which is based on enrolment in a particular programme of study must continue in that programme to receive the award. The official award records are on file in the Office of the Registrar (Room \$416).

Admission awards

A substantial number of admission scholarships are awarded each year on the basis of excellent academic standing as demonstrated by secondary school grades, information in the Student Profile and other information submitted by the secondary schools. In order to be considered for the University's Open Admission Scholarships, students should complete a scholarship application form, available in all Ontario secondary schools in February. Successful applicants will be notified at the time they receive an offer of admission to the University.

Plumptre Admission Scholarship Awarded to the student entering first year whose achievement in secondary school is considered to be the most outstanding. The scholarship is awarded in memory of Professor A.F. Wynne Plumptre, a former principal of Scarborough College.

Frederick A. Urquhart Admission Scholarships

Eight scholarships are awarded to students entering first year on the basis of exceptional academic achievement in secondary school. The scholarships are awarded in honour of Professor Emeritus F.A. Urquhart, a distinguished entomolo-

University of Toronto, Scarborough College Admission Scholarships Approximately forty scholarships are awarded to students on the basis of excellent academic achievement.

Scarborough College Alumni Admission Award

Awarded to a graduate of a City of Scarborough high school (public or separate) who has provided evidence of valuable community service and demonstrated high academic standing. Applications are mailed to Scarborough schools in Febru-

Alfa-Laval Admission Scholarships Two scholarships are awarded annually to students on the basis of excellent academic achievement in the secondary school programme.

Scarborough Alumni Entrance Scholarship

Awarded to a student entering first year on the basis of academic excellence in the secondary school programme.

Associates of Scarborough College **Entrance Scholarship**

Awarded to a student entering first year on the basis of academic excellence in the secondary school programme.

Warner-Lambert Admission Scholarship

Awarded to a student entering first year on the basis of academic excellence in the secondary school programme.

Rohm and Haas Canada Admission Scholarship

Awarded to a student entering first year who a) is graduating from a City of Scarborough secondary school and b) has demonstrated excellence in academic achievement.

Ting Sum Tang Memorial Entrance Scholarship

Awarded to a student on the basis of excellent academic achievement in the secondary school programme. Donated by the Federation of Chinese Canadian Professionals (Ontario Education Foundation).

In-course awards

A.D. Allen Scholarship

Awarded to the outstanding student in each year at Scarborough College, in any field of study. The scholarships are awarded in memory of Dr. A.D. Allen, a former principal of Scarborough College.

Vincent Bladen In-course Scholarships

A total of six scholarships are awarded on the basis of exceptional academic achievement at the completion of each year of study in the Humanities. Sciences or Social Sciences. The scholarships are awarded in memory of Professor V. Bladen, a former member of the faculty in Economics.

Scarborough College In-course Scholarships

Awarded to the outstanding students in each year at Scarborough College, in each of Humanities. Sciences and Social Sciences.

The Hudson's Bay Company Scholarship

Awarded to the student who has demonstrated outstanding academic achievement at the end of third year. The scholarship alternates between students in the Humanities/Social Sciences and Life Sciences/Physical Sciences.

The Ali Tayyeb Scholarship

Awarded to a student who demonstrates excellent scholarship in political geography, geography of resources, studies of developing nations. Canadian studies, or an appropriate related field. The scholarship is awarded in memory of Professor Ali Tavveb, a former member of the faculty in Geography. Suitable candidates are nominated by members of the Scarborough College faculty.

Scarborough College Student Council Prizes

Awarded to the student entering second. third or fourth year who a) has made an outstanding contribution to the Academic, Social or Cultural life of Scarborough College and b) has a minimum of a "B" average. Applications available in Room 5416.

Bladen Prize in Economics

Awarded on the basis of an essay submitted by a student specializing in Commerce or Economics on any subject covered by a B, C or D level course in Economics.

Tom McFeat Prize in Anthropology Awarded to the outstanding student

entering the fourth year of the Specialist Programme in Anthropology.

John Pounder Prize in Astronomy Awarded to a full-time student with an overall average of A- (80%) or higher in the current year and with the highest grade (at least A-) in ASTA02Y.

William Beardmore Memorial Prize in History

Awarded to the student completing third year, who in the opinion of the members of the teaching staff in History, has excelled in the study of History. Awarded in the memory of the late William Beardmore, a History graduate of Scarborough College.

The Morris Krever History Prize Awarded to a student entering the third year of the Major or Specialist Programme in History on the basis of academic performance (at least B+ standing) and financial need. Emphasis is placed on academic performance. Applications are required.

Diefenbaker Essay Prize

Awarded on the basis of an essay, 2,500 to 5,000 words in length, on any topic within the general field of Canadian Studies. The essay should have Canada as its primary, principal or exclusive focus. Essays are nominated by instructors.

McClelland and Stewart Essay Prize in Canadian Studies

Awarded on the basis of an essay, 2,500 to 5,000 words in length, on a topic focusing on Canadian art, drama, music or literature.

The Oxford University Press English **Essay Prize**

Awarded for the best essay written for an English course, in the past academic vear.

The Margaret H. McCoy Johnston Scholarship

Awarded to the student enrolled in a four year degree programme who, on completion of the third year of study, has the highest grade point average in courses required for (a) any 2 language majors accepted in the Modern Languages Programme or (b) the Specialist Programme in French plus at least three other courses in another modern language.

Anita FitzGerald Prize in Women's Studies

Awarded for the best essay in the area of Women's Studies.

The Katherine Nagel Philosophy Prize

Awarded to the student in the Major or Specialist Programme in Philosophy before the beginning of the third or fourth year of study whose grades and performance in Philosophy, in the opinion of the Faculty in Philosophy, have best demonstrated excellence in the sub-

Margeson Scholarship in English Awarded to an outstanding student who has completed the second year of the Major or Specialist Programme in English.

Leigha Lee Browne Scholarship in Drama

Awarded to a student displaying outstanding ability in the dramatic arts who is either continuing in a Drama Programme at Scarborough College or is graduating and has registered in an advanced training programme in the dramatic arts.

The Gilchrist Award in Cell and **Molecular Biology**

Awarded to the student entering the fourth year of study in the Specialist Programme in Cell and Molecular Biology who has completed at least ten of the required full course equivalents of the Programme requirements and who has the highest grade point average in the Programme (minimum B+/3.30 GPA).

The Gilchrist Award in Computer Science

Awarded to an excellent student entering the third year of a Major Programme or fourth year of a Specialist Programme in Computer Science.

The Gilchrist Scholarship in Terrain and Environmental Earth Sciences Awarded to the student in the Specialist Programme in the Terrain and Environmental Earth Sciences who has the

highest aggregate standing at the end of the third year of study in the required courses of the programme.

The Gilchrist Scholarship in Physical Sciences

Awarded to the outstanding student who (i) has achieved at least an average of Aon five full credits, of which three must be physical sciences courses, in the first year of full-time study and (ii) is registered as a full-time student in a physical sciences Specialist Programme in second year.

The Scarborough College Physics Prize

Awarded to the student in a Physics Specialist or Major Programme, including joint Programmes, who has the highest combined grade point average in PHYB01, PHYB03, PHYB04, PHYB17 and PHYB19, provided that the average is at least 3.3 (B+),

Research Prize in Biology

Awarded to the outstanding student who has completed BIOD01Y and/or BIOD02Y and has demonstrated excellence in research and in the presentation of findings at a Research Day in Life Sci-

Management Accounting Student of Merit Scholarship

Awarded to the student who has completed the third year of study in the Specialist Programme in Commerce or Commerce and Economics, and who has completed the following courses with the highest average grade: COMBO1Y, JCEC02Y, JCEC72H/73H.

North Scarborough Rotary Club Scholarships

One scholarship is awarded to a student in a Commerce Programme and one is awarded to a student in a Political Science Programme. Candidates must be Canadian citizens or Permanent Residents, graduates of a City of Scarborough secondary school and have achieved a cumulative grade point average of at least 3.3 (B+). Applications available in Room S416 in April.

Clarkson Gordon of Scarborough Award in Commerce

Awarded to an outstanding student entering third or fourth year in a Commerce Programme, who has achieved a cumulative grade point average of at

The Harvey Babiak Award in Financial Accounting

Awarded to a student completing the third year of the Specialist Programme in Commerce or Commerce and Economics with the highest grade (at least A minus) in COMCO1Y. Donated by Thorne Ernst & Whinney.

Warner-Lambert Arts Administration Scholarships

One scholarship will be awarded to a student enrolled in the Co-operative Programme in Arts Administration who has

demonstrated outstanding academic achievement.

One scholarship will be awarded to a student enrolled in the Co-operative Programme in Arts Administration who has demonstrated outstanding achievement on the work placement.

SKF Canada International Development Scholarship

Awarded to the student enrolled in the Co-operative Programme in International Development Studies who has demonstrated outstanding academic achieve-

Washington United Church U.C.W. International Development Scholarship

Awarded to a student entering the third year of the Co-operative Programme in International Development Studies on the basis of outstanding academic achievement.

Andrew Tsang Memorial Scholarship in Sino-Canadian Studies

Awarded to the undergraduate, whose academic performance and extracurricular activities in the area of Chinese studies and Sino-Canadian studies best exhibits commitment to Chinese-Canadian cultural and economic ties.

Samual Beatty In-Course Scholarships

Awarded to students enrolled in second. third or fourth year, in a Specialist Programme offered by the departments of Mathematics, Physics or Computer Science (Faculty of Arts and Science, Scarborough College) on the basis of academic performance and financial need. (Applications are required.)

APUS Scholastic Awards

Part-time undergraduate students who (a) have completed at least ten full courses, of which four are in an area of specialization, and; (b) have obtained a B average (G.P.A. of 3.0) in the most recent five full courses, may apply.

APUS Award for the University of Toronto's Sesquicentennial

Part-time undergraduate students who (a) have completed at least five full courses with a B average (G.P.A. of 3.0) in the last five full courses, and (b) have demonstrated outstanding achievement or commitment in activities distinct from their University studies or have

overcome adverse circumstances in order to attend University, may apply. Applications for both APUS awards are available in Room \$416.

Other awards are available.

Students should check the "Undergraduate Awards" binder in Room S416.

Graduation prizes

The Governor General's Silver Medal Awarded to the outstanding member of the graduating class, chosen from among the winners of the graduation prizes.

Graduation Prizes in Humanities, Life Sciences, Physical Sciences and Social Sciences

Awarded to the outstanding member of the graduating class in each of these four areas of scholarship.

Ali Tayyeb Prize

Awarded to the outstanding member of the graduating class in Geography.

The Irwin Publishing Prize in Classical Studies

Awarded to the outstanding member of the graduating class who has completed the Major Programme in Classical Studies.

Forrin Prize in Psychology

COMBO1Y and COMCO1Y.

Awarded to the outstanding member of the graduating class who has completed the Specialist Programme in Psychology.

CGA Ontario Award for Excellence Awarded to an outstanding graduating student completing a Commerce programme who has displayed excellent achievement in accounting, with grades not less than A minus in each of

The Graduation Prize in Sociology Awarded to the student who has achieved the highest scholastic average (grade point average) in either the Sociology Specialist or Major Programme. The grade point average is based on all sociology courses attempted.

CIBA-GEIGY Award in Neuroscience Awarded to a student graduating with a four-year degree who has completed either the Neuroscience Specialist or Major Programme, who in the judgement of the Faculty, has demonstrated the most outstanding academic and laboratory performance.

The Gilchrist Graduation Prize in Computer Science

Awarded to an outstanding member of the graduating class who completed a Major or Specialist Programme in Computer Science.

The Gilchrist Graduation Prize in Cell and Molecular Biology

Awarded to the student who has the highest grade point average in the Specialist Programme in Cell and Molecular Biology (minimum B+/3.30 GPA).

Orpheus Prize in Humanities

Awarded to an outstanding member of the graduating class who has completed either the Specialist or College Programme in the Humanities or the Major Programme in Literature.

Digital Equipment of Canada Limited Award of Merit

Awarded to the most outstanding student graduating in Computer Science in the University.

Scarborough College Honours List

Scarborough College publishes annually an honours list, including the names of all degree students who have achieved a grade point average of 3.70 or better in their most recent year of full-time study or equivalent amount of part-time study. Students are considered for the honours list at the end of the session in which they complete their 5th, 10th, 15th and 20th credit. Other students may be nominated by the academic Divisions of the College.

Graduation With High Distinction and With Distinction

Scarborough College students who have completed at least ten full courses while registered at Scarborough College or at the University of Toronto's Faculty of Arts and Science will graduate with high distinction if their cumulative grade point average is 3.50 or better and will graduate with distinction if their cumulative grade point average is between 3.20 and 3.49. Other students with a cumulative grade point average of 3.20 or better will be considered on an individual basis.

Bursaries

University of Toronto Undergraduate Bursaries

Applicants for bursaries must demonstrate financial need. Applications may be obtained from the Counselling Services Office. Deadline: November 1; however, applications will be accepted until February 28, should emergencies arise.

Scarborough College Bursaries

Applicants for bursaries must demonstrate financial need. Applications may be obtained from the Counselling Services Office.

* Edward A. Pickering Placement Bursaries in Arts Administration
Awarded to students enrolled in the Cooperative Programme in Arts
Administration undertaking Placement, on the basis of financial conditions during Placement. (Applications are required.) Donated by the Corporation of Massey Hall and Roy Thompson Hall.

Paskal Bursary in Psychology

Awarded to a full-time student who has completed a three-year programme and plans to pursue a fourth year (either graduate or undergraduate) with specialization in Psychology. The bursary is awarded on the basis of academic standing (at least Grade B standing is required) and financial need. Awarded in memory of Professor Vivian Paskal, a former member of the faculty in Psychology. Applications are available in Room S416 in April.

The MacDonald Bursary

Awarded to a full-time degree student registered in second, third or fourth year who achieved at least a Grade B standing in the previous year and who can demonstrate financial need.

Ontario Student Assistance Programmes

Canadian citizens or permanent residents who have established themselves as Ontario residents, and who demonstrate financial need, may be eligible for interest-free loans or grants. Applications are available from the Counselling Services Office. The Office of Student Awards inquiry number is (416) 978-7950.

* PENDING APPROVAL OF COLLEGE COUNCIL

Academic Regulations

Student responsibility

Students are responsible for making themselves familiar with the information in this Calendar, particularly with this section, as well as instructions published by the Registrar periodically. Students whose registration contravenes the regulations will be withdrawn from courses. Members of the Registrar's Office and Counselling Services Office will assist students in interpreting the regulations and explaining their application in particular cases. Where appropriate, they will assist those who encounter special difficulties in requesting special consideration.

Calendar changes

The information published in this calendar outlines the rules, regulations, curricula and Programmes for the 1989 Summer Session (May to August) and the 1989-90 Winter Session (September to May).

The College reserves the right to change without notice any information contained in this Calendar, including any rule or regulation. The publication of information in this Calendar does not bind the University to the provision of courses, Programmes or facilities as listed herein.

Enrolment limits

Scarborough College reserves the right to limit the number of registrants in any Programme or course where the number of qualified students exceeds the teaching or other resources available. As far as possible, places will be available for incoming students in A-level courses.

St. George Campus or Erindale Campus courses

Students who propose to register in courses on the St. George or Erindale campus should consult page 31 of this Calendar.

Registration

Full registration information and the schedule of fees will be provided by the Registrar's Office, as follows:

Summer Session

Students who were registered at the College in the 1988 Summer Session or the 1988-89 Winter Session should pick up registration material from the Registrar's Office beginning on April 17. Signs will be posted at the College when it is available. New students and students reactivating their enrolment after a year away will be mailed their registration

material upon request. There is a \$20 fee for students reactivating their enrolment.

Winter Session

Students who were registered at the College in the previous Winter Session should pick up registration material from the Registrar's Office beginning on March 13. Material which is not picked up by April 14 will be mailed with Statements of Results in June. Returning students who were not registered in the previous winter or summer session should get in touch with the Office of the Registrar to request reactivation of their enrolment for which there is a \$20 fee; they will be mailed registration material. New students will receive registration information with their offers of admission.

Fees

A schedule of fees for 1989/90 will be available in June. As a guideline, the following fees were charged for 1988-89; fees are expected to increase by about 7 1/2% for 1989-90. Full-time students taking the usual load of five courses incurred fees charges of about \$1555 for Canadian citizens or permanent residents or about \$5470 for visa students.

Students in debt to the University
Scarborough College imposes the following academic sanctions on students in debt to the University:

- transcripts are not issued
- diplomas are not released
- written certification of degree and programme completion is not provided
- registration of continuing students is cancelled
- registration is refused to students returning to the College after an absence of twelve months or more

The following debts are taken into consideration when applying sanctions:

- tuition fees
- residence fees and other residence charges
- library fines
- Bookstore accounts
- loans made by colleges, faculties or the University
- Health Service accounts
- unreturned or damaged instruments, materials and equipment

Services to Disabled Persons

A Co-ordinator is available to provide personal support and liaison with

academic and administrative departments on campus and with agencies offcampus, and to organize volunteers to assist in various ways.

The University is committed to making a major improvement in the accessibility of buildings, programmes and services over the ten-year period 1981 to 1991. Devices to aid print-handicapped students on all three campuses and personal amplification systems to aid hard-of-hearing students may be borrowed from the Co-ordinator.

The office is located in the Koffler Student Services Centre, 978-8060, but the Co-ordinator usually spends one day each month at the Scarborough campus. Appointments can be made through the Counselling Services Office.

Course key

The Course Code

1 The Discipline Abbreviation
The first three letters of the course code indicate, in an abbreviated form, the discipline or subject area of the course.
ANTAO1Y "ANT" indicates a course in Anthropology;

CHMB05Y "CHM" indicates a course in Chemistry;

PHLD87H "PHL" indicates a course in Philosophy.

Where a course is offered jointly by two disciplines, the course code is made up of a "J" and the first letter of the two disciplines concerned with the "J" appearing usually in the first position. For example: JCEC73H indicates a course offered jointly by Commerce and Economics.

- 2 The Course Level
 The fourth letter of the course code
 indicates the level of the course with "A"
 indicating the most elementary level and
 "D" the most advanced.
- 3 The Course Number
 The fifth and sixth letters of the course
 code are course numbers. In most disciplines, these numbers have no
 significance, except to identify the
 course in a shorthand form.
- 4 Credit Value and Duration of a Course

The final letter of the course code indicates the credit value and duration of a course as follows:

Full Course Sep.-Dec.

Full Course Jan.-May

Hence, ANTA01Y is an elementary course in Anthropology taught throughout the session and worth a full course credit. PHLD87S is an advanced course in Philosophy taught in the second term and worth one-half a course credit.

May-June

July-August

Exclusions, Prerequisites and Corequisites

1 Exclusions

A student may not register for credit in a course which lists, as an exclusion, one which the student is also taking or has already passed. (See the Equivalent Course List on page 231.)

2 Prerequisites

A student must have passed the prerequisite course before enrolling in the course being described. Instructors are permitted to waive pre-requisites if they feel that there are adequate grounds for so doing. If a student registers in a course without meeting its prerequisite and without obtaining a specific waiver, the student may be withdrawn from the course at any time during the term. Students who obtain waivers of specifically stated prerequisites in order to take more advanced courses may not then take the less-advanced prerequisite courses.

3 Corequisites Students must either already have passed the corequisite course, or must enrol in it at the same time as they take the course being described. Instructors are permitted to waive corequisites if they feel that there are adequate grounds for so doing. If students register in a course without meeting its corequisite, or if they withdraw from the corequired course without obtaining specific waiver of the corequisite, they may be withdrawn from the course at

4 Exclusions, Prerequisites and Corequisites in Parentheses
Some exclusions and some prerequisite and corequisite courses are enclosed in parentheses. This indicates that the course is no longer in the College's

any time during the term.

curriculum. Students who have already passed an excluded course contained in parentheses may not take the course being described. Students who have completed, in a previous session, a prerequisite or corequisite course contained in parentheses may make use of the course to meet the requirements of the course being described.

Supervised Reading, Supervised Research and Independent Study Courses

Students in these courses work under the direction of a faculty member with whom they meet periodically or in whose laboratory they work. Students must obtain written permission of instructors before enrolling in them.

Course selection

In selecting their courses, students must adhere to the following regulations.

- 1 Courses¹ selected must satisfy the degree requirements.
- 2 Courses must satisfy the requirements of programmes of study: Specialist Programmes, Major Programmes or College Programmes.
- 3 Prerequisites and corequisites for each course, as stated in the course descriptions, must be met, unless waived by the instructor.
- 4 Students may not register for credit for a course if they have already passed² another course shown in the course description as an exclusion to that course or in a non-Scarborough course deemed to be the equivalent (or the partial equivalent) of a Scarborough course which they have already passed. (Consult the Equivalent Course List on page 231.)
- 5 Students may not re-register for credit in a course if they have already passed that course. Students may re-register in a course they have taken, but failed. In such cases, both registrations in the course are shown on the student's record, and both grades count in the student's grade point average.

6 Students may not register for credit in a course which is a specific prerequisite³ for a course they have already passed.

7 Where students may not register in courses for credit, they may register in them as extra courses. In such cases, both registrations in the course are shown on the student's record but the second grade is not included in the student's grade point average; nor does it count towards the degree.

8 Students may normally select as many courses as they wish each session. Students should, however, note the following.

- The usual load for a full-time student in the Winter Session is five courses.

- The usual maximum load for a student in the Summer Session is two courses.

- Students who are on probation are strongly advised to carry no more than an average course load. Should they choose not to follow this advice they do so at their own risk.

9 Full-time students are those students who register in at least four courses in the Winter Session. Students who are restricted on admission to part-time studies until they have met certain conditions may register in no more than two and one-half courses in any session until those conditions are met.

10 Students must register for their courses in accordance with instructions issued each session by the Registrar. Students who wish to change their registration:

- may do so only until the deadlines for adding and withdrawing from courses, stated in the "Academic Calendar" of this Calendar.

 must notify the Registrar of any change by means of a registration change form, submitted by the appropriate deadline.

11 Where multi-sectioned courses have a common examination, students enrolled in the evening section of the course may be required to sit an examination during the day.

Degree requirements

Students who first registered at the College before the 1989 Summer Session may, if they wish, complete the degree requirements outlined in the 1988-89 Scarborough College Calendar.

Three-year degree

To qualify for a three-year degree, students must:

- 1 pass at least fifteen courses
- 2 complete the requirements of a Major Programme or a College Programme.
- 3 earn a cumulative grade point average of at least 1.60.

Four-year degree

To qualify for a four-year degree, students must:

- 1 pass at least twenty courses
- 2 complete: (a) a Specialist Programme, or (b) two Major Programmes, or (c) a Major Programme and a College Programme.
- 3 earn a cumulative grade point average of at least 1.60.

B.A. and B.Sc. degrees

The type of degree students receive is determined, for students completing the requirements outlined above, by the Programme completed. (See the list of Programmes on page 49 for the type of degree towards which the Programme leads.) For students completing the requirements outlined in the 1988/89 Calendar, the type of degree is determined by the number of Science credits completed.

NOTES:

- 1 A course. The word course is used in two ways: a) to describe a full or half course such as "the last day to withdraw from a course", or b) to describe a number of full courses, or the equivalent in full and half courses such as the requirement of passing fifteen courses for a three-year degree.
- 2 To Pass a Course. To pass a course means to obtain a grade of D- or better in that course (or "Credit" in a Credit/No Credit course).
- 3 A Specific Prerequisite. This rule does not apply in the case of non-specific prerequisites (such as "one Blevel course in English") or in the case where one of two or more completely different courses may serve as prerequisite.

Programme requirements

Specialist Programmes

1 Specialist Programmes are designed to provide depth and intensity of study within a limited area defined as a discipline, a group of disciplines, or a particular theme or area of study. A Specialist Programme may be taken only as part of a four-year degree and will consist of at least nine courses. There are four Specialist (Co-operative) Programmes (see page 50).

(A list of Specialist Programmes may be found on page 49.)

Major Programmes

2 Major Programmes are designed to provide concentration in an area of study defined as a discipline, a group of disciplines or a particular theme or area of study. A Major Programme may be taken as part of either a three-year or a four-year degree and will consist of six to eight courses.

(A list of Major Programmes may be found on page 50.)

College Programmes

3 College Programmes are designed to provide an organizing framework for students desiring wide-ranging but coherent programmes of study in a major area of the curriculum. A College Programme may be taken as part of either a three- or a four- year degree. (A list of College Programmes may be found on page 50.)

Approved Individual Programmes

4 Students may propose individual Programmes of study, other than those described in this Calendar. Such proposals will be considered favourably only from students with cumulative grade point averages of 3.5 or greater. To be approved, individual Programmes should specify six to eight courses for a Major or College Programme and ten to fourteen courses for a Specialist Programme. The courses should all be offered on the Scarborough Campus and should form a logical programme. The student should offer a rationale for the proposal. Proposals should be made to the Associate Dean.

Proposals must be submitted at least eight months prior to the session in which the students expect to graduate.

Course selection and registration for Programmes of study

- 1 Students are responsible for ensuring that their course selection will enable them to complete the requirements of their Programme(s) by the time they complete their other degree requirements. In certain Programmes, approval by the supervisor of some or all courses is necessary. In all Programmes, the supervisor is available for advice concerning Programme requirements and course selection.
- 2 While students in their first year of full-time study, or first four courses of part-time study, are not required to select a Programme, they should, when selecting their first year courses, consider carefully the requirements of any Programmes they may later choose to follow. Supervisors, instructors in Alevel courses, and counsellors in Counselling Services may be consulted for assistance. Students who have registered in a Programme should consult annually with the supervisors of their Programmes to ensure that their course selection will meet Programme requirements.
- 3 Students register in their Programmes at the time they submit their course registration for the Winter Session following the session in which they attain their fourth credit.

Programme transfers

Students who wish to transfer from one Programme to another after classes have started should discuss the proposed transfer with the supervisor in the new Programme and submit a registration change form to the Registrar's Office. (If enrolment in the new Programme is limited, the form must be signed by the Programme supervisor.)

Certification of completion of Programmes

Students request certification of completion of their Programmes early in their final session of study at the College, at the same time as they request graduation.

When Programme requirements are changed, students may elect to satisfy the requirements in effect when the

student first completed courses at the College or subsequent requirements if the student finds them more favourable. However, the College reserves the right to require substitution for courses which are no longer offered.

Regulations concerning Programmes of study

- 1 Students may register in no more than two Programmes at any time. Students may receive certification of completion of no more than two Programmes. Students may not register in two limited enrolment Specialist Programmes.
- 2 Where a student is registered in two Major and/or College Programmes with overlapping course requirements, a student may use no more than two courses to fulfil the requirements of both Programmes. In cases where two Programmes have an overlap of more than two courses, students must substitute additional courses, approved in advance by either supervisor, to reduce the overlap to two courses or fewer. Such substitutions should be discussed with the appropriate supervisor when the student first registers in the overlapping Programmes.
- 3 Where a student completes the requirements of a three-year degree and of a Major or College Programme, and subsequently chooses to complete a four-year degree and Specialist Programme, the student may use the courses already accredited to the Major or College Programme to fulfil the requirements of the Specialist Programme. Upon successful completion of the additional requirements, any previous certification of the Major or College Programme will be superseded on the student's transcript by certification of the Specialist Programme.
- 4 Supervisors have the authority to deal with special circumstances concerning Programme requirements. They may:
 prescribe additional courses where a student is registered in two Major Programmes (or a Major and a College Programme) that require more than two overlapping courses (see 2 above);

- accredit to Programme requirements.

courses taken on other campuses of this University or at other Universities; and - permit course substitutions or other modifications of Programme requirements where they deem them appropriate. When special arrangements are made, students should ask their

supervisor to record them on a programme exceptions form.

- 5 Students should note that certain Programmes will require students to take some of their courses on the St. George Campus.
- 6 Students intending to enrol in any course on the St. George Campus which they intend counting towards their programme and which is listed as partially equivalent in the Equivalents list should consult with their Programme Supervisor first.

Standing in a course

Grading scheme

Students are assigned a grade in each course, as follows:

Grade A+ A- B+ B- C+ C- D+ D- CR	Grade Point Value 4.3 4.0 3.7 3.3 3.0 2.7 2.3 2.0 1.7 1.3 1.0 0.7	Percentage Equivalent 90-100 85-89 80-84 77-79 73-76 70-72 67-69 63-66 60-62 57-59 53-56 50-52 No value	Definition Excellent Good Adequate Marginal Credit in a Credit-/No-credit course
E	0.3	35-49	Inadequate
F	0.0	0-34	Wholly Inadequate
NCR	0.0	No Value	No credit in Credit- /No-credit course

Grades of 'E'. 'F', and 'NCR' are failing grades, yielding no standing in a course and no degree credit. Students are cautioned that a numerical score on an assignment is not deemed to be automatically equivalent to the corresponding letter grade.

Credit/No credit courses

In some courses such as music performance courses, or drama courses, specific letter grades may not be assigned. Students may instead be graded on a Credit/No credit (CR/NCR) system.

The grade of "No credit" is a failing grade. Where students earn a grade of "Credit" in a course, the course is not included in the grade point average; where students earn a grade of "No Credit", the course is included as an F (value zero) in the grade point average.

Aegrotat standing

The Sub-committee on Standing may, on petition, assign a grade of "Aegrotat" (AEG). This grade is assigned on the basis of term work where medical or similar evidence demonstrates that a student is unable to complete course requirements within a reasonable time, and where a student has already completed at least 60% of the work of the course with a term mark of C minus or better. Where a student is assigned Aegrotat standing, the course is not included in any grade point average.

Extra courses

Extra courses are those courses in which students may not register for credit (see "Course Selection" on page 26). The course and its grade will appear on the student's transcript (designated as an extra course) but the grade will not be included in any grade point average.

Overall standing

Grade point averages

At the end of each summer session (May to August) and each winter session (September to May) both a sessional and a cumulative grade point average (GPA) will be calculated for each student, and shown on the student's transcript.

1 A grade point average is calculated as follows: the grade points earned in each full course and one-half the grade points earned in each half course are added together and this total is divided by the number of full courses (or equivalent) taken.

2 A sessional grade point average is calculated on the basis of all courses taken in a given session (winter or summer) having a grade point value.

3 A cumulative grade point average is calculated on the basis of all courses taken having a grade point value.

Determination of academic status

Academic status will be determined as follows for students who have attempted at least two and one-half full courses (or equivalent):

1 In good standing

Students who maintain a cumulative grade point average of 1.60 or better shall be said to be "in good standing".

2 On probation

 Students shall be placed on probation who have attempted at least two and one-half courses in the College and have a cumulative GPA of less than 1.60.

- Students returning from suspension (under 5) below or under any provision in previous College rules) shall be placed on probation again.

3 Probation cleared

Students may clear probation by achieving a cumulative GPA of 1.60 or better. Students who have cleared probation shall be said to be again "in good standing".

4 Probation continued

Students may continue on probation by achieving a sessional grade point average of at least 1.70 in each session (summer or winter) until such time as they return to good standing.

5 Suspended or refused further registration

Students who, by the end of a given session, whether Summer (May to August) or Winter (September to May), have not either cleared probation or achieved a sessional grade point average of at least 1.70 shall be liable for suspension or refusal of further registration as follows, regardless of the number of courses taken in the session:

- Students who have incurred no previous suspension will be suspended for one year.
- Students who have previously incurred (at worst) a one year suspension will be suspended for three years.
- Students who have previously incurred a three year suspension will be refused further registration in the College.

Determination of academic status for students admitted on condition

In certain circumstances, students who do not meet normal admission requirements may be admitted "on condition". The academic status of such students is determined according to the following rules:

- 1 The standing of students admitted on condition will be assessed at the end of the session in which such students complete their second full-course equivalent.
- 2 Where such students earn a cumulative grade point average of 1.70 or better, their conditional status will be removed, and they will be said to be "in good standing".
- 3 Where such students earn a cumulative grade point average of less than 1.70, they will be suspended for one year.
- 4 Upon their return from suspension, their academic status will be assessed according to the appropriate rules above.

Study at other institutions or other divisions of the University of Toronto

Although courses taken at other institutions or other divisions of the University of Toronto (with the exception of the Faculty of Arts and Science) are not included in grade point averages, they are taken into consideration and may affect a student's academic status.

Courses on other campuses

Courses on other campuses

Students are permitted to take some courses on other campuses of the University of Toronto subject to the following rules. Students may be withdrawn from courses after classes have started if their registration violates these rules.

Equivalent courses

Students may not register in any course on another campus where an equivalent course is offered on the Scarborough Campus during the same session. This includes courses offered in different terms of the same session. Two

exceptions to this rule exist as follows: 1 where the course is offered only dur-

ing the day on the Scarborough Campus. the student may take the course in the evening on another campus.

2 where the student has fourteen or more credits at the beginning of the session, the student may take the course. A list of courses, deemed to be equivalent for purposes of this rule, is on page 231 of this Calendar.

Overall limits

Of the total number of courses completed by Scarborough College students. at least one half must at all times be Scarborough College courses. (The total number of courses refers to the sum of the courses in which students are registered plus those which they have already passed.)

Term limits in the Summer Session

1 Students may take no more than two full courses (or equivalent) on other campuses in a given Summer Session.

2 Students may take no more than three courses on other campuses in any term of a given Summer Session. (In this instance Y, F and S courses count as one, A and B courses count as two and H courses count as one half.)

3 Students are advised that a course load in excess of two full courses in the Summer Session or in excess of three courses in a Summer Session term represents an overload and may prove too difficult for any but the best students. Students who overload do so at their own risk.

Other than Arts and Science credits

Students are not permitted to register for courses in Faculties other than Arts and Science unless they have received the permission of the Sub-Committee on Standing or unless the courses are required by their Specialist, Major or College Programme.

Transfer to the Faculty of Arts and Science

Students who are contemplating transfers to other Colleges in the University should be aware that Scarborough College is in fact a separate faculty and that the rules covering students at Scarborough College differ from those in the Faculty of Arts and Science. Students

are urged to consult the Office of Admissions at 315 Bloor Street West to establish how they will be affected by transferring from one faculty of Arts and Science to another.

Study at other universities:

Students who wish to take courses at another university and have credits transferred to the University of Toronto must receive permission from the University of Toronto to do so prior to taking the courses. Students who study at other institutions without the University of Toronto's approval in advance do so at their own risk in that the credits usually are not transferred after the fact. However, students should also be aware that duplication of previous study is not permitted. Students who study at another institution after leaving Scarborough College are required to supply official transcripts upon re-enrolment. Grades attained at other universities may affect a student's academic standing.

There are two types of programmes where credit transfer is considered. The Study Elsewhere programme allows a student to study full-time at an accredited university in a different cultural setting to enhance the student's educational experience. A Letter of Permission allows a student to study at a university similar in setting to the University of Toronto. The regulations governing the programmes are different.

(i) Letters of Permission

To take a course at another university. students must, in advance, request a "Letter of Permission" from Scarborough College. Requests should be addressed to the Assistant Registrar - Admissions, on a form available in Room S416. Requests should include the name of the university, the course number, title and description. Courses requested must be appropriate for Arts and Science degree credit at this university. In addition the student must give reasons why the Letter of Permission is necessary. To be considered, a student must have completed the equivalent of one year of full-time study and be in good standing.

A fee of \$25.00 per Letter of Permission is charged.

Grades and Accountability

To receive credit, the student must earn one full grade higher than the minimum passing grade (i.e. a C minus or better at universities using a grading scale similar to that of the University of Toronto). Grades are not recorded on transcripts and are not included in any grade point averages. The student must arrange for the host university to send an official transcript to Scarborough College promptly after completion of the course. Students who do not register or withdraw without academic penalty must arrange for a letter from the Registrar of the host university confirming this. Failure to meet this or the minimum grade requirement will result in the notation of "no credit" being entered on the student's transcript at Scarborough

Limits on Letters of Permission

A maximum of 5.0 credits may be obtained on a Letter of Permission. If a student has received more than 5.0 transfer credits upon admission, it is unlikely that a Letter of Permission will be allowed. Letters of Permission are not normally granted for study at institutions within Metropolitan Toronto and surrounding regions. Only 1.0 credit at the C or D level will be permitted to be taken on a Letter of Permission. A student who completes the final course(s) for the degree during the Winter Session may not apply to graduate at the June convocation but may apply for graduation at the November convocation.

(ii) Study Elsewhere year

To apply for a Study Elsewhere programme, students may obtain an application from the Assistant Registrar-Admissions or Associate Dean (Academic). The application requires details about the proposed course of study and asks students to show how the intended studies will enhance their studies at Scarborough College. Students who intend to count the courses towards programme requirements must obtain the approval of the Programme Supervisor before submitting the application.

Students normally apply for a Study Elsewhere year during the third year of a four year programme. However students may apply after completing four full-course equivalents at Scarborough College. To be eligible a student must have a grade point average of 2.5 or better. Students must return to Scarborough College to complete the final year of study. A maximum of 5.0 full-course equivalents will be considered for transfer.

Completed applications should be submitted to the Associate Dean (Academic) by April 1. The proposed programme will be reviewed by the Study Elsewhere Committee.

Since there is often limited information about foreign universities, students should begin the process early in October. Most often students register at the host university and follow its courses for credit. It is possible that students may arrange to take University of Toronto independent study or supervised reading courses under supervision from University of Toronto faculty. The University of Toronto offers Study Elsewhere opportunities at Aix-en-Provence, Granada, Laval and Siena but students may submit proposals for any accredited university that qualifies for a Study Elsewhere experience.

Fees and aid

Students pay the appropriate fees to the host university and a fee (\$185 in 88/89) to the University of Toronto to maintain registration at Scarborough College. Students taking supervised reading courses pay regular Scarborough College tuition fees.

Students who would be eligible for Ontario Student Assistance for study at Scarborough College may be eligible for similar assistance in their Study elsewhere year. (Consult the Office of Student Awards.)

Degrees

Scarborough College students may earn either a Bachelor of Arts or a Bachelor of Science degree. Students may elect to receive their degree after having completed the requirements for a three-year degree or a four-year degree. Students who wish to graduate must notify the Office of the Registrar on a degree request form by 15 February for graduation at Spring Convocation or by 31 August for graduation at Fall Convocation. Students are advised, however. to submit their requests in the first term of their final session in order that possible problems may be solved well in advance of Convocation. Students who have elected to graduate after having completed a three-year degree may still choose to complete the requirements of the four-year degree; a second degree will not be conferred but completion of the four-year degree requirements will be noted on the student's transcript. Students who have received a three-year degree, and wish to receive certification of completion of a four-year degree. should notify the Office of the Registrar by means of a degree request form. Students who have submitted the degree request form will be mailed complete information about the time and arrangements for the Convocation. Degrees are conferred at university convocations, held twice annually: the Spring Convocation held in June and the Fall Convocation held late in November. (Diplomas only indicate completion of a "Bachelor of Arts" or "Bachelor of Science" degree. No distinction is made on diplomas between three- and four-year

Academic transcripts

degrees nor is programme indicated.)

The academic transcript is the official statement of the academic record of each student.

Contents

The transcript records the following information:

1 Information to identify the student: full name, university student number, and date of birth.

- 2 The student's academic record, listed chronologically by session.
- each course attempted, its abbreviated title, and its grade;
- the sessional grade point average;
- the cumulative grade point average at the end of the session;
- the student's academic status at the end of the session: in good standing, on academic probation, suspended for one year, suspended for three years, refused further registration, or suspension deferred:
- completion of degree and Programme requirements, and date of conferral of the degree;
- any academic honours awarded: scholarships, prizes or medals awarded by the College or by the University, inclusion on the Scarborough College Honours List, and graduation with high distinction or with distinction.

Ordering copies

Students may obtain copies of their academic transcripts, subject to reasonable notice and upon payment of a fee. Copies of transcripts may be requested in person or by letter only. As a student's signature is required to authorize release of the transcript (in order to protect confidentiality of records), telephone requests cannot be accepted.

To order copies of transcripts, students should visit the Office of the Registrar, or should write to: Office of the Registrar, Scarborough College, University of Toronto, 1265 Military Trail, Scarborough, Ontario, M1C 1A4. Payment by mail should take the form of a cheque or money order payable to "The University of Toronto".

There is no charge for copies of transcripts sent to other divisions of the University of Toronto.

Copies of transcripts sent directly to educational institutions and other institutional recipients bear a replica signature of the Registrar and the official College seal. To prevent tampering, most institutional recipients insist that the transcript copy be sent directly to them.

Access to student records

In order (a) to allow students as great a degree of access to their own academic records as is academically justifiable and administratively feasible, and at the same time (b) to safeguard students' rights to privacy of their academic records, the University of Toronto implemented on 1 July 1979 a "Policy on access to student records maintained by undergraduate academic divisions of the University of Toronto." The implementation of this policy with respect to Scarborough College students is as follows. (The full text of this policy, as amended in 1983, is available at the Office of the Registrar.):

Student record information deemed to be public information

The following parts of students' personal and academic records are deemed to be public information and will be given freely to enquirers on request:

- any session in which a student is or has been registered;

 the student's address and telephone number:

for graduates of the College, the degree and date of its conferral. Students who do not want their address and telephone number released by the College or published by the Students' Administrative Council in its annual student directory, should notify both the Scarborough College Registrar's Office (in writing) and the Students' Administrative Council (12 Hart House Circle, St. George Campus, University of Toronto, telephone 978-4911).

Access to other parts of the student record

All other parts of students' records are considered confidential, and access will be granted only as follows:

- 1 to students who wish to see their own records;
- 2 to members of the University staff who demonstrate to the Registrar that they require access in order to perform their duties;
- 3 copies of student transcripts, and letters or oral reports based on other information, will be released on the written request of the student;

4 This information will otherwise be released only when required by law.

Students' access to their own records

Students may request personal access to the following parts of their own records:

1 official transcripts of their academic record:

2 student records in computer files, except information dealing with students' applications for admission (particularly the secondary school principal's confidential recommendation);

3 students' paper files, except for information filed before I July 1979, when this policy was implemented, information relating to students' applications for admission (letters of reference which have been provided on the understanding that they shall be maintained in confidence) and medical information provided in confidence.

Students who wish to inspect their academic records (as provided above) must make their request in writing to the Associate Registrar. The Associate Registrar will arrange individual appointments at a mutually convenient time within thirty days of the receipt of students' requests. At the appointed time, students may examine their records in the presence of the Associate Registrar (or another designated member of the Registrar's Office staff). Students have the right to challenge the accuracy of the record and to have it supplemented with comments so long as the sources of such comments are identified and the official student academic record remains securely within the custody of the academic division. Reference to such comments would not necessarily appear on official academic reports such as transcripts or statements of results. Students may request a copy of the material in their files (to which they have access), for a \$10.00 copying fee.

Withdrawal

Withdrawal from a course

- 1 Students may withdraw from courses without academic penalty up to the dates stated in the Academic Calendar on page 7.
- 2 A student may effect withdrawal from a course by completing a registration change form and submitting the form to the Office of the Registrar. Where this is not possible, the student may write to the Office of the Registrar.
- 3 Where a student withdraws from a course by the appropriate deadline, no record of registration in the course is shown on the student's transcript.
- 4 Where students cease to complete course requirements, but do not withdraw officially by the deadline, a grade based on the marks awarded (including a zero for any incomplete work) will be recorded.
- 5 Students who withdraw from courses by appropriate deadlines may be entitled to a fees adjustment. For full information, please refer to the fees schedule published each session. The amount of the fees adjustment is determined by the date upon which the registration change form is received by the Office of the Registrar.
- 6 Students who withdraw from courses will be given or mailed a receipted copy of their registration change form. Students should retain these copies until after they have received their statement of results for the particular session.

Withdrawal from the session

- 1 Students who wish to withdraw from the College for a given session do so by withdrawing from all courses by the deadlines above.
- 2 Students must also complete the following procedures and submit a withdrawal form to the Office of the Registrar:
- surrender any Bookstore charge card and arrange payment of any outstanding account;
- return any borrowed books to the Library, pay any outstanding library fines, and surrender their library card;
- return any equipment borrowed from the College Recreation Centre and surrender any recreation centre locker;
 surrender any College locker and return (perhaps for a partial refund) any

College parking permit;

and - surrender any laboratory locker and equipment.

University grading practices policy

These procedures are somewhat simplified for part-time students.

3 Students who wish to withdraw from the College are advised to speak with a counsellor in the Counselling Services Office. The counsellor will advise students concerning the academic consequences of their withdrawal (deadline dates, eligibility for re-admission, etc.). any fees adjustments, and repayment of Ontario Student Assistance.

Regulations governing special students

"Special students" are students registered at Scarborough College for degree courses: (a) who are not proceeding towards a University of Toronto degree, or (b) who have been admitted on an interim basis and who must meet certain conditions before admission as regular degree students. Except for regulations concerning degree requirements, and regulations where special students are specifically exempted, all regulations apply equally to special students and degree students. Where students have been admitted on an interim basis as special students, the conditions of their admission supersede the normal regulations governing academic status.

University grading practices policy

Purpose

The purpose of the University Grading Practices Policy is to ensure that:

- grading practices throughout the University reflect appropriate academic standards:
- the evaluation of student performance is made in a fair and objective manner against these academic standards;
- grade scales, while remaining suited to the particular circumstances of every division, are compatible with each other;
- the academic standing of every student can be accurately assessed even

when courses have been taken in different divisions of the University and evaluated according to different grade scales.

Meaning of grades

Grades are a measure of the performance of a student in individual courses. Each student shall be judged on the basis of how well he or she has command of the course materials.

A grade assigned in a course is not an assessment of standing within a programme of studies. To determine the requirements for credit and standing in a programme of studies, the academic regulations of the division in which the programme is offered should be consulted

Grades for each course shall be assigned with references to the meanings as described on page 29.

Grades vs. scores

Grades should always be based on the approved grade scales. However, students may find that on any one evaluation they may receive a numerical or letter mark that reflects the score achieved on the test or essay. The cumulative scores may not be directly identified with the final grade. Grades are final only after review by the Subcommittee on Marks Review.

Approval of grades

Grades shall be recommended by the instructor to the Divisional Marks Review Committee which will examine all grades before submitting them for approval by the College's Sub-committee on Marks Review. Grades shall not be reported or released to students as official until the College's review procedure has been carried out. The College's review constitutes final approval of grades except when grades are changed on appeal.

Classroom procedures

1 As early as possible in each course (and no later than the last date for course enrolment) the instructor shall make available to the class, and shall file with the division, the methods by which student performance shall be evaluated. This should include whether the

methods of evaluation shall be essays. tests, examinations, etc., the relative weight of these methods in relation to the overall score, and the timing of each major evaluation.

2 After the methods of evaluation have been made known, the instructor may not change them or their relative weight without the consent of at least a simple majority of the students enrolled in the course. Any changes shall be reported to the division.

3 Student performance in a course shall be assessed on more than one occasion. No one essay, test, examination, etc. should have a value of more

than 80% of the grade.

- Exempt from this requirement are advanced seminar courses or supervised research or supervised reading courses. In such courses more than 80% of the final grade may be based on a thesis, a research essay or project, or a comprehensive examination.

4 In courses that meet regularly as a class there shall be an examination (or examinations) conducted formally under College auspices and worth (alone or in the aggregate) at least one-third of the final grade.

- In A-level courses, at least one third of the final grade will be based upon a formal examination(s) in the Christmas examination period in December and/or in the final examination period in April and May (or in comparable examination periods in the Summer Session).

- In B-level, C-level and D-level courses, at least one third of the final grade will normally be based upon a formal examination(s). Alternatively, a supervised term test(s), valued at least one third of the final grade, may be substituted for the formal examination, upon the annual request of the instructor and approval of the appropriate Divisional Chair.

- The following courses may be exempted from the requirement for examinations, upon annual request of the instructor and approval of the appropriate Divisional Chair: advanced seminar courses; supervised reading or research courses; field courses; and performance courses such as music performance or art studio courses. All courses which are exempted from the one-third examination requirement are reported annually to the Sub-committee on Curriculum & Standards of the Governing Council.

- Oral Examinations. At the discretion of the instructor an oral examination

may be required in conjunction with any piece of written work. At the examination, the student must defend the ideas advanced in the paper. The grade assigned for the paper may be substantially affected by the results of the oral examination.

5 The relative value of each part of an examination shall be indicated to the student. In the case of a written examination, the value shall be indicated on the examination paper.

6 Commentary on assessed term work and time for discussion of it shall be made available to students.

7 At least one piece of term work which is a part of the evaluation of a student's performance, whether essay, lab report, review, etc., shall be returned to the student prior to the last date for withdrawal from the course without

academic penalty.

- The following two categories of courses shall be exempted from this requirement: field courses such as Anthropology and Geology; independent research and senior essay courses, which are by definition "one-on-one" courses with continual monitoring throughout the year, and large single end-of-year assignments which constitute the basis of the final mark.

8 Grades shall be recommended by the instructor in reference to the approved grade scales on the basis of each student's overall performance.

Appeals procedure

For procedures for appeals concerning grades and grading practices, see "Procedures for requesting special consideration, petitions, and appeals" (page 39).

Student access to examination papers

The College provides access to copies of the previous years' final examination papers as well as the opportunity to review examination papers. In addition to the customary re-reading of papers and the re-checking of marks, the College provides the opportunity for students to petition for the re-reading of their examination. For further details, please refer to "Procedures for requesting special consideration, petitions, and appeals" (page 39).

Examinations

Examinations are held at the end of both terms in each session. Students who make personal commitments during the examination period do so at their own risk. No special consideration will be given and no special arrangements made in the event of personal commitments. Information regarding dates and times of examinations will not be given by telephone. Students are responsible for reading the timetable carefully and appearing at the time and place specified. Students taking courses during the day may be required to write evening examinations, and students taking evening courses may be required to write day examinations.

Examination timetable conflicts

Students scheduled to write two examinations at the same time should report their conflicts to the Administrative Assistant to the Registrar (Room \$420A. 284-3300). Arrangements will normally be made for students to write both examinations on the same day, with a supervised break. Where the conflict involves a St. George Campus course. arrangements will normally be made for both examinations to be written at Scarborough College. Requests for such arrangements must be made no later than two full weeks before the commencement of examinations and will not be considered after that time.

Students with three consecutive examinations

Students scheduled to write examinations in three consecutive time slots (these are morning, afternoon, and evening) may request special arrangements. Requests for such arrangements must be made with the Administrative Assistant to the Registrar no later than two full weeks before the commencement of examinations. Requests will not be considered after that time.

Special consideration regarding examinations

Students requesting special consideration because they are unable to write a final examination must submit a petition through the Counselling Services Office no later than the last day of the examination period. Petitions must be accompanied by a medical certificate or other appropriate supporting evidence. Please refer to the information concerning petitions and medical certificates (page 39). Students are expected to be available for examinations throughout this period.

Identification cards

Students will be required to identify themselves at examinations by means of their University of Toronto photo identification card. Students who do not have this card should arrange to obtain one well in advance of the day of their first examination.

Examination room regulations

- 1 All students are advised to read the University of Toronto Code of Behaviour, copies of which are available from the Registrar's Office,
- 2 Students are advised to arrive at the examination room at least fifteen minutes before the scheduled examination time. Invigilators will begin the actual examination at the scheduled time.
- 3 No persons shall be allowed in an examination room during an examination except the students writing the examination and those supervising it.
- 4 Candidates shall bring their photo identification cards and place them in a conspicuous place on their desks. (Students registered in other Faculties or Colleges of the University shall bring their student cards.)
- 5 Bags and books are to be deposited in areas designated by the invigilator and are not to be taken to the examination desk or table. Students may dispose of their purses by placing them, closed, on the floor underneath their chairs.
- 6 The invigilator has the authority to assign seats to candidates.
- 7 No materials shall be brought into the examination room or used at an examination except those authorized by the Chief Presiding Officer or Examiner.
- 8 Candidates shall not communicate with one another in any manner whatever while the examinations are proceeding.
- 9 Candidates bringing any unauthorized material into an examination room or who assist, or obtain assistance from other candidates or from an unauthorized source, are liable to be refused permission to write the remaining part of

the examination or any subsequent examinations. Such candidates are also liable to the loss of academic credit for the course, to suspension, or to expulsion from the University.

- 10 Candidates shall not be permitted to leave the examination room except under supervision until at least half an hour after the examination has commenced.
- 11 Candidates shall not leave the examination room within the final ten minutes of an examination, during which time they shall remain quietly seated at their desks.
- 12 At the conclusion of an examination all writing within the answer books shall cease. The invigilator may refuse to accept the papers of candidates who fail to observe this requirement.
- 13 Examination books and other material issued for the examination shall not be removed from the examination room without the authority of the invigilator.
- 14 Smoking is not permitted in the examination centres.

Procedures for requesting special consideration, petitions and appeals

Petitions for exceptions to the academic regulations

- 1 Students may request that an exception to an academic regulation be made in their case. Such a request takes the form of a petition to the Scarborough College Sub-committee on Standing.
- 2 To enter a petition, the student prepares a written statement:
- stating clearly the special consideration requested;
- stating clearly the grounds upon which special consideration is requested, that is, the reason(s) why the student believes an exception to the rules is appropriate in this particular case; and
- appending documents to evidence special circumstances: medical certificates, etc.
- 3 Students who wish to submit medical certificates in support of their petitions must ask their physician:
- to verify that the student was

examined at the time of the illness;

- to state briefly the nature of the illness;
- to indicate the duration of the debility caused by the illness; and
- to indicate the physician's professional opinion as to whether the student should receive special consideration with his or her academic work on medical grounds.
- 4 Students may seek advice from counsellors in Counselling Services before entering a petition.
- 5 Students are notified in writing of the Sub-committee's decision on their petition.

Requests for special consideration in a course

Term work

- 1 Students who are unable to write a term examination, or whose performance is adversely affected by illness or other extenuating circumstances, or who are unable (for these reasons) to submit term assignments by instructors' deadlines, must (except as noted below) speak with their instructor as soon as possible to request special consideration.
- Students who wish to appeal the decision of their instructor with respect to a request for special consideration, must, as soon as possible, speak with or write to the Chair of the division offering the course.
- 2 Where students' medical problems or other extenuating circumstances occur towards the end of the term, and where they must request extensions of time to submit term assignments or permission to write make-up term examinations after the last day for submission of term work (shown in the "Academic Calendar" section of this Calendar), students must submit a formal petition to the Subcommittee on Standing. The petition must be submitted as soon as possible and no later than the last day of the relevant examination period.

Final examinations

1 Students who, for reason of illness or other extenuating circumstances, are unable to write a final examination, may request special consideration by means of a petition to the Sub-committee on Standing.

Such petitions must be submitted as soon as possible and no later than the

last day of the examination period.

When an examination has been missed because of illness, a student who requests special consideration must submit a medical certificate (see Petitions, 3, above) certifying in addition that:

- the student was examined at the time of illness; and
- the student was incapable of attempting the examination at the scheduled time.
- 3 When an examination has been missed because of domestic affliction or other extenuating circumstances, a student must submit appropriate documentation from a professional such as a social worker or lawyer, stating the nature and extent of the problem and certifying that the student was incapable of attempting the examination at the scheduled time.
- 4 Where students suffer illness or domestic affliction that does not prevent their writing an examination, they are required to attempt the examination, If, after receipt of their statement of results they believe that their performance has been adversely affected by the illness or other problem, students may then request special consideration by means of a petition to the Sub-committee on Standing. Where the Sub-committee accepts the validity of a petition, and where the students' examination marks are significantly lower than their term marks, students will normally be allowed to write a special examination during the next examination period. Where students expect to graduate at the end of a given session, special arrangements may be made for an immediate make-up examination.

Students who are concerned that their performance may be affected by illness should visit a physician on the day of the examination to obtain both medical assistance and a medical certificate that may be submitted if a petition proves to be necessary. Petitions of this nature should be entered as soon as possible, but no later than six months after the relevant examination period.

Requests for checking of marks in a course

Term work

Students who believe that their mark on a term examination or term assignment has been calculated incorrectly should speak with the course instructor as soon as possible to request that the mark be checked.

Final examinations

Students who believe that an error may have occurred in the calculation of their final examination mark may:

1 within six months of the relevant examination period, request from the Office of the Registrar a photocopy of their final examination. A ten dollar fee is required at the time of the request.

2 request a recheck of the calculation through the Office of the Registrar if students believe that an error has been made in the calculation of their examination mark. This request must be entered within six months of the relevant examination period. If an error is discovered and the mark is changed, the copying fee will be refunded.

Final grade

Students who believe an error has occurred in the calculation of their final grade, may submit, through the Office of the Registrar, a request for a recheck of the calculation of the grade. This must be done within six months of the relevant examination period. A ten dollar fee is required at the time of the request. If an error is discovered and the grade is changed, the fee will be refunded. Instructors are required to re-read the final examination (if any) and to recheck the calculation of term and final marks before submitting a failing grade for any student.

Petition of marks in a course

Term work

- 1 Students who wish to petition their grade on a term examination, an essay or another term assignment, must speak with the course instructor as soon as possible, and certainly before the end of term.
- 2 Students who wish to appeal the decision of an instructor with respect to the grading of term work may speak with or write to the Chair of the division offering the course.
- 3 Students who wish to appeal their grade on term work returned to students only after the end of term (that is, after the instructor submitted grades for the course), may enter a formal petition to the Sub-committee on Standing. See above for information about the petition procedure. Petitions must be entered

within six months of the final examination period and will be treated in the same way as requests for re-reading of a final examination (see below).

Final examinations

- 1 Students may request from the Office of the Registrar a photocopy of their final examination within six months of the relevant examination period. A ten dollar fee is required at the time of the request.
- 2 After students have seen the photocopy of their final examination but within six months of the relevant examination period, they may submit a petition to the Sub-committee on Standing to request re-reading of their final examination. The Sub-committee will authorize a re-reading only where a student:
- has articulated clear grounds for reconsideration of some part of the examination, addressing the substance of the answer in relation to the mark given it, or otherwise identifying the nature of the alleged misevaluation:
- has demonstrated that the alleged misevaluation is of a substantial nature: that is, that, in an objective answer, a correct response has been counted as incorrect; or that, in a subjective or essay answer, the response has been underevaluated substantially. If an error is discovered and the mark is changed, the copying fee will be refunded.
- 3 Where the Sub-committee on Standing authorizes re-reading of any examination or item of term work, it is the responsibility of the division offering the course to arrange the re-reading and to authorize any change in the grade. It has been the usual practice in the divisions to have examinations or term work re-read by the course instructor, unless some convincing argument is put forward by the student that the work be re-read by another member of the faculty.
- 4 Where the Sub-committee on Standing authorizes re-reading of an examination or item of term work, the amended grade will stand, whether it is higher or lower than the original grade.
- 5 Instructors are required to re-read the final examination (if any) and to recheck the calculation of term and final marks before submitting a failing grade for any student.

Petitions concerning grading practices in a course

- 1 Students who believe an instructor has violated a rule of the Grading Practices Policy are expected to discuss this complaint with the instructor at once.
- 2 If this discussion does not yield a satisfactory resolution to the problem, students may appeal the decision of the instructor to the Chair of the division offering the course.
- 3 If the appeal does not yield a satisfactory resolution to the problem, students may appeal the decision of the division to the Principal of the College.
- 4 Students who wish to withdraw from a course after the last day to withdraw without academic penalty on the grounds that the Grading Practices Policy was violated must also submit a petition to the Sub-committee on Standing.

Academic appeals

Students may appeal a decision of the Sub-committee on Standing or the Sub-committee on Marks Review to the Sub-committee on Academic Appeals.

An appeal to the Sub-committee on Academic Appeals must be commenced no later than six months after the decision (to be appealed) has been communicated in writing to the student. An appeal is commenced by filing a notice of appeal (on an appropriate form) through the Office of the Associate Dean (Academic) of the College.
Full information may be obtained from that office.

The University of Toronto Academic Appeals Board

Students may appeal a decision of the Sub-committee on Academic Appeals to the University of Toronto Academic Appeals Board. Such appeals must be commenced no later than ninety days after the decision (to be appealed) has been communicated in writing to the student. An appeal is commenced by filing a notice of appeal (on an appropriate form) to the Secretary of the Appeals Board. Full information may be obtained from the Secretary to the Appeals Board, Office of the Governing Council Secretariat, Room 106, Simcoe Hall, St. George Campus, telephone 978-8794.

University Ombudsman

The Ombudsman assists in any way possible to resolve grievances or complaints, and can recommend changes in academic or administrative decisions where this seems justified. In handling a grievance or complaint, the ombudsman has access to all relevant files and information, and to all appropriate University officials. The ombudsman is independent of all administrative structures of the University, and is accountable only to the President and the Governing Council. For information, advice, or assistance, contact the Office of the University Ombudsman, University of Toronto, 16 Hart House Circle, Toronto, Ontario M5H 1A1 (Telephone 978-4874).

Sexual Harassment Education, Counselling and Complaint Office

The University of Toronto does not tolerate any form of sexual harassment and is actively endeavouring to provide an environment free of it. All forms of sexual harassment, from verbal abuse to inappropriate touching to sexual assault, are covered by the University's policy. The Sexual Harassment Education, Counselling and Complaint Office was established to educate the University community on this issue. The Sexual Harassment Officer also provides counselling to those people who are the object of unwanted sexual attention and to those who are alleged to have sexually harassed someone, as well as implements the formal complaint procedure. Contacting the Sexual Harassment Officer is not a commitment to file a complaint and at any point a complaint can be dropped.

The services of the Sexual Harassment Office are available to all members of the University. All complaints and requests for information will be kept completely confidential unless the individuals involved approve otherwise. Members of the University at Scarborough College may arrange to meet with the Sexual Harassment Officer at Scarborough Campus in Room S303H on the first and third Thursday of each month during the Winter Session or go to the downtown office, whichever is more convenient. For information, to arrange educationals

or to file a complaint, contact the Sexual Harassment Education, Counselling and Complaint Office, University of Toronto, 455 Spadina Avenue (at College), Room 302, Toronto, Ontario, M5S 2G7 (telephone 978-3908).

Discipline: academic matters

Code of behaviour on academic matters

The Governing Council of the University of Toronto has approved a Code of Behaviour regarding academic discipline applying to students and members of the teaching staff of the University. The full text of the Code is available from the Office of the Registrar. Important parts of the Code, from the point of view of the student, are shown below.

1 Academic offences

In order to protect the integrity of the teaching, learning and evaluation processes of the University, it shall be an offence for any member of the University:

- to use or possess an unauthorized aid or aids or obtain unauthorized assistance in, or to personate another person at any academic examination or term test or in connection with any other form of academic work;
- to represent as that of the member in any academic work submitted for credit in or admission to a course or programme of study or to fulfil a requirement for any degree, diploma or certificate, any idea or expression of an idea or work of another;
- to submit for credit in any course or programme of study, without the knowledge and approval of the member to whom it is submitted, any academic work for which credit has previously been obtained or is being sought in another course or programme of study in the University or elsewhere;
- to submit for credit in any course or programme of study any academic work containing a purported statement of fact or reference to a source which has been concocted;
- to forge or in any other way alter or falsify any academic record, or to utter

or make use of any such forged, altered or falsified record;

- to remove books or other library material from a University library without proper authorization, to mutilate library material or misplace it, or in any other way to deprive another member or members of the University of the opportunity to have access to library resources;
- to make use of a computer for an unauthorized purpose or for any purpose other than that for which the computing access code was granted, or to access, use, alter, modify, read or copy datasets that do not belong to the member or are not intended for the use of the member, or to interfere with the legitimate use of a computer by another member or members, or to make use of an account or access code not legitimately belonging to the member or without the knowledge and permission of a member to whom it legitimately belongs; or
- to access any University computer system without proper authorization, to modify, remove, use or prevent access to its programmes or datasets, to damage or mutilate a computer, or in any way to deprive another member or members of the University of the opportunity to have legitimate access to computer resources.

2 Sanctions

One or more of the following sanctions may be imposed by the Dean where a student or former student admits to the commission of an offence:

- censure
- assignment of a mark of zero or a failure for the piece of academic work in respect of which the offence was committed;
- assignment of a penalty in the form of a reduction of the final mark;
- denial of privileges to use any facility of the University, including library and computer facilities;
- assignment of a mark of zero or a failure for the course in respect of which the offence was committed:
- suspension from attendance in a course or courses, a programme, an academic division or unit, or the University for a period of not more than twelve months.

One or more of the following sanctions may be imposed by the Tribunal upon conviction of any student or former student of any offence:

- the sanctions enumerated above;
- suspension from attendance in a course or courses, a programme, an academic unit or division, or the University for such period of time up to five years as may be determined by the Tribunal;
- assignment of a mark of zero or a failure for any completed course or courses in respect of which any offence was committed or in any course or courses which have not been completed at the time the offence was committed;
- recommendation of expulsion from the University;
- recommendation for revocation of one or more degrees, diplomas and certificates.

3 Reporting

Unless otherwise directed by the Tribunal or the Dean, as the case may be, the Provost shall report the name of any member convicted by the Tribunal of an offence or suspended by the Dean for twelve months, giving the nature of the offence and the sanction imposed, to the Academic Affairs Committee in open session. In addition, the Provost shall report annually to the Academic Affairs Committee a statistical summary, without names, of the academic offences disposed of by the Tribunal and at the decanal level.

Discipline: nonacademic matters

Code of behaviour on non-academic matters

The Scarborough College Council has approved a code of behaviour regarding non-academic discipline. The code is not to be construed to prohibit peaceful assemblies and demonstrations, lawful picketing or to inhibit free speech. The procedures of Scarborough College regarding non-academic discipline shall be governed by the principles and rules of natural justice as exemplified by the provisions of the Statutory Powers Procedure Act, Ontario, 1971.

The full text of the code is available from the Office of the Registrar.

Important parts of it from the point of view of the student are shown below:

1 Non-academic offences

It shall be an offence for any member of the University:

- to disrupt College activities by action, threat or otherwise;
- to enter or remain in any College building, facility, room or office with intent to damage, destroy or steal any property that is not their own;
- to destroy, deface or otherwise damage any property that is not their own;
- to assault another person, threaten any other person with bodily harm or with damage to such a person's property or, knowingly, and without just cause, to cause any other person to fear bodily harm or fear damage to his or her property;
- to create a condition which unnecessarily endangers or threatens the health, safety or well being of other persons or threatens the damage or destruction of property;
- to use a position of authority to attempt to force any other person into a sexual relationship, or to subject a person to unwanted sexual attention, or to punish a refusal to comply:
- to subject any other person to verbal or physical abuse or harassment or to discriminate against any other person on the basis of race, creed, colour, national origin, citizenship, religious or political affiliation or belief, sex, sexual orientation, marital status and/or family relationship and place of residence:
- to possess stolen College effects or, on College premises, any property stolen from any other member of the College community;
- to use any College facility, equipment or service contrary to expressed instructions of an authorized person or without just cause:
- to violate the parking or traffic regulations of the College;
- to violate the Residence Code of Behaviour:
- to bring a false charge against any member of the College community under this Code;
- to counsel or aid a person in the commission of an offence;
- if found guilty of an offence, to refuse to comply with a sanction imposed by the Appeals Board.

Conduct which constitutes a breach of the Criminal Code or other statute, or which would give rise to a civil claim or action, shall ordinarily be dealt with by the appropriate criminal or civil court. However, in cases in which criminal or civil proceedings would not be appropriate or would not adequately protect the good order and proper functioning of the College's programmes and activities. the safety, rights or property of its members or visitors, or the property of the University, proceedings may be brought under Scarborough College's disciplinary code. Nonetheless, internal proceedings shall be undertaken in addition to proceedings in the external courts only in serious cases where considered essential in the circumstances.

2 Sanctions

The following sanctions may be imposed by the College:

- reprimand;
- requirement to make restitution for any damage caused or otherwise to rectify any situation which the accused created or helped to create;
- conduct probation for a period not exceeding one year;
- requirement of security for good behaviour not exceeding \$100.00;
- fine not exceeding \$100.00:
- denial of access to specified College premises;
- combination of any of the above.

Non-credit courses in writing skills

EWSA01F/S Basic Writing Skills

Coordinator: A. Fisher
The aim of this course is to help students learn to construct syntactically clear and correct sentences and to develop a prose style suitable for university level work. The primary focus will be on the sentence level: grammar, punctuation, diction, usage, and style. The course will also concentrate on the organization and development of coherent paragraphs and short, simple essays. All written work will be done in class time.

Session: Summer Evening, Winter Day, Winter Evening

EWSA02F/S Composition at the Computer

The aim of this course is to teach students the process of writing through the use of the latest methodology and technology in the field of rhetoricomposition. Students will learn to use computer software (including word processing software) designed to guide them through the stages in the composing process -- planning, writing, revising, and editing -- with emphasis on improved rhetorical development, logical presentation, grammar, and style. All writing will be done in class sessions in a micro-computer laboratory.

Some typing skills would be helpful but are not required. Enrolment is limited. Winter Evening; Summer Evening

EWSA03F/S Varieties of Academic Writing

The aim of this course is to introduce students to the organization and rhetorical development of the types of essays and reports required in various academic disciplines. It will also include instruction on the process of research and note-taking as well as a visit to the library. Most written work will be done in class.

Session: Summer Evening, Winter Day

These courses do not count for credit towards the degree requirements. Timetable information and registration forms may be obtained from the Registrar's Office (\$416B) or Counselling Services (\$302, 284-3292). Further information about these courses may be obtained from the Writing Laboratory (\$302E, 284-3369).

Part-time Studies

Part-time students and full-time students are treated alike at Scarborough College. All students are subject to the same admission standards, governed by the same rules and regulations, and required to satisfy the same degree requirements.

It is true, however, that students whose outside commitments prevent them from coming to the College during the day may find that they have less access to services in the University (although the Registrar's Office is open from 5:00 pm to 7:00 pm on class nights) and to the informal student network. Part-time students should try to make the time to develop contact with their fellow students and with faculty members, since this is an integral part of the University experience. When problems arise, evening students are encouraged to contact Counselling Services (284-3292). On Tuesday evenings, the Counselling Services Office is open from 5:00 p.m. to 7:00 p.m. and upon request evening counselling appointments can be arranged. In addition, the Association of Part-time Undergraduate Students (APUS) serves as the voice of part-time students in the University and can be a source of help.

Admission to Scarborough College

The same admission standards are applied to both full and part-time students. Most students are admitted on the basis of their Ontario Grade 13 marks. Non-matriculants over the age of 21 years may be considered on the basis of other credentials including those established by successful completion of pre-University courses offered by Woodsworth College of the University of Toronto at all three campuses of the University. More information on admissions and application deadlines are in the Admissions section of this Calendar. Any questions or concerns can be addressed by contacting the Assistant Registrar - Admissions at 284-3359.

Awards

Part-time students are considered for awards and scholarships on the same basis as full-time students. Some special awards and bursaries for part-time students are available through APUS. For further information see the Awards section of this Calendar.

Academic Regulations and Degree Requirements

Part-time students are governed by the same regulations as any other student. Students are responsible for reading through the section of the Calendar dealing with Academic Regulations, When in doubt, students should contact Counselling Services for assistance in interpreting regulations and their applications in particular cases. We have noted below several regulations that seem of particular relevance to part-time students. However, this list is by no means exhaustive. It must be emphasized that all rules and regulations apply to parttime students and that the fact that a particular rule is not quoted below in no way suggests that it will not apply.

- 1 Because part-time students are often involved in their studies for more years than full-time students, part-time students may more frequently find that degree or programme requirements change during their academic career. When changes occur, students are usually allowed, sometimes for a limited period of time, to continue under the old rules. This does not usually apply to rules other than degree or programme requirements.
- 2 Although the College attempts to make available to part-time students as many evening courses as possible, students may occasionally find that it is to their benefit to take courses on other campuses of the University. Since different numbering schemes are in effect on other campuses, students should take care to consult the Equivalent Course List on page 231 of the Calendar to ensure that courses on other campuses do not duplicate courses already completed. Students, of course, may not receive credit twice for courses that are deemed to be equivalent. Students are also expected, whenever possible, to take their courses on the Scarborough Campus. Normally students may not register for courses on other campuses if equivalent courses are available in that session on the Scarborough Campus. Where the equivalent course is available at Scarborough only during the day, students may register in evening sections on other campuses.

- 3 Part-time students are governed by the same regulations concerning the dropping of courses as all other students.
- 4 Students should be aware that special circumstances may on occasion justify an exception to the academic regulations. Requests for special treatment takes the form of a petition to Scarborough College Sub-committee on Standing. Students who believe that such special consideration is necessary should contact a counsellor in Counselling Services at the earliest possible time to discuss the appropriate form of action. Students should be aware that special consideration may not be granted and should avoid taking any action that will harm them if the petition is rejected.

Choosing a Programme

Since most students must complete Programmes and since evening course offerings are limited, evening students should plan their course selection very carefully bearing in mind pre- and corequisites and the fact that certain courses may not be available in a particular session.

Programmes which are available in the evening are listed below with a brief description of the availability of courses. Students are encouraged to consult their Programme Supervisor in planning their course selection.

A 1989 summer timetable is available in the Registrar's Office.

Anthropology Specialist and Major Programme

Normally, one of the following core requirements is offered on a rotational basis [ANTB15Y, ANTB20, ANTB26] every year during the evening.

Commerce Major Programme

Each of the required courses [COMA01, COMB01, ECOA01, JCSB27] is offered in the evening at least once each year. Other COM and ECO courses are also offered in the evening session.

Economics Major Programme

Each of the five courses specifically required for the Economics Major [ECOA01Y, ECOB03Y, ECOB07Y, ECOB11H, ECOB12H] is offered in the evening at least once each year.

ECOA01Y, ECOB03Y, and ECOB11H is offered in both summer and winter evening sessions each year. ECOB07Y and ECOB12S are offered in each winter evening session, and ECOBO7Y in most summer sessions. Each winter session, and most summer sessions, at least one other course at the B. C. or D level is offered.

English Specialist and Major Programme

English courses are as far as possible cycled as follows:

ENGA01Y - every two years. ENGA02Y - every four years. ENGC59Y - every four years. Pre-1800 courses - at least every two vears.

Post-1800 courses - at least one every

D-level courses - usually 3 half-courses every year.

History Specialist and Major **Programme**

HISA01Y offered in the evening every other year. Upper level History courses - at least two offered every year.

Philosophy Specialist and Major **Programme**

PHLA01Y offered in the evening every other year. PHLB01F, PHLB20F/S, PHLB50F, PHLB60F/S - two of these courses are usually offered every year.

Political Science Major Programme

POLA01Y, POLB50Y offered every second POLC75Y and core area courses [B61F/62S: B80Y: B86Y: B87Y] offered every three or four years. Others, including C & D level courses, occasionally.

Psychology Specialist and Major **Programme**

The following courses are normally offered annually in the evening and/or in the summer: PSYAO1Y, PSYBO1, and PSYB07, all of which are required for both programmes. As well, all courses in each of the content areas and all D-level courses appear in the evening or summer on approximately a 3-year cycle.

Part-time students are also encouraged to check the offerings on the St. George campus, to which they have access and which they will find are not identical to those at Scarborough in a given year.

Sociology Specialist and Major Programme

SOCA01Y is offered in the evening every

For part-time students majoring in Sociology, the other required courses are offered in the following sequence in winter evening sessions:

SOCB03Y History of Social Thought Methods in Social Research SOCB01Y For part-time students specializing in Sociology, the other required courses are offered in the following sequence in winter evening sessions:

History of Social Thought SOCB03Y SOCB06H **Social Statistics**

Methods in Social Research SOCBOIY SOCC05Y Contemporary Social

Theory SOCD42S Advanced Seminar in Socio-

logical Theory

SOCD43S Advanced Seminar in Research Methods

For both Majors and Specialists, the remaining courses required to fulfil the Programme requirements are offered in winter and summer evening sessions.

Programmes of Study and Course **Descriptions**

The following Programmes are offered at Scarborough College. All programmes in Commerce, Computer Science, Economics, Neurosciences, and all Co-operative Programmes have strict enrolment limits. For details on application to the Programmes, see the appropriate discipline entry in this Calendar. In the event that the number of qualified applicants exceeds the teaching or other resources available, enrolment in other Programmes may have to be limited at a future date. In the event of under-enrolment, some of these Programmes may have to be withdrawn.

Specialist Programmes - Type of Degree

Anthropology* - B.A./B.Sc.

Arts - B.A.

Biological Sciences - B.Sc.

Chemical Physics - B.Sc.

Chemistry - B.Sc.

Chemistry & Biochemistry - B.Sc.

Cell and Molecular Biology - B.Sc.

Cognitive Science - B.Sc.

Commerce - B.A.

Commerce & Economics - B.A.

Computer Science - B.Sc.

Computer Science & Physics - B.Sc.

Computer Science for

Data Management - B.Sc.

Drama - B.A.

Ecology & Environmental Studies - B.Sc.

Economics - B.A.

Economics & History - B.A.

Economics & Mathematics - B.A.

Economics & Political Science - B.A.

Economics & Quantitative Methods - B.A.

English* - B.A.

Fine Art History - B.A.

Fine Art Studio - B.A. French - B.A.

Geography - B.A./B.Sc.

Terrain and Environmental Earth

Sciences - B.Sc.

History* - B.A.

Humanities - B.A.

Language & Literature - B.A.

Linguistics - B.A.

Mathematics - B.Sc.

Medieval Civilization - B.A.

Modern Languages - B.A.

Neurosciences - B.Sc.

Philosophy* - B.A.

Physics - B.Sc.

Political Science - B.A.

Psychology* - B.A./B.Sc.

Sociology* - B.A.

Major Programmes - Type of Degree

Anthropology* - B.A./B.Sc. Biochemistry - B.Sc. Biological Sciences - B.Sc. Chemistry - B.Sc. Classical Studies - B.A. Commerce* - B.A. Cognitive Science - B.Sc. Computer Science - B.Sc. Drama - B.A. Economics* - B.A. English* - B.A. Fine Art History - B.A. Fine Art Studio - B.A. French Language - B.A. French Language & Literature - B.A. Geography - B.A./B.Sc. German Language - B.A. History* - B.A. History of Ideas - B.A. Italian Language - B.A. Italian Language & Literature - B.A. Linguistics - B.A. Mathematics - B.Sc. Medieval Civilization - B.A. Music History & Literature - B.A. Philosophy* - B.A. Physics - B.Sc. Political Science* - B.A. Psychology* - B.A./B.Sc. Society, Values & Medicine - B.A. Sociology* - B.A. Spanish Language - B.A. Statistics - B.Sc. Women's Studies - B.A.

College Programmes - Type of Degree

Canadian Studies - B.A. Development Studies - B.A./B.Sc. Humanities - B.A. Myth & Religion - B.A.

Co-operative Programmes - Type of Degree

Administration - B.A. Arts Administration - B.A. International Development Studies - B.A./B.Sc. Computer Science & Physics - B.Sc.

Co-operative Programmes are workstudy Programmes which are designed to integrate related, practical experience with regular university studies. All Cooperative Programmes are Specialist Programmes and may be taken only as part of a four-year degree. Most Co-operative Programmes, however, will require up to five years to complete because of the time required for the work placements.

College makes available to students who are able to study only in the evening.

Anthropology

Assistant Chairman: M. Lambek (284 - 3118)

Anthropology is the study (or science) of humankind, dealing with the origin, development and nature of humans and their culture. As such it is concerned with human phenomena in the widest possible terms, both biological and cultural. It differs from other social sciences in its comparative and historical approach, and in its intimate links with the physical and natural sciences. Anthropology examines societies today and in the past, both complex civilizations and relatively small-scale nonliterate societies. From this vantage point Anthropology attempts to arrive at an understanding of the common factors underlying human existence and to isolate the causes that have led and continue to lead to social and cultural change (and to differences between peoples and cultures).

Because of the vastness of its subject matter, Anthropology is traditionally divided into four sub-fields: Social-Cultural Anthropology, Prehistoric Archaeology, Physical Anthropology and Anthropological Linguistics, At the present time, Scarborough College offers courses in the first three only, with occasional offerings in the last. Students interested in inquiring about appropriate course sequences in one of the subfields are recommended to consult with one of the faculty in that sub-field. Students will be directed to appropriate faculty by the Supervisor of Studies.

Specialist Programme in Anthropology

Supervisor: R.W. Shirley (284-3193) The Specialist Programme in Anthropology is intended to provide the professionally-oriented student with background preparation of sufficient breadth and depth to pursue specialized training at the graduate level. It is also designed to offer interested students a course structure of sufficient flexibility to follow their intellectual interests into the diverse yet holistic perspective on the human phenomena provided by

Anthropology.

All students are required to consult with the Supervisor concerning the selection of a course sequence appropriate to their interests and objectives.

The Programme requires completion of twelve full-course equivalents, no less than ten of which will be in Anthropology. Students must complete at least eight full-course equivalents in disciplines other than Anthropology within the four-year degree programme. The courses within the Programme are to be selected as follows:

Introduction to Anthro-1 ANTAO1Y pology

Two courses from among the following:

ANTB15Y Biological Anthropology ANTB20Y Social and Cultural Anthropology ANTB26Y Introduction to Prehistoric Archaeology

3 Six full-course equivalents from the remaining B, C or D-level courses in Anthropology.

One full-course equivalent in a field methods or supervised reading and research course

ANTC03F ANTC04S ANTC52A ANTC60S ANTD12F ANTD31F ANTD32S

5 At least 2 full-course equivalents in disciplines other than Anthropology must be agreed upon in consultation with the Supervisor.

Major Programme in Anthropology

Supervisor: R.W. Shirley (284-3193) The Major Programme in Anthropology provides a course structure for those students desiring to expand upon or supplement other areas of academic interest by taking advantage of Anthropology's unique global, chronological and biological perspective on humankind.

The Programme requires completion of six full-course equivalents in Anthropology including:

- Introduction to Anthro-ANTAOLY pology
- 2 One course from among the follow-

ANTB15Y Biological Anthropology Social and Cultural ANTB20Y Anthropology ANTB26Y Introduction to Prehistoric Archaeology

3 Four additional full-course equivalents from B, C, or D-level courses in Anthropology, of which at least one must be at the C or D level. Students are required to consult with the Supervisor regarding course selections and requirements and are strongly urged to take at least seven full-course equivalents in disciplines other than

ANTAO1Y Introduction to Anthropology

degree programme.

Anthropology within the three-year

An introduction to the fields of anthropology through which the student will obtain the anthropological view of the nature and diversity of humans. The first term deals with Physical Anthropology and Prehistoric Archaeology, concentrating on the biological basis and the evidence for the origins and growth of culture. The second term concerns the nature of language and the comparative aspects of Cultural Anthropology, through a study of social groups as well as economic, political and religious systems in both non-industrial and industrial societies. Lectures and tutorials. Session: Winter Day, Winter Evening M. Lambek & Staff

ANTBOIY Ecological Anthropology The interrelationship of human populations with their environment, particularly as reflected in differences in technology, socio-political organization, and ideology. Emphasis will be placed on the view which sees variability in human behaviour as the product of adaption and evolutionary change. Exclusion: (ANTB10) Prerequisite: ANTA01 Session: Winter Day

ANTB15Y Biological Anthropology A survey of the human place in nature: origin (Fall) and ongoing evolution (Spring). Basic to the course is an understanding of the synthetic theory of evolution and the principles, processes, evidence and application of the theory. Laboratory projects acquaint the student with the methods and materials utilized by the Physical Anthropologist.

Specific topics include: the development of evolutionary theory, the

^{*} These are Programmes which the

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biological basis for human variation, the evolutionary forces, human adaptability, primate biology, social organization and behaviour of non-human primates, taxonomy and classification, paleontological principles and human origins. Prerequisite: ANTA01 or permission of instructor.

Session: Winter Day L. Sawchuk

ANTB16Y Cultures of Modern Canada

This course has two objectives: on the one hand, it explores the regional and ethnic diversity of contemporary Canadian cultures, and on the other, it examines forces which operate, however successfully, to bind Canadians together and foster a coherent world-view. The first objective entails consideration of localized case studies, e.g. of agriculturally based religious communities, Newfoundland outports, indigenous groups (Native Canadians and Metis), and others. The second involves searching for shared cultural meanings in Canadian literature, myth and symbolism, mass media, and political culture. Issues of particular interest are Canada's place in a Western meta-culture, and the extent to which technology both reflects cultural assumptions and implicitly shapes relations to the physical and social environments.

Prerequisite: ANTAO1 or permission of instructor.

Session: Winter Day

1. Boddy

ANTB20Y Social and Cultural Anthropology

Basic approaches to the understanding of social and cultural organization in societies of varying complexity but with emphasis on simpler societies. Comparative social institutions, especially kinship and marriage will be examined along with economic, political, legal and ritual elements. Some attention will also be given to belief systems and symbolic thought as well as sources of stability and change in society and anthropological perspectives on current social issues. Prerequisite: ANTA01 or permission of instructor.

Session: Winter Day, Summer Evening R.W. Shirley

ANTB26Y An Introduction to **Prehistoric Archaeology**

A survey of the anthropological subdiscipline which is concerned with human socio-cultural development during the past three million years. Specifically, the course reviews the aims. methodology and results of prehistoric archaeology in both the New and Old Worlds.

This course will involve two hours of lecture and one hour of lab/tutorial per week as well as one field trip on a Saturday or Sunday of the Fall term. Prerequisite: ANTAO1 Session: Winter Day

ANTB38Y Prehistory of North America North of Mexico

An introduction to the establishment and diversification of native traditions in North America from a late Palaeolithic hunting base to the emergence of civilization in Mesoamerica. The course will focus on processes of cultural change and on archaeological methods of reconstructing the past. Primary attention will be paid to the civilizations of the eastern and southwestern United States. At the end of the course, a field trip to Ohio will permit students to obtain first-hand experience of the remains of the Hopewell moundbuilders, one of the most interesting early traditions in this region.

Prerequisite: ANTA01; B26 recommended as Pre- or Co-requisite Session: Winter Day

M. Latta

ANTB49F Myth and Symbol

What is myth? What is the reality myths symbolize? Using narratives recorded in small-scale societies of Amazonia, Africa, Australia and Melanesia, the course will critically examine various ways anthropologists make sense of myth. Myths are treated as idealized history, dogmas about the nature of the world and origin of humanity, 'charters' for social institutions, models for conflict-resolution, storehouses of ecological information. and expressions of the structure of the human mind.

The course traces changes in themes and styles of myth interpretation, especially those that parallel shifts in sociological and psychological theories of symbol formation. Prerequisite: ANTA01 Session: Winter Day G. Gillison

ANTB54S Anthropology of Sex

This course is designed to introduce the student to anthropological questions and theories regarding human sexual biology. Major topics to be critically assessed include evidence for the origins and evolution of human sexuality: sex differences among the living primates; the influence of culture on the biology of sex in human populations: prehistoric, historic and contemporary patterns in sexually-transmitted diseases; sociobiological theories of sex differences. Prerequisite: ANTA01: ANTB15

Session: Winter Day A. Herring

ANTCO3F and CO4S Directed Reading in Anthropology

A directed exploration of specific topics in Anthropology, based on extensive investigation of the literature. Individual tutorials, as arranged. Prerequisite: ANTA01 and one B-level full-course equivalent in Anthropology and permission of instructor Session: Winter Day, Winter Evening, Summer Evening Members of Faculty

ANTCIOS Anthropological Perspectives on Development

The concept of development is compared with classic descriptions of the impact of Western rule and influence. such as "modernization", "acculturation" and "culture change", and related to more recent theories of "underdevelopment" and "world system". An anthropological view of non-Western societies is emphasized as a basis for understanding the context in which development occurs. Detribalization, labour migrations, urbanization and problems of adjustment to change are examined from the perspective of indigenous forms of social organization and systems of religious thought.

Exclusion: (ANTB17) Prerequisite: ANTA01 Session: Winter Day G. Gillison

ANTCI IY The Anthropology of Women and Gender

A cross-cultural examination of sex roles and gender constructs and their implications for the position(s) of women in contemporary and traditional societies. The course explores how and why socio-cultural systems based on sexual inequality originate, how they maintain

themselves, and how they change. Topics include: biological freedoms and constraints; cultural interpretations of femaleness and maleness seen in myth. ritual, metaphor and other imagery; economic and political aspects of gender relations, especially sexuality and reproduction; differences and similarities between small scale and complex societies.

Prerequisite: ANTA01 or JHSA01 or permission of instructor. Session: Winter Day

J. Boddy

ANTC16Y Human Origins

The study of human origins has undergone a transformation in recent years. The science has benefited from a series of unexpected fossil discoveries, and it has become willing to look at new approaches to answering the major issues about human evolution. While there is more question about the ways of knowing our past, there is also greater security that the questions being asked are answerable. This course will examine some of these, particularly the process of speciation, with specific reference to the emergence of Homo. While the fossils (casts) will be examined, there will be emphasis on the interpretations of the process of hominisation through the thoughts and writings of major workers in the field. Topics are set within their fossil and time contexts and include the emergence of bipedalism and opposability and their correlates, nonhuman primate social organization and demographic reconstruction, diet and foraging techniques, and "the origins" (for example, the use of fire; the development of language; the origin of consciousness). 2 hours of lecture, 2 hours of labs. Prerequisite: ANTA01 or permission of

instructor Session: Winter Evening

ANTC19S Economic Anthropology

A consideration of comparative economic systems in ecological and adaptive perspective, and of the nature of methods of production as a developmental process and its relation to total societal frameworks.

The course examines cross-cultural systems of production, redistribution. and market exchange, with attention given to the production and use of material objects in differing cultural environments, and to the effects of

change on the ideologies surrounding these objects as products of specific environments. The marketplace is used as the focus for studying these features. Two one-hour lectures and one one-hour seminar per week.

Exclusion: (ANTB19)

Prerequisite: ANTA01 or JHSA01 or per-

mission of instructor Session: Winter Day

R.W. Shirley

ANTC25F Anthropology and Psychology

An anthropological approach to topics of psychological interest. Amongst the areas we may consider: the relationship between culture and personality; the cultural construction of the "self"; other cultures' conceptions and expressions of the emotions; the life cycle in crosscultural perspective; psychoanalytic (Freudian) contributions to the understanding of culture (e.g. symbolic projection, unconscious motivation: the crosscultural expression and treatment of psychopathology).

Throughout, the central concern is with how we are to understand the relationship between psychic universals and diverse cultural and social forms in the constitution of human experience.

Prerequisite: ANTA01

Corequisite: ANTB20 and PSYB30 are recommended

Session: Winter Day

M. Lambek

ANTC41Y Human Adaptability

Human adaptability refers to the human capacity to cope with a wide range of environmental conditions, including aspects of the physical environment like climate (extreme cold and heat), high altitude, and geology, as well as aspects of the socio-cultural milieu, such as pathogens (disease), nutrition and malnutrition, migration, technology, and social change. Behavioural/cultural, physiological, and genetic modes of adaptation are discussed within the context of an holistic, population-based, biocultural perspective. Case studies are used extensively. Emphasis is placed on applying theories and principles to contemporary environmental problems. Exclusion: (ANTB44)

Prerequisite: ANTA01 or BIOA03: ANTB15 highly recommended

Session: Winter Day

A. Herring

ANTC47Y Human Osteology

Human Osteology is a "hands-on" laboratory course which introduces students to the methods of analyzing human skeletal remains. It is designed with the needs of Physical Anthropology and Archaeology students in mind, but has proven useful to students in allied disciplines.

The first half of the course is the "Bone Biology/Anatomy" part, while the second half is the "Anthropological" unit. During the first half of the year, lectures and labs will cover (1) the composition and microstructure of bone; (2) the development, growth, remodeling and plasticity of bone; and (3) the detailed "normal" gross anatomy of the skeleton and dentition.

Topics and analytic methods covered during the second half include: (1) the recovery and treatment of skeletal remains from archaeological sites; (2) odontological description, including dental pathology; (3) osteometric description; (4) nonmetric trait description; (5) methods of estimating age at death and sex; (6) quantitative analysis of metric and nonmetric data; and (7) paleopathol-

One 1-1/2 hour lecture and one 1-1/2 hour laboratory session per week. Limited enrolment: 30. Exclusion: (ANTB47) Prerequisite: ANTA01 or BIOA03; ANTC16 (ANTB14) and ANTB15 recommended Session: Winter Day

ANTC49F Law and Society

This course is an examination of the problem of order in society. It will be highly comparative, studying legal institutions through the world and at all levels of social complexity.

The course will start with an examination of social control in relatively "simple" societies, followed by a survey of the legal institutions of various forms of the state. It is hoped to include some work on the philosophy of Law. Exclusion: (ANTB49)

Prerequisite: ANTA01 or ANTB20 or permission of instructor Session: Winter Day

R.W. Shirley

ANTC51Y Medical Anthropology

The examination of health and disease in socio-cultural and ecological perspective. Emphasis is placed on variability of populations in terms of both disease susceptibility and cultural means of definition and treatment.

The course is designed to introduce students to the basic concepts and principles of medical anthropology, focusing on the interrelationship of biological and cultural variables and processes. Principles of epidemiology, patterns of inheritance, evolutionary processes, the cultural specificity of notions of health and illness, causation of therapy are considered. Specific topics include: infectious disease (focusing on World Jewry), curing roles, aims and techniques in traditional Africa and Latin American societies (shamanism, herbalism, sorcery, etc.), health care delivery and innovation in the Third World, mental illness and the social control of deviance. Exclusion: (ANTB51) Prerequisite: ANTA01 Session: Winter Day M. Lambek, L. Sawchuk

ANTC58Y Native People of the Canadian Subarctic

This course offers an holistic, intensive examination of the history and development of native peoples of the subarctic region of Canada. The course is teamtaught by a social/cultural and physical anthropologist. Major issues to be considered in the subarctic include the history of European/native relationships: current debates surrounding land tenure, social structure, and political leadership; missions and missionaries; health, disease, and health care in the past and present; and historical and current population processes. Prerequisite: ANTB21Y Session: Winter Day A. Herring, K. Siechiechowicz

ANTDO3Y Analysis of Archaeological Material

An in-depth examination of two major classes of material culture: ceramics and lithics. Students will develop analytical skills through construction and study of artifacts in order to evaluate materials. construction principles and function of tools in prehistoric and contemporary

contexts. Exclusion: (ANTC29) Prerequisite: Any B-level course in Archaeology Session: Winter Day M. Latta

ANTD16S Biomedical Anthropology This course is designed for advanced students seeking an intensive examination of specific problems in medical Anthropology.

Problems to be discussed include: genetic disorders in families and populations, the interaction of malnutrition and infectious diseases in human populations, chronic non-infectious diseases in populations today, and epidemiology and medical anthropology as complementary disciplines. Laboratory sessions will cover: methods of data collection and analysis, problem sets in medical genetics, karyotyping, the use of genetic markers in biomedical anthropology and the life table and the analysis of cause-specific mortality over time.

Two hours of lectures and one three-hour laboratory session per week. Exclusion: (ANTC45) Prerequisite: ANTC51 (ANTB51Y) and one C level full-course equivalent in Physical Anthropology Session: Winter Day L. Sawchuk

ANTD24F Theory and Methodology in Social/Cultural Anthropology

An overview of the history of ethnological thought, focusing on certain key theoretical debates which run through it and largely determine the "state of the art" today.

Evolutionary, diffusionist, psychological, cross-cultural, functionalist, structuralist, and hermeneutical approaches will be considered through selected writings from such major figures as Tylor. Durkheim, Boas, Kroeber, Malinowski, Radcliffe-Brown, and Levi-Strauss. An attempt will be made to understand these individuals in terms of the social and intellectual climates in which they wrote.

Exclusion: (ANTC16), (ANTC17) Prerequisite: ANTA01 and ANTB20 or permission of instructor Session: Winter Day J. Boddy, M. Lambek, R.W. Shirley

ANTD31S and D32F Advanced

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ANIDSIS and DSZF Advanced		ANTC24Y	Primary Group Cultures
Research in Anthropology		ANTECON	Exclusion: (ANTB24)
	ical examination of specific	AN1C28F/3	The Prehistoric Archaeol-
	Anthropology, based on		ogy of Canada
	or field research. Individual		Exclusion: (ANTB28)
tutorials, as		417775200	Prerequisite: ANTB38
	ANTC13 and ANTC14)	ANTC30S	Biological Anthropology of
	Permission of instructor		Past and Present Canadian
	ter Day, Winter Evening,		Native Peoples
Summer Eve			Prerequisite: ANTB15 or
Members of	Faculty		permission of instructor.
C M-	ot Offered in 1989-90		ANTB21 recommended
Courses No	o Oueleg in 1999-90		Corequisite: ANTC28
ANTB03F	The Americas: An Anthropo-	ANTC32	(ANTB28) recommended
ANIBUSP	logical Perspective	ANICSZ	Political Anthropology Exclusion: (ANTB32)
	Coreauisite:		Prereauisite: ANTA01
	ANTC37(ANTB37) recom-	ANTC33Y	The Fourth World: Native
	mended	MILCOSI	Peoples and the Nation
ANTB05F	African Cultures and		State
MUIDOSE	Societies I: Survey		Prereauisite: ANTA01 or
	Prerequisite: ANTA01 or		permission of instructor
	Permission of instructor		Corequisite: ANTB21 or
ANTBO7S	Comparative Slavery		ANTC10 (ANTB17) recom-
AN10075	Prerequisite: ANTA01		mended
ANTB11F	Human Behaviour in the	ANTC35F	Quantitative Methods in
MIDILI	Old Stone Age	MILLOSI	Anthropology
	Prerequisite: ANTA01		Exclusions: (ANTB43);
	(ANTB26 is recommended).		ECOB11; PSYB07; SOCB06
ANTB12S	The Rise of Civilization		Prerequisites: ANTA01;
ANTIDILI	Prerequisite: ANTA01		ANTB15 and ANTB26 are
	(ANTB26 is recommended)		recommended
ANTB21Y	Canadian Native Peoples	ANTC37F/9	Prehistory of Mexico and
ANIDEII	Prerequisite: ANTA01 or		Mesoamerica
	permission of instructor		Exclusion: (ANTB37)
	Corequisite: ANTB38,		Prerequisite: ANTA01;
	ANTC28, ANTC30 recom-		ANTBO3F and ANTB38 is
	mended		recommended
ANTB23Y	Comparative Mythology	ANTC40Y	Anthropological Demogra-
ANTB30Y	Language and Culture		phy
	Prerequisite: ANTA01		Exclusion: (ANTB40)
ANTB55Y	Cultures of the Middle East		Prerequisite: ANTA01;
	and Islamic World		ANTB15 is recommended
	Prerequisite: ANTA01 or	ANTC48Y	Childhood in Contemporary
	permission of instructor		Cultures
ANTC05Y	Anthropological Study of		Exclusion: (ANTB46)
	Religion		Prerequisite: ANTA01 or
	Exclusion: (ANTB02)		ANTB20 or permission of
	Prerequisite: ANTA01Y		instructor
ANTCO6S	African Cultures and	ANTC50F/S	Death and Burial
	Societies II: Case Studies		Prerequisite: Any B level
	Exclusion: (ANTB06) Prere-		full-course equivalent in
	quisite: ANTBO5		Anthropology
ANTC18Y	Cultural Evolution	ANTC52A	Field Methods in Archaeol-
	Exclusion: (ANTB18)		ogy
	Prerequisite: ANTA01 or		Exclusion: (ANTB52)
	permission of instructor		Prerequisite: any B-level
ANTC22Y	Primate Behaviour		full-course equivalent in
	Exclusion: (ANTB22)		Archaeology as well
	Prerequisite: ANTA01 or	ANTC53Y	Classification and Material
	ANTB15 or PSYA01 or		Culture
	BIOA03		Exclusion: (ANTB53)
			Prerequisite: ANTB26

ANTC24Y

Primary Group Cultures

ANTC56Y	The Anthropology of Food
	Exclusion: (ANTB56)
	Prerequisite: ANTA01 and
	one other B or C level full-
	course equivalent in Anthropology
ANTC60S	Fieldwork in Social and Cul-
	tural Anthropology
	Prerequisite: Any B level
	full-course equivalent in
	Anthropology or ID or per-
	mission of instructor.
ANTDO1S	Pre-Industrial Technology
	Exclusion: (ANTB41)
	Prerequisite: ANTA01 and
	any B or C level full-course
	equivalent in Anthropology.
ANTD02S	Background to Modern
	Archaeology: Settlement
	Patterns
	Exclusion: (ANTC44)
	Prerequisite: Any B level full-course equivalent in
	Archaeology or related dis-
	ciplines
ANTDO4Y	Advanced Archaeological
	Methods: Data Description
	and Presentation
	Exclusion: ANTC27
	(ANTB27)
	Prerequisite: ANTB26
ANTD11Y	The Concept of Race in
	Anthropology
	Exclusion: (ANTC43)
	Prerequisite: ANTB15 or one
	C-level full-course equivalent in Anthropology
ANTD12F/9	Research on the Social
	Behaviour of Non-Human
	Primates
	Exclusion: (ANTC12)
	Prerequisite: ANTC22
	(ANTB22) or permission of
	instructor
ANTD14Y	New Perspectives on
	Human Origins
	Exclusion: (ANTC36)
	Prerequisite: ANTB15 or one
	C-level full-course
	equivalent in Physical
ANTD15F	Anthropology Frontiers of Anthropology
ANIDISE	Prerequisite: ANTB15 or one
	of ANTB22, ANTC16,
	ANTC41, ANTC47, ANTC51
	or permission of instructor
ANTD23F/9	Ethnomedicine
	Exclusion: (ANTC46)
	Prerequisite: ANTC51
	(ANTB51) or permission of
	instructor

Arts

Specialist Programme in the Arts Supervisor: Janis Hoogstraten (284-3370) The Specialist Programme in the Arts is designed for all those students who would like to acquire a broad foundation of knowledge in Fine Art, Drama, and Music, while at the same time developing expertise in one of those areas.

We recognize that much artistic work cuts across the strict boundaries of these disciplines and this Programme will allow the student to explore the inter-relationships among the arts. Such exploration will be a stimulating experience to any student in the humanities. The Programme is also intended to provide career preparation for students who are interested in such fields as arts administration and public and high school teaching.

The course requirements for a Specialist Programme in the Arts are as follows:

I The Major Component:

The Major Component must be chosen from one of Fine Art History, Fine Art Studio, Drama, or Music. In each case the courses taken are the same as those specified for the Major Programme in the chosen discipline. Consult the calendar entries under the individual disciplines.

2 The Minor Component:

Two of the following sets of courses in areas other than that of the Major Component:

Drama:

DRABOLY, DRABO3Y, DRABO4Y. Fine Art History: FARA10F/S, FARA11F/S, FARA12F/S, FARA13F/S, plus one full-course equivalent at the B-level (Supervisor's approval required).

Fine Art Studio:

either FARA90Y or FARA70F/S and FARA71F/S, plus any two full-course equivalents in Fine Art Studio.

Music:

MUSA 10F, MUSB30S, MUSB17F plus an additional 1.5 full-course equivalent in Music.

Arts Administration:

HUMB90Y (Introduction to Arts
Administration)
and 2 full-course
equivalents from:

COMA01Y Financial Accounting
ECOA01Y Introduction to Economics
ECOB35F/S Public Decision Making
JCSB27Y Organizational Behaviour
POLB62F/S Public Policy Making

3 One full-course equivalent from:
HUMB60F/S Women Artists in Society
HUMB70Y Introduction to Cinema
ENGB60Y Creative Writing I
PSYB50F Sensation and Perception
PSYB51F Perception and Cognition
PHLB03F Philosophy and Art
or one full-course
equivalent from a relevant

required)

4 HUMC10S To be taken after 10 courses

HUMD30Y

Senior Seminar in Arts Administration

discipline (authorization

from Programme Supervisor

Astronomy

Discipline Representative: C.C. Dyer (284-3318)

Astronomy is at the same time one of the oldest and one of the most dynamic areas of science. It is basically man's attempt to gain an understanding of his place in the Universe, ranging from the planetary system in which he lives to the most distant galaxies and quasars which can be seen only as they were before men walked this earth. Within the past ten years have come astronomical observations which suggest the explosive "Big Bang" origin of the entire Universe and the presence of hitherto unsuspected complex molecules in the interstellar medium of our galaxy. The implications of these and other astronomical discoveries for man and his world are profound.

The full range of astronomical topics is covered at an introductory level in ASTA02 (for science students) and ASTA03 (for non-science students) and ASTB03, while selected astrophysical topics are dealt with at a more advanced level in AST321, 322, 323 and ASTC01. ASTC10 presents the general theory of

relativity and some of its applications in astrophysics and cosmology.

ASTA02Y Astronomy and Astrophysics: An Introduction

In this modern look at the Universe an appreciation of the techniques and implications of astronomical observations is developed through an application of familiar physical concepts to the astronomical setting. The material discussed covers observations in the entire electromagnetic spectrum, from X-rays to the radio band. It ranges from the relatively nearby solar system to the distant reaches of quasars; from the wasteland of interstellar space to the nuclear inferno deep in a stellar interior; from the quiet life of a star like the sun to its often cataclysmic demise; from the tranquillity of an interstellar dust cloud to the frenzied environs of a pulsar, an Xray source or a black hole. Completion of this course should better equip one to assess the importance of forthcoming developments in the advancement of knowledge of the Universe and to contemplate such questions as life on other worlds. Instruction in the use of the telescopes, cameras and darkroom equipment is provided for all interested students, whether their ultimate purpose is carrying out a term project or merely extracurricular star-gazing.

Two lectures and one tutorial/laboratory per week. Practical observations are introduced in the laboratory periods and on scheduled evenings in the fall. Visits to the David Dunlap Observatory and the McLaughlin Planetarium are also arranged. Exclusion: ASTA03 Prerequisite: OAC Physics, OAC Algebra & Geometry Session: Winter Day R. Carlberg

ASTA03Y Introduction to Astronomy

A description of the solar system, sun, stars, galaxies and other phenomena of the Cosmos in which we live. The mechanisms which make our sun and other stars shine are explained, and the nature and evolution of our solar system, star systems, galaxies and the Universe as a whole are discussed in a manner suitable for the non-science student. Methods and techniques for exploring the Universe are described, including the recent use of radio telescopes and telescopes on spacecraft. Two lectures and one tutorial per week.

This is supplemented by a planetarium demonstration and a class trip to the David Dunlap Observatory. Using the College's 12 inch Questar telescope, students also have an opportunity to observe and to photograph heavenly bodies if they wish. Exclusion: ASTA02 Session: Winter Day C.C. Dyer

ASTB03S Great Moments in Astronomy

An examination of the people, the background and the events associated with some major advances in astronomy. Emphasis is given to the role of a few key individuals and to how their ideas have revolutionized our understanding of nature and the Universe. Implications of the revised outlook are also discussed. The course will focus on: the first measurement of stellar distances; the prediction of the existence of Neptune; the discovery of the nature of stars; the proof of the existence of "island universes"; the birth of the theory of stellar structure; the detection of the cosmic fireball; and the expansion of the Universe. The perspective gained is used to assess current astronomical research and its impact on society.

The course is intended primarily for students not in Physical Science who, in their second or higher years, wish to acquire an understanding of the origins and significance of our present world view. A term paper dealing in detail with an aspect of one of the topics is required.

Prerequisite: Four full-course equivalents Session: Winter Evening

ASTCO1H Research Topics in Astronomy

Application of individual effort to reading and research on a topic of current interest.

Research on some topic of current interest in astrophysics and write a report ("mini-thesis") on their work. The student is expected to gain an appreciation of the current state of knowledge about a particular topic of astrophysical interest and to become familiar with the basic methods of research. The topic will be selected by one of the instructors in consultation with the student. Formal lectures are replaced by regular consultation between the student and instructor. It is expected that at least 80 hours of work will be done during the year, following which the mini-thesis will be

submitted to the instructor.

For more detailed information see Professors Dyer or Kronberg. The bibliography is dependent upon the topic selected.

Prerequisite: ASTA02 or two of 321, 322, 323; PHYB01; permission of instructor Session: Winter Day

ASTC10Y Relativity and Cosmology A brief review of the special theory of relativity and of the mathematical background of general relativity theory. General relativistic field equations in free space and in the presence of matter, gravitational radiation, cosmological theories and observations. Prerequisite: PHYB01 Session: Winter Day C.C. Dyer

Courses Not Offered in 1989-90

ASTB02H Practical Astronomy
Prerequisite: ASTA02 or
ASTA03; PHYA03; MATA26
or (MATA55)

ASTB04F Quantitative Cosmology

Prerequisite: ASTA03Y, or ASTB03S

Biological Sciences

Associate Chair: TBA From its early beginnings as a descriptive science, biology has developed, particularly in the last few decades, into a sophisticated experimental science employing other basic sciences such as chemistry, physics, and mathematics. Modern biology includes the study of structure and function of all living organisms, including man. Within biology various core areas may be distinguished: morphology and structure (anatomy), taxonomy, physiology, biochemistry, genetics and evolution, and ecology. In addition to their fundamental significance, certain of these areas are central to understanding and solving many problems currently confronting mankind.

Four Programmes in Biology are offered. (1) Three Specialist Programmes: for students wishing to concentrate in the biological sciences. These Programmes cover core areas of Biology and require a number of courses in cognate disciplines. NOTE - it is possible for

students to take the introductory mathematics and physics courses (or in the case of the Ecology and Environmental Programme - mathematics and physics, geography, or geology courses) in the second, third, or fourth years of the Programme. (2) The Major Programme: for students interested in Biology but wishing to combine it with other areas of interest.

Supervisors and other staff members should be consulted if you have questions about your Programme in Biology, or the year-to-year sequence of courses.

Major Programme in Biological Sciences

Supervisor: TBA

This Programme must include BIOA03Y plus 6 full-course equivalents in Biology. Note that at least I full-course equivalent must be in animal science and I fullcourse equivalent in plant science. (The following are the plant science courses: BIOB06Y, BIOB39F, BIOB40S, BIOC07S, BIOC37F, BIOC38S, BIOC46S, BIOC47F, BIODIOS, BIOD11F, BIOD12H, BIOD17F. BIOD30S).

Note that B, C, and D level courses can be taken in any year after the first, subject to the fulfilment of the necessary prerequisites.

- 1 BIOA03Y
- 2 At least six full-course equivalents (unspecified) from the following groups: (Note that at least 0.5 fullcourse equivalent must be taken from each group and that courses with an * can be used to fulfil this requirement in only one group). Group 1. Evolution, Structure, and Diversity: BIOB25F*, BIOB26S, BIOB32F, BIOB39F, BIOB40S, BIOC29F, BIOC30S, BIOC37F*, BIOC38S, BIOC60S. Group 2. Physiology and Biochemistry: BIOB02Y, BIOB06Y, BIOB17Y, BIOC31S*, BIOC48F*, JBCC35Y, JBCC36H, BIOD12H, BIOD30S. Group 3. Ecology and Environmental Biology: BIOBO3S, BIOB12Y, BIOB14F, BIOB28S**, BIOC03F, BIOC07S, BIOC16S, BIOC19F, BIOC33S, BIOC46S, BIOC47F, BIOC50F, BIOC52F, BIOD10S, BIOD11F, BIOD13F, BIOD15F. Group 4. Genetics and Cell Biology: BIOB05Y, BIOB23Y, BIOB25F*, BIOC31S*, BIOC37F*, BIOC48F*, BIOC20Y, BIOC51F, BIOD05S, BIOD17F, BIOD19S, BIOD20H.

fulfil the half course requirement in Ecology and Environmental Biology,

Specialist Programme in Biological Sciences

Supervisor: TBA

This Programme must include the following 14 full-course equivalents of which at least one should be in the Plant Sciences (see Major Programme for a list of Plant Science courses) and at least three must be at the C or D levels (0.5 must be at the D level). Note that courses at the B, C, or D levels may be taken in any year after the first, subject to the fulfilment of the necessary prerequisites.

- BIOAO3Y
- At least one full-course equivalent in Evolution, Structure, and Diversity: BIOB25F, BIOB26S, BIOB32F, BIOB39F, BIOB40S, BIOC29F, BIOC30S, BIOC37F, BIOC38S, BIOC60S.
- 3 At least one full-course equivalent in Function: BIOB02Y, BIOB06Y, BIOB17Y, BIOC31S, BIOD12H, BIOD30S.
- 4 At least one full-course equivalent in Ecology and Environmental Biology: BIOB03S, BIOB12Y, BIOB14F, BIOB28S, BIOC03F, BIOC07S, BIOC16S, BIOC19F, BIOC33S, BIOC46S, BIOC47F, BIOC50F, BIOC51F, BIOC52F, BIOD10S, BIOD11F, BIOD13F, BIOD15F.
- 5 At least one full-course equivalent in Cell and Molecular Biology: BIOBOSY, BIOB23Y, BIOC20Y. JBCC35Y, JBCC36H, BIOC48F. BIODOSS, BIOD17F, BIOD19S, BIOD20H.
- 6 Five other full-course equivalents in Biology (unspecified). Note that BIODOLY or BIODO2Y can be used in filling this requirement.
- 7 Three full-course equivalents in cognate disciplines: CHMA02Y PHYA03Y MATA26Y or MATA27Y or MATA55Y
- 8 One full-course equivalent from Humanities or from the BJP courses (Joint Biology-Philosophy).
- 9 It is recommended that Biology Specialists take a course in Computer Science such as CSCA04H or CSCA56F/S.

Specialist Programme in Cell and Molecular Biology

Supervisor: TBA

This programme must include the following 14 full-course equivalents of which at least 3 must be at the C or D levels (0.5 must be at the D level). Note that courses at the B. C. or D levels can be taken in any year after the first, subject to the fulfilment of the necessary prerequisites.

- 1 BIOAO3Y
- 2 Five full-course equivalents as fol-BIOB02Y; BIOB05Y; BIOC20Y: JBCC35Y; JBCC36H or BIOD20H: BIOC48F or BIOD19S. Courses from the above which are not used to fulfil the requirement of the five full-course equivalents in category 2 may be used to fulfil the requirement of three full-course equivalents in category 3 below. Three full-course equivalents from
- the following: BIOBOGY or BIOB17Y; BIOB23Y; BIOB25F or BIOC37F; BIOD05S; BIOD17F, BIOD01Y or BIOD02Y. Courses from the following St. George offerings may be taken to satisfy 1.5 full-course equivalents of the 3 full-course equivalents required for this category: JBM351Y, JBM353Y, MPL334Y, any MPL400 series course, any BCH400 series course, or any MGB course. Students who wish to enrol in courses offered on the St. George campus should note that entry into many of these courses will be by bal-
- 4 Four full-course equivalents in cognate disciplines: CHMA02Y CHMB05Y PHYA03Y MATA26Y or MATA27Y or MATA55Y
- One full-course equivalent from the Biology course offerings at Scarborough Campus not listed above. BIOC60S (0.5 full-course equivalent) is recommended.
- 6 It is strongly recommended that students take a statistics course.

Specialist Programme in Ecology and Environmental Biology

Supervisor: TBA

This Programme must include the following 14 full-course equivalents of which at least 3 must be at the C or D levels (0.5 must be at the D level). At least 1 full-course equivalent must be in animal science and I full-course equivalent in plant science (see Major Programme for list of plant science courses). Note that B, C or D level courses can be taken in any year after the first, subject to the fulfilment of the necessary prerequisites. 1 BIOA03Y

- 2 Five full-course equivalents in Ecology and Environmental Biology of which the following 2 full-course equivalents are mandatory: BIOB12Y. BIOB28S and BIOC60S; and 3.5 fullcourse equivalents from the following groups with at least 0.5 fullcourse equivalent from each group: Group 1: BIOC07S, BIOC46S, BIOC47F. BIOD10S, BIOD11F. Group 2: BIOC16S, BIOC19F, BIOD13F, BIOD15F. Group 3: BIOB03S, BIOB14F, BIOC03F, BIOC33S, BIOC50F, BIOC52F.
- 3 Two full-course equivalents in Structure and Diversity: BIOB25F*. BIOB26S, BIOB32F, BIOB39F, BIOB40S, BIOC29F, BIOC30S, BIOC37F*, BIOC38S.
- 4 One full-course equivalent in Physiology and Biochemistry: BIOB02Y. BIOBOGY, BIOBITY, BIOC3 15*, JBCC35Y, JBCC36H, BIOC48F*. BIOD 12H, BIOD 30S.
- 5 One full-course equivalent in Genetics and Cell Biology: BIOB05Y. BIOB23Y, BIOB25F*, BIOC20Y, BIOC31S*, BIOC37F*, BIOC48F*. BIOC5 1F, BIOD05S, BIOD17S, BIOD19S, BIOD20H.
- Note that in the above items 3, 4 and 5 courses with an * can be used to fulfil the requirements of only one of these categories.
- 7 0.5 full-course equivalent from categories 3, 4, 5 or from BIODOLY or BIOD02Y.
- 8 Three full-course equivalents in cognate disciplines: CHMA02Y PHYA03Y or GLGA01Y or GGRA05F/S and CSCA04H MATA26Y or MATA55Y
- For those interested in pursuing Theoretical Ecology, an additional MAT course should be considered.

^{**}Note: This course cannot be used to

10 A computer science course such as CSCA04H or CSCA56F/S is also recommended.

Specialist and Major Programmes in Microbiology-Biochemistry

Supervisor: J. Silver (284-3211) Office:

These Programmes are no longer being offered, but students currently enrolled will be allowed to complete them.

BIOA03Y Introductory Biology

This course is designed for students who intend to pursue further courses in Biology or other Natural Sciences. It offers a thorough consideration of basic biological concepts as they pertain to both plants and animals. Lectures will emphasize the energetics of living systems, the transmission and functions of genes, integrative functions in plants and animals and the origin and evolution of life.

Specific topics include: the chemical constituents of cells, cell structure and function, inheritance, the structure and function of genes, early developmental processes, mechanisms of development. cellular metabolism, photosynthesis, molecular basis of muscle contraction, nerve physiology, plant hormones, evolution, basic ecology. Two one-hour lectures and one three-hour laboratory per week. Laboratory and discussion periods will supplement the lecture material.

Although this course has no prerequisites, some background in Biology and Chemistry is recommended. Exclusion: (NSCA02) Session: Winter Day The Faculty

BIOB02Y Basic Microbiology

The general properties of bacteria, fungi and viruses, their structure, function and relationship to man, employing selected organisms to demonstrate their significance in industry, research and the health sciences. Laboratories include practical training in basic microbiological techniques.

To gain awareness of the world of microorganisms, their physiology, genetics, structure, and importance in medicine, industry and the environment. To obtain proficiency in the handling and growing of microorganisms in the laboratory. One two-hour lecture and

three hours of laboratory each week. Prerequisite: BIOA03 Session: Winter Day I. C. Silver

BIOBO3S Microbes in the Environment

This microbial ecology course will deal with the relationships of microorganisms: bacteria, cyanobacteria, fungi, and viruses, to their environments. As customary in microbial ecology, the course will be both organism and habitat oriented.

Major topics will include the role of microbes as biogeochemical agents (organic matter and nutrient cycling) in both terrestrial and aquatic environments; as specific pathogens, producers of specific antagonistic and stimulating factors, and as symbionts.

Other topics will include bacteria as primary producers in unusual environments e.g., deep-ocean hydrothermal vents; and the significance of degradation processes carried out by bacteria in the context of oil spills and other environmental hazards. Two one-hour lectures/week; problem sets. Prerequisite: BIOA03 Corequisite: BIOB02 Session: Winter Day C. Nalewajko

BIOBO5Y Genetics

A lecture and laboratory course in basic genetics and cytogenetics, with examples chosen from work on bacteria, fungi, Drosophila and vertebrates, including man.

Topics include: Mendel's principles, linkage, mapping, structure of genes. genetic control of protein synthesis, recombinant DNA technology and its uses.

regulation of gene activity, chromosome structure, mutation, Lectures, laboratory, problem sessions, discussion. Prerequisite: BIOA03 Session: Winter Day T.B.A.

BIOBO6Y Plant Physiology

A basic lecture and laboratory course on the general physiology of plants.

The green plant as a functional organism; water and salt uptake and translocation, water loss; mineral nutrition, carbohydrate, protein and lipid metabolism. Enzymology. Photosynthesis and respiration. Growth and development of plants. The objective of this course is to introduce the student

to the science of plant physiology, and to provide a training in laboratory techniques and the presentation of scientific data in this field. Lectures and laboratory work.

Prerequisite: BIOA03 Session: Winter Day G. F. Israelstam

BIOB12Y Fundamentals of Ecology

The scientific study of the interactions that determine the distribution and abundance of organisms. A course intended to promote the development of an ecological conscience but not a course devoted to the problems of pollution and populations.

Importance of evolution in ecology; factors limiting the distribution of organisms such as adaptation, behaviour, and dispersal; attributes of populations: population estimation, life table analysis. estimation of the innate capacity for increase, and population growth; species interactions: competition and predation; theories of population regulation; attributes of communities; concept of the community, species diversity, community patterns and classification succession and climax; concept of the ecosystem; biomes of the world; community energetics; community nutrition; other topics of general ecological interest. Prerequisite: BIOA03 Session: Winter Day

R. Boonstra

BIOB14F Environmental Biology

A course designed to explore the biological consequences of major selected problems facing Canada and the World which are a direct consequence of human activities. Each of the problems addressed will deal with the causes, the effects, and the potential solutions. A short introduction section in the course will discuss a number of ecological principles that apply to communities in order to set the stage for interpreting the implications of these problems. The following will be among the topics discussed: sustainable development, the pesticide problem, the acid rain problem. the potential impact of increasing carbon dioxide levels on world climate, conservation and extinction of plants and animals, deforestation of the tropics and the human population problem. Two one-hour lectures per week, plus tutorials every week.

Prerequisite: BIOA03 Session: Winter Day R. Boonstra

BIOB17Y Animal Physiology

The function of cells and of the organ systems which have evolved to control the environment of the individual cell within the organism. Topics include: (i) body fluids and circulation, (ii) ionic and osmotic balance, (iii) excretion, (iv) gas exchange, (v) nerve and muscle physiology. First term - nutrition, gas exchange, gas transport, heart and circulation. excretion, osmoregulation. Second term nerves and bioelectricity, synapses and integration, muscle and neuromuscular systems, sense receptors and C.N.S., hormones. Lectures and laboratory work. Prerequisite: BIOA03 Session: Winter Day

BIOB23Y Developmental Biology The study of morphological change and underlying molecular and cellular processes which occur during the life history of an organism. An analysis of development in a variety of multicellular organisms. Particular reference will be given to the concept that regulation of gene activity is fundamental to develop-

In the Fall term and the first half of the Spring term the principles of animal development are dealt with. The following model systems are employed erythropoiesis, lens development, spermatogenesis, myogenesis, frog metamorphosis and carcinogenesis. In the last half of the second term aspects of plant development will be discussed.

Topics will include: seed germination, meristems and hormonal and environmental effects on plant development. Lectures and laboratory work, Prerequisite: BIOA03 Session: Winter Day I. R. Brown and T.B.A.

BIOB25F Vertebrate Histology: Cells and Tissues

The structure of cells and the various tissue types which make up the vertebrate body: epithelial, connective, muscle, nervous, blood, and lymphatic with emphasis on their involvement in form and function. Two one-hour lectures and three hours of laboratory per week. Prerequisite: BIOA03 Exclusions: (BIOB27) Session: Winter Day J. H. Youson

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BIOB26S Vertebrate Histology:

Biological Sciences

The histological structure of the major organ systems of the vertebrate body (integument, digestive, respiratory, excretory, reproductive, and endocrine) with particular emphasis on functional morphology, evolution, and development. Two one-hour lectures and three hours of laboratory per week. Prerequisite: BIOA03, BIOB25 Exclusion: (BIOB27) Session: Winter Day J. H. Youson

BIOB28S Elementary Statistics for Biologists

The course is intended to provide the biology student with a basic understanding of the relation between data accrued through experimentation and the statistics that are applied to describe and compare sets of data.

Students will be required to carry out statistical analysis using the "old" long-hand methods so that they have some appreciation for the basis of the statistics they obtain by utilization of statistical computer packages. Topics will include: design of experiments, normal distribution, scale transformation, mean standard deviation, standard error, chi-square, contingency, student's t-test, partial and multiple regression and analysis of variance.

Two hours of lecture and one hour of tutorial per week. Problem sets will be assigned weekly.

Exclusions: PSYB07, PSYC08 (PSYB08), GGRB31, SOCB06, ECOB11, ECOB12, STAB22

Session: Winter Day 1. M. Campbell

BIOB32F Vertebrate Morphogenesis

A lecture and laboratory course on comparative morphogenesis of the vertebrates, dealing with their evolution and their anatomical and functional specializations as expressions of their responses to environmental challenges and selection pressures. Beginning with ancestral vertebrates, the evolutionary pathways leading to the more highly evolved and extant vertebrates will be examined. Laboratory work includes study of prepared material and dissection of representative preserved specimens.

Prerequisite: BIOA03 Exclusion: (BIOB22) Session: Winter Day A. H. Weatherley

BIOCO7S Phytogeography of Canada

An examination of the bioclimates and vegetation of Canada and the adjacent U.S. with emphasis on the major ecosystems (tundra, boreal and temperate forests, Pacific-Cordilleran complex, grasslands and parklands) and their responses in time to glacial-interglacial oscillations in climate.

Three one-hour lectures per week. Offered in alternate years. Prerequisite: BIOA03 Session: Winter Day J. C. Ritchie

BIOC16S Marine Biology: Habitats and Communities*

A course in selected topics of marine biology. Topics will include origins of the oceans: waves, tides and currents; historic marine expeditions, planktonic, intertidal, shallow and deep sea plants and animals and their adaptations: oceanic food chains, the structure of benthic communities and marine zoogeography; traditional aspects of marine invertebrate, fish and cetacean harvesting versus aquaculture and conservation; marine pollution, and man in the sea. Two hours of lectures per week plus bi-weekly tutorials. Offered in alternate years with BIOD15F (River Ecology). Limited enrolment: 20, Prerequisite: BIOC29 (BIOB08) or permission of instructor. Session: Winter Evening D. D. Williams

*In the 1989-90 session, the course will be held during reading week at the Bermuda Biological Station and will have a considerable practical component. Interested students must contact the instructor in the first week of the fall term for details and must be prepared to place a deposit towards the cost of travel and accommodation.

BIOC19F Limnology

Limnology, a branch of ecology which deals with lakes, may be defined as the study of relationships between organisms in a lake, and of interactions between organisms and their environment. The structure and function of normal lake ecosystems will be examined with the objective of gaining insight into responses of lakes to man-made perturbations such as overfishing, eutrophication and acidification.

One two-hour lecture per week;

problem sets. Text: Limnology by R. G. Wetzel, Saunders College Publishing. Prerequisite: BIOB03 Session: Winter Day C. Nalewaiko

BIOC20Y Cell Biology

This course will focus on both structural and functional aspects of cells. Topics to be covered include: the structure and function of cellular organelles, the cytoskeleton, organelle biogenesis, the cell cycle, membrane transport and cellcell interactions. These topics will be discussed with regard to insights obtained from various approaches including microscopy and molecular biology. Two hours of lectures per week. Prerequisite: One full-course equivalent from the following: BIOB02Y, BIOB05Y, BIOB23Y, BIOB25F (BIOB27Y), BIOB26S (BIOB27Y), BIOC37F (BIOB13Y), BIOC38S (BIOB13Y) or JBCC35Y (JBCB35Y). JBCC35Y may be taken concurrently. Exclusion: (BIOB20) Session: Winter Day

T.B.A., R. Dengler, J. Youson

BIOC29F Invertebrate Zoology

A general survey of the invertebrate animals (Protozoa-Urochordata), excluding the Arthropods, with emphasis on those groups of numerical, evolutionary and medical importance, Lectures and laboratories will cover classification and study of diversity within groups, with emphasis on functional morphology and evolution. Living specimens and technical films will form an important part of laboratories.

Two one-hour lectures and three hours of laboratory work per week. Field trip.

Prerequisite: BIOA03 Exclusion: (BIOB08) Session: Winter Day D. D. Williams

BIOC30S The Arthropoda

The phylum Arthropoda contains the most numerous and successful of all invertebrate animals. The phylum includes such familiar organisms as insects, crabs, lobsters, barnacles, ticks, spiders, scorpions, centipedes and trilobites. The course will cover functional morphology and evolution of aquatic and terrestrial forms, classification, ecology and behaviour of important groups. Live specimens and technical films will be included in laboratory work.

Two one-hour lectures and a threehour lab per week. Offered in alternate

years. Prerequisite: BIOA03, BIOC29 or permission of instructor Exclusion: (BIOB08) Session: Winter Day D. D. Williams

BIOC31S Invertebrate Neurobiology

An examination in lectures and laboratory reports of current topics on invertebrate neurobiology. These topics will revolve around the neural, synaptic and muscular mechanisms underlying certain simple behaviours and their development especially in insects, crustaceans and molluscs.

One two-hour lecture per week; laboratory work to be arranged with class.

Prerequisite: BIOA03 Exclusion: (BIOB31) Session: Winter Day C. K. Govind

BIOC33S General Biology of Vertebrates

Course considers a variety of living vertebrates in a comparative fashion in relation to their life cycles, distribution, adaptations and diversity of form and function, environmental physiology, population biology, ethology.

Practical work includes selected films, visits to zoo. There will also be required essays and seminars. Prerequisite: BIOA03 Exclusion: (BIOB22) Session: Winter Day A. H. Weatherley

JBCC35Y Introductory Biochemistry

An introductory course for students in the biological sciences, designed to introduce a broad range of biochemical topics.

Topics covered in the course will include: metabolism of sugars, amino acids and lipids and the relationship of these to the energy metabolism of the cell; the effect of hormones on cellular metabolism; structure and function of enzymes; structure and biosynthesis of nucleic acids; biosynthesis of proteins. Regulation and integration of metabolic pathways will be discussed.

The teaching method will consist of one two-hour lecture per week. The text used is: Biochemistry by L. Stryer, W.H. Freeman and Company. Prerequisites: BIOA03, CHMB05 Exclusion: (JBCB35) Session: Winter Evening 1. W. Gurd

JBCC36H Laboratory in Biochemistry

An introductory laboratory course designed to introduce students to basic experimental techniques used in biochemical research.

Biological Sciences

The course will introduce students to practical and theoretical aspects of techniques used in biochemical research, including: spectrophotometry; chromatography; radioisotopes; electrophoresis; protein fractionation; etc.

The teaching method will consist of three hours of laboratory work plus one hour of lecture each week.
Prerequisites: BIOAO3, CHMBO5
Corequisite: JBCC35 (JBCB35)
Exclusion: (JBCB36)
Session: Winter Day
TBA

BIOC46S Plant Population Ecology

The analysis of vegetation in terms of population ecology, including the following topics: demography and life tables; life cycle types; modes of reproduction; population regulation processes; competition and niche theory.

Two one-hour lectures and one three-hour laboratory per week. Offered in alternate years.
Prerequisite: BIOB12
Exclusion: (BIOB47)
Session: Winter Day
J. C. Ritchie

BIOC48F Molecular Physiology of the Bacterial Cell

A lecture and laboratory course emphasizing the molecular mechanisms of bacterial cell regulation and of cellular processes such as active transport. chemotaxis, secretion and antibiotic resistance. The biological basis of using bacterial host-vector systems in recombinant DNA technology is discussed. Laboratory exercises are researchoriented experiments involving the growth and enumeration of bacterial cells, effects of antibiotics, incorporation of radioisotopes into macromolecules and the isolation and characterization of bacterial plasmids. Gel electrophoresis, liquid scintillation counting and other research techniques are used. Limited enrolment: 32.

Prerequisite: BIOB02 Exclusion: (BIOB48) Session: Winter Day I. C. Silver **BIOC51F** Population Genetics

A discussion of biological evolutionary processes and population dynamics from the standpoint of predictive models based on the Hardy-Weinberg law.

The lectures deal with genetic variation and its source, natural selection, population fitness, inbreeding, gene drift, immigration and the process of speciation. The laboratories consist of problems in population genetics. Prerequisite: BIOA03 Corequisite: BIOB05Y or permission of instructor Exclusions: (BIOC06) (BIOB11) I. M. Campbell

BIOC52F Animal Behaviour

A detailed introduction to the study of animal behaviour. The course will emphasize the evolutionary and ecological basis of animal behaviour. Students will participate in several hands-on exercises to gain experience in the methods used to test quantitative hypotheses about the behaviour of animals in the wild.

Lecture topics include: the history of ethology; mechanisms of behaviour (genetic, neural, physiological, and developmental); animal communication; orientation and navigation; habitat selection and territoriality; foraging behaviour; the evolution of sex; parental investment and parental care; reproductive tactics; mating systems; social behaviour; human behaviour and cultural evolution. Labs will involve prepared exercises on foraging behaviour, social behaviour, mating behaviour, and antipredator behaviour using local animals in their natural habitat. Each student will also conduct an individual research project.

Two one-hour lectures and one three-hour lab per week. Limited enrolment: 20
Prerequisite: BIOA03
Session: Winter Day
J. M. Eadie

BIOC60S Evolutionary Biology

An in-depth examination of the fundamental principles of evolution. Topics include: the history of evolutionary theory; mechanisms of evolutionary change; natural selection, genetic drift, mutation and recombination; the maintenance of genetic variation; speciation and adaptive radiation; rates of evolution; phylogenetics and systematics, including the use of molecular techniques to trace evolutionary

relationships; the ecological basis of evolutionary change, coevolution; human evolution. The course will not consider population genetics in detail and will focus on conceptual, rather than mathematical, issues.

Two one-hour lectures per week and one two-hour tutorial every second week.

Prerequisite: BIOA03

Exclusions: (BIOC06) (BIOB11)
Session: Winter Day

J. M. Eadie

BJPC70F Theoretical Foundations of Biology I

An examination of the conceptual and logical aspects of explanation, theory, and model construction in biology.

The following topics will be covered: the structure of evolutionary theory; the nature of selection, fitness and adaptation; reductionism in genetics; reductionism in evolution; and the role and nature of functional explanation in biology.

Prerequisite: BIOA03 Exclusions: PHLB70, (PHLB71)

Session: Winter Day P. Thompson

BJPC71S Theoretical Foundations of Biology II

An examination of current theoretical controversies in evolutionary biology.

The following topics will be covered: the controversy over the units of selection; 'Punctuated Equilibria' as a new and general theory of evolution; culture and the evolutionary process; and cladistic versus evolutionary systematics.

Prerequisite: BJPC70 (PHLB71)

Exclusion: (PHLC71)

Session: Winter Day

P. Thompson

BIODOIY Supervised Study in Biology

An independent study course designed to permit intensive examination of the literature of a selected topic and/or laboratory or field project in biology. Supervision of the work is arranged by mutual agreement between student and instructor.

Prerequisite: Satisfactory completion of fifteen full-course equivalents, of which at least four must be Biological Science B- or C-level courses.
Exclusion: (BIOCOl) Session: Winter Members of Faculty

BIODO2Y Directed Research in Biology

Identical to BIOD01Y (BIOC01Y) but not to be taken with the same faculty member.

Prerequisite: Completion of fifteen fullcourse equivalents, of which at least four must be Biological Science B- or Clevel courses. Will require a seminar presented by the student during a Biology Research Day in the Spring. Exclusion: (BIOC02) Session: Winter Members of Faculty

BIOD11F Quaternary Vegetation and Environments

A case study examination of selected ecosystems (Circum-Mediterranean, Northern North American) in which the proxy data base will be assembled and analysed against current theories of palaeoclimatic and other environmental change during the Quaternary period. Emphasis on vegetational history.

One three-hour seminar period per week. Offered in alternate years. Prerequisites: One of QUAA03, GLGA01 or BIOA03; plus one of BIOC47 (BIOB47), GLGB02 or QUAD01 (QUAC01) Exclusion: (BIOC11)

Session: Winter Day

J. C. Ritchie

G. F. Israelstam

BIOD 12H Physiology and Biochemistry of Plant Growth and Development

A lecture and seminar course in plant growth and development. Emphasis will be placed on the mechanisms controlling growth and development.

The plant growth hormones and their mechanism of action, germination, dormancy, senescence, tropic responses, growth mechanisms, correlation effects, flowering, fruiting. Biological clock mechanisms. It is hoped to provide an in-depth understanding and to review critically the processes of growth and development in plants. It should acquaint the student with current literature on the subject, via library research, providing a sound basis for possible future research in this field. Lectures and seminars. Limited enrolment: 12. Prerequisite: BIOB06 Corequisite: JBCC35 (JBCB35) recommended Exclusion: (BIOC12) Session: Winter Day

BIOD13F Environmental Biology of Fish Populations

Fishes are among the most widely distributed and successful of vertebrates and as such offer great scope for the study of evolution, environmental physiology, ethology and ecology - which are the major themes of this course. A simplified introduction to the study of population dynamics applied to fisheries is also considered.

Prerequisite: permission of instructor Exclusion: (BIOC13) Session: Winter Day A. H. Weatherley

BIOD17F Plant Molecular Biology Plants undergo a variety of interesting developmental and environmental responses that are now beginning to be understood at the molecular level. This course will focus on aspects of molecular biology that are unique to plants. Topics to be covered include: light regulation of enzyme activity and gene expression: the chloroplast genome and its expression; interaction of chloroplast and nuclear genomes in chloroplast biogenesis; nitrogen fixation in cyanobacteria and higher plants; genetic engineering of plants.

In addition to lectures by the instructor, students will give oral presentations based on current journal articles.

Prerequisites: BIOC20 or JBCC35 (IBCB35) or BIOB05 Session: Winter Day T.B.A.

BIOD19S Molecular Biology of the Gene

The basic concepts of the molecular biology of the gene - key experimental observations. Main topics will include the structure and function of genes and mechanisms regulating gene expression. This lecture and laboratory course will indicate how recent advances in genetic engineering have permitted great strides to be made in increasing our basic knowledge of the molecular biology of the gene. The course will demonstrate how recent research activity utilizing recombinant DNA technology has advanced our understanding of areas such as human genetic diseases, the molecular functioning of the brain and the production of molecules useful in medicine and agriculture. Students will receive laboratory experience in the use of a range of molecular biology techniques.

Lab sections will meet once every three weeks for a 9 a.m. to 5 p.m. session. Limited to 40 students. Prerequisites: BIOBO5 or JBCC35 (JBCB35) Exclusion: (BIOB19) Session: Winter Day I. R. Brown

BIOD30S Physiology of Algae

Algae are a heterogenous group, ranging in size from about one micrometer to several meters, in morphology from simple unicells to elaborate seaweeds, and in physiology, from exclusively photosynthetic organisms to forms which resemble bacteria and animals in their nutrition. The crucial role of algae as primary producers in aquatic environments has motivated intensive investigations of their physiology.

Course content: Kinetics of growth in culture (batch cultures, chemostats and turbidostats); effects of environmental variables on photosynthesis, respiration, photorespiration, and growth; heterotrophy, osmoregulation; survival and growth in extreme environments. One two-hour lecture and three hours of laboratory/week. The laboratory work involves about five research-style experiments. Limited enrolment: 25. Prerequisites: BIOB03

Exclusion: (BIOB49) Session: Winter Day C. Nalewajko

Courses Not Offered 89/90

IRHRO IV Introduction to Biological

JEILEGE I	minograciton to protogreat
	Sciences
	Exclusion: (NSCA02)
BIOB39F	Comparative Morphology of
	Fungi, Algae and Bryo-
	phytes
	Prerequisite: BIOA03
	Exclusion: (BIOB24)
BIOB40S	Comparative Morphology of
	Vascular Plants
	Prerequisite: BIOA03
	Exclusion: (BIOB24)
BIOC03F	Ecology Field Course
	Prerequisite: BIOB12
BIOC37F	Plant Structure and
	Development: Cells and Tis-
	sues
	Prerequisite: BIOA03
	Exclusion: (BIOB13)

			C	anadian Studies 6
BIOC38S	Plant Structure and		FREB38F/	
	Development: Organs Prerequisite: BIOA03,		FREB43F/	Canada S French Language in Canada
	BIOC37 or permission of instructor Exclusion: (BIOB13)	3	HISB04Y	Introduction to Cana- dian History
BIOC47F	Plant Community Ecology	4	One of th	e following:
<i>D.</i> OC 171	Prerequisite: BIOB12 Exclusion: (BIOB47)		ANTB16Y	
BIOC50F	Ecology of Arid Regions Prerequisite: BIOA03		POLB50Y	and Politics
BIOD05S	Advanced Genetics Prerequisite: BIOB05		ENGB07Y	English
	Exclusion: (BIOC05)	_	SOCB13Y	
BIOD 10S	Principles and Methods of	5		one-half further full-course
	Pollen Analysis			its from the groups A, B and elow. The selection must
	Prerequisite: One of			t least one full-course
	(QUAA03), GLGA01 or			nt from each of the groups.
	BIOA03; plus one of			sk indicates a course for
	BIOC46, BIOC47 (BIOB47),			ere is a prerequisite; check
	GLGB02 or (QUAD01)			calendar entry for the
	(QUACO1).			ot all B-, C- and D-level
BIOD LEE	Exclusion: (BIOC11) River Ecology			re offered each year.
BIOD 15F	Prerequisite: BIOB12 or	C	roup A	ire officied each year.
	BIOC29 (BIOB08) or permis-		RABO6Y	Canadian Drama
	sion of instructor.		NGB07Y	Canadian Literature in
BIOD20H	Techniques in Cell Biology		,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	English
BIODZOII	Prerequisite: BIOC20 and	FI	NGB25F/S*	
	permission of instructor.		NGC07F*	Canadian Poetry in English
	permission of matroctors		NGC02Y*	Canadian Fiction in English
			NGD07Y	Contemporary Canadian Literature
Canadi	ian Studies	F.	ARB60Y	The Arts in Canada: 1670 to 1960
			ARC19Y*	The Canadian Landscape
The College	e offers a large number of		ARB62F/S	Recent Canadian Art
courses co	ncerned with Canadian insti-		REB10Y*	Language Practice
tutions, so	iety, and culture, the pre-	F	REB22S*	The Society and Culture of
history and	l history of Canada, and its			French Canada I

history and history of Canada, and its geography and physical environment. The College Programme in Canadian Studies encourages students to work in various disciplines and divisions of the College in order to understand the distinctive approaches of those disciplines to the study of Canadian life and culture.

College Programme in Canadian Studies

Supervisor: I.R. Robertson (284-3182) Students must select nine full-course equivalents as follows:

Language Practice I 1 FREATOY (or FREA06Y followed by FREA 10Y)

2 One of: FREB36F/S French-Canadian Novel to 1945

French-Canadian Novel FREB37F/S since 1945

French Canada I The Society and Culture of FREB23S* French Canada II French-Canadian Novel to FREB36F/S 1945 French-Canadian Novel FREB37F/S* since 1945 FREB38F/S* Theatre of French Canada FREB43F/S* French Language in Canada FREC39F/S* French-Canadian Poetry MUSC09F/S* Canadian Music Group B Cultures of Modern Canada ANTB16Y Canadian Native Peoples ANTB21Y* Prehistory of North America ANTB38Y* ANTC28F/S* Prehistoric Archaeology of Canada ANTC30F/S* Biological Anthropology of Past and Present Canadian Native Peoples HISC42Y* French Canada: Origins to the Present

HISC43Y*	The Evolution of Ontario
HISC46Y*	1850-1950 Atlantic Canada
HISC47Y*	The Canadian Left, 1867-
	Present
HISC48Y*	The History of the Canadian Mosaic
HISC49F/\$*	Canada Between the World Wars
HISD41F/S*	Wars Old Huronia
HISD45Y*	History of Canadian Social,
11130431	Political, and Historical
	Thought
POLB50Y	Introduction to Canadian
220001	Politics
POLB51F/S*	Government and Politics in
	Ontario
POLB52Y*	Canadian Constitution
POLB53F/S	Public Policies in Canada
POLB61F/S	Canadian Public Administra-
	tion: Institutions and
	Processes
POLB62F/S	Public Policy-Making
POLC50Y*	Canadian Problems in Com-
	parative Perspective
POLC54F/S*	Intergovernmental Rela-
DO! GE !!!	tions
POLC55Y	Comparative Provincial
DOLCGIE/C+	Government
POLC61F/S*	Policy Development and
DOLCO AVE	Political Evaluation
POLC84Y* POLD51F/S	Canadian Foreign Policy
LOFD311/2	Topics in Canadian Govern- ment
POLD65F/S*	Topics in Canadian Leader-
TOLDOJI73	ship
POLD71Y*	Canadian Political Ideas
SOCB13Y*	Canadian Society
SOCB20Y*	Ethnic and Race Relations
SOCB23Y*	Population
SOCC24F/S*	
3000241/3	Changing Family Life in Canada
SOCC25F/S	Comparative Race Relations
SOCC27F/S*	Social Class in Canadian
	Society
SOCC34Y*	Sociology of Mass Media
	and Communications
Group C	
ECOA01Y	Introduction to Economics
ECOC31F/S*	Economics of the Public
	Sector: Taxation
ECOC32F/S*	Economics of the Public
	Sector: Expenditure
ECOB35F/S*	Public Decision Making
ECOC37F/S*	Law and Economics
ECOC45F/S*	Poverty and Income Distri-
	bution
ECOC62F/S*	International Economics:
FCORCUS	Trade Theory
ECOB81Y*	North American Economic

History

JCEC54F/S	Industrial Relations
COMC15Y*	Income Tax
GGRB01Y*	Geography of Resources
GGRB05Y*	Urban Geography
GGRB13Y	Modern Urban Landscapes
GGRB17Y*	Rural Geography
GGRC04F/S*	Urban Residential Geogra- phy
GGRC31F/S*	Development and Planning of Metropolitan Regions
GGRC34F/S*	Landscape Interpretation
(QUAA03Y)	(Ice Ages and Human Ecology)
BIOB12Y*	Fundamentals of Ecology
BIOC07F/S*	Phytogeography of Canada
BIOC46F/S	Plant Population Ecology

It should be noted that there are supervised reading courses at the C- and Dlevel in many disciplines. If these are concerned with Canadian material, they may be included in the above listing of courses. However they normally require several prerequisites and approval from the discipline representative before they can be undertaken.

Chemistry

Discipline Representative: A. Walker 284-3319

Chemistry can be viewed as both a challenging intellectual pursuit and a powerful, practical tool for developing the resources of our contemporary society. The Chemistry Handbook outlines the teaching and research activities of the Chemistry faculty and offers a wide range of informal advice on undergraduate activities. A sound knowledge of the fundamental concepts of chemistry is useful to any student in the Physical or Life sciences.

The basic course in chemistry is CHMA02 which must be taken by those who wish to take further chemistry courses or who require chemistry for another science.

Completion of CHMA02 permits students to take any of the B-level courses in Chemistry. These are divided according to the following subdisciplines: Inorganic Chemistry (CHMB01), Analytical Chemistry (CHMB02), Physical Chemistry (CHMB03) and Organic Chemistry (CHMB05). Thereafter, one can proceed to the following advanced-level courses: CHMC01 (Inorganic), CHMC02 (Physical), CHMC03 (Organic) and JBCC35(JBCB35Y) (Biochemistry).

For those who wish to enrol subsequently in St. George 400-series courses, completion of the following groups of courses, together with their corequisites and prerequisites, will ensure admission to the St. George courses indicated, provided that B standing or permission of the instructor is obtained.

To Enter	Complete
St. George Series	Scarborough Courses
420	CHMA02; CHMB03;
	CHMC02
430	CHMA02; CHMB01;
	CHMB02; CHMC01
440 (except 447)	CHMA02; CHMB05;
· •	CHMC03

NOTE: TIMETABLING CONSTRAINTS USUALLY PRECLUDE SCARBOROUGH C-LEVEL AND ST. GEORGE 400-LEVEL COURSES BEING TAKEN IN THE SAME YEAR.

While courses in Physics do not appear among the prerequisites or corequisites of most courses in Chemistry, students are urged to take PHYA03 early in their programmes. Thus, the suggested firstyear programme in Chemistry includes CHMA02, MATA26 and PHYA03.

Completion of a Specialist or Major Programme in Chemistry can lead to a number of career opportunities in industry, research, teaching, and government. Students who are interested in these Programmes are urged to consult with the supervisors early in their academic careers.

Specialist Programme in Chemistry Supervisor: A. Walker 284-3319. This is the most general of the Specialist Programmes and provides the student with a firm basis in each of the chemis-

try subdisciplines.

Students should complete the following fourteen required courses:

First year: CHMA02Y MATA26Y

General Chemistry Calculus

Physics for the Physical and PHYA03Y

Life Sciences

Second and Third years:

CHMB01Y Inorganic Chemistry I CHMB02Y Analytical Chemistry

СНМВОЗҮ	Physical Chemistry I
CHMB05Y	Organic Chemistry 1
CHMC01Y	Inorganic Chemistry II
CHMC02Y	Physical Chemistry II
CHMC03Y	Organic Chemistry II
MATB41F	Techniques of the Calculus of Several Variables I
MATB42S	Techniques of the Calculus of Several Variables II

In addition, three more full-course equivalents in Chemistry, including at least two full-course equivalents selected from the CHMD40 - 50 series and the 400 level courses at the St. George Campus. At least one full-course equivalent must be taken at St. George from the 400 level, CHM325H (Macromolecular Chemistry) or CHM319H Introduction to Instrumental Methods of Analysis.

Specialist Programme in Chemistry and Biochemistry

Supervisor: A. Walker 284-3319. This Programme places greater emphasis on the biological aspects of chemistry and is offered for students who are primarily interested in chemistry but who also want to study the chemistry of living systems.

Students should complete the following fifteen courses:

NOTE: COMMENCING SEPTEMBER 1. 1988, ENTRY TO ALL FOURTH YEAR **BIOCHEMISTRY COURSES WILL BE BY** BALLOT ONLY.

First year: CHMA02Y General Chemistry BIOA03Y Introductory Biology MATA26Y Calculus PHYA03Y Physics for the Physical and Life Sciences

Second and Third years: CHMB01Y Inorganic Chemistry I Analytical Chemistry CHMB02Y CHMB03Y Physical Chemistry I CHMB05Y Organic Chemistry 1 IBCC35Y Introductory Biochemistry JBCC36H Laboratory in Biochemistry CHMC01Y Inorganic Chemistry II CHMC02Y Physical Chemistry II CHMC03Y Organic Chemistry II MATB41F Techniques of the Calculus of Several Variables I MATB42S Techniques of the Calculus of Several Variables II

In addition, CHM447S (St. George) or

BCH424S (St. George), two additional CHM full-course equivalent selected from the C- or D- level or 300 - 400 series (St. George), or 400 series BCH courses.

NOTE: In addition to the courses noted above an additional Biology course is recommended. BIOD19S, BIOB17Y, BIOB02Y, BIOB06Y are particularly appropriate for this Programme.

Specialist Programme in Chemical Physics

Supervisor: S. Fraser 284-3227. This Programme offers students interested in both Chemistry and Physics the opportunity to combine their studies in the Specialist Programme. For the first two years the course of studies also satisfies the Chemistry Specialist Programme requirements.

Students should complete the following fifteen courses and are urged to include MATA04Y at an early stage in their Programme.

First year:

MATC51F

PHY351H

CHMA02Y General Chemistry PHYA03Y Physics for the Physical and

Life Sciences MATA26Y Calculus

Second and Third years: CHMB01Y Inorganic Chemistry I Physical Chemistry I CHMB03Y CHMB05Y Organic Chemistry I Techniques of the Calculus MATB41F of Several Variables I Techniques of the Calculus MATB42S of Several Variables II Physical Chemistry II CHMC02Y PHYB01S Electricity and Magnetism Introductory Electronics PHYB03F PHYB04F Waves and Vibrations PHYB08H Intermediate Physics Laboratory

Fourth year: Four full-course equivalents must be taken as follows: 1. one CHM420 full-course equivalent from the St. George Campus; 2. one, one and one half, or two fullcourse equivalents in third year physics. from the following two-campus menu: at Scarborough PHYC04F, PHYC05H, PHYCO7F, PHYCO8S*, PHYCO9S, and at St. George the set of physics 300 courses and half-courses: 3. the remaining courses or half courses

(to make not less than four full-course

Differential Equations I

Classical Mechanics

equivalents) from fourth year physics only, or third or fourth year physical chemistry, or third or fourth year mathematics.

N.B. One full-course equivalent is 1 course, or 2 half-courses. * Not offered in 1989/90.

Students are urged to consult with the Supervisor early in the Programme.

Major Programme in Chemistry Supervisor: K. Henderson/A. Verner 284-3133

This is the most general Major Programme offered. With its wide selection of options, it offers the possibility of obtaining an introduction to all of the subdisciplines of chemistry.

Students should complete the following eight courses:

First year:

CHMA02Y General Chemistry

MATA26Y Calculus

MATA27Y Techniques of Calculus PHYA03Y Physics for the Physical and Life Sciences

Second and Third years: One of the following sets of options must be taken:

Inorganic/Organic

CHMB01Y	Inorganic I
CHMB02Y	Analytical
CHMB05Y	Organic I
CHMC01Y	Inorganic II
CHMC03Y	Organic II

Physical Organic

CHMB03Y	Physical I
CHMB05Y	Organic I
MATB41F	Techniques of the Calculus
	of Several Variables I
MATB42S	Techniques of the Calculus
	of Several Variables II
CHMC02Y	Physical II
CHMC03Y	Organic II

Physical Inorganic

CHMB01Y CHMB02Y CHMB03Y MATR41E	Inorganic I Analytical Physical I Techniques of the Calculus
MATB41F	Techniques of the Calculus of Several Variables I

MATB42S Techniques of the Calculus of Several Variables II

one of

CHMC01Y Inorganic II CHMC02Y Physical II

Chemistry

CHMB01Y	Inorganic I	
CHMB02Y	Analytical	
CHMB03Y	Physical I	
CHMB05Y	Organic I	
One C-level Chemistry course*		
* Students should note that if they are		
going to select CHMC02Y, MATB41F and		
MATB42S are required as prerequisites.		

Major Programme in Biochemistry Supervisor: K. Henderson/A. Verner 284-3133

This Programme places a greater emphasis on the biological aspect of chemistry than does the general Chemistry Major Programme. It is offered for students who are primarily interested in chemistry but also want to study the chemistry of living systems.

Students should complete the following seven and one-half courses:

First year:

CHMA02Y	General Chemistry
MATA26Y	Calculus
OF	

Techniques of Calculus MATA27Y BIOA03Y Introductory Biology

Second and Third years:

CHMB05Y	Organic Chemistry I
CHMC03Y	Organic Chemistry II
JBCC35Y	Introductory Biochemistry
IBCC36H	Laboratory in Biochemistr
and one full-	course equivalent selected
from:	• •
CHMBOOV	Analytical Chamistry

Analytical Chemistry CHMB03Y* Physical Chemistry I BIOB02Y Basic Microbiology BIOB 17Y General and Comparative Physiology

* Students should note that if they are going to elect CHMB03Y, they must take PHYA03Y and MATA26 or MATA27 as prerequisites.

CHMA02Y General Chemistry

Nuclear chemistry, atomic and molecular structure, ionic solids, bonding in organic compounds; states of matter and equations of state; thermo-chemistry; chemical equilibrium in the gas phase and in solutions; reaction kinetics.

The course includes the quantitative description of gases, solids and solutions and develops ideas of bonding and structure in chemical compounds based on Lewis structures, VSEPR and simple molecular orbital theory. Reactions and equilibria in chemical systems are explored through their thermodynamic properties and chemical kinetics. Time permitting, descriptive topics such as introductory organic chemistry are used to round out the course. Two lectures per week and one four-hour laboratory every second week.

Prerequisite: OAC Chemistry (or Grade 12 Chemistry and permission of instructor): OAC Calculus.

Corequisite: NONE: But MATA26Y or MATA27Y are strongly recommended and are required for some higher level chemistry courses.

Session: Winter Day

CHMB01Y Inorganic Chemistry I Atomic and molecular structure, includ-

ing energy levels, bonding, electronegativity, lattice energies, heats of formation and hydration. Oxidation state diagrams. Chemistry of hydrides, halogens and selected topics in main group elements.

The further development of the ideas of structure and bonding introduced in CHMA02Y. The nature of bonding in covalent, ionic and coordination compounds. Thermodynamic and kinetic considerations in compound formation. The use of these concepts to rationalize the descriptive chemistry of the periodic table with special emphasis on the main group elements. Two lectures and one additional period per week to be used for supplementary or remedial work as required.

Prerequisite: CHMA02 Session: Winter Day

CHMB02Y Analytical Chemistry

To introduce the principles and methods of chemical analysis and to provide practical experience in the techniques employed in a chemistry laboratory.

The course consists of two main divisions: classical wet quantitative analysis and modern instrumental

analysis. The classical methods employed include gravimetric and volumetric analyses. The instrumental section will introduce the techniques of various spectrophotometric and electrochemical methods of analysis as well as chromatographic and other separatory techniques. One hour of lectures and six hours of laboratory per week. Prerequisite: CHMA02

Other recommended courses: CHMB01 Session: Winter Day

CHMBO3Y Physical Chemistry I Introduction to Physical Chemistry, including thermodynamics, electrochemistry and colloid chemistry, quantum mechanics, spectroscopy and chemical kinetics.

The course starts with a thermodynamic description of chemical behaviour. The basic laws of thermodynamics and their applications to a wide variety of contemporary problems including spontaneous processes, chemical equilibria, phase equilibria, electrochemistry and colloid chemistry are emphasized.

The kinetic theory of gases provides the major emphasis for the 2nd quarter. This is followed by an introduction to the quantum mechanical principles which govern the internal structure of atoms and molecules. The term ends with a treatment of chemical kinetics.

Two lectures a week.
Prerequisite: CHMA02; MATA26 or
MATA27*; PHYA03

* Students are strongly urged to take MATA26.

Corequisite: MATB41 and MATB42 are strongly recommended but not required. See CHMC02 Physical Chemistry II, however.

Session: Winter Day

CHMB05Y Organic Chemistry I

The chemistry of the principal functional groups encountered in aliphatic and aromatic compounds, interpreted in terms of reactivity, stereochemistry and reaction mechanisms. An introduction to organic spectroscopy will also be given.

The fundamentals of organic chemistry, including aliphatic and aromatic chemistry and an introduction to the chemistry of biologically important molecules such as proteins and carbohydrates. Two lectures per week and a four-hour laboratory every second week. Prerequisite: CHMA02 Session: Winter Day

JBCC35Y Introductory Biochemistry
An introductory course for students
interested in the bio-medical sciences,
designed to introduce students to a
broad range of biochemical topics.

Topics covered in the course will include: metabolism of sugars, amino acids and lipids and the relationship of these to the energy metabolism of the cell. The effect of hormones on cellular metabolism; structure and function of enzymes; structure and biosynthesis of nucleic acids; biosynthesis of proteins. Regulation and integration of metabolic pathways will be discussed. Two one-hour lectures per week. The text used is: "Biochemistry by L. Stryer, W.H. Freeman & Co. Publishers" Prerequisite: BIOAO3; CHMBO5

JBCC36H Laboratory in Biochemistry

Session: Winter Day

An introductory laboratory course designed to introduce students to basic experimental techniques used in biochemical research.

The course will introduce students to practical and theoretical aspects of techniques used in biochemical research, including: spectrophotometry; chromatography; radioisotopes; electrophoresis; protein fractionation; etc. Three hours of laboratory plus one hour of lecture each week.

Prerequisite: BIOA03; CHMB05 Corequisite: JBCC35(JBCB35Y) Session: Winter Day

CHMCO1Y Inorganic Chemistry II

A study of transition metal chemistry including energy level diagrams; valence bond, crystal field and molecular orbital theories of bonding; spectra of transition metal complexes; structure and coordination numbers; isomerism; inorganic reaction kinetics and organometallic chemistry.

The objective of this course is to understand the structure, bonding, spectra and reactions of transition metal complexes. Two hours of lecture per week; six hours of laboratory per week to be taken in the Spring term. The required text is Inorganic Chemistry 3rd edition by J.E. Huheey.

Prerequisite: CHMB01, CHMB02
Session: Lectures: Winter Day Laboratory: Spring Term - T10-5

CHMC02Y Physical Chemistry II
Quantum mechanics and its application
to theories of atomic and molecular
structure, and spectroscopy. Basic principles of classical and quantum statistical
mechanics, statistical thermodynamics,
theory of chemical kinetics and photochemistry. The laboratory associated
with this course illustrates much of this
physical theory and introduces advanced
experimental techniques.

The first half of the course emphasizes quantum chemistry and the various techniques for the determination of energy levels in isolated atoms and molecules. The electronic and molecular structure of molecules are then examined through atomic and molecular spectroscopy. Intermolecular forces and modes of energy transfer between molecules ultimately lead into a study of classical and quantum statistical mechanics through which we interpret the behaviour of microscopic systems. Finally, the basis of modern reaction dynamics will be introduced. Lectures, tutorial and laboratory. Prerequisite: CHMB03; MATB41 and

MATB42 Session: Lectures: Winter Day Laboratory: Fall Term - T10-5

CHMC03Y Organic Chemistry II

An in-depth treatment of organic reactions and synthesis, stereochemistry and conformational analysis, spectroscopy of organic molecules and reaction mechanisms, and an introduction to aromaticity, photochemistry, free radicals, polymers, organometallic compounds, and the chemistry of naturally occurring molecules such as terpenes, steroids and carbohydrates. This course provides further experience in organic chemistry to students who have completed one course in the subject. The laboratory experiments are designed to complement the topics covered in lectures, with an emphasis on more advanced techniques, and the use of modern physical techniques and newer synthetic methods.

Two lectures and one three hour laboratory every week.
Prerequisite: CHMB05
Session: Winter Day

CHMD45Y Library Thesis

A report on a selected current topic in chemistry based on literature research and carried out under the direction of one of the chemistry staff. Approximately 260 hours of work are expected.

The objective is to obtain a thorough understanding of a topic of current interest and to prepare a comprehensive and critical report on this subject. To develop familiarity with the techniques of searching the chemical literature. The topic will be selected in conference with a member of the chemistry staff. Progress will be monitored during periodic consultations with the staff member. Exclusion: CHMD47F/S/H(CHMC47F/S/H) (CHMC45Y)

Prerequisite: Permission of instructor Normally only for individuals who have completed fifteen full-course equivalents including at least two C-level Chemistry courses, and who are pursuing one of the Chemistry Programmes.

Session: Summer Day, Winter Day Members of the Chemistry Faculty

CHMD46Y Introduction to Research Participation in a chemical research project under the direction of a member of the Chemistry staff, requiring approximately 260 hours of effort.

The objective is to develop familiarity with some of the methods of modern chemical research. The particular research problem to be pursued will be determined by discussions between the student and the faculty director of the research.

Prerequisite: Permission of instructor Corequisite: One of the advanced laboratory courses at St. George (CHM438F or CHM448F) (except for students undertaking a project in physical chemistry). Normally only for students following one of the Chemistry Programmes. Exclusion: (CHMC46Y) Session: Summer Day, Winter Day Members of the Chemistry Faculty

CHMD47F/S/H Library Thesis Similar to CHMD45Y (CHMC45Y) but representing 130 hours of work.

The objective is to obtain a thorough understanding of a topic of current interest and to prepare a comprehensive and critical report on this subject. To develop familiarity with the techniques of searching the chemical literature. The topic will be selected in conference with a member of the chemistry staff. Progress will be monitored during periodic consultations with the staff member.

Exclusion: CHMD45Y (CHMC45Y and CHMC47 F/S/H)

Prerequisite: Permission of instructor Normally only for individuals who have completed fifteen full-course equivalents and including at least two C-level chemistry courses, and who are pursuing one of the Chemistry Programmes. Session: Summer Day, Winter Day Members of the Chemistry Faculty

CHMD48S Special Topics in Inorganic Chemistry

A selection of topics in inorganic chemistry. Recent developments are emphasized. The content of the course varies from year to year, so students should consult with the faculty members involved as to the specific areas to be covered in a given year.

This course provides an introduction to current research areas and their theoretical and practical importance in inorganic chemistry. The emphasis will be on inorganic, but a good background in organic and physical chemistry is useful. Two lectures per week.

Prerequisite: CHMC01

Exclusion: (CHMC48S)
Session: Winter Day
R.H. Morris, A. Walker

Courses not Offered in 1989-90

CHMD49S	Special Topics in Physical
	Organic Chemistry
	Corequisite: CHMC03
CHMD50S	Special Topics in Physical
	Chemistry
	Corequisite: CHMC02
CHMD51S	Special Topics in Synthetic
	Organic Chemistry
	Corequisite: CHMC03
CHMD52S	Special Topics in
	OrganometallicChemistry
	and Catalysis
	Prerequisite:CHMC01
	<u>-</u>

Classical Studies

Discipline Representative: A. Boddington (284-3144)

A study of the Greek and Roman world is crucial to an understanding of western civilization. It is also an excellent area for the student who wishes to follow a programme involving different, but related, disciplines. Courses in Classics [CLA] and Greek and Roman History [GRH] explore the literature, the religion, and the social and political history of the Ancient World. In these courses all the source material will be read in translation. But language is an important ingredient in this cultural complex; and the courses in Greek and Latin provide an opportunity to learn the languages and to study the literary and historical texts in the original.

The Classical Studies Major Programme has three options.

- I CLASSICAL CIVILIZATION in which the Greek and Roman authors will be read in translation.
- II CLASSICAL STUDIES with LATIN
 III CLASSICAL STUDIES with GREEK

Major Programme in Classical Studies

Supervisor: I. R. McDonald (284-3175)
For the Major Programme in Classical
Studies students must complete eight
full-course equivalents to be selected as
follows:

- CLASSICAL CIVILIZATION in which the Greek and Roman authors will be read in translation.
- 1 CLAA01Y Classical Civilization 2 HUMA11Y Greek and Roman Mythology
- 3 One of
 GRHB01Y Greek History from the
 Bronze Age to the Death
 of Alexander
 GRHB02Y Greek and Roman History
 from the Death of Alexander to the Gracchi
 GRHB03Y Roman History from the
- Gracchi to Nero
 4 CLACO3Y Greek and Roman Epic
 or
 CLACO4Y Greek and Roman Tragedy
 Exclusions: CLABO2,

DRAB14

- 5 Two full-course equivalents to be selected in consultation with the Supervisor from: CLACO1F/S, C02F/S, C21Y, C23F/S; GRHC24F/S, C25Y, C26Y, C27Y, C28Y, C29Y; HUMC12Y, C61F/S.
- 6 Two full-course equivalents to be selected in consultation with the Supervisor from: CLA, GRH, GRK, LAT, PHLB40F, PHLB42F, PHLC40S, PHLC42S, FARA10F/S, FARB04F/S, FARB05F/S, FARB06F/S, FARC05F/S.

II. CLASSICAL STUDIES - with LATIN

- 1 CLAA01Y Classical Civilization 2 Three full-course equivalents in
- Latin, at least one of which must be at the C-level.
- 3 GRHB03Y Roman History from the Gracchi to Nero
- Two further full-course equivalents to be selected in consultation with the Supervisor from:
 CLAC01F/S, C02F/S, C03Y, C04Y, C21Y, C23F/S;
 GRHC24F/S, C27Y, C29Y
 HUMC12Y;
 LATC30-34F, C35-39S, C40Y, D01F, D02S
- 5 One additional full-course equivalent to be selected in consultation with the Supervisor from:
 CLAB30F/S, B31F/S, B32F/S, B33F/S; HUMA11Y; GRHB02Y; HISB61Y any course listed in (4) above not previously included as a programme requirement.

III. CLASSICAL STUDIES - with GREEK (CLASSICAL or MODERN)

- 1 CLAA01Y Classical Civilization 2 Three full-course equivalents in Clas-
- sical or Modern Greek, at least one of which must be at the C-level
- 3 GRHBOLY Greek History from the Bronze Age to the Death of Alexander
- 4 Two full-course equivalents to be selected in consultation with the Supervisor from: CLAC01F/S, C02F/S, C03Y, C04Y, C21Y, C23F/S; GRHC24F/S, C25Y, C26Y; GRKC30-C34F, C35-39S, C40Y; HUMC12Y, C61F/S; SOCB20Y (Modern Greek option only).

5 One additional full-course equivalent to be selected in consultation with the Supervisor from: CLAB30F/S, B31F/S, B32F/S, B33F/S FARA10F/S, B04F/S, B05F/S, C05F/S; PHLB40F/S, B42F/S, C40F/S, C42F/S, or any course listed in (4) above not previously included as a programme requirement.

Students may combine a Major in Classical Studies (Greek or Latin) with a Major in another language for a Specialist Programme in Language and Literature. See under Language and Literature.

Classics

CLAA01Y Classical Civilization

An introduction to the Greco-Roman World: the achievements of the Greeks and Romans in literature, philosophy, science, and government.

These achievements will be set in an historical framework to enable the evolution of ideas to be traced. The course will not merely be a survey course. Provision has been made as well for study in greater depth in carefully selected areas, with readings, in translation, from the classical authors.

The class will meet twice a week for lecture presentations, with a seminar in the third hour.
Session: Winter Day
J. Warden, J. R. McDonald

CLAB11S The Classical Element in English

An examination of the role of Greek and Latin in the development of the English language.

The course aims to provide the student who has no previous knowledge of classical Greek or Latin with an understanding of and appreciation for the influence of those languages on contemporary spoken and written English, and to acquaint him or her with basic principles of word formation and analysis. Topics will include: history of the contact between the classical languages and English; Latin and Greek word roots, affixes, combining forms, and inflectional patterns; cognates, derivatives, doublets, and hybrids; pronunciation; morphological and semantic changes. Exclusion: CLAB10 Session: Winter Day I.R. McDonald

CLAB33F The Age of Homer

The world of Homer's heroes as described in the Iliad and revealed through archaeology. The course will cover the development of early Greek epic poetry and will offer a survey of Mycenaean remains. Required reading will include Homer's Iliad.

The objectives will be to investigate the Homeric Poems as sources of history for a period of Greek civilization for which no substantial ancient documents exist (ca.1500-1000 B.C.); to appreciate the poetic qualities of the poems and to understand something of the circumstances under which they were composed; to impart a knowledge of the cultures described by Homer and known through excavation (e.g. Mycenae, Pylos, Ithaca, Troy, etc.).

Lectures will be illustrated by slides where appropriate. Readings will include the *Iliad* and the *Odyssey* in translation. Exclusion: (HUMB25) Session: Winter Day A. Boddington

CLACO2F/S Selected Topics in Classical Civilization

A detailed study of the ideas and values within the popular culture, and the intellectual climate unique to various periods of the Greek and Roman civilizations. Prerequisite: One full-course equivalent in CLA or GRH or permission of the Instructor. Session: Winter Day T.B.A.

CLACO3Y Greek and Roman Epic

The epic genre in the classical world: its genesis in myth and history; its cultural and artistic determinants; its place in the history of ideas and in the growth of the Western literary tradition. Close reading (in translation) of Homer's Iliad and Odyssey, Virgil's Aeneid, Lucan's Pharsalia; reference also to other works and their contribution to the development of the genre.

All study of Western Literature starts with Homer. The aim of this course is to make you familiar with the texts of Homer and his successors in the epic genre, so that you may learn to appreciate them for themselves within their own cultural and historical context and begin to understand the nature of their influence on later literature. If you wish to do any reading in advance, you might start with some of the following: Homer, The Iliad (trans. R. Lattimore) U. of Chicago Press p.b.; Homer, The Odyssey

(trans. R. Lattimore) Harper p.b.: E.T. Owen, The Story of the Iliad, Clarke Irwin 1964 p.b.; G.S. Kirk, The Songs of Homer, Cambridge Univ. Press 1962.

Classes will be an informal mixture of lectures and seminars. Exclusion: (CLAB01) Prerequisite: CLAA01Y or one course in English or another literature. Session: Winter Day I.R. McDonald

CLAC23S Christianity in the Greco-Roman World

An examination of the relationship between Christianity with its Jewish origins and the Roman Empire.

Some of the topics discussed will be a history of the relationship between the church and the state, persecution and martyrdom, rival religions, the development of Christian art and architecture. and the influence of Greek philosophy. We will read selections from writers of the first four centuries of the church and will also consider the pagan reaction. Exclusion: (CLAB23) Prerequisite: CLAA01 or one of HUMB20. HUMB28, HUMB29, or permission of instructor Session: Winter Day I.H. Corbett

Greek and Roman History

GRHB01Y Greek History from the Bronze Age to the Death of Alexander

An introduction to political, economic, social, and cultural aspects of Greek history.

The period will be studied, as far as possible, from the Greek authors (in translation) and attention will be given to the discoveries and methods of archaeology. The course should be of interest to students of Classics, History, Archaeology, Anthropology, and Political Science.

Topics will include: the Bronze Age of Greece and Minoan Crete, with some consideration of why and how those cultures rose and fell; the cultural and artistic "Renaissance" of the Greek world; political developments, with special reference to the nature and development of Athenian Democracy and the strange society of Sparta; the Athenian Empire and its relationship to Athenian Democracy; the rise of Macedonia and the conquests of Alexander. To consider how the Greeks viewed their own history, we shall study the Persian Wars as seen

through the eyes of Herodotus, and the Peloponnesian War as interpreted by Thucydides; and at all times we shall endeavour to pay the Greeks the compliment of trying to see them as they really were and not as we imagine them. Session: Winter Day A. Boddington

GRHB02Y Greek and Roman History from the Death of Alexander to the Gracchi

A study of the emergence and evolution of the Hellenistic Monarchies after the death of Alexander, the development of Rome as a "World Power", and the interaction of the Greek and Roman Worlds.

This course introduces the student to an important period of Classical History in which the Mediterranean world evolved from one of individual states to the single "world empire" which was the cradle of so many systems characteristic of the West, especially Christianity. One two-hour lecture per week, and one onehour tutorial per week. All the tutorials will be led by the lecturer. The lectures will give the necessary background information and some analysis, raising questions to be considered in the tutorials. Questions and discussion will be welcomed in lectures as well as tutorials. Students will be encouraged to consult with me about their reading and essays. Note: A detailed Course Outline and Bibliography are available on request. Session: Winter Day J. Corbett

GRHC24S Ancient Historiography

A study of the major Greek historians. Herodotus and Thucydides, and the major Roman historians, Livy and Tacitus. All authors will be read in translation. This is not primarily a history course, since the focus will be on the authors, their intellectual world, and their literary merits. The course should be useful to students of Classics, Greek and Roman History, and History. It might interest any student of literature.

The following topics will be considered: the development of historiography as a form of expression; its uses and possible abuses; the intellectual and cultural milieu of each author and the nature of its influence upon him: the problems of source criticism; and the literary qualities of the four authors read.

Three lecture/discussions per week, in which students are encouraged to

take an active part. Prerequisite: CLAA01 or one GRH or HIS course. Session: Winter Evening A. Boddington

GRHC29Y Studies in Roman History: Roman Britain

An examination of life and culture in Roman Britain.

This course moves beyond the generalizations of a survey course to ask more penetrating questions about the nature and effect of Roman power and influence as it spread to the western limit of Empire. The Roman literary sources (read in translation) for the geography, conquest, occupation, and administration of Britain are supplemented by a wealth of archaeological material: forts and frontier works; towns and public buildings; houses, tombs, and temples; coins, pottery, and inscriptions. Working carefully but imaginatively from evidence of both kinds, the student may explore the lives of the native inhabitants and their Roman conquerors; men and women, soldiers and civilians, administrators and insurgents. Prerequisite: GRHB03 or any related GRH, CLA or HUM course Session: Winter Day A. Boddington

Greek

GRKA01Y Introductory Greek The bases of the language, with an emphasis on reading.

This course is for students who wish to acquire a basic reading knowledge of ancient Greek. Four hours a week. Text: Reading Greek (JACT Cambridge, 1978). Exclusion: OAC Classical Greek or Grade 13 Classical Greek, except by permission of the Division.

Session: Winter Day T.B.A.

GRKB02F Introduction to Greek Authors

A rapid reading of simple Greek texts combined with a consolidation of gram-

This course is intended to help students review classical Greek grammar in preparation for reading texts. Exclusion: (GRKA10) Prerequisite: GRKA01 or OAC Greek or Grade 13 Greek Session: Winter Day M.E. Irwin

GRKB10Y Intermediate Modern Greek

Study of the Modern Greek language, primarily in its written form, with the goal of preparing the student for the reading of Modern Greek literature.

Prerequisite: GRKA05 or GRK150 (St. George) unless the student is a native speaker of the language
Session: Winter Day
G. Kirikopoulos

GRKB11S Plato: Apology

Session: Winter Day

M.E. Irwin

A study of the Apology, Plato's version of Socrates' defence in court against the charges of religious non-conformity and of corrupting the young. The text will be read in Greek. The political, legal, and social situation in Athens at the time of the trial will be considered. Exclusion: (GRKB01)

Prerequisite: GRKB02 (GRKA10)

GRKC22Y Images of Modern Greece: 1936 to the Present

An examination of the social, political, and cultural development of modern Greece in the last quarter-century.

This chronological study of one of the most vital moments in modern Greek history will focus first on the time of the Metaxas dictatorship, World War II and the civil war; then on the "boom" years from 1960 to 1967; and lastly on the period from the establishment of the military junta to the present. Analysis of social, economic, and political phenomena will be complemented by a detailed study of cultural expression in such diverse fields as literature, music, theatre, cinema, and folklore. Our field of enquiry will include selections from the work of poets, novelists, and dramatists such as Seferis, Elytis, Vrettakos, Tachtsis, and Kehaidis, of Karolos Koun and the Art Theatre; of seminal composers Theodorakis and Hadiidakis, and their heirs; and of the folklorist Domna Samiou. The final stage of the course will stress developments of the last decade.

Lectures and seminar discussion. Exclusion: (GRKB22) Prerequisite: GRKB10 or permission of instructor Session: Winter Day G. Kirikopoulos

GRKC30-34F GRKC35-39S GRKC40Y Supervised Reading

Reading of texts in Greek chosen by consultation between students and faculty.

Students who wish to enter the Greek Supervised Reading Programme should enrol in any of the above courses. They should then contact the co-ordinator and discuss what they want to read and with whom. (This will depend to some extent on time available.) The student will meet regularly with the tutor - the exact arrangements depending on the difficulty of the chosen text and the level of the student's ability. Problems in the text will be discussed as well as the literary qualities and cultural context of the work being studied. Exclusion: (GRKB30-35, GRKB35-39, GRKB40)

Prerequisite: GRKB11(GRKB01) or demonstrated competence in reading classical Greek

Session: Winter Day
Co-ordinator: I.R. McDonald

Latin

LATA01Y Introductory Latin

An introduction to the essentials of the Latin language. Although the emphasis will be on language, selected texts will be read to introduce the student to Latin literature.

The course aims to bring the student with no previous knowledge of Latin to a sound basic reading knowledge of prose and poetry. Some time will be given to an exploration of the language in its cultural and historical context, and of the impact of Latin on English.

Classes are designed to introduce fundamentals of vocabulary, grammar, and syntax, but this routine will be varied occasionally to allow for lectures, discussions, and slides to increase awareness of the cultural milieu. Exclusion: OAC Latin or Grade 13 Latin, except by permission of the Division Session: Winter Day 1. R. McDonald

LATBO2F Introduction to Latin Authors

Rapid reading of simple Latin texts, both prose and verse, together with a survey of Roman literature and a consolidation of grammar.

This course serves as an introduction to university-level Latin studies for students with Grade 13 Latin and as a stepping stone to the reading of Latin authors for those who have begun the study of Latin in the College.

Texts to be read will be selected from a wide range of styles and periods to give the student a good general view of the scope and variety of Latin litera-

Exclusion: LATA10
Prerequisite: LATA01 or OAC Latin or
Grade 13 Latin
Session: Winter Day

J.H. Corbett

LATRIIS Catullus

A selection of the works of Catullus. The influences which affect Catullus, and his contribution to Latin poetry will be considered.

The material studied will be primarily the love poetry of Catullus but some of the invective works and one of the "long poems" will also be examined. After some introductory lectures most of the classes will be devoted to translating and studying individual poems in the light of critical literature. The text used will be the edition of Kenneth Quinn (Macmillan, 1970). Exclusion: (LATBO1) Prerequisite: LATBO2 (LATA10) Session: Winter Day T.B.A.

LATC30F-34F LATC35S-39S

LATC40Y Supervised Reading

Students who wish to take Latin Supervised Reading courses should enrol in any of the above courses (F/S/Y as appropriate). They should then contact the co-ordinator and discuss with him what they want to read and with whom. The student will be expected to read much of the material on his or her own, and to meet with the tutor once a week, normally for a two-hour period; exact arrangements will depend on the nature of the text and level of ability of the student. The purpose of these sessions is to sort out any problems of comprehension and to discuss the literary qualities and

cultural context of the work being read. Exclusion: (LATB30-34, LATB35-39, LATB40) Prerequisite: LATB11 (LATB01)

Session: Winter Day
Co-ordinator: I. R. McDonald

LATD01F-D02S Independent Studies

These courses are designed to widen students' knowledge of Latin literature beyond those works and authors which have been studied in earlier courses.

A student will be expected to read considerably more than is required in the Supervised Reading courses. The reading may be confined to one author or grouped around a topic or genre. A student who registers for both D01 and D02 may be permitted to present a major essay, on a topic approved by the faculty in Classics, as the work required for D02. Students will meet regularly throughout the term with a member of the faculty.

N.B. A student interested in Independent Studies should meet with the co-ordinator before enrolling, preferably in the Spring of the preceding

year.

Exclusion: (LATC01-02)
Prerequisite: At least two of LATC30-39
(LATB30-39); permission of instructor.
Co-ordinator: I. R. McDonald

NOTE: The following courses are also taught by the faculty in Classics.

HUMAllY Greek and Roman Mythology

HUMC12Y Studies in Greek Mythology

and Its Influences

For further information see under Humanities.

Courses Not Offered in 1989-90

CLAB10F/S Greek and Latin for Scientists Exclusion: CLAB11F/S CLAB30F/S The Age of Pericles Exclusion: (HUMB22) CLAB31F/S The Age of Augustus Exclusion: (HUMB23) CLAB32S The Age of Nero Exclusion: (HUMB24) CLAC01F Selected Topics in Classical

Literature
CLACO4Y Greek and Roman Tragedy

Exclusions: DRAB14

(CLAB02)

CLAC21Y	Greek and Roman Religion Exclusion: (CLAB21)
	Prerequisite: HUMAll or CLAA01
GRHB03Y	Roman History from the
CRIICO EU	Gracchi to Nero
GRHC25Y	Studies in Greek History I
	Prerequisite: GRHB01, or
	any related GRH, CLA, or
CDUICACE	HUM course
GRHC26Y	Studies in Greek History II
	Prerequisite: GRHB01, or
	any related GRH, CLA, or
	HUM course
GRHC27Y	Studies in Roman History:
	Pompeii
	Exclusion: (GRHB27)
	Prerequisite: GRHB03, or
	any related GRH, CLA, or
	HUM course.
GRKA05Y	Introduction to Modern
	Greek
GRKC23F	Modern Greek Cinema and Theatre
	Prerequisite: GRKB10Y or
	CLAA01Y, or any related
	course in Greek or Cinema
	or Drama.
GRKC24S	Classical Themes in Modern
	Greek Literature
	Prerequisite: GRKB10Y or
	CLAA01Y, or any related
	course in GRK, CLA, or GRH
LATC20F	Latin Authors II
	Exclusion: (LATB20)
	Prerequisite: LATB11
	tresequisite, maint

Cognitive Science

Supervisor: J. M. Kennedy (284-3339) Cognitive Science is the study of knowledge--how human beings, other animals, and even machines acquire knowledge, organize and store that knowledge, and use that particular knowledge to solve problems. Cognitive scientists are particularly interested in the way we use symbolic systems, such as natural or computer languages, drawing, or mathematical notation to organize our knowledge of the world. Cognitive science considers questions like: Are we born with some knowledge already in place? How does our experience of the world allow us to develop knowledge? How does the knowledge we already have affect our experience of the world? Is knowledge stored as visual images, words, or abstract propositions?

How do we decide which pieces of information are relevant to a specific problem? How do we master and store the complicated system of rules that allows us to use language? How do language and culture affect our understanding of the world? How is the knowledge stored in a computer like and unlike the knowledge stored in our heads?

Researchers in philosophy and psychology, linguistics, computer science and anthropology all use different methods to investigate these questions and have all provided part of the answers. The cognitive science Programmes (Specialist and Major) include courses from all these disciplines--from the humanities and the sciences at both the theoretical and the practical level.

The Faculty of Education, University of Toronto, considers four year graduates of the Specialist Programme in Cognitive Science to have an excellent preparation for application to the Primary Junior Division of the Bachelor of Education Programme. Applicants should have an overall 70% average and appropriate experience.

The Specialist Programme requires 12.5 courses; the Major Programme requires 7.5 courses.

Specialist Programme in Cognitive Science

Supervisor: J. M. Kennedy (284-3339) * Students should check prerequisites/corequisites/exclusions for these courses. Reauired Courses

6.5 full-course equivalents:

the following:

0.5 full-course equivalents.				
1	PSYA01Y	Introduction to		
		Psychology		
2	LINAOIY	General Linguistics		
3	PHLAO1Y	Fundamental Questions		
		of Philosophy		
4	CSCA56F/S	Computer Programming		
	or	-		
	CSCA58F/S*	Introduction to Com-		
		puting		
5	PSYB07F/S	Data Analysis in		
		Psychology		
6	PSYB51F/S*	Perception and Cogni-		
		tion		
7	PSYB57F/S*	Memory and Cognition		
8	JLPB55F/S*	Psycholinguistics		
9	PHLB20F/S	Belief, Knowledge and		
		Truth		
10	PHLB81F/S	Theories of Mind		
Optional Courses				
Psychology				
2 f	ull-course equ	iivalents chosen from		

1	PSYB01F/S	Psychological Research
2	PSYB10F/S*	Laboratory Introduction to Social
		Psychology
3	PSYB20F/S*	Introduction to
		Developmental
4	PSYB50F/S*	Psychology Sensation and Percep-
•	131230173	tion
5	PSYB65F/S*	Biological Foundations
_	DOVICE OF 154	of Behaviour
6	PSYC08F/S*	Experimental Design in Psychology
7	PSYC34F/S*	Psychometric Methods
		Laboratory
8	PSYC54F/S*	Cognition and
_	DCUCOOR IS	Representation
9	PSYC82F/S	Theoretical Psychology
10	PSYD53F/S*	Psychology and the
11	PSYD80F/S	Law Current Topics in
1.	1310001/3	Theoretical Psychology
12	PSYD85F/S*	History of Psychology
	nguistics	matory of raychology
		ivalents chosen from
	e following:	.vareing chosen from
ï	LINB02F/S*	Phonology
2	LINBO9F/S*	Phonetics
3	LINBI IY*	
	THADILL.	Syntax
4	LINC12F/S*	Semantics
5	JLPC24F/S*	Developmental Psycho-
_	H DD 555 464	linguistics
6	JLPD55F/S*	Disorders of Speech and Language
Ρŀ	illosophy	and Language
1	full course cou	ivalent chosen from the
fo.	lun-course equ	ivalent chosen from the
10.	llowing: PHLB14F/S*	Philosophy of Costal
1	PHLB14F/5"	Philosophy of Social Science
2	PHLB50F/S	Symbolic Logic I
3	PHLB53F/S	The Art of Thinking
4	PHLB70F/S*	Philosophy of Science
5	PHLB80F/S	Philosophy of Science Philosophy of
,	TTIEBOOL/3	Language
6	PHLC50F/S	Symbolic Logic II
7	PHLC54F/S	Metalogic
	gnate Courses	Metalogic
		ivalent chosen from the
		valent chosen from the
	lowing:	Decomposition 4 1:
1	CSCA66F/S*	Programming Applica- tions
2	CSCA68F/S*	Computer Applications
3	CSCB38F/S*	Discrete Mathematics
-		for Computer Science
4	CSCB58F/S*	Computer Organization
5	One half cours	se in Anthropology at
the	B-level or high	ner
	J	

M	lajor Program	me in Cognitive
	cience	
		Kennedy (284-3339)
*	Students shoul	d check
рı	rerequisites/co	requisites/exclusions
	r these course	
	equired Course	
3	5 full-course e	animalante
ĩ.	PSYA01Y	quivalents
•	FSIAUII	Introduction to
_	T 13/1 A 3/12/	Psychology
2	LINAOIY	General Linguistics
3	PSYB51F/S*	Perception and Cogni-
		tion
4	PSYB57F/S*	Memory and Cognition
5	JLPB55F/S*	Psycholinguistics
0	ptional Course	s
Ps	sychology	
		quivalents chosen from
th	e following:	4
ï	PSYBO1F/S	Psychological Research
•	1218011/2	I abanatani
2	DCVD LAT /C+	Laboratory
2	PSYB10F/S*	Introduction to Social
_		Psychology
3	PSYB20F/S*	Introduction to
		Developmental
		Psychology
4	PSYB50F/S*	Sensation and Percep-
		tion
5	PSYC08F/S	
•	1310001/3	Experimental Design in
_	DCVCD AT /C+	Psychology
6	PSYC34F/S*	Psychometric Methods
_		Laboratory
7	PSYC54F/S*	Cognition and
		Representation
8	PSYC82F/S	Theoretical Psychology
9	PSYD80F/S	Current Topics in
		Theoretical Psychology
10	PSYD85F/S*	History of Psychology
	nguistics	mstory or rayendingly
ĩ	S full-course of	quivalent chosen from
	o following:	daisaieur cuoseu itom
	e following:	Dl1
1	LINBO2F/S*	Phonology
2	LINBO9F/S*	Phonetics
3	LINB 1 1 Y*	Syntax
4	LINC12F/S*	Semantics
5	JLPC24F/S*	Developmental Psycho-
	-	linguistics
6	JLPD55F/S*	Disorders of Speech
•	121 2001/3	and Language
_	amata Cauvaa	
	gnate Courses	
		ivalent chosen from the
	llowing:	
1	PHLB20F/S	Belief, Knowledge and Truth
2	PHLB50F/S	Symbolic Logic I
3	PHLB70F/S*	Philosophy of Science
4	PHLB81F/S	Theories of Mind
5	PHLC50F/S*	
	CCCVECE TO	Symbolic Logic II
6 7	CSCA56F/S	Computer Programming
1	CSCA58F/S*	Introduction to Com-

puting

Commerce

Assistant Chairman: TBA Commerce courses are designed both for those students who intend to specialize in the area and for those who wish to take one or more Commerce courses to supplement their studies in other areas. Courses in Commerce should help students to develop the analytical skills needed to diagnose and solve problems in business and government.

Students may take Commerce courses as part of a three or four year degree (normally a B.A. degree) and may, if admitted, work towards completing a Major or Specialist Programme. Graduates of a fifteen or twenty course degree programme may be eligible for admission to graduate study in business or may seek employment in accountancy or pursue other industrial, commercial or governmental careers.

The College does not offer the Bachelor of Commerce (B. Comm.) degree. Students who wish to obtain the B. Comm. must either enter or transfer to another college of the University (at the St. George or Erindale campus). Because of differences in course and degree requirements, such transfers should take place as early as possible in a student's career. Since many Commerce courses at the St. George Campus are subject to limits on enrolment, Scarborough College students should not assume that they will be able to take Commerce courses at that campus where a comparable course is not available at Scarborough.

Admission to graduate studies leading to the Master of Business Administration (MBA) degree is open to all qualified graduates (fifteen or twenty course degrees) regardless of the subjects or disciplines studied at the undergraduate level. Students contemplating graduate study would be well advised to include some courses in Commerce in their undergraduate programme. They should also consider strengthening their preparation for graduate work by taking courses in such areas as Economics, Mathematics, Computer Science, Sociology, Psychology and Anthropology.

Limited enrolment: Because of pressures of demand for places, it has been necessary to place enrolment limits on many Commerce courses and on admission to Programmes. Information on how to apply for admission to a

Programme and to limited enrolment courses will be available prior to the end of classes in April.

Prerequisites: Prerequisites will be strictly enforced for all Commerce courses. Students who knowingly or unwittingly register for courses for which they do not have the necessary prerequisites will be denied access to those courses.

Commerce Programmes

There are two Specialist Programmes as well as a Major Programme in Commerce. Registration in all three programmes is limited. Each year seventy students are admitted in total to the two Specialist Programmes and ninety to the Major Programme. Applications for admission are accepted after students have completed at least four full-course equivalents (i.e. generally after completing the first year of the degree programme). Applicants must have completed (or be in the process of completing) COMA01 and ECOA01 (plus MATA27 or equivalent if applying to either of the Specialist Programmes). Admission to Programmes is currently based on grades in COMA01, ECOA01 and the applicant's two best other grades (including MATA27 or equivalent if applying to a Specialist Programme).

The two Specialist Programmes are designed to provide students with the foundation for a managerial career in commerce, industry or the public sector, or for further study in such fields as accounting, finance, law, management, marketing and organizational behaviour. The Specialist Programme in Commerce and Economics combines commerce courses with a solid grounding in economics. The Specialist Programme in Commerce allows a student the opportunity to pursue some degree of specialization in a specific area of commerce.

The Major Programme in Commerce is designed to provide students with an introduction to the field that can be used as the basis for graduate or professional studies or as a complement to undergraduate studies in related areas.

Subject to enrolment limits, a student admitted to any of the Programmes will have access to the full range of offerings in the discipline. Specific Programme requirements are listed below.

Specialist Programme in Commerce Supervisor TBA

The Programme requires the completion of the following minimum

requirements as part of a twenty-course degree:

- Eight full-course equivalents in Commerce including COMA01, COMB01, JCSB27, JCEC02, JCEC72, JCEC73. (See Note A)
- 2. ECOA01, ECOB03, ECOB07 and (ECOB11 and ECOB12) or (STAB22 and STAB47).
- 3. MATA27 or (MATA26 and MATB41) or (MATASS and MATBSO).
- (CSCA56 and CSCA66) or (CSCA58 and CSCA68).
- 5. Four additional full-course equivalents from courses other than COM, ECO, JCE and JEG to include at least one full-course equivalent from among the following courses: CLAAOIY, CLABIIF/S, CLAB30F/S, CLAB31F/S, CLAB32F/S, CLAB33F/S, DRABO3Y, DRABO4Y, DRABO6Y, ENGA08Y, ENGB07Y, ENGB08Y, ENGBIOY, ENGBIIY, ENGBI4Y, ENGB15Y, ENGB20F, ENGB21S, ENGB25F/S, ENGB34F/S, FREB20Y, FREB24Y, FREB26Y, FREB29F, FREB36F, FREB37S, FREB49Y, GRHB01Y, GRHB02Y, GRHB03Y, HISA01Y, HISBO2Y, HISBO3Y, HISBO4Y, HISBO6Y, HISBO7Y, HUMA01Y, HUMA11Y, ITAC12F/S, ITAC13F/S, ITAC22F, ITAC23S, ITAC27F/S, ITAC31Y, ITAC32F/S, ITAC33F/S, ITAC34F/S, ITAC35F/S, ITAC36F/S, ITAC40F/S, JTAC41F/S, ITAC43F/S, ITAC44F/S, ITAC45F/S, LITAO1Y, MUSA10F, MUSA20S, MUSB14F/S, PHLA01Y, PHLB01F, PHLB03F, PHLB04S, PHLB05F, PHLC05S.

Note A: JCE courses may be counted as either Commerce courses or Economics courses. If JCE courses are used to meet the Economics requirements, other COM courses must be substituted in meeting the Commerce requirements.

Recommendations for Area Concentration

degree of concentration in a specific area of Commerce studies should consider the following lists of recommended courses: Accounting: COMC01, COMC10, COMC15, COMC30, COMD50. COMD55, COMD60. Marketing: COMC04, COMC05, COMD07, COMD08, ECOC41. A course in research methods

Students who wish to pursue some

(SOCB01 or PSYB01). Other related courses: ANTB16.

ANTC10, ANTC19, ANTC32, PSYB10, PSYB50, PSYC11, PSYC12, PSYD15, PSYD16, SOCB13, SOCB23, SOCC34. Finance: JCED70, JCED75, COMC01. Other related courses: ECOC11. ECOC13, ECOC14, ECOC31, ECOC32,

Organizational Behaviour: COMC10, COMC22, COMC25, COMC26, ICEC54. A course in research methods (SOCB01 or PSYB01). Other related courses: ANTB16. ANTB20, ANTC10, ANTC19, ANTC24, ANTC32, POLB61, POLB62, POLB63, POLC60, PSYB10, PSYC12, PSYD15. PSYD16, SOCA01, SOCB02, SOCB04, SOCB07, SOCB10, SOCB13, SOCC07, SOCC13, SOCC22, SOCC35.

Specialist Programme in Commerce and Economics Supervisor: TBA

The Programme requires completion of the following minimum requirements as part of a twentycourse degree:

- 1. Six full-course equivalents in Commerce including COMA01, COMB01, JCSB27, JCEC02, JCEC72, JCEC73. (See Note A under Specialist Programme in Commerce).
- 2. Five full-course equivalents in Economics including ECOA01. ECOB03, ECOB07, and (ECOB11 and ECOB12) or (STAB22 and STAB47).
- 3. MATA27 or (MATA26 and MATB41) or (MATA55) and MATB05Y.
- (CSCA56 and CSCA66) or (CSCA58 and CSCA68).
- 5. Four additional full-course equivalents from courses other than COM, ECO, JCE and JEG to include at least one full-course equivalent from among the Humanities options listed under the Specialist Programme in Commerce.

Major Programme In Commerce Supervisor: TBA

The Programme requires completion of the following as part of a fifteen or twenty-course degree:

- 1. Six full-course equivalents in COM or ICE courses including COMAO1, COMBO1 and JCSB27Y. (See Note A under Specialist Programme in Commerce.)
- 2. Two full-course equivalents in Economics including ECOA01.
- 3. Five additional full-course equivalents, one of which must be at the B, C, or D level, from courses other than COM, ECO, JCE, or JEG, to



include at least one full-course equivalent from among the Humanities options listed in the Specialist Programme.

Careers in Accountancy

The College offers a significant number of courses which have been recognized as meeting part of the educational training of Chartered Accountants, Certified General Accountants and Certified Management Accountants. A brochure describing the various programmes and listing the recognized Scarborough College courses is available from Counselling Services (284-3292).

COMAO1Y Financial Accounting Basic theory and concepts which underlie the preparation of financial statements; development of double entry theory and practice; the accounting cycle from the recording of transactions in double entry form to the year-end entries and the preparation of financial statements; problems of measuring income. The course provides a rigorous introduction to accounting techniques and to the principles and concepts underlying those techniques. Class size is limited to 80 per section. Session: Winter Day, Winter Evening, Summer Evening

COMBOLY Management Accounting An introduction to cost accounting with emphasis on the use of accounting information in managerial decision-making. Topics include types of cost accounting systems, patterns of cost behaviour, problems of cost determination, allocation, budgeting and control. Class size is limited to 80 per section. Prerequisites: COMA01 and ECOA01 Session: Winter Day, Winter Evening, Summer Evening

JCSB27Y Organizational Behaviour Social factors in administration, the structuring of intra-organizational and inter-organizational relationships, and the distribution of power and dependency in society. Empirical studies used in the first term will focus on single organizations. Those used in the second term will focus on industries and other inter-dependent organizations. Prerequisite: One previous full-course equivalent in Sociology, Commerce, Economics, or Political Science Session: Winter Day, Winter Evening, Summer Evening

COMCOIY Intermediate Financial Accounting

An examination of some of the theoretical and practical accounting problems involved in income determination and balance sheet valuation. The course builds extensively on the material in COMA01 and, to a lesser extent, COMBO 1. Potential students should review thoroughly the basic accounting model, preparation of financial statements and accounting principles prior to the start of the course. Limited enrolment: 60. Prerequisite: COMB01

Session: Winter Day, Winter Evening

JCEC02Y Corporation Finance An examination of the financial environment within which Canadian companies operate. The aim is to cover the main principles of financial management and to discover the social and legal significance of the modern corporation. Limited enrolment: 60. Prerequisites: COMB01; ECOB03; ECOB11. ECOB12 is strongly recommended. Session: Winter Day, Winter Evening

COMCO4F Principles of Marketing An introduction to basic concepts and tools of marketing designed to provide students with a conceptual framework for the analysis of marketing problems. The focus is on the nature and scope of marketing in a organizational and societal setting. The subjects include an examination of buyer behaviour, market segmentation and target marketing, the basic elements of the marketing mixproduct, price, promotion and channel policies; marketing planning, evaluation and control. Limited enrolment: 60. Prerequisite: COMBO1. ECOBO3 is recommended. Session: Winter Day, Winter Evening, Summer Evening

COMC05\$ Introduction To **Marketing Management**

R. Serpkenci

A pragmatic case and readings oriented approach to develop the analytical skills required of marketing managers. The course is designed to help improve skills in analyzing marketing situations, identifying market opportunities, developing marketing strategies, making concise recommendations, and defending these

recommendations. Limited enrolment: Prerequisite: COMC04. ECOB11 or equivalent recommended. Session: Winter Day, Winter Evening, Summer Evening R. Serpkenci

COMC10F Management Control Systems

The course objective is to develop a thorough understanding of planning and control systems in organizations, with an emphasis on behavioural implications of various accounting systems. Limited enrolment: 60.

Prerequisites: COMBO1, ICSB27 Session: Winter Evening

COMC15Y Income Tax

An examination of the broad principles of federal income tax in Canada and of the detailed provisions involved in the taxation of business enterprises. Limited enrolment: 60

Prerequisite: Completion of at least ten full-course equivalents including COMA01 and ECOA01 Session: Winter Evening

COMC22F Personnel Administration

An introduction to the basic concepts. theories and practices of personnel management. Topics include recruitment, selection, training, development, performance appraisal, compensation and human resources planning. Affirmative action, discrimination and equal pay issues will be examined in relation to human rights legislation. Limited Enrolment: 60. Prerequisite: JCSB27 Session: Winter Day

COMC25F Organizational Design This course reviews design alternatives, involving changes in strategies, structures, environments and people for both business and non-business complex organizations. Limited enrolment: 60. Prerequisite: ICSB27

Session: Winter Day

COMC26S Comparative Organizational Behaviour

This course studies the impact on organizational strategies of different environments, discussing, among other questions, differences between nations. The

course may also deal with societal attitudes in reference to quality of work life. Limited enrolment: 60. Prerequisite: ICSB27 Session: Winter Day

COMC30Y The Legal Environment of Business

An intensive examination of those aspects of the law that most directly affect the operations of a business. Limited enrolment: 60. Prerequisite: Completion of at least ten full-course equivalents including

COMA01 and ECOA01

Session: Winter Day, Summer Evening

JCEC54F/S Industrial Relations

A study of industrial relations in the Canadian setting. Topics include: industrial relations theory and systems; history, philosophy and structure of unionism, labour law, and collective bargaining. Limited enrolment: 80. Exclusion: (JCEB54) Prerequisite: Completion of at least ten full-course equivalents including ECOA01. Session: Winter Evening

JCEC72F Analysis for Decision Making I

A course in the analytical formulation and solution of decision problems. Linear decision models, and especially linear programming, are the tools primarily discussed and employed. Limited Enrolment: 80. Exclusion: (JCEB72) Prerequisites: CSCA56 or CSCA58. MATA04 or MATA22 or MATA26 or MATA27 or (MATA55), ECOB03 Corequisite: ECOB11 or GGRB31 or STAB47 Session: Winter Day

JCEC73S Analysis for Decision Making II

A continuation of JCEC72 with less emphasis on deterministic, linear models. Course content will be determined by the instructor and will usually include several of the following: decision making under uncertainty, inventory theory, simulation, non-linear programming, allocation of risk-bearing. Limited Enrolment: 80.

Exclusion: (JCEB73)

Prerequisite: JCEC72(JCEB72)

Session: Winter Day

COMDO7S Market Research

A decision oriented course, designed to introduce students to the market research process. Alternative data collection, sampling, analysis, and evaluation procedures are discussed. Exploratory, descriptive and causal research approaches are reviewed. Both theoretical and technical considerations in designing and execution of market research are stressed. Instruction involves lectures and class projects including computer analysis.

Exclusion: (COMC07)

Prerequisites: COMC05, ECOB11 or equivalent. Computer background

recommended.

Session: Winter Day or Evening

COMDOSS Retail Management and Strategy

An advanced marketing course designed to provide, through lectures and cases, a decision making perspective in retailing management. Topics include: the evolving nature of retail markets, strategic planning in retailing, profitability and productivity issues, merchandising, buying, location analysis, retail imagery and research.

Exclusion: (COMC08) Prerequisite: COMC05 Session: Winter Evening R. Serpkenci

COMD50F Advanced Accounting

Consideration of accounting practice in the context of accounting theory and concepts for a number of areas including intercorporate investments, and foreign currency translation.

Exclusion: (COMC50)

Prerequisites: COMC01 and permission

of instructor.

Session: Winter Evening

COMD558 Current Issues in Accounting

The course will deal with a number of topics in current accounting literature. with particular reference to the problem of the development of theories of, and for, accounting. Topics may also include not-for-profit and government accounting, leases and pensions, and human resource accounting.

Exclusion: (COMC55) Prerequisite: COMC01 Session: Winter Evening

COMD60S Auditing

An introduction to the principles and practice of auditing. The course is designed to provide students with a foundation in the theoretical and practical approaches to auditing by emphasizing auditing theory and concepts, with some discussion of audit procedures and the legal and professional responsibilities of the auditor.

Exclusion: (COMC60) Prerequisite: COMC01 Session: Winter Evening

JCED75S Investments

This course studies and reviews major investment problems, in particular the investment in stocks and bonds, risk and return characteristics, efficient markets. valuation, and portfolio management. Limited enrolment: 60

Exclusion: (JCEC75) Prerequisite: JCEC02 Session: Winter Day

COMD80F/S Supervised Reading Course

This course is intended for upper-level students whose interests are not covered in one of the other Commerce courses normally offered. The course will only be offered when a faculty member is available for supervision and would only be available to students whose Commerce performance has been well above average. Students interested in this course should consult with the Supervisor of Studies for Commerce well in advance.

Exclusion: (COMC80)

Prerequisite: Permission of instructor Session: Summer Day, Summer Evening,

Winter Day, Winter Evening

Courses Not Offered 1989-90

COMC40F/SManagement Issues and Practices in the Developing World Prerequisites:

COMBO1, JCSB27

COMD20F/SBusiness Policy Exclusion: (COMC20)

> Prerequisites: COMBOI. JCSB27, COMC04 Coreauisite: ICEC02

Advanced Corporate JCED70S

Finance Exclusion: (JCEC70) Prerequisite: ICEC02

Computer Science

Discipline Representative: A. Mendelzon 284-3194.

Computer science is the study of the use of computers to process information. The form of this information may vary widely, from the businessperson's records, to the scientist's experimental results, to the linguist's texts. One of the fundamental concepts in computer science is the algorithm -- a list of instructions that specify the steps required to solve a problem. Computer science is concerned with producing correct, efficient, and maintainable algorithms for a wide variety of applications. Closely related is the development of tools to foster these goals, programming languages for expressing algorithms: operating systems to manage the resources of a computer; and various mathematical and statistical techniques to study the correctness and efficiency of algorithms. Theoretical computer science is also concerned with the inherent difficulty of problems that can make them intractable by computers. Numerical analysis, data management systems, computer graphics, and artificial intelligence are concerned with the applications of computers to specific problem areas.

The Specialist Programme in Computer Science prepares a student for graduate study and for a professional position in the computer field. In the Specialist Programme for Data Management there is an emphasis on information system development, an area of increasing importance to business, industry, and government. It can lead to graduate study but is designed primarily to prepare a student for a professional

The Major Programme in Computer Science provides an introduction to some of the main areas of computer science and also provides preparation for a career in the computer field, it is a suitable programme for a student interested in applying computer science techniques to problems from another research area or for a student interested in a career in secondary school teaching.

The Specialist Programme in Computer Science and Physics provides a thorough understanding of how modern computers work. It provides a good background in modern physics, including electronics. At the same time, more and more problems in physics require

the use of computers. This new joint programme involves a carefully selected set of courses which will give the student the needed expertise in both subject areas. This programme should be an excellent background for work in hightech industries.

Students interested in computer studies should also refer to Specialist and Major Programmes in Cognitive Science, and the Specialist (Co-operative) Programme in Computer Science and Physics.

Specialist Programme in Computer

Supervisor: G. Cupit (284-3352) NOTE: Registration in this programme is limited. A maximum of twenty students will be admitted annually to the second year of the programme. Selection will be based on grades in first-year courses in Computer Science and Calculus.

There are eleven courses required for the Specialist Programme in Computer Science. Note that the courses need not be taken in exactly the indicated order, but if an alternative ordering is adopted, care must be taken to ensure that prerequisites are satisfied and other conflicts avoided.

First year: CSCA58F, CSCA68S, MATA04Y, (MATASSY) or MATA26

NOTE: As an alternative to MATA55 as a first-year requirement for the Specialist Programme in Computer Science, students may be allowed to enter with only MATA26, provided that in a later year they take MATB43 (and the courses lead-NOTE: Those who took MATA55 instead of MATA26 need not take MATB43.

Second year: CSCB28S, CSCB38F, CSCB58F, both MATB41F and MATB42S or MATB05Y, MATB43S if necessary

Third year: CSCC24S, CSCC78F, STAB47S*, MATB49S or MATC51S or MATC60F * A lower-level statistics course is normally a prerequisite to STAB47S.

Third or fourth year:

Six-half courses to be chosen from the following options. CSCC64S and one of 438, 448, 465, 478.

Two of: CSCC50, C51, 446. Any two of: CSCC54F, C85S, 340, 372, 418, 428, 434, 444, 454, 458, 468, 484, 485, 488.

Note that only CSCC50, C51, C54, C64, and C85 are available at Scarborough; the remaining courses must be ballotted for and completed at the St. George campus. Consult the Department of Computer Science Undergraduate Student Handbook.

It is also desirable to have a sequence of approximately four related half-courses in a subject area in which computers can be usefully applied.

Specialist Programme in Computer Science for Data Management

Supervisor: G. Cupit (284-3352)

NOTE: Registration in this Programme is limited. A maximum of twenty students will be admitted annually to the Second Year of the Programme. Selection will be based on grades in first-year courses in Computer Science and Calculus. There are thirteen and one-half courses required for the Specialist Programme in Computer Science for Data Management. The courses may be taken in a different order, but care must be taken to ensure that prerequisites are satisfied and conflicts avoided.

First year: CSCA58F, CSCA68S, MATA26Y or MATA27Y or (MATA55Y), MATA04Y, COMA01Y, ECOA01Y

Second year: CSCB28S, CSCB38F, CSCB58F, ECOB03Y or ECOB07Y, both MATB41F and MATB42S or MATB05Y

Third year: CSCC24S, CSCC78F, COMB01Y, STAB47S* * A lower-level statistics course is normally a prerequisite to STAB47S.

Third or fourth year: CSCC64S, 434
Three half-courses to be chosen from the following options. Any one of: CSCC50F, C51S. Any two of: CSCC54F, C85S, 340, 372, 418, 428, 444, 454, 458, 468, 484, 485, 488, including at least one of: CSCC85, 372, 458, 468, 488, Note that only CSCC50, C51, C54, C64 and C85 are available at Scarborough; the remaining courses must be ballotted

for and completed at the St. George Campus. Consult the Department of Computer Science Undergraduate Student Handbook.

In completing the Programme, a student is encouraged not to include any Computer Science courses other than those required above.

Specialist Programme in Computer Science and Physics

Supervisor of Studies: G. Cupit (284-3352), J. King (284-3318) Note: Registration in this programme is limited. A maximum of twenty students will be admitted annually to the Second Year of the Programme. Selection will be based on grades in first- year courses in Computer Science, Calculus and Physics. There are 16 courses required for the Specialist Programme in Computer Science and Physics. Note that courses need not be taken in exactly the indicated order, but if an alternative ordering is adopted, care must be taken to ensure that prerequisites are satisfied and other conflicts avoided.

First Year CSCA58F, CSCA68S, MATA04Y, MATA26Y or (MATA55Y), PHYA03Y

Second Year
CSCB28S, CSCB38F, CSCB58F, CSCC24S,
both MATB41F and MATB42S or
MATB05Y,
PHYB03F, PHYB01S, PHYB08H

Third Year CSCC78F, CSCC50F, CSCC85S, MATC51F, MATC56S, PHYB04F, PHYB17S, PHYB19S

Fourth Year CSCC64S, CSCC51S, Three of: PHYC04F, C05H, C07F, C08S, C09S

Two of: CSCC54F*, 372, 418, 428, 438, 448, 458, 465, 468, 484, 485, 488.

* STAB47 is a prerequisite to CSCC54 and this in turn usually requires a lower-level statistics course.

Note that only CSCC54 is available at Scarborough; the remaining courses must be ballotted for and completed at the St. George Campus. Consult the Department of Computer Science Undergraduate Student Handbook. For the Specialist (Co-operative) Programme in Computer Science and

Physics see Co-operative Programmes.

Major Programme in Computer Science

Supervisor: G. Cupit (284-3352)
NOTE: Registration in this programme is limited. A maximum of thirty students will be admitted annually to the Second Year of the Programme. Selection will be based on grades in first-year courses in Computer Science and Calculus.

Eight full-course equivalents are required. The courses need not be taken in the order given, but care must be taken to ensure that prerequisites are satisfied and conflicts avoided.

First year: CSCA58F, CSCA68S, MATA26Y or MATA27Y or (MATA55Y), MATA04Y

Second year: CSCB28S, CSCB58F, CSCB38F, both MATB41F and MATB42S or MATB05Y

Third year, or, Third or Fourth year: CSCC24S

Four half-courses to be chosen from the following options: (i) at least one of C54F, C85S, 340, 428, 434, 444, 454, 458, 468, 484, 485, 488 (ii) at least one of C50F, C51S, C64S, C78F, 438, 446, 448, 465, 478, JMCC31F, JMCC32F (iii) at most two of 318 or 418, 300. Note that CSCC24, C50, C51, C54, C64, C78 and C85 and JMCC31 and JMCC32 are available at Scarborough; the remaining courses must be ballotted for and completed at the St. George Campus.

The following courses are offered only on the St. George Campus. Please consult the Department of Computer Science Undergraduate Student Handbook for more details.

Consult the Department of Computer

Science Undergraduate Student Hand-

book.

CSC300	Computers and society
CSC318	Computer graphics and applications
CSC336	Numerical methods
CSC340	Information systems analysis and design
CSC372 CSC418	Microprocessor software Interactive computer graph-
	ics

CSC428	Human-computer interac-
CSC434	
CSC438	Data management systems
CSC444	Computability and logic
	Economics of computers
CSC446	Computational methods for
	partial differential equa-
	tions
CSC448	Formal languages and auto-
	mata
CSC454	
CSC458	The business of software
C3C458	Architecture of distributed
	computer systems
CSC465	Programming methodology
CSC468	Operating systems
CSC478	Computer algebra
CSC484	Applied ontif -:- 1:
	Applied artificial intelli-
CCCADE	gence
CSC485	Introduction to computa-
	tional linguistics
CSC488	Language processors

Computer Science

CSCA04S How Computers Are Used Parts of a computer and their interconnection. System operations: commands, files, security. Common applications: games, text processing, spreadsheets. Problem solving with computers: algorithms and basic programming concepts. Other applications and topics: data organization, communications, office automation, artificial intelligence, computing in other academic disciplines. (Students will use micro-computers and will do some programming, but the aim of the course is to show how computers are used, not to teach programming.) Primarily for non-science students, but may be followed by other CSC courses. Exclusion: SMC104H; VIC104H; CSC104; grade 12 or 13 computer studies or data processing. This course may not be taken after or concurrently with any other CSC course. Session: Winter Day

CSCA56F/S Computer Programming Introduction to algorithms, computer organization and computer programming. Emphasis is on learning to program in a high-level language. Various applications of computers will be discussed.

This course is intended for students who want to learn programming for use in their own area of interest. It introduces students to algorithms and acquaints them with the capabilities and limitations of computers. The Turing language is introduced as a tool for the precise specification of algorithms for

computers, and for their communication to people. Some applications of programming techniques will be considered. Two hours of lecture and one two-hour tutorial per week. Exclusion: CSCA58

Prerequisite: One OAC in Mathematics Session: Winter Day, Winter Evening

CSCA58F Introduction to Computing An introduction to algorithms and problem solving with computers. Programming in a high-level language such as Turing, including an introduction to simple data structures, string manipulation, recursion, linked lists, hashing, program correctness, and floating point calculations. Comparison of several internal sorting algorithms. Brief exposure to machine language programming. (More intensive than CSCA56; intended primarily for students who plan to pursue any of the Programmes in Computer Science, or who want a more vigorous treatment of the topic area.) Two hours of lectures and two hours of tutorials per

week. Exclusion: CSCA56 Prerequisite: OAC Calculus and OAC Algebra and Geometry. Corequisite: MATA26 or (MATA55) or MATA27 Session: Winter Day

CSCA66S Programming Applications Practical approaches to solving problems involving data structures, non-numerical applications, and data processing.

This course is a continuation of CSCA56 and it covers sample problems from several areas. Particular emphasis is placed on business applications. Students interested in other applications should consider CSCA68 instead. Exclusion: CSCA68 Prerequisite: CSCA56 or CSCA58 Session: Winter Day

CSCA68S Computer Applications A continuation of CSCA58. An introduction to the representation and applications of graphs, computer simulation models, artificial intelligence, and numerical methods, including the use of data types such as stacks, queues, trees and heaps. Some exposure to languages such as Fortran, PL/I, and Pascal. Two

hours of lectures, and a two-hour tutorial per week. **Exclusion: CSCA66** Prerequisite: CSCA58, or CSCA56 and permission of instructor Corequisite: MATA26 or MATA27 Session: Winter Day

CSCB095 Software Tools in Unix and C

Introduction to programming in the C language and to the use of programmable command interpreters ("shells") in the UNIX operating system. Practice with UNIX software tools; their strengths and weaknesses.

Prerequisite: CSCA68 Session: Winter Day

CSCB28S Principles of Data Processing Systems

The emphasis is on development and evaluation of techniques of managing large centralized data processing environments, and includes exposure to and programming in languages for data processing. Topics include: external storage devices; buffering; blocking; file access methods; [algorithms for external sorting]; sequential, index sequential, and direct file organization; methods of indexed sequential file organization, including B-trees and variants; methods of direct file organization, including external hashing; organization of and algorithms for multiple attribute files; data encoding, and introduction to data base management. Enrolment limit: 100 Prerequisite: CSCA68 Session: Winter Day

CSCB38F Discrete Mathematics for **Computer Science**

A rigorous treatment of certain aspects of discrete mathematics with applications to computer science. Emphasis on the basic properties and fundamental algorithms concerning integers (including induction, Euclidean algorithm, modular arithmetic), and on logic (including propositional and predicate calculus and simple formal theories). Application to topics such as program correctness, formal program verification, algorithms from graph theory, and elementary set theory. Corequisite: MATA04Y (MATA40) Prerequisite: CSCA68 Session: Winter Day

CSCB58F Computer Organization This course is designed to give students an understanding of the operation and

the hardware of a modern digital computer. No knowledge of electronics is necessary.

Specific topics include: an introduction to boolean algebra, the design and analysis of gate networks, memory devices, the organization of a simple microprogrammed machine, basic data representation, assembly language, addressing structures, mechanisms for input and output, the structure of peripheral devices, some case studies of particular machines. There will be four laboratory periods in which students will conduct experiments with digital logic circuits.

Enrolment limit: 100. Prerequisite: CSCA68 Session: Winter Day

CSCC24S Principles of Programming Languages

A wide variety of programming styles and the programming languages that support them. Emphasis on recursion and concurrency; other programming regimes such as backtracking and coroutines. Language features such as pattern matching, programs as data, and module encapsulation. Examples from languages such as Lisp, Concurrent Euclid, Prolog, Smalltalk, and Simula. Enrolment limit: 100. Exclusion: (CSCB68) Prerequisite: CSCB38 (strongly recom-

mended: CSCB58) Session: Winter Day

IMCC31F Combinatorics

A brief survey of the field of discrete mathematics is with emphasis on problem solving. Elementary counting, generating functions and difference equations, permutations with restriction, Polva counting, graphs, network flow problems, balanced incomplete block designs, incidence structures. Prerequisite: MATB44/CSCB38 and at least one other B-level course in Mathematics or Computer Science. Session: Winter Day E. Mendelsohn

CSCC50F Numerical Algebra and Optimization

The efficiency and stability of solution techniques for systems of linear equations and least squares problems, including LU- and QR-based methods. Algorithms for optimization problems, including linear programming, and for systems of nonlinear equations. Exclusion: CSC336H

Prerequisite: CSCA68, MATA04Y, MATB41F and MATB42S or MATB05Y

Session: Winter Day

CSCC518 Numerical Approximation, Integration and Ordinary Differential Equations

Analysis of methods for approximation, integration, and the solution of ordinary differential equations. Emphasis on the convergence and stability properties of the algorithms, rather than on their implementation.

Exclusion: ACT323H, CSC336H, (JMCC51) Prerequisite: CSCA68, MATA04Y, MATB41F and MATB42S or MATB05Y Recommended Preparation: CSCC50

Session: Winter Day

CSCC54F Computer-Based Simulation Models

Constructing and using models of complex systems. Representing models as simulation programs for computers, Implementing simulation models using such simulation languages as GPSS and DYNAMO. Methods of generating uniformly distributed pseudo-random numbers and stochastic random variates with specific distributions. Validation of simulation models by statistical analysis. Case studies of some applications of computer-based simulation. Prerequisite: CSCA68, STAB47S Session: Winter Day

CSCC64S Effective and Efficient Computing

Measuring algorithm performance. Techniques of efficient algorithm design: divide and conquer, greedy method, dynamic programming, graph traversal, change of representation. Introduction to complexity theory: models of computation, P. NP, polynomial time reduction, NP-completeness. Introduction to the theory of computation: Church's thesis, computable and uncomputable functions, recursive and recursively enumerable sets, universality, many-one reduc-

Prerequisite: CSCB38H Session: Winter Day

CSCC78F Information Structures

An advanced study of major classes of information structures with an emphasis on the design, analysis, and implementation of non-numerical algorithms, using an abstract data types approach. Advanced topics on linear lists, their implementation, searching and sorting. Trees, tree traversal, tree directories. Sets and graphs, efficient operations, and advanced applications. Relations and the relational algebra. Storage management, allocation, and garbage collection. Two hours of lecture and a one hour tutorial. Exclusion: CSCC34 before 1982/83 Prerequisite: CSCB28 and CSCB38 or (CSCB68)

CSCC85S Microprocessor Systems
Hardware and software aspects of microcomputers and microprocessors. Instruc-

tion sets, addressing modes, memory devices, bus structures. Input/output and interrupt mechanisms. Assembly language and high-level language programming. System and applications software. Laboratory experiments will provide hands-on experience. Enrolment limit: 45.

Prerequisite: CSCB58 or permission of instructor.

Session: Winter Day

Session: Winter Day

CSCD94H Computer Science Project
This half-course involves a significant
project in any area of computer science.
The project may be undertaken individually or in small groups. The course is
offered by arrangement with a computer
science faculty member, at Scarborough

or the St. George campus.

This course is intended for students specializing in computer science. It can be taken as an F or S course in a single term, or as an H course spread over an entire winter or summer session. Projects must be completed by the last day of classes in the term or session the course is taken.

Prerequisite: Three C-level computer science half-courses, a GPA of 2.50, and permission of the Programme Supervisor. Enrolment procedures: Project Supervisor's note of agreement to be presented to the Programme Supervisor by whom a Special Permission will be issued for registration.

Session: Winter Day

CSCD95H Computer Science Project Same description as CSCD94H. Normally a student may not take two project halfcourses on closely related topics or with the same supervisor.

If an exception is made allowing a second project on a topic closely related to the topic of an earlier project, higher standards will be applied in judging it. We expect that a student with the experience of a first project completed will be able to perform almost at the level of a graduate student.

Session: Winter Day

Courses Not Offered in 1989-90 JMCC32F Graph Theory and Algo-

Graph Theory and Algorithms for its Applications Prerequisite: MATB44 (or CSCB38) and at least one other B-level course in mathematics or computer science

Co-operative Programme in Administration

Director: A.N. Sheps Co-ordinator: Beverley Abramson (284-3226)

Supervisor: J. Esberey (284-3168)

The Co-operative Programme in Administration is a work-study programme which combines academic studies in Commerce, Economics, Political Science, History, the behavioural and social sciences and statistics with work placements in public and private enterprises. The programme alternates study terms with work terms and typically requires five years to complete. Administration students learn through both studies and practical experience about:

policy and economic analysis

decision-making in both government and business

- the allocation of resources

the anotation of resources and programmes dealing with complex social, economic, political and business prob-

- financial and management accounting

 urban, regional and social planning The Programme prepares students for permanent employment in government, regulatory agencies, crown corporations and business enterprises, or for further studies in the social sciences, law, public or business administration, planning, or social work. Graduates receive a four-year B.A. with a Specialist certification in Administration.

Admission to the Programme

Students must apply to and be accepted by the Scarborough Campus of the University of Toronto and indicate their interest in the Administration Programme on the University of Toronto Supplementary Application. They then are asked to make a special application directly to the Office of Cooperative Programmes.

Admissions are granted on the basis of applicants' interest and potential ability in administration, accomplishment and grades in both verbal and quantitative studies, and a letter of reference from a high school teacher or university instructor. Interviews may be required. Enrolment is limited and only a small number of applicants can be accepted each year. Admissions are considered annually in May and early June. Fees: Every student in a co-operative programme is required to pay additional fees as established by the University.

Specialist (Co-operative) Programme in Administration

This Programme requires eight fourmonth terms of study, four work terms and two "off" terms over a five year period. Students begin with a full academic year of study, then alternate study and work terms, and conclude with a final eight months of study. Exceptionally, with the agreement of the Director and Co-ordinator, a fifth work term may be allowed. Work terms are arranged and scheduled by the Office of Co-operative Programmes but must be won by students in competition with cooperative students from this and other universities. During work terms students serve in the administration of government departments, crown corporations, business enterprises and public agencies.

Performance on each work term is evaluated by both the employer and Coordinator. Also students must submit to the Supervisor for evaluation a report for each work term which integrates knowledge gained during the placement with academic study already completed.

To maintain standing in the Programme, to be eligible for a work term, and to receive specialist certification upon graduation, a student must

- complete a full-time course of studies (at least two full-course equivalents and normally 2.5) during each study term
- maintain a cumulative grade point average of 2.50
- receive a satisfactory evaluation for work term performance and work term reports

Notes:

- EACH COURSE MAY BE COUNTED
 ONLY ONCE IN SATISFYING WORK
 PLACEMENT AND PROGRAMME
 REOUIREMENTS.
- 2. IT IS THE STUDENTS' INDIVIDUAL RESPONSIBILITY TO ENSURE THAT THEY HAVE COMPLETED THE CORRECT COURSES TO MAKE THEM ELIGIBLE FOR EACH WORK TERM AND THAT THEY HAVE CORRECTLY COMPLETED PROGRAMME AND DEGREE REQUIREMENTS FOR GRADUATION.

Eligibility for work terms

To compete for a work placement a student must be in good standing in the Programme and must have completed

- for the first work term: seven fullcourse equivalents, including COMA01, ECOA01, one of HISB02 or HISB03 or HISB04, POLB50, JCSB27
- for the second work term: nine fullcourse equivalents including the above courses and COMBO1, ECOBO3.
 At least one of POLB51, POLB53, POLB61, POLB62, POLC55, POLC64, POLD50 or POLD62
- for the third work term: eleven fullcourse equivalents including the above courses, a statistics half-course from section A, IV, below, and at least two of POLB51, POLB53, POLB61, POLB62, POLC55, POLC64, POLD50 or POLD62
- for the fourth work term: thirteen full-course equivalents including the above courses.

Curriculum

In the first two years of study all students follow a common core of studies (section A below).

- beginning in the third year, students choose an advanced option (Section B, below) from the following fields of administrative studies: Economic Policy, Policy Analysis, Programme Management, Social Policy, and Urban and Regional Policy. The choice should be made on the basis of the student's career goals and personal interests and skills. advanced courses in Commerce, Computer Science, Economics, Geography,
Mathematics, and Psychology have prerequisites so students must plan their studies with care.

EACH STUDENT'S CURRICULUM REQUIRES THE ANNUAL APPROVAL OF THE SUPERVISOR.

If courses are not available, students should check with the Supervisor for alternatives.

The first two years in the Programme should consist of: First Year: (Winter Session) COMA01,

ECOA01, one of HISB02 or HISB03 or HISB04, JCSB27, POLB50
Second Year: (Summer and Winter Sessions) COMB01, ECOB03, at least two elective full-course equivalents, and a work term. Students interested in the Programme Management or Economic Policy advanced options, or in careers in Commerce or Economics, may select MATA27 (Calculus) as early in their studies as possible, although it is not a required course for the co-op curriculum or for the Programme Management or Economic Policy options.

Students who take MATA27Y (Calculus) in their first year may postpone taking JCSB27Y, but must complete it before they are eligible for a third work term. A Statistics course, ECOC32F/S or ECOB35F/S, and a Computer Science course, where required, should also be included as early as possible in a student's programme.

The curriculum requirements are as

follows:

A. Core Courses: eleven full-course equivalents, to be selected as follows:

I. Behavioural Foundations (two full-course equivalents)

a Required:

*JCSB27Y Organizational Behaviour b one full-course equivalent from: POLB66Y Psychology and Politics

POLD65F/S Topics in Political Leadership

PSYB10F/S Introduction to Social Psychology

PSYC11F/S Social Psychology Laboratory

SOCB04Y Political Sociology SOCC07F/S Sociology of Occupations and Professions

SOCC13F/S Industrial Sociology

* Prerequisite waived for Administration students

| Public Policy Development and

II. Public Policy Development and Evaluation (four and one-half full-course equivalents)

a Required:	
ECOA01Y	Introduction to Economics
ECOB03Y	Price Theory
POLB50Y	Introduction to Canadian
1 OLDJO1	Politics
b Two of:	ronnes
	Carrena e policion in
POLB51F/S	Government & Politics in
	Ontario
POLB53F/S	Public Policies in Canada
POLB61F/S	Canadian Public Administra-
	tion: Institutions and
	Processes
POLB62F/S	Public Policy-Making
POLC55F/S	Comparative Provincial
	Governments
POLC64F/S	Comparative Public
I OLCOTI / 3	Administration
DOLD FOR (C	
POLD50F/S	Organized Interest and Pub-
	lic Policy
POLD62F/S	Organized Interests and the
	State
c one of:	
ECOB35F/S	Public Decision Making
ECOC32F/S	Economics of the Public
	Sector: Expenditures
III Historica	ıl and Cultural Foundations
	rse equivalents)
	ed from the curricular
offerings of t	the Humanities Division at
diffings of t	me numanities pivision at
	which must be:
HISB02Y	Britain from the 18th Cen-
	tury to the Present
HISB03Y	History of the United States
HISB04Y	Introduction to Canadian
	History
IV. Financia	l Management (two and
one-half full-	course equivalents)
a Required:	•
COMADIY	Financial Accounting
COMBOIY	Management Accounting
	ll-course equivalent from:
ECOB11F/S	Quantitative Methods in
ECOBITI/3	
GGRB31F/S	Economics: I Data Analysis in Geography
	Data Analysis in Geography
STAB52F/S	Probability and Statistics I
STAB57F/S	Probability and Statistics II
PSYBO7F/S	Data Analysis in Psychology
SOCB06F/S	Social Statistics
B. Advance	d Options: Students must
choose one o	of the following categories:
I. Economic	Policy (four full-course
equivalents)	• •
a Required:	
ECOB07Y	Macroeconomic Theory and
2000011	Policy
ECOBI2F/S	
ECOD121/3	Quantitative Methods in
	Economics: II
	ie-half full-course
equivalents i	
ECOB68F/S	Comparative Economic Sys-

tems

ECOC11Y ECOC31F/	Econometrics Economics of the Public	POLC65F/S	
	Sector: Taxation	DOLCZEV	mental Relations
ECOC32F/S	Economics of the Public	POLC75Y	Political Analysis
	Sector: Expenditures	POLC87Y	Comparative Politics of
ECOC37F/S	Law & Economics	POLD50F/S	Industrial Societies
ECOC41F/S		LOTD201/2	
ECOC48F/S	Monetary Economics	DOI DELE	Public Policy
ECOC51F/S	Labour Economics	POLD51F/S	- Abion in Canadian Goacill.
ECOC61F/S	International Economics:	POLD62F/S	ment
	Finance	POLDOS1/2	
ECOC62F/S		POLD65F/S	State
	Trade Theory	LOTD021/2	
JCEC54F/S	Industrial Relations	hone full a	ship
JEGB27F/S	Location & Spatial Develop-	ECOB07Y	ourse equivalent from:
	ment	LCOBO7 I	Macroeconomic Theory and
c one full-c	ourse equivalent from:	ECOB12F/S	Policy
POLB51F/S	Government & Politics in	LCODIZI/3	
	Ontario	ECOB35F/S	Economics: II
POLB53F/S		ECOB68F/S	
POLB61F/S	Canadian Public Administra-	ECOBOOL/3	Comparative Economic Sys- tems
	tion: Institutions and	ECOC31F/S	
	Processes	FC0C311/3	Economics of the Public Sector: Taxation
POLB62F/S	Public Policy-Making	ECOC37F/S	Law and Economics
POLC54F/S	Intergovernmental Rela-	ECOC41F/S	Industrial Openings
	tions of Canada	ECOC51F/S	
POLC55F/S	Comparative Provincial	JCEC54F/S	Industrial Relations
	Government	JEGB27F/S	Location and Special
POLC60F/S	Administrative Politics	JEODE11/3	Location and Spatial Development
POLC61F/S	Policy Development and	III Program	me Management (four and
	Political Evaluation	one-half full	-course equivalents)
POLC63F/S	Administrative Theories	a two full-co	ourse equivalents from:
	and Policy-Making	COMC04F/S	Principles of Marketing
POLC64F/S	Comparative Public	COMCOSE/S	Introduction to Marketing
	Administration	44.3200175	Management
POLD50F/S	Organized Interests and	COMD08F/S	Retail Management and
	Public Policy		Strategy
POLD62F/S	Organized Interests and the	JCEC02Y	Corporation Finance
17 D.17 4	State	JCEC72F/S	Analysis for Decision Mak-
II. Policy An	alysis (four full-course	•	ing I
equivalents)		JCEC73F/S	Analysis for Decision Mak-
a (nree full-	course equivalents from:		ing II
POLB51F/S	Government & Politics in	b Required:	one of:
POLB53F/S	Ontario	ECOB12F/S	Quantitative Methods in
POLB61F/S	Public Policies in Canada		Economics: Applications
LOFPOIL\2	Canadian Public Administra-	PSYC08F/S	Experimental Design in
	tion: Institutions and		Psychology
POLB62F/S	Processes	c one-half fu	ll-course equivalent from:
POLC54F/S	Public Policy-Making	POLB51F/S	Government & Politics in
FOLC34F/S	Intergovernmental Rela-		Ontario
POLC55F/S	tions of Canada	POLB53F/S	Public Policies in Canada
I OLCJJI/J	Comparative Provincial Government	POLB61F/S	Canadian Public Administra-
POLC60F/S	Administrative Politics		tion: Institutions and
POLC61F/S	Policy Development and		Processes
	Political Evaluation	POLB62F/S	Public Policy-Making
POLC63F/S	Administrative Theories	POLC55F/S	Comparative Provincial
. > 20000170	and Policy-Making		Government
POLC64F/S	Comparative Public	POLCEUT (S	Administrative Politics
	Administration	POLC61F/S	Policy Development and
	- /		Political Evaluation

POLC63F/S	Administrative Theories and Policy-Making	POLB51F/S	Government & Politics in Ontario
POLC64F/S	Comparative Public Administration	POLB53F/S POLB61F/S	Public Policies in Canada Canadian Public Administra-
POLD50F/S	Organized Interests and	TOLLOTTI	tion: Institutions and
. 02200170	Public Policy		Processes
POLD62F/S	Organized Interests and the	POLB62F/S	Public Policy-Making
	State	POLC54F/S	Intergovernmental Rela-
	e-half full-course		tions of Canada
equivalents	from the following, includ-	POLC55F/S	Comparative Provincial
ing a maxim	um of one-half course in	POLC61F/S	Government Policy Development and
	nd at least one-half course	POLCOTP/3	Political Evaluation
in Computer	Management Control Sys-	POLC63F/S	Administrative Theories
COMC10F/3	tems	102203170	and Policy-Making
COMC22E/S	Personnel Administration	POLC64F/S	Comparative Public
COMC25F/S	Organizational Design		Administration
COMC26F/S	Comparative Organizational	POLD50F/S	Organized Interests and
	Behaviour		Public Policy
	Business Policy	POLD62F/S	Organized Interests and the
CSCA56F/S	Computer Programming	·	State
CSCA58F/S	Introduction to Computing		d Regional Policy (four full-
CSCA66F/S	Programming Applications	course equiv	/alents)
CSCA68F/S	Problem Solving with Com-	a Required:	Huban Caagnaphy
05 0DD 05 /6	puters	GGRB05Y GGRB17Y	Urban Geography Rural Geography
CSCB28F/S	Programming Techniques	JEGB27F/S	Location and Spatial
ECOB68F/S	for Data Processing Comparative Economic Sys-	JEGB27173	Development
ECOBGOL/2	tems	h one and or	ne-half full-course
ECOC37F/S	Law and Economics	equivalents	
ECOC41F/S	Industrial Organization	GGRC04F/S	
ECOC51F/S	Labour Economics		phy
JCEC54F/S	Industrial Relations	GGRC07F/S	Countryside Conservation
JEGB27F/S	Location & Spatial Develop-	GGRC13F/S	Urban Political Geography
_	ment	GGRC18F/S	Urban Transportation Policy
SOCC07F/S	Sociology of Occupations		Analysis
	and Professions	GGRC31F/S	Development and Planning
	Industrial Sociology	DOLDE LE C	of Metropolitan Regions Government & Politics in
	least one half-course from	POLB51F/S	Ontario
Computer Se		POLB53F/S	Public Policies in Canada
course equi	olicy (four and one-half full-	POLB61F/S	Canadian Public Administra-
a Required:	valents/	I OLDOII, O	tion: Institutions and
SOCB01Y	Methods in Social Research		Processes
SOCB05Y	Urban Sociology	POLB62F/S	Public Policy-Making
SOCC06F/S	Applied Sociology	POLC55F/S	Comparative Provincial
PSYC08F/S	Experimental Design in		Government
	Psychology	POLC60F/S	Administrative Politics
	ull-course equivalent from:	POLC61F/S	Policy Development and
COMC04F/S	Principles of Marketing	DOI 0000 10	Political Evaluation
COMC05F/S	Introduction to Marketing	POLC63F/S	Administrative Theories
	Management	POLC64F/S	and Policy-Making Comparative Public
SOCB23Y SOCC07F/S	Population Sociology of Occupations	FOLCO4F/3	Administration
2000011/2	and Professions	POLD50F/S	Organized Interests & Pub-
SOCC11F/S		. 0200010	lic Policy in Canada
3000111/3	Enforcement	POLD62F/S	Organized Interests & the
SOCC13F/S	Industrial Sociology	, -	State
c one full-co	ourse equivalent from:	SOCC26F/S	Sociology of Urban Growth
ECOC37F/S	Law and Economics		

Co-operative Programme in Arts Administration

Director: T.B.A. Co-ordinator: Jan Nolan (284-3376) Supervisor: T.B.A.

The Co-operative Programme in Arts Administration is designed for students with an interest in both the arts and business or management. The programme combines academic study with practical work experience and typically requires up to five years to complete. Work placements are arranged with the management of galleries, museums, performing groups, arts service organizations and government cultural agencies. The curriculum combines specially designed courses in arts administration and policy, and studies in Commerce. Economics, Political Science and other administrative skills with a major and a minor in Drama, Fine Arts, or Music.

Arts Administration students learn from both courses and practical experience about

- the economic and financial problems of the arts
- government decision making and funding
- policy formulation and implementation, especially with reference to the arts
- the management and marketing of complex arts policies, programmes and enterprises

The Programme prepares students with a knowledge of both the arts and management and finance for permanent employment as arts administrators, or for further studies in Business Administration, Museum Studies, Drama, Music or Art History.

Graduates receive a four year B.A. with specialist certification in Arts Administration.

Admission to the Programme

a From Grade 13/OAC programme (or equivalent): Students must apply to and be accepted by Scarborough College and the University of Toronto. On the University of Toronto Supplementary Application they must indicate their choice of Scarborough College and the Co-operative Programme in Arts Administration.

They will then be asked to make a special application directly to the Office of Co-operative Programmes.

b From first-year University: Students accepted by the University and College may apply whether or not they have completed any part of the first year curriculum. The timing of their first work placement will depend on the particular university courses they have already completed.

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Admissions are granted on the basis of applicants' academic performance, background in one or more of the arts, interest and potential ability in Arts Administration, and a letter of reference from a high school teacher or university instructor. Interviews may be required. Enrolment is limited and only a small number of applicants can be accepted each year. Decisions about admissions are normally made annually in May and early June.

Fees:

Every student in a co-operative programme is required to pay additional fees as established by the University.

The Specialist (Co-operative) Programme in Arts Administration requires twenty courses (four years) of study and two work terms of four months each. Exceptionally, with the agreement of the Director and Coordinator, a third work-term may be allowed. Students are eligible for their first work term after their first two years of study. Work placements are arranged by the Office of Co-operative Programmes but must be won by students in competition with all applicants for the position. The places of work will vary widely according to a student's needs and abilities but generally students will serve in the administration or management of galleries, museums, concert halls, theatres, broadcasting organizations, government, private or voluntary cultural agencies or offices at the municipal, provincial or federal levels, performing groups, studios and studio cooperatives, arts service organizations. university cultural projects, and public relations offices of corporations which support the arts.

Performance on work terms will be evaluated by both employer and Coordinator. Students must also submit for evaluation a report for each work term which integrates knowledge gained during the placement with academic study already completed.

To maintain standing in the Programme, to be eligible for work term placement

and to receive specialist certification upon graduation a student must:

- maintain a cumulative grade point average of 2.50
- receive a satisfactory evaluation for work term performance and work term reports
- complete a full-course of study (at least two full course equivalents and normally 2.5) during each study term

NOTES:

- 1 EACH COURSE MAY BE COUNTED ONLY ONCE IN SATISFYING WORK PLACEMENT AND PROGRAMME REQUIREMENTS.
- 2 IT IS THE STUDENTS' INDIVIDUAL RESPONSIBILITY TO ENSURE THAT THEY HAVE COMPLETED THE CORRECT COURSES TO MAKE THEM ELIGIBLE FOR EACH WORK TERM AND THAT THEY HAVE CORRECTLY COM-PLETED PROGRAMME AND DEGREE REQUIREMENTS FOR GRADUATION.

Eligibility for work placements

To compete for work term placement a student must be in good standing in the Programme and must have completed at least ten full-course equivalents includ-

- three full-course equivalents from the major field
- one full-course equivalent from the minor field
- COMA01Y (Financial Accounting)
- ECOA01Y (Introduction to Econom-
- JCSB27Y (Organizational Behaviour) and
- **HUMB90Y** (Introduction to Arts Administration)

Normally, students return to their studies after each work term (and must be registered in courses after the completion of their last work term). They register in HUMD30Y (Senior Seminar in Arts Administration) after the completion of at least one work term.

All students must complete the Administrative field (eight full-course equivalents, Section A. below), a major field (six full-course equivalents) in one of Drama, Fine Art History, Fine Art Studio, or Music (Section B, below), and a minor field (two full-course equivalents), different from the major, in one of Drama, Fine Art History, Fine Art Studio, or Music (Section C, below). They must select their major and minor fields upon registering in the Programme.

The first year of study should consist of two courses from the major field,

one course from the minor field, and one of COMAOIY and ECOAOIY.

It is strongly recommended that the students take a French or a foreign language course.

Careful attention should be paid to the prerequisites for various advanced courses in the Arts Fields.

Each student's curriculum requires the annual approval of the Supervisor.

The course requirements are as follows: Twenty full-course equivalents, seventeen of which must be selected as follows: eight full-course equivalents from Section A. six full-course equivalents from Section B, three full-course equivalents from Section C.

A Administrative Field of Study a) Required:

5.5 full-course equivalents:

Financial Accounting COMAGIY **ECOA01Y** Introduction to Economics ECOB35F/S Public Decision Making HUMB90Y Introduction to Arts

Administration HUMD30Y Senior Seminar in Arts

Administration ICSB27Y* Organizational Behaviour

* Prerequisite waived for Arts Administration Co-operative students.

b) 1 full-course equivalent from: POLB53F/S Public Policies in Canada

POLB61F/S Canadian Public Administration: Institutions and **Processes**

POLB62F/S Public Policy-Making POLC64F/S Comparative Public Administration

c) 1.5 full-course equivalents from any of:

COMB01Y Management Accounting COMC04F/S Principles of Marketing COMC05F/S Introduction to Marketing

Management COMCIOF/S Management Control Sys-

tems COMC22F/S Personnel Administration COMC30Y The Legal Environment of

Business

COMD07F/S Market Research CSCA04F/S How Computers are Used Computer Programming CSCA56F/S

ECOB03Y Price Theory ECOB07Y Macroeconomic Theory and

> Policy Corporation Finance

JCEC02Y JCECS4F/S Industrial Relations POLB53F/S Public Policies in Canada

POLB61F/S Canadian Public Administration:Institutions and Processes POLB62F/S Public Policy-Making POLC60F/S Administrative Politics POLC61F/S Policy Development and Political Evaluation POLC63F/S Administrative Theories and Policy-Making POLC64F/S Comparative Public Administration Please note that many of the above courses require prerequisites and/or permission of instructor.

B Major Field Six full-course equivalents from one of the following fields: I Drama

Required:

or

DRAB01Y An Introduction to the Practical Elements of Theatre DRAB03Y

The History of Theatre I DRAB04Y The History of Theatre II DRAB06Y Canadian Drama

ENGBIIY Varieties of Drama and

One full-course equivalent from the courses listed under the Major Programme in Drama, Group A (page 111) and

one full-course equivalent from the courses listed under the Major Programme in Drama, Group B (page 111)

II Fine Art History Required:

Five full-course equivalents in art history, one from each of the following areas:

Classical Medieval Renaissance Baroque

Modern (1750 to the present) and

One additional full-course equivalent in art history at the C-level

See pages 132-134 for Fine Art History courses.

III Fine Art Studio

Required: FARA90Y

Foundation Studies in Studio

Introductory Drawing FARB70F/S Introduction to Printmaking FARB72F/S FARB74F/S Intermediate Drawing FARB75Y Introduction to Painting and

2.5 additional full-course equivalents in Fine Art Studio of which one must be at C-level. (see pages 134-136)

IV Music Required: MUSA 10F Introduction to Music 1 MUSB17F/S Materials of Music I MUSB30F/S Introduction to Music: History and Literature 🐇 MUSC04F/S Materials of Music II and 4 additional full-course equivalents from Music

C Minor Field Two full-course equivalents from one of the following fields which must be different from the major field. I Drama Required:

Two of: DRABOLY An Introduction to the Practical Elements of Theatre DRAB03Y The History of Theatre I DRAB04Y The History of Theatre II

DRAB06Y Canadian Drama **ENGBIIY** Varieties of Drama

II Fine Art History Required:

FARA10F/S Ancient Art and Architecture

FARAIIF/S Medieval Art FARA12F/S Renaissance and Baroque

FARA13F/S Modern Art: 1750 to the Present

III Fine Art Studio

Required:

FARA90Y Foundation Studies in Stu-

OF FARA70F/S Two and Three Dimensional

Design and

FARA71F/S Colour plus

1 additional full-course equivalent in Fine Art Studio. (see pages 134-136) IV Music Required:

MUSA10F/S Introduction to Music I MUSB17F/S Materials of Music I MUSB30F/S Introduction to Music: His-

tory and Literature plus an additional 0.5 full-course equivalent in Music. (see page 186)

HUMB90Y Introduction to Arts Administration and Policy

The theory and practice of arts administration and policy in Canada.

The course will examine all aspects of arts administration and policy, from the economic and financial problems of artists, arts organizations, service and funding agencies, to the formulation of municipal, provincial and federal arts policies. Topics include marketing of artistic works, publicity and promotion, fund-raising, audience development, corporate, foundation and government support, and Canada's domestic and international arts policies. The teaching method will include lectures, class participation, term papers and guest speakers.

Session: Winter Day P. Schafer

HUMD30Y Senior Seminar in Arts Administration

The course will deal with selective problems and issues in arts administration and policy.

Capitalizing on the practical experience students have had in the field, this seminar will analyse such basic problems and issues as board management relations, corporate sponsorships, dealing with the creative personality, motivating volunteers, crisis management, the roles and responsibilities of governments and arts councils, and future directions in Canada's internal and external arts policies. Students will be expected to make presentations on these topics for discussion and evaluation in class. Extensive use will be made of case studies.

Enrolment is limited to students who have completed at least one work term in the Specialist Co-operative Programme in Arts Administration, or by permission of the instructor.

Session: Winter Day P. Schafer

Co-operative Programme in Computer Science and Physics

Director: A.N. Sheps Co-ordinator: G. Cupit (284-3352) Supervisor: J. King (284-3318)

The Co-operative Programme in Computer Science and Physics is a workstudy programme which combines academic studies in computer science. mathematics and physics with work placements in public and private enterprises. The Programme alternates study during the regular academic term (September to May) with work terms during the summer term (May to August).

The Programme prepares students for permanent employment with government and business enterprises concerned with research and technology as well as for graduate study in Computer Science. Graduates receive a four-year B.Sc. with a Specialist certification in Computer Science and Physics.

Admission to the Programme

a. From Grade 13/OAC programme (or equivalent): Students must apply to and be accepted by Scarborough College and the University of Toronto. On the University of Toronto Supplementary Application form they must indicate their choice of Scarborough College and the Co-operative Programme in Computer Science and Physics.

They will then be asked to make a special application directly to the Office of Co-operative Programmes.

b. From First-year University: Students accepted by the University and College may apply whether or not they have completed the first year curriculum. The timing of their work placement will depend upon the particular university courses they have already completed.

Admissions are granted on the basis of the applicants' academic performance, background in relevant subjects, and a letter of reference from a high school teacher or university instructor. An interview may be required. Enrolment is limited and only a small number of applicants can be accepted each year. Decisions about admissions are normally made annually in May and early June. Fees: Every student in a co-operative programme is required to pay additional fees as established by the University.

The Specialist (Co-operative) Programme in Computer Science and **Physics**

This programme requires twenty courses (four years) of study and two work terms of four months each. Exceptionally, with the agreement of the Director and Co-ordinator, a third work term may be allowed. Students are eligible for their first work term after their first two years of study. Work placements are arranged by the Office of Co-operative Programmes but must be won by students in competition with all applicants for the position.

Performance on work terms will be evaluated by both employer and Coordinator. Students must also submit for evaluation a report for each work term which integrates knowledge gained during the placement with academic study already completed.

To maintain standing in the Programme, to be eligible for a work term, and to receive specialist certification upon graduation a student must

- maintain a cumulative grade point average of 2.50
- receive a satisfactory evaluation for work term performance and work term reports
- be registered as a full-time student during study terms

There are 16 courses required for the Programme. Note that courses need not be taken in exactly the indicated order, but, if an alternative ordering is adopted, care must be taken to ensure that prerequisites are satisfied and other conflicts avoided.

EACH STUDENT'S PROGRAMME REQUIRES THE ANNUAL APPROVAL OF THE SUPER-VISOR.

First Year: CSCA58F, CSCA68S MATA04Y, MATA26Y

(MATA55Y)

PHYA03Y Second Year CSCB38F, CSCB58F,

CSCB28S, CSCC85S MATB41F and MATB42S

or MATB05Y

PHYBO3F, PHYBO1S, PHYB08H

Third Year CSCC24S, CSCC50F, CSCC78F, MATC51F,

MATC56S PHYB04F, PHYB17S, PHYB19S,

PHYC05H

Fourth Year CSCC51F, CSCC64S

PHYC04F, C07F, C08S, C09S Two of:

Two of: CSCC54F, 372, 418, 428, 438, 448, 458, 468, 484, 488

Note that only CSCC54 is available at Scarborough, the remaining courses must be ballotted for and completed at the St. George Campus. Consultathe Department of Computer Science Undergraduate Student Handbook.

NOTE: IT IS THE STUDENTS' INDIVIDUAL RESPONSIBILITY TO ENSURE THAT THEY HAVE CORRECTLY COMPLETED PRO-GRAMME AND DEGREE REQUIREMENTS FOR GRADUATION.

Eligibility for work placements:

To compete for work term placement a student must be in good standing in the Programme and must have completed at least ten full-course equivalents.

Normally, students return to their studies after each work term (and must be registered in courses after the completion of their last work term).

Co-operative Programme in International **Development Studies**

Director: A.N. Sheps Co-ordinator: D. Paul Schafer (284-3161) Supervisor: Rorke Bryan (284-3115)

The Co-operative Programme in International Development is intended for students with an interest in international development, in geography, ecology and economics, and in the relations of Canada with the Third World. The Programme combines academic study in the social and ecological sciences with practical work experience in a Third World country, and typically requires up to five years to complete. A ten to twelve month work placement, usually with a Canadian - sponsored development project or agency abroad, is a central part of the programme. One of the distinctive features of the curriculum is the integration of political, economic and social development studies with courses in ecological and physical resource management. International Development Studies students learn through both studies and practical experience about:

development economics and social and political change in the Third World

- international relations
- environmental sciences, especially the management of natural resources in developing countries
- the geography, culture, language and history of the area in which they are interested.

The Programme prepares students for employment with Canadian and international governmental and non-governmental development agencies and projects. It also provides background for further studies in environmental geography, economics and political science.

Graduates receive a four-year B.A. or B.Sc. with specialist certification in International Development Studies.

Admission to the Programme

a. From Grade 13/OAC programme (or equivalent): Students must apply to and be accepted by Scarborough College and the University of Toronto and must indicate their interest in the International Development Studies Programme on the University of Toronto Supplementary Application.

They will then be asked to make a special application directly to the Office of Co-operative Programmes.

b. From first-year university: Students accepted by the University and College may apply whether or not they have completed any part of the first year curriculum. The timing of their work placement will depend upon the particular university courses they have already completed.

Admissions are granted on the basis of the applicants' academic performance, background in relevant subjects, verbal skills, interest and potential ability in international development studies and work, and a letter of reference from a high school teacher or university instructor. Enrolment is limited and interviews are usually required. Admissions decisions are normally made from late May until early July.

Fees: Every student in a co-operative programme is required to pay additional fees as established by the University.

The Specialist (Co-operative) Programme in International Development Studies

This programme requires twenty courses (four years) of study and a work term of approximately ten to twelve months duration. The work term will normally begin no sooner than the end of the third year and no later than January of

the fourth year of the Programme.

Work placements are arranged by the Office of Co-operative Programmes but must be won by students in competition with all applicants for the positions. Students may be responsible for financing part of the living expenses associated with placements. The location of the placements will vary according to each student's disciplinary and regional preferences and abilities, the availability of positions, and the practicability and safety of development work. Generally, students will serve with the administration or management of research. development and aid projects of Canadian or local universities, scholars, agencies and organizations in a developing country or, in some cases, with the Canadian offices of government or nongovernment development agencies.

The objective of the work placement is to provide students with experience and appreciation of the practical difficulties of development work and the flexibility required in the application of theoretical concepts. Before the work term students must, in consultation with the Programme Supervisor, develop a proposal for a research subject. A critical or analytical paper on the research subject and if possible based on the work placement experience is then written during the final year in the Programme after students return from their placements. Performance on placements will be evaluated by the employer, the Coordinator and the Supervisor. Shortly after their return (typically in September or October of the final year) students must submit a brief evaluation of their placement to the Programme's Supervi-

Eligibility for Work Placements To compete for work placements a stu

To compete for work placements a student must

 have completed at least fifteen fullcourse equivalents including at least 10 from the core programme (Section A) and advanced option (Section B); and two full courses from the regional and language option, which includes at least one language f.c.e.

After the work term students return to their studies and enroll in IDSD01Y (International Development Studies: Advanced Seminar) and such other courses as are necessary to complete their degrees.

To maintain standing in the Programme and to receive specialist certification upon graduation, a student

must

- maintain a cumulative grade point average of 2.50
- receive satisfactory evaluations for work placement performance and the research paper
- be registered as a full-time student during study terms

All students must complete

- a common core programme (at least nine full- course equivalents) in resource management sciences and development economics and politics (Section A, below)
- an advanced option (at least three full-course equivalents) in either political economy or ecological management (Section B, below)
- a regional language and culture option (Section C, below)
- IDSD01Y, an advanced seminar related to their work placement experience
- other elective courses (Section D, below)

NOTES:

- 1. EACH COURSE MAY BE COUNTED ONLY ONCE IN SATISFYING WORK PLACEMENT AND PROGRAMME REQUIREMENTS.
- 2. IT IS THE STUDENTS' INDIVIDUAL RESPONSIBILITY TO ENSURE THAT THEY HAVE COMPLETED THE CORRECT COURSES TO MAKE THEM ELIGIBLE FOR THE WORK TERM AND THAT THEY HAVE CORRECTLY COMPLETED PROGRAMME AND DEGREE REQUIREMENTS FOR GRADUATION.

In the first two years of study students must complete as much of the common core programme and of language studies as possible. The core programme contains two courses specially designed for International Development students: IDSB01Y: International Development Studies, Political Economy (page 107); and IDSB02Y: International Development Studies: Physical and Ecological Resource Management (page 107). Students must choose their regional and language option (Section C) no later than year 2 and their advanced option (Section B), no later than the beginning of year 3. In choosing courses students must pay careful attention to the prerequisites for higher level courses. Some courses in the Programme are offered on other campuses of the University. Please note that course offerings in all the campuses will not be finalized until after this calendar has been printed. CHECK WITH SUPERVI-SOR FOR COURSE AVAILABILITY.

Each student's programme requires the annual approval of the Supervisor.

The curriculum requirements are as follows:

Twenty full-course equivalents including:

A Core Programme: at least nine fullcourse equivalents from the following: (PLEASE NOTE THE COURSES ON ST. GEORGE CAMPUS ARE IDENTIFIED WITH*. ALSO NOTE THAT STUDENTS MUST COM-PLY WITH REGULATIONS REGARDING REGISTERING IN COURSES ON OTHER CAMPUSES.)

I. Required:

i. Keguirea.	
IDSB01Y	International Development
	Studies: Political Economy
IDSB02Y	International Development
	Studies: Physical and Eco-
	logical Resource Manage-
	ment
ECOA01Y	Introduction to Economics
BIOB14F/S	Environmental Biology
POLB80Y	International Relations

One F.C.E. in Forestry which must include: FOR495F Forestry in Development
ANTC10F/S Anthropological Perspectives on Development

GGRB09F/S Hydrology, Land Use and Water Quality

or

*GGR206H Introduction to Hydrology GGRC27Y Soil Management and Conservation

Il. One full-course equivalent from:

n. One fun-course equivalent from;		
Management Issues and		
Practices in the Develop-		
ment World		
Economic Development		
Development Policy		
Politics of the Third World		

III One-half course from:

III. One-naij	course from:
ANTC35F/S	Quantitative Methods in
	Anthropology
ECOB11F/S	Quantitative Methods in
	Economics
GGRB31F/S	Data Analysis in Geography
SOCBO6E/S	Social Statistics

B Advanced Options: at least three fullcourse equivalents chosen from either I or II. below

I. Political Ec	onomy	*GGR310H
ECOB03Y	*GGR355H	
	Price Theory two full-course equivalents	*GGR393H
from		
ANTB20Y	Social and Cultural Anthro-	*GGR416H
7,111, 12, 10, 1	pology	
ANTC11Y	The Anthropology of	*GGR461H
	Women	
ANTC19F/S	Economic Anthropology	
ANTC51Y	Medical Anthropology	C Regional a
ANTC55Y	Women in Development	least two full
ANTC56Y	The Anthropology of Food	from courses
ANTC60F/S	Fieldwork in Social and Cul-	development
ANTCOOLIS	tural Anthropology	course equiv
ECOB07Y	Macroeconomic Theory and	language app
LCODO7 1	Policy	developed co
*ECO230Y	International Economic	functional kr
LCOZJOI	Institutions	language ma
ECOC66F/S	Economic Development	regional cou
ECOC67F/S	Development Policy*	and courses
ECOCO1173	*if not taken as part of core	Programme S
	requirements above	courses for t
GGRC20F/S	Issues in Rural Develop-	STUDENTS IN
GGRC20173	ment	REGIONS AN
GGRC29Y	Problems in Modern Agri-	CONSULT TH
GGRC231	cultural Land Use	FOR A LIST C
POLB91Y	Politics of the Third World*	IONALISI
POLD311	*if not chosen as part of	I Latin Amer
	core requirements	a. at least of
POLD93F/S	Selected Topics on	from
FOLD93F/3	Developing Areas	ANTBO3F/S
POLD94F/S	Selected Topics on	AIT DOSI /
FOLD341/3	Developing Areas	ANTBO7F/S
*POL445Y	Canada and the Third World	*ANT443Y
SOCC17F/S	Social Change in the Third	ANTITOT
300017173	World	
	WOING	ENGB20F/S
II Ecological	Resource Management	LINGDEOL
	e full-course equivalents	
chosen from		*GGR244H
ANTBOLY	Ecological Anthropology	OUNE ! !!!
ANTC51Y	Medical Anthropology	*GGR249H
BIOB 12Y	Fundamentals of Ecology	OUNE ION
DIODILI	(Note: BIOA03Y Introduc-	*HIS291Y
	tory Biology is a prere-	
	quisite - students in this	*HIS292Y
	stream are strongly advised	
	to take BIOA03Y)	*HIS394Y
BIOC50F/S	Ecology of Arid Regions	
*BOT206Y	Applied Botany	*HIS490H
*FOR455H	Advanced Forest Ecology	1,15 15 011
*FOR456H	Forest Soils II	HUMC14Y
GGRB03Y	Climatology	oc.iii
GGRB19Y	General Geomorphology	POLC98Y
GGRC28Y	The Hydrology of Surface	. 02050.
03110201	and Subsurface Waters	*POL442Y
GGRC32F/S	Research Seminar in Soil	
- J. C. L. / J	Management	*PRT280H
*GGR207H	Airphoto Interpretation	
*GGR305H	Biogeography	*SOC323Y

*GGR310H	Problems in Biogeography
	Environmental Change
	Methods of Environmental
	Impact Assessment
	Field Studies in Environ- mental Assessment
	mental Assessment Remote Sensing of Environ-
	ment
	men.
C Regional ar	nd Language Options: At
	course equivalents chosen
	dealing with a designated
development	region. One of these full-
course equiva	ilents should be in a
language app	ropriate for work in less
	untries. Students with a
	owledge of an appropriate
	substitute non-language
	ses. Selection of a region
	s subject to approval by the upervisor. Some approved
	wo regions are listed below.
	TERESTED IN OTHER
	LANGUAGES SHOULD
CONSULT TH	E PROGRAMME SUPERVISOR
	F COURSES AVAILABLE.
I Latin Ameri a. at least or from	ca le full-course equivalent
ANTB03F/S	The Americas: an Anthro-
	pological Perspective
ANTBO7F/S	
*ANT443Y	Social Anthropology of Latin America and the
	Caribbean
ENGB20F/S	
Eliobe vi / b	in English: Africa and the
	West Indies
*GGR244H	Historical Geography of
	Latin America
*GGR249H	Contemporary Latin Amer-
4111000011	ica
*HIS291Y	Latin America: the Colonial Period
*HIS292Y	Latin America: The
11132321	National Period
*HIS394Y	Protest and Change in the
	Caribbean
*HIS490H	Topics in Modern Latin
	American Social History
HUMC14Y	Topics in Latin American
	Culture and Literature
POLC98Y	Politics and Society in
*DOI 44011	Latin America
*POL442Y	Topics in Latin American Politics I and II
*PRT280H	Aspects of Brazilian Cul-
INIZOVA	ture
*SOC323Y	Social Change in Latin
	A

America

and

b. at least one full-course equivalent			
from			
SPAA01Y	Introductory Spanish		
SPAA02H	Language Practice I		
SPABOLY	Intermediate Spanish		
SPAB02H	Language Practice II		
*PRT100Y	Introductory Portugese		
*PRT222Y	Language Practice		
II. Africa			
	e full-course equivalent		
from	o da		
	African Cultures and		
	Societies I: Survey		
ANTBSSY	Cultures of the Middle		
711110001	East and the Islamic World		
ANTC06F/S	African Cultures and		
ANT COOL / 2	THE PARTIE OF THE		
*ANT345Y	Societies II: Case Studies		
-AN 1345 Y	Social Anthropology of		
ENGROSE (A	West Africa		
ENGB20F/S	Contemporary Literature		
	in English: Africa and the		
	West Indies		
*GGR345H	Africa: Geographical		
	Aspects of Economic		
	Change		
*HIS395Y	Black Africa in the 20th		
	Century		
*HIS495Y	Black Africa: Social and		
	Economic History		
POLC95Y	Politics and Society in		
1020331	Independent Africa		
*POL430Y	Topics in African Politics		
	ropics in African Politics		
and	. 6.31		
b. at least one full-course equivalent			
from			
FREA09Y	Practical French I		
FREAloy	Language Practice I		
FREA17F/S	Intermediate Conversation		
	I		
FREBIOY	Language Practice II		
FREB17F/S	Intermediate Conversation		
	II		
FREB19Y	Practical French II		
*NEW280Y	Introductory Swahili		
*NEW380Y	Intermediate Swahili		
Efforts will be	made to accommodate		
students who	have other regional and/or		
linguistic inte	rests. See Supervisor.		
www.ro mile	com occoupervisor.		

и кеципец.	
IDSD01Y	International Development
	Studies: Advanced Seminar

and any five other full-course equivalents which satisfy the degree requirements.

In addition to the courses listed, students should be aware of the following recommended courses:

COMAOIY	Financial Accounting
ECOC61F/S	International Economics: Finance
ECOC62F/S	International Economics:
*ECO328Y	Trade Theory International Economics
*FOR466Y	Wildlife Ecology and
*GGR334H	Management Water Resource Manage- ment
*GGR356H	Energy-Environment Interaction
*GGR461H	Remote Sensing of Environ- ment
*JPE400Y	The Political Economy of International Development

Students should also be aware of certain courses at other universities which may, with the approval of the Programme Supervisor and the agreement of the host university, be taken for programme credit.

IDSB01Y International Development Studies: Political Economy

Introduces students to major development problems, the principal social, economic and political factors that condition these and the impact on them of various development strategies pursued in a sample of third-world countries. The course is composed of five sections: the evolution and meaning of the term "third world"; the evolution of the socioeconomic situation in less-developed countries; absolute poverty, inequality, oppression and socio-cultural strain; conservative, reformative and revolutionary development strategies; recent developments in thought about the third world including advocacy of "basic needs" strategy and a New International Economic Order. Prerequisite: A course in Economics or Politics or permission of the instructor Session: Winter Day

IDSB02Y International Development Studies: Physical and Ecological Resource Management

Introduces students to the physical and ecological bases of natural resource management, and their role in constraining development in third world countries. The course includes study of: basic climatic processes, climatic differentiation; the hydrologic cycle and its role in water resource management; principles of soil development and nutrient cycling; processes of plant colonization and community

development. It will include case studies of natural resource management and mismanagement in developing countries. Students will be encouraged to develop specific regional interests in course tutorials.

Session: Winter Day

IDSDO1Y International Development Studies: Advanced Seminar

Normal enrolment in this course will be made up of IDS students who have completed their work placement. Each student will give at least one seminar dealing with their research project and/or placement. The research paper will be the major written requirement for the course, to be submitted no later than mid-March in the final year. The course will also include seminars by practising professionals on a variety of development topics.

Prerequisite: Students must have completed the first four years of the IDS Programme or its equivalent and have completed their placement. Also, permission of instructor is required.

Session: Winter Day

R. Bryan

NOTE:

FOR courses: these courses are offered by the Faculty of Forestry. The Calendar of that Faculty should be consulted for complete course descriptions. For International Development Studies students the prerequisites for FOR456H are IDSB02Y and GGRB29Y. FOR455H has no prerequisites but enrolment is limited and students should apply early. FOR455H is offered in alternate years

GGR courses: The normal prerequisites in GGR B-level courses may be waived by permission of the instructor for IDS students.

Students in the Ecological Management stream who plan to graduate with a Bachelor of Science degree should make sure that their course selection satisfies the B.Sc. degree requirements.

Development Studies

College Programme in Development Studies

Supervisor: T.B.A.
The dimensions and diversity of problems facing developing countries have involved many academic disciplines. At the Scarborough Campus the College Programme in Development Studies is based primarily on existing courses taught by faculty members actively involved in development problems. In organizing the Programme an attempt has been made to provide a core of fun

organizing the Programme an attempt has been made to provide a core of fundamental knowledge which can be applied in Third World countries. Students may then select additional courses from a broad range of relevant courses at the Scarborough and St. George Campuses which will allow more specialized thematic or regional concentration. Students enrolling in this Programme are strongly advised to combine it with a major programme in a related discipline. The Programme is designed both for students with a broad general interest in developing countries or those with some interest in pursuing a course in development studies. Students in the latter category should seriously consider the

Students must complete:

IDSB01Y Political Economy of International Development
Development Studies: Physical and Ecological
Resource Management

more intensive Co-operative Programme

in International Development Studies.

They must also complete at least three full-course equivalents from the follow-

(Courses marked with an asterisk have

prerequisites.)
*ANTC10F/S Complex Societies: Anthro-

pological Perspectives on Development

*BIOB14F Environmental Biology
*ECOC66F Economic Development
*ECOC67S Development Policy
*GGRC27Y Soil Management and Conservation
POLB80Y International Relations

POLB91Y Politics of the Third World
*SOCC17F Social Change in the Third
World

An additional *three* full-course equivalents should be selected from the following:

(Courses not selected as the three core courses in the group above may be included.)		prerequisites in each discipline selected. It is possible to complete the Programme within three years, as shown in Example
*ANTBOLY	Ecological Anthropology	1 below.
ANTBO3F/S	The Americas: an Anthropo-	Example 1 (three-year degree)
• • • • • • • • • • • • • • • • • • • •	logical Perspective	First Year:
*ANTBOSF	African Cultures and	IDSB01Y, IDSB02Y, ECOA01Y, GGRA05F/S,
	Societies I: Survey	SOCAOLY
	Comparative Slavery	Second Year:
*ANTB20Y	Social and Cultural Anthro- pology	ECOBO3Y, GGRC27Y, SOCC35Y, POLB80Y, POLB91Y
*ANTB55Y	Cultures of the Middle East	Third Year:
	and the Islamic World	ECOC66F, ECOC67S, SOCC17F, POLC95Y,
*ANTC06S	African Cultures and	POLD93F, POLD94S
7	Societies II: Case Studies	However, students are strongly advised
*ANTC11Y	The Anthropology of	to register in a four-year degree which
	Women	requires a Major (or Specialist) in a dis-
*ANTC19F	Economic Anthropology	cipline as well as a Major in the College
*ANTC35F	Quantitative Methods in	Programme in Development Studies. In
	Anthropology	Example 2 a Major in Political Science
*ANTC51Y	Medical Anthropology	would be obtained along with a Major in
*ANTC55Y	Women in Development	Development Studies.
*ANTC56Y	The Anthropology of Food	Example 2 (four-year degree)
*ANTC60F/S	Fieldwork in Social and Cul-	First Year:
	tural Anthropology	ECOA01Y, POLA01Y, SOCA01Y, ANTA01Y,
*BIOB12Y	Fundamentals of Ecology	GGRA05F/S
*BIOC50F	Ecology of Arid Regions	Second Year:
ECOA01Y	Introduction to Economics	ECOB03Y, POLB50Y, SOCC35Y, POLB91Y,
*ECOB03Y	Price Theory	IDSB02Y
*ECOB07Y	Macroeconomic Theory and	Third Year:
	Policy	ECOC66F, ECOC67S, SOCC17F, POLB80Y
*ECOB11F/S	Quantitative Methods in	Fourth Year:
	Economics	POLB70Y, ANTC10F, POLC87Y, POLD93F,
*GGRB03Y	Climatology	POLD94S, GGRB31S, IDSB01Y
GGRB19Y	General Geomorphology	
*GGRB31S	Data Analysis in Geography:	
	An Introduction	

Drama

*GGRC20F/S Issues in Rural Develop-

The Hydrology of Surface

Problems in Modern Agri-

Research Seminar in Soil

Geography and Develop-

Politics and Society in Latin

Selected Topic on Develop-

Africa: Perspectives in

Politics and Society in

and Subsurface Waters

cultural Land Use

Management

Tropical Africa

Selected Topics on

Developing Areas

America

ing Areas

Studies requires a minimum of eight

These normally involve A-level

The College Programme in Development

full-course equivalents from the courses

listed above, together with appropriate

ment

*GGRC28Y

*GGRC29S

*GGRC32F

*GGRC33F

POLC95Y

POLC98Y

POLD93F

POLD94S

prerequisites.

Notes:

Discipline Representative:

M.Q. Schonberg

The Drama courses at Scarborough College have been devised to serve both students who intend to specialize in Drama and Theatre studies and those who have a casual interest in the subject.

At present we offer two types of courses which complement each other: theoretical and practical. The theoretical courses are in the History of Theatre, in which the student becomes familiar with the development of the theatre from a non-literary point of view from its classical beginnings to the present day. These courses are augmented by courses in the dramatic literatures of several countries which are offered by members of the faculty who specialize in these areas.

Advanced students may choose an Independent Studies course or Directed Reading course, where they work individually under the supervision of their

own tutors.

In the practical courses, the students become acquainted with all aspects of theatre production in studio situations, both as actors and technicians. The students study with faculty members and with professional artists and teachers. Participation in public productions at the College is encouraged.

Drama students may wish to refer to the following:

Specialist Programme in the Arts: Page 57 Specialist in Co-operative Programme in Arts Administration: Page 99

Specialist Programme in Drama

Supervisor: M.Q. Schonberg A student is required to complete thir-

		e equivalents, eleven in eatic Literature and Thea-
		related disciplines, as fol-
	ws:	
I	DRABOTY	An Introduction to the Practical Elements of Theatre
2	DRAB03Y	The History of Theatre I
3	DRAB04Y	The History of Theatre
4	ENGB11Y	Varieties of Drama

ENGC50Y Modern Drama Three full-course equivalents chosen from the following:

HOM the lonewing.	
CLAC04Y	Greek and Roman
	Tragedy
DRAB05Y	The Art and Nature of
	Comedy
DRAB06Y	Canadian Drama
DRAB10B	Improvisational Theatre:
	Commedia dell'Arte
DRAB12B	Medieval and Early
	Tudor Drama: The Texts

and Their Production **ENGBIOY** Shakespeare English Drama to 1642 ENGC33Y* ENGC55F/S* Drama Since 1960 Early Shakespeare ENGD15F*

ENGD16S* Problems in Later Shakespeare ENGD17F/S* Marlowe and Jonson

ENGD39F/S* G. B. Shaw FREB29F/S* French Drama of the Eighteenth Century

French Theatre of the FREB30F/S* Early Modern Period

Contemporary French FREB31F/S* Theatre: The Theatre

and the Absurd FREB38F/S* The Theatre of French Canada

FREB39F/S* Workshop in Modern French Theatre

FREB41F/S* French Classicism: The Theatre

ITAC27F/S* Modern Italian Theatre from Pirandello to the Present

Italian Sixteenth Cen-ITAC35F/S* tury Theatre

ITAC41F/S* Italian Eighteenth Century Theatre JDHB16Y Dramatic Literature and

Political Revolution

* Students should check these courses for prerequisites

7 Three full-course equivalents chosen from the following (no more than one full-course equivalent may be chosen from DRAD20Y-DRAD28S). DRAC01Y Intermediate Workshop

in Theatre Performance The Directors' Theatre DRAC02Y DRAC10Y** Individual Studies in French Theatre and

Drama in Translation DRAC11Y** Individual Studies in German Theatre and

Drama in Translation DRAC12Y** Individual Studies in Italian Theatre and

Drama in Translation DRAC13Y** Individual Studies in

Russian Theatre and Drama in Translation DRAC14Y** Individual Studies in

Spanish Theatre and Drama in Translation

DRAD01Y* Advanced Workshop: Performance and Direct-

DRAD20Y*/DRAD21Y*/DRAD22Y* DRAD23Y*/DRAD24Y*/DRAD25F* DRAD26S*/DRAD27F* DRAD28S* Supervised Reading

Courses The student may take only one of the Individual Studies courses in any sin-

gle academic year. * Two full-course equivalents chosen from the following:

ANTA01Y Introduction to Anthropology

ANTB23Y Comparative Mythology ANTC05Y* Anthropological Study of Religion

CLAC03Y Greek and Roman Epic English Literature: Prac-**ENGAO1Y** tical Criticism and

Interpretation Twentieth-Century **ENGA08Y** Literature

HISAOIY	The European World: An Introduction to History
HUMA01Y	Prologue
HUMALIY	Greek and Roman
	Mythology
HUMB70Y	Introduction to the
	Cinema
LINAOIY	General Linguistics
LINA04F/S	Introduction to
	Language
MUSA 10F/S	Introduction to Music
MUSB17F/S	Materials of Music I
MUSB30S	Introduction to Music
	History and Literature
PHLB03F/S	Philosophy and Art
PSYA01Y	Introduction to Psychol-
	ogy
SOCA01Y	Introduction to Sociology

* Students should check these courses for prerequisites

** Prerequisite: ten full-course equivalents

NOTE: No more than ten full-course equivalents in DRA are permitted in the four-year degree.

Major Programme in Drama

Supervisor: M.Q. Schonberg A student is required to complete seven full-course equivalents in the area of Dramatic Literature and Theatre. The following four courses comprise the core of the programme: DRAB01Y An Introduction to the Prac-

tical Elements of Theatre DRAB03Y History of Theatre I DRAB04Y History of Theatre II **ENGBIIY** Varieties of Drama In addition, the student must take three full-course equivalents, one from group A and two from group B, but no more than two courses from DRAC10-C14 (and no more than one full-course equivalent from DRAD20Y-DRAD28S) may be taken within the three-year degree.

Group A

DRACOLY Intermediate Workshop in	1
Theatre Performance	
DRAC10Y** Individual Studies in Fren Theatre and Drama in	cł
Translation	
DRAC11Y** Individual Studies in Ger-	
man Theatre and Drama i Translation	n
DRAC12Y** Individual Studies in Italia	an
Theatre and Drama in	
Translation	

DRAC13Y** Individual Studies in Russian Theatre and Drama in Translation DRAC14Y** Individual Studies in Spanish Theatre and Drama in Translation DRAD01Y Advanced Workshop: Performance and Directing DRAD20Y*/DRAD21Y*/DRAD22Y* DRAD23Y*/DRAD24Y*/DRAD25H* DRAD26S*/DRAD27F/S* DRAD28F/S* Supervised Reading Courses

Group B

ENGD15F*

ENGD16S*

CLAC04Y	Greek and Roman Tragedy
DRAB05Y	The Art and Nature of
	Comedy
DRAB06Y	Canadian Drama
DRAB10B	Improvisational Theatre:
	Commedia dell'Arte
DRAB12B	Medieval and Early Tudor
	Drama: the Texts and their
	Production
DRAC02Y	The Directors' Theatre
ENGB10Y	Shakespeare
ENGC33Y*	English Drama to 1642
ENGC35F/S*	Drama Since 1960
ENGC50Y*	Modern Drama

Early Shakespeare

Problems in Later

Shakespeare

ENGD17F/S* Marlowe and Jonson ENGD39F/S* G. B. Shaw FREB29F/S* French Drama of the Eighteenth Century FREB30F/S* French Theatre of the Early Modern Period FREB31F/S* Contemporary French Theatre: the Theatre and the

Absurd FREB38F/S* The Theatre of French Canada

FREB39F/S* Workshop in Modern French Theatre

FREB41F/S* French Classicism: The Theatre HUMB70Y Introduction to Cinema

ITAC27F/S* Modern Italian Theatre from Pirandello to the Present Dav

ITAC35F/S* Italian Sixteenth-Century Theatre

ITAC41F/S* Italian Eighteenth-Century Theatre Dramatic Literature and Pol-JDHB16Y

itical Revolution * Students should check these courses for prerequisites.

** Prerequisite: ten full-course equivalents

DRABOLY An Introduction to the Practical Elements of Theatre

An introductory practical course, concentrating on the non-literary aspects of theatre.

In the workshops the student will study basic acting techniques (rudiments of voice, movement, script interpretation, building a character), and will also be introduced to such technical skills as lighting, sound, makeup, set construction and painting. In addition, the student will be expected to participate in at least one production per term. Three two-hour workshops per week, plus additional time as necessary for rehearsals and/or production meetings, etc. Careful preparation for each of the workshops is essential. Session: Winter Day TBA

DRABO3Y The History of Theatre I A study of the non-literary aspects of theatre from the Classical Greek Theatre to the end of the eighteenth century.

Areas of concentration will include classical Greek and Roman theatre, Western European Medieval dramatic traditions; the impact of the commedia dell'arte on European theatre; Elizabethan and Jacobean drama; the theatre of the Baroque; Neo-classicism. Acquaintance with representative plays of the various periods will be required. Attention will also be paid to the social and political milieu from which the plays arise.

Lectures and tutorials. The text for the course will be *History of the Theatre* by Oscar Brockett.

Representative plays will be announced.
Session: Winter Day
TBA

DRAB05Y The Art and Nature of Comedy

A study of the comic form in the theatre and film.

The student will read plays by the masters of comic drama and view films that are classics in the history of comic cinema. Representative theoretical works will be studied with reference to the political and social aspects of comedy.

The types of comedy explored will cover a wide range of works from farce to burlesque to comedy of ideas, political and literary satire, and the comedy of the absurd.

The course will be taught in lectures and seminars.
Session: Winter Day
M.Q. Schonberg

JDHB16Y Dramatic Literature and Political Revolution:

A study of plays which deal with the various aspects of political revolution.

Political revolution is perhaps the most striking feature of modern political change. From about 1800, dramatists have been fascinated with the political, social and psychological issues raised by the apparent either/or of revolutionary change.

Texts will be drawn from European and North American literatures. All texts will be read in English. Exclusion: (JHGB50) (LITB15Y) Session: Winter Day H. Ohlendorf

DRACO1Y Intermediate Workshop in Theatre Performance

This course is designed to enable advanced students to concentrate on problems related to the staging of plays in studio situations.

A portion of the course is devoted to work with TV-video tape equipment. A minimum of three hours weekly in formal groups, and additional time in rehearsal, will be devoted to advanced exercises in acting skills, scene work, and work on productions.

Prerequisite: DRAB01

Corequisite: ENGB11

Session: Winter Day

M.Q. Schonberg

DRAC10Y Individual Studies in French Theatre and Drama in Translation

DRAC11Y Individual Studies in German Theatre and Drama in Translation

DRAC12Y Individual Studies in Italian Theatre and Drama in Translation

DRAC13Y Individual Studies in Russian Theatre and Drama in Translation

DRAC14Y Individual Studies in Spanish Theatre and Drama in Translation

Individuals will study under the supervision of members of the appropriate language discipline, and details of course content and evaluation will be arranged in consultation between the student, a member of the language discipline, and the Drama Supervisor.

In these courses the emphasis will be on the student's individual initiative, with the faculty member acting as tutor rather than lecturer.

Prerequisite: At least ten full-course equivalents, two of which must be DRABO3 and DRABO4. These courses are intended for students specializing in Drama who are not sufficiently fluent in French/ German/ Italian/ Russian/ Spanish to read the works in the original language. Permission of Supervisor required.

Session: Winter Day M.Q. Schonberg

DRADO1Y Advanced Workshop: Performance and Directing

Detailed textual analysis, in-depth scene study, and elements of directing for the stage. The course will also include work on theatrical technique in areas such as period style, masks, improvisation, stage fighting, etc. Students are expected to work on group projects, as well as on specific assignments according to their individual area of interest. Prerequisites: DRABO1, DRACO1 Session: Winter Day

TBA

JSDD16Y Golden Age Spanish Drama

This is an advanced seminar course on the Spanish drama of the 16th and 17th centuries. Representative works by the major playwrights will be closely examined and both literary and practical aspects will be considered. Videotapes of historical productions will be discussed. Students will be required to present one theoretical and one staging seminar. The course will be conducted in English. Texts will be read in translation.

Prerequisites: One B-level Drama fullcourse equivalent and permission of the instructor.

Session: Winter Day P. León

DRAD20-24Y

DRAD25-28H Supervised Reading This is an advanced reading course for drama students. The student wishing to take this course should consult with M.Q. Schonberg, the Programme Supervisor, who will arrange in co-operation with the student a reading list and set the specific requirements for the course.

The emphasis in this course will be on advanced individual projects exploring specific areas of the history of theatre and/or dramatic literature. Proposals by students for specific projects will be assessed by the Supervisor in consultation with other members of faculty. Prerequisite: One B-level full-course equivalent in Drama, and permission of instructor.

Session: Winter Day M.Q. Schonberg

Courses Not Offered in 1989-90

DRAB04Y
DRAB06Y
DRAB10B
Improvisational Theatre:
The Commedia dell'Arte
Medieval and Early Renaissance Theatre
The Directors' Theatre
Exclusion: (DRAB02)
Prerequisite: DRAB03
Corequisite: DRAB04

Economics

Assistant Chair: TBA

The Economics curriculum offers a wide variety of theoretical and applied courses. The curriculum provides an excellent background for careers in business, government, and the professions. Many of the courses are not intended exclusively for specialists in the discipline but can be of value to students with very diverse interests.

There are certain courses that are central to the curriculum: the introductory course (ECOA01Y); the initial B-level courses - Price Theory (ECOB03Y) and Macroeconomic Theory and Policy (ECOB07Y); at least one course that provides a different perspective either on contemporary economic theory, or on ways of organizing economic activity - Economic History (ECOB81Y, ECOB82Y, ECOC83Y), the Literature of Economics (ECOC25F, ECOC26S), Comparative Economic Systems (ECOB68). A student

who wants to pursue Economics in depth should consider seriously acquiring a background in Accounting, Statistics, and Computer Science and, most important of all, Mathematics (especially Calculus, Probability Theory, and Linear

Many courses in the Social Sciences complement courses in Economics so that students are urged to read the Calendar and, with the help of the Supervisor, to plan their programmes of study carefully.

Specialist Programme in Economics Supervisor: TBA

NOTE: Registration in this Programme is limited.

Students will be selected to enter the Second Year of the Programme, on the basis of GPA for those four courses taken to date in which the student's grades are highest (including ECOA01). Students wishing to register in the Programme at a later date may be admitted at the discretion of the supervisor.

The Specialist Programme in Economics requires a heavy concentration in the discipline. A Specialist Programme may not be advisable for all students. Students who are interested in Economics and in other areas as well should refer to the Economics course descriptions, and to the Major Programme in Economics.

The Programme is designed for students considering employment in fields where a knowledge of economic theory and a modest ability to do research are important. The Programme is not a guarantee of employment but it does provide the basic quantitative and theoretical skills that are desirable for decision-making in business and government.

Students must complete at least ten

full-course equivalents as specified below and not more than fourteen fullcourse equivalents in Economics. The following specific courses must be included as part of the ten course minimum: ECOA01Y MATA27Y or MATB05Y or MATB41F ECOB03Y ECOB07Y ECOB11F/S or (STAB22F and STAB47F/S) ECOB12S ECOC25F or ECOC26S or ECOD05S or ECOD07S **ECOCI1Y** ECOC66F or ECOB68S or ECOB81Y or ECOB82Y or ECOC83Y

ECOC13F ECOC14S

A D-level course in economics. At least one course from the following introductory Humanities courses: CLAA01Y, CLAB11F/S, CLAB30F/S. CLAB31F/S, CLAB32F/S, CLAB33F/S, DRABO3Y, DRABO4Y, DRABO6Y, ENGA08Y, ENGB07Y, ENGB08Y, ENGB10Y, ENGB11Y, ENGB14Y, ENGB15Y, ENGB20F, ENGB21S, ENGB25F/S, ENGB34F/S, FREB20Y, FREB24Y, FREB26Y, FREB29F, FREB36F, FREB37S, FREB49Y, GRHB01Y, GRHB02Y, GRHB03Y, HISA01Y, HISB02Y, HISB03Y, HISB04Y, HISB06Y, HISB07Y, HUMA01Y, HUMA11Y, ITAC12F/S, ITAC13F/S, ITAC22F, ITAC23S, ITAC27F/S, ITAC31Y, ITAC32F/S, ITAC33F/S, ITAC34F/S, ITAC35F/S, ITAC36F/S, ITAC40F/S, ITAC41F/S, ITAC43F/S, ITAC44F/S, ITAC45F/S, LITA01Y, MUSA10F, MUSA20S, MUSB14F/S, PHLAO1Y, PHLBO1F, PHLBO3F, PHLB04S, PHLB05F, PHLC05S. Where students are enrolled in Majors in both Economics and Commerce, the same course may be used to satisfy the distributional requirement, without counting against the regulation that only two courses used to satisfy programmes may overlap (see Programme Requirements, Regulations concerning Programmes of Study, item 2, page 28). Students are urged to take ECOA01Y, and either MATA27Y or MATA26Y or MATA55Y in their first year of full-time study (or equivalent). MATA27Y is adequate for satisfying the mathematics requirements of the Programme. However, students considering the possibility of graduate work in Economics are urged to take B-level Calculus as well, and to take Mathematical Statistics (STAB22 and STAB47) instead of ECOB11F/S. **NOTE:** Students taking MATA26Y or

MATA55Y must complete additional courses in Mathematics in order to satisfy the Programme requirements (namely, MATBO5Y or MATB41F). ECOB03Y, ECOB07Y and ECOB11F/S or (STAB22 and STAB47) should normally be taken in the second year of full-time study.

Students may petition the Supervisor for permission to substitute other courses for some of those listed above.

Specialist Programme in Commerce and Economics

NOTE: Registration in this Programme is limited. Students will be selected to enter the Second Year of the Programme on the basis of GPA for those four courses taken to date in which the student's grades are highest (including ECOA01Y and COMA01Y). Please refer to Commerce and Econom-

Specialist Programme in Economics and History

Supervisor: TBA

NOTE: Registration in this Programme will be limited. Students will be selected to enter the Second Year of the Programme on the basis of GPA for those four courses taken to date in which the student's grades are highest (including ECOA01Y). Students wishing to enter at a later date may be admitted at the discretion of the Supervisor.

Requirements: Thirteen and one half full-course equivalents in a degree programme of at least twenty full-course equivalents of which six and one half are in Economics and seven are in History. Required courses in Economics:

ECOA01Y ECOB03Y ECOB07Y ECOB11F/S

Two full-course equivalents, at least one of which must be in economic history. from the following courses in economic history or the history of economic thought - ECOC25F, ECOC26S, ECOB81Y, ECOB82Y, ECOC83Y, ECOD05S, ECOD07S One additional full-course equivalent in

Required courses in History: HISA01Y and six other full-course equivalents in History, including Greek and Roman History (GRH). Of these six, three must be upper-level courses (these are to be chosen from: HISCIIY -HISC99Y, GRHB24S - GRHC29Y, or HIS300 and 400 level courses on the St. George Campus). One full-course equivalent must deal with the period prior to 1815 (consult the list of pre-1815 courses in the calendar under History). One full-course equivalent must correspond generally in area and time period to one of the courses in economic history or the history of economic thought (CHOSEN IN CONSUL-TATION WITH PROGRAMME SUPERVISOR).

Specialist Programme in Economics and Mathematics

Supervisor: TBA

NOTE: Registration in this Programme is limited.

Students will be selected to enter the Second Year of the Programme, on the basis of GPA for those four courses taken to date in which the student's grades are highest (including ECOA01Y). Students wishing to register at a later date may be admitted at the discretion of the Supervisor.

This Programme is designed for students considering the possibility of graduate work in mathematical economic theory. Students must complete at least fifteen full-course equivalents in Economics, Mathematics, Statistics, Computer Science and Humanities. The specific requirements are as follows: ECOA01Y

MATA26Y or MATA27Y or (MATA55Y) MATA04Y

CSCA56F/S or CSCA58F

ECOB03Y ECOB07Y

ECOB13F

(MATB41F and MATB42S and MATB43S) or MATB05Y

MATB44F and MATB49S STAB22F and STAB47S

ECOC13F and ECOC14S

MATC51F MATC53Y ICEC72F

JCEC73S A further one and one-half full-course equivalents in ECO or JCE. One course from among the Humanities options listed for the Specialist Pro-

Where students are enrolled in Majors in both Economics and Commerce, the same course may be used to satisfy the distributional requirement, without counting against the regulation that only two courses used to satisfy programmes may overlap (see Programme Requirements, Regulations concerning Programmes of Study, item 2, earlier in the Calendar).

It is recommended but not required that students include in their Programme an additional half-course in computer science and ECOC11Y.

Specialist Programme in Economics and Political Science

Supervisor: TBA

NOTE: Registration in this Programme is limited.

Students will be selected to enter the Second Year of the Programme on the basis of GPA for those four courses taken to date in which the student's grades are highest (including ECOA01). Students wishing to register in the Programme at a later date may be admitted at the discretion of the Supervisor.

at the discretion of the Supervisor. Six full-course equivalents are required in each of the two disciplines.* The specific courses required are listed below. In addition, mention is made of courses in other disciplines that complement the Specialist Programme. Required courses in Economics: **ECOA01Y** ECOB03Y ECOB07Y ECOC31S, ECOC32F ECOC25F or ECOC26S or ECOD05S or ECOD07S ECOB35S or ECOC66F ECOB11F/S or (STAB22F and STAB47S) ECOB12S Required courses in Political Science: POLA01Y POLB50Y POLB70Y or POLC74Y Three additional full-course equivalents from at least two of the five sub-fields listed below: A Canadian Government, Public Administration - POLB53F/S, POLC52Y, POLC54F/S, POLC55Y **B** Public Administration and Public Policy POLB53F/S, POLB61F/S, POLB62F/S. POLC60F/S, POLC61F/S, POLC62F/S, POLC63S, POLC64F/S C International Relations - POLB80Y, POLC82Y, POLC81S, POLC84Y D Comparative Politics, Industrialized Countries - POLB86Y, POLB87Y, POLC85Y, POLC87Y, POLC88Y, POLC89Y, E Comparative Politics, Developing Countries - POLB91Y, POLC95Y, POLC96Y, POLD93S, and POLD94S

Related (but not required) courses in

*The maximum number of Economics

equivalents that can be counted for the

MATA26Y or MATA27Y, CSCA56F,

and Political Science full-course

four-year degree is sixteen.

other disciplines:

COMA01Y

Specialist Programme in Economics and Quantitative Methods

Supervisor: TBA

NOTE: Registration in this Programme is limited to an annual entry of 10 students. Students will be selected to enter the Second year of the Programme on the basis of GPA for those four courses taken to date in which the student's grades are highest (including ECOA01). Students wishing to enter the Programme at a later date may be admitted at the discretion of the supervisor.

This Programme is designed for stu-

dents considering the possibility of gra-

duate studies in Economics while providing a stronger mathematical orientation than does the Specialist Programme in Economics. Students must complete at least thirteen full-course equivalents in Economics, Mathematics, Statistics, Computer Science and Humanities. The specific requirements are as follows: **ECOA01Y** CSCA58F CSCA68S MATA26Y or MATA27Y or MATA55Y ECOB03Y ECOB07Y ECOB13S MATA04Y STAB22F and STAB47S (MATB41F and MATB42S) or MATB05Y CSCB28S or CSCB68F **ECOCITY** ECOC13F ECOC14S ICEC72F

One half-course from: CSCC34F.

STAC42F, STAC52F

One half-course from the D-level courses in Economics.
One course from among the Humanities options for the Specialist Programme. Where students are enrolled in Majors in both Economics and Commerce, the same course may be used to satisfy the distributional requirement, without counting against the regulation that only two courses used to satisfy programmes may overlap (see Programme Requirements, Regulations concerning Programmes of Study, item 2, earlier in the Calendar).

CSCC51S, CSCC78F, MATB43S, MATC53Y,

Major Programme in Economics Supervisor: TBA

NOTE: Registration in this Programme is limited.

Students will be selected to enter the Second Year of the Programme on the basis of GPA for those four courses taken to date in which the student's grades are highest (including ECOA01). Students wishing to register at a later date may be admitted at the discretion of the Supervisor.

This Programme is designed to give a coordinated exposure to the subject matter of Economics to students pursuing the three-year degree or to those pursuing the four-year degree with more than a single area of concentration.

The Programme consists of six fullcourse equivalents in Economics and one in Humanities. The Economics courses must include: ECOA01Y, ECOB03Y, ECOB07Y, ECOB11F/S or (STAB22F and STAB47S) and ECOB12F/S and one full-course equivalent chosen from the C-level courses in Economics. The Humanities course must be selected from the options listed for the Specialist Programme. Where students are enrolled in Majors in both Economics and Commerce, the same course may be used to satisfy the distributional requirement, without counting against the regulation that only two courses used to satisfy programmes may overlap (see Programme Requirements, Regulations concerning Programmes of Study, item 2, earlier in the Calendar). It is recommended, but not required, that a student also include one course chosen from ECOC66F, ECOB68S, ECOB81Y, ECOB82Y, ECOC83Y.

Note: Students who have been admitted to the Programme prior to the summer of 1983 will not be required to take ECOB12.

ECOA01Y Introduction to Economics

A study of economic theory and its application to contemporary Canadian economic problems. Problems discussed will include: unemployment, inflation, pollution, poverty, monopoly. Session: Summer Evening, Winter Day, Winter Evening

IDSB01Y Political Economy of International Development

Introduces students to major development problems, the principal social, economic, and political factors that condition these, and to the impact on them of various development strategies pursued in a sample of Third-World countries.

NOTE: This course counts no more than half a full-course equivalent in Economics for any Economics programme. Prerequisite: One full-course equivalent in either Economics or Political Science Session: Winter Day

ECOBO3Y Price Theory

Intermediate level development of the principles of microeconomic theory. Initially the primary emphasis is on static partial equilibrium analysis, but general equilibrium analysis is developed later in the course. The topics covered are: consumer theory, theory of production, theory of the firm, theories of competition, monopoly and oligopoly, factor prices and welfare economics. Class size is limited to 80 per section.

Prerequisite: ECOA01
Session: Summer Evening, Winter Day, Winter Evening

ECOBO7Y Macroeconomic Theory and Policy

An exposition of macroeconomic theory with detailed discussion of the theory of output, employment and the price level, and of policy techniques for influencing and controlling the levels of these variables. There is some discussion of Canadian institutions and markets as well as of the policy experiences of Canada and other countries. Class size is limited to 80 per section.

Prerequisite: ECOA01

Session: Winter Day, Winter Evening

ECOB11F/S Quantitative Methods in Economics: I

An introduction to probability and descriptive statistics. Topics to be covered will include: marginal and conditional probability, statistical independence, the Central Limit Theorem, confidence intervals and hypothesis testing, and some aspects of distribution theory. The theory in this course will be applied to economic problems. The format of the course will be lectures and

tutorials. Limited Enrolment: 80 per sec-

Exclusions: ANTC35(ANTB43); GGRB31;

PSYB07: SOCB06; STAB22

Note: (STAB22 and STAB47) are counted as equivalent to ECOB11.

Prerequisite: ECOA01

Session: Summer Evening, Winter Day (F),

Winter Evening (S)

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ECOB12S Quantitative Methods in Economics: II

An introduction to statistics and regression analysis as used in economic analysis. Topics to be covered include: analysis of variance (ANOVA); the simple regression model, testing of hypotheses in the regression model, an introduction to multiple regression. This course will include a series of computer-oriented assignments to give the student familiarity with practical problems in regression analysis. Limited Enrolment: 80 per section.

Prerequisite: ECOB11 or GGRB31 or STAB22 and STAB47

Session: Summer Evening, Winter Day, Winter Evening

ECOB13S Application of Mathematics to Economics

Calculus, linear algebra, and to some extent real analysis, will be used to prove some important propositions in economic theory. Some of the results will be extensions or refinements of ideas already discussed in ECOB03 and ECOB07 although the course also covers new ground. The course is designed to give new insight into the performance of economic systems as well as to highlight the role of mathematics in economic theory - as an aid to precise thought and as a powerful tool for simplifying. Limited Enrolment: 60.

Prerequisite: ECOA01; MATA27 or (MATA55) or MATB41 or MATB05Y

Session: Winter Day.

JEGB27F Location and Spatial Development

An examination of the use of competitive location theory in the analysis of regional economic growth and decline. Topics include Ricardian rents and spatial equilibrium, trade flows and spatial price equilibrium, geographical market areas and spatial pricing policies, the location of a firm with mobile resources. industry location in equilibrium, trade theory and regional specialization, and the regional growth theories of Borts-Stein and Myrdal. Two hours of lectures and one tutorial hour per week. Prerequisite: ECOA01 Session: Winter Day

I. Miron

ECOB35F Public Decision Making

A study of decision making by governments from an economic perspective. The course begins by examining various rationales for public involvement in the economy and then examines a number of theories explaining the way decisions are actually made in the public sector. The course concludes with a number of case studies of Canadian policy making. Limited Enrolment: 60. Prerequisite: ECOA01 Session: Winter Day M. Krashinsky

ECOB68S Comparative Economic Systems

An introduction to alternative ways of organizing economic activities - allocating resources, distributing income, accumulating capital. Part of the time will be spent examining these alternatives from a theoretical perspective; the rest will be devoted to studies of particular economies, especially Canada, the Soviet Union and Yugoslavia. Prerequisite: ECOA01 Corequisite: ECOB03 Session: Winter Day 1. Parker

ECOB81Y North American Economic History

A survey of important themes in the economic history of Canada and the United States. A comparative approach is employed to develop such themes as the role of natural resource staple industries, and urbanization, and the relationship of the state to economic change in the two countries. Prerequisite: ECOA01 Session: Winter Day I. Parker

ECOB82Y European Economic History

A study of the emergence of industrial society in Europe since the Middle Ages with some emphasis on the comparative experience of Britain and other European countries and the growth of the nineteenth century world economy. Particular attention is paid to technical change, the expansion of markets, population growth, the economic effects of public policy, and consequent changes in income levels and the structure of the economy.

Prerequisite: ECOA01 Session: Winter Day

JCEC02Y Corporation Finance

An examination of the financial environment within which Canadian companies operate. The aim is to cover the main principles of financial management and to discover the social and legal significance of the modern corporation. Limited Enrolment: 60. Prerequisites: COMB01; ECOB03; ECOB11. ECOB12 is strongly recommended Session: Winter Day, Winter Evening

ECOCITY Econometrics

A formal development of multiple regression analysis using matrix algebra. Application of statistical techniques in testing economic theory. The implications and treatment of special statistical problems that arise in estimating economic relationships. A research paper is required. Exclusion: ECO327 Prerequisite: ECOB03, ECOB07, ECOB12, MATA04Y or MATB41 or permission of

instructor Session: Winter Day

ECOC13F Advanced Microeconomic Theory

An upper level extension of the ideas studied in ECOB03. The course offers a more sophisticated treatment of such topics as equilibrium, welfare economics, theories of the firm, linear programming, income distribution, risk and uncer-

Prerequisites: ECOB03, ECOB11, MATA27 or (MATA55)

Session: Winter Day D. Campbell

ECOC14S Advanced Macroeconomic Theory

Post-Keynesian developments in macroeconomic (including monetary) theory; empirical testing of Keynesian and post-Keynesian macroeconomic theories, and the uses of macroeconometric models. Prerequisites: ECOB03; ECOB07; ECOB11; MATA27 or MATA55

Session: Winter Day

ECOC25F History of Economics I: Adam Smith to Karl Marx

A study of the literature of classical Political Economy, especially the work of Adam Smith, Malthus, Ricardo, I.S. Mill, and Marx.

Exclusion: (ECOB20)

Prerequisite: ECOB03 or ECOB07 Corequisite: ECOB03 or ECOB07 (whichever is not used to satisfy the prereauisite). Session: Winter Day

I. Parker

M. Krashinsky

ECOC31S Economics of the Public Sector: Taxation

A course concerned with the revenue side of government finance. In particular, the course deals with existing tax structures, in Canada and elsewhere, and with criteria for tax design. Some attention will also be given to the use of government fiscal policy to regulate the level of economic activity. Exclusion: (ECOB31) Prerequisite: ECOB03 Session: Winter Day

ECOC32F Economics of the Public **Sector: Expenditures**

A study of resource allocation in relation to the public sector, with emphasis on decision criteria for public expenditures. The distinction between public and private goods is central to the course. Special topics discussed include: pollution, the economics of education, fiscal federalism, urban problems.

Exclusion: (ECOB32) Prerequisite: ECOB03

Session: Winter Day M. Krashinsky

ECOC37S Law and Economics

A study of laws and legal institutions from an economic perspective. Includes the development of a positive theory of the law suggesting that laws frequently evolve so as to maximize economic efficiency. The efficiency of various legal principles is examined. Topics covered are drawn from: externalities, property rights, environmental law, contracts, torts, product liability and consumer protection, criminal law, and procedure. Limited Enrolment: 60. Exclusion: (ECOB37)

Prerequisite: ECOB03 (ECOB03 will be

accepted as a corequisite when ECOC37(ECOB37) is taught in the second term of the winter session) Session: Winter Day M. Krashinsky

ECOC41F/S Industrial Organization The economics of the firm in a market environment. The aim is to study business behaviour and market performance as influenced by concentration, entry barriers, product differentiation and diversification. Limited Enrolment: 60. Exclusion: (ECOB41) Prerequisite: ECOB03

ECOC48S Monetary Economics

Session: Winter Day

This course examines monetary theory and institutions focusing on the relationship among money, prices and economic activity. Topics include: money supply definitions and relevance, a detailed examination of the demand for and supply of money, the term structure of interest rates, targets and instruments of monetary policy, the use of rules versus discretionary monetary policy. Limited enrolment: 60 Exclusion: ECO348H Prerequisite: ECOB07 Session: Winter Day

ECOC51S Labour Economics

The application of the basic tools of labour economics to various policy issues such as: fertility and family formation; labour force participation; hours of work, overtime and moonlighting; mobility and migration; the effect of market structures on the wage-employment decision; the role of wage structures: causes, types and incidence of unemployment; wage-price guidelines and the wage-price-employment trade-offs; the impact of institutional constraints such as unions, feather-bedding, minimum wages, wage parity, sex discrimination, occupational licensing, unemployment insurance, wage subsidies and negative income tax plans.

Exclusion: (ECOB51) Prerequisite: ECOB03 Session: Winter Day

JCEC54F/S Industrial Relations

A study of industrial relations in the Canadian setting. Topics include: industrial relations theory and systems; history, philosophy and structure of unionism, labour law, and collective bargaining, Limited enrolment: 80. Exclusion: (ICEB54) Prerequisite: Completion of at least ten full-course equivalents including ECOA01. Session: Winter Evening

ECOC61S International Economics: Finance

Macroeconomic theories of the balance of payments and the exchange rate in a small open economy. Recent theories of exchange-rate determination in a world of flexible exchange rates; the forward exchange market. The international monetary system: fixed "versus" flexible exchange rates; international capital movements, eurocurrency markets and their implications for monetary policy. Exclusion: (ECOB61) Prerequisite: ECOB07

ECOC62F International Economics: Trade Theory

An outline of the standard theories of international trade: analysis of the factors on which a country's trade with other countries is based and the welfare implications of this trade; and empirical tests of these theories. Economic growth and international trade. The instruments and effects of trade policy (tariffs, quotas, nontariff barriers); the theory of customs unions.

Exclusion: (ECOB62) Prerequisite: ECOB03 Session: Winter Day

Session: Winter Day

ECOC66F Economic Development

An introduction to the processes of growth and development in less developed countries and regions. Topics include the role of international trade and investment in developing countries. the problems of population growth and unemployment, inequalities in income distribution, the roles of agriculture and industry. Limited Enrolment: 60. Exclusion: (ECOB66)

Prerequisite: ECOB03 Session: Winter Day

A. Berry

ECOC67S Development Policy

A consideration of how government policy can affect the pace and nature of development in Third World countries. Emphasis will be on the most important policies including those relating to population growth, international trade and investment, public finance, education, and technology.

Exclusion: (ECOB67) Prerequisite: ECOC66(ECOB66)

Session: Winter Day

A. Berry

JCEC72F Analysis for Decision Making I

A course in the analytical formulation and solution of decision problems. Linear decision models, and especially linear programming, are the tools primarily discussed and employed. Limited Enrolment: 80.

Exclusion: (ICEB72) Prerequisite: CSCA56 or CSCA58, MATA22 or MATA26 or MATA27 or MATA04 or MATA55, ECOB03 Corequisite: ECOB11 or GGRB31 or

STAB47

Session: Winter Day

JCEC73S Analysis for Decision Making II

A continuation of JCEC72(JCEB72) with less emphasis on deterministic, linear models. Course content will be determined by the instructor and will usually include several of the following: decision-making under uncertainty, inventory theory, simulation, non-linear programming, allocation of risk-bearing. Limited Enrolment: 80. Exclusion: (JCEB73) Prerequisite: JCEC72(JCEB72) Session: Winter Day

ECODOIF Topics in Advanced **Economic Theory**

This course is devoted to some aspect of economic theory not usually covered at the undergraduate level, or to recent work extending or revising received theory, or to alternatives to orthodox economic theory.

A detailed list of courses and instructors will be available to students early in the summer.

Exclusion: (ECOC15 and ECOC16) Prerequisite: ECOC13 and ECOC14 and permission of instructor.

Session: Winter Day

ECODO2S Topics in Advanced **Economic Theory**

This course is devoted to some aspect of economic theory not usually covered at the undergraduate level, or to recent work extending or revising received theory, or to alternatives to orthodox economic theory.

Details will be available to students early in the summer.

Exclusion: (ECOC15 and ECOC16) Prerequisite: ECOC13 or ECOC14 and permission of instructor.

Session: Winter Day

ECODO7S The Economics of Karl Marx

A study of Marx's approach to economic theory and economic history. Discussion will centre on Marx's theory of capitalism and will emphasize the theory of exploitation and the process of accumulation.

Exclusion: (ECOC07) Prerequisites: ECOB03: ECOB07. ECOC25(ECOB20) or ECOC26(ECOB21) Session: Winter Day

ECOD11F and ECOD12S Supervised Reading

For upper-level students whose interests are not covered in one of the other courses normally offered. Students are expected to design the course with the guidance of a staff member interested in the area of study being proposed. The courses will normally be made available only to students whose performance in Economics courses has been well above average. Students interested in supervised reading courses are urged to contact faculty members well in advance, as not all faculty will be available for these courses in any single term. Exclusion: (ECOC11 and ECOC12) Prerequisite: Permission of instructor Session: Summer Day, Summer Evening, Winter Day, Winter Evening

ECOD13F Workshop in Economics Workshops deal with detailed problem areas in economics. In past years these have included such subjects as natural resources, technical change, international investment, multinational firms. economic discrimination, or extensions of applied topics covered at the B-level.

Details will be available to students early in the summer. Exclusion: (ECO17; ECOC18; ECOC19;

ECOC20)

Prerequisites: ECOB03: ECOB07: MATA26 or MATA55; and permission of instructor

Session: Winter Day

ECOD14S Workshop in Economics Workshops deal with detailed problem areas in economics. In past years these have included such subjects as natural resources, technical change, international investment, multinational firms, economic discrimination, or extensions of applied topics covered at the B-level.

A detailed list of the courses and instructors will be available to students early in the summer.

Exclusion: (ECOC17; ECOC18; ECOC19;

ECOC20) Prerequisites: ECOB03: ECOB07: MATA26 or MATA55; and permission of instructor

Session: Winter Day

JCED75F/S Investments

This course reviews major investment problems, in particular the factors affecting term structure and risk structure of yields on financial claims. Limited enrolment: 60.

Exclusion: (JCEC75) Prerequisite: JCEC02 Session: Winter Day

Courses Not Offered in 1989-90

ECOC26S

History of Economics II: Origins of Modern **Economic Theory** Exclusion: (ECOB21) Prerequisite: ECOB03 or ECOB07 Coreauisite: ECOB03 or ECOB07 (whichever is not used to satisfy the prere-

auisite). ECOC45F Poverty and Income Distri-

bution

1971

Exclusion: (ECOB45) Prerequisite: ECOB03 Economic History 1914-

ECOC83Y

Exclusion: (ECOB83) Prerequisites: ECOA01 and 3 B-level courses in Economics or History

ECOD055

The Economics of J.M. Keynes Exclusion: (ECOC05) Prerequisites: ECOB03, ECOBÓ7: ECOC25(ECOB20) or ECOC26(ECOC21)

ECOD15F ECOD16S

Workshops in Economics Exclusion: (ECOC17; ECOC18: ECOC19: ECOC20) Prerequisite: ECOB03; ECOB07: MATA26 or MATA55; and permission of instructor

ECOD17F ECOD18S ECOD19F ECOD20S

Workshops in Economics Exclusion: (ECOC21. ECOC22, ECOC23, ECOC24) Prerequisite: ECOB03: ECOBO7; MATA26 or MATA27 or MATA55: For ECOD19 (ECOC23) and ECOD20 (ECOC24), ECOC13 or ECOC14 will be a prerequisite, and permission of

instructor **ICED70S** Advanced Corporate

> Finance Exclusion: (JCEC70) COM431; COM438 Prerequisite: JCEC02

English

Discipline Representative: M. Cuddy-Keane (284-3175)

The study of English encompasses English, Canadian, and American literatures as well as other literatures written in the English language. The curriculum offers a broad range of courses designed to enable students to gain a comprehensive knowledge of a rich literary tradition. In addition, sequences of courses are available (in historical periods, in specific genres, in national literatures, and in particular authors) that allow students to pursue individual interests at greater depth. In all courses, emphasis is placed on close responsive reading, critical thinking, and clarity of expression.

At the A-level, the curriculum offers two kinds of course. A01 and A02 deal with works from a broad historical spectrum, and provide a basic grounding for further studies in English: they are designed particularly, but not exclusively, for students planning a Specialist or Major Programme in English. For students not intending to pursue an English Programme, A08 provides a good alternative introduction to English at the university level through the study of

Twentieth-Century literature. At the Blevel, courses require no prerequisite and are therefore available both to beginning and to more advanced students. C-level courses, as their prerequisites indicate, are designed to build upon previous work in English and presuppose some background in critical skills and some familiarity with the subject matter. D-level courses (which are equivalent to 400-level courses on the St. George Campus) provide opportunities for more sophisticated study and require some independent work on the part of the student. These courses are generally restricted in enrolment and may involve the presentation of seminars.

Students are advised to consult the prerequisites for C and D-level courses when planning their individual programmes, and to check with the Discipline Representative before taking courses on other campuses.

Specialist Programme in English Supervisor: M. Cuddy-Keane (284-3175) Ten full-course equivalents in English and two in other disciplines in the Division of Humanities are required. They

should be selected as follows.

ENGA01Y English Literature: Practical Criticism and Interpretation

2 ENGA02Y English Literature: Historical Survey

ENGC59Y English Literary Criticism

Five additional full-course equivalents in English at the A, B, or C-level, including: a) two full-course equivalents in periods before 1800, one of which must be at the C-level (see list A) b) two full-course equivalents in periods after 1800, one of which must be at the C-level (see list B)

Two full-course equivalents in English at the D-level

Two full-course equivalents in other Humanities disciplines. The following are particularly recom-

mended:

CLABIIF/S The Classical Element in English

CLAC03Y Greek and Roman Epic CLAC04Y Greek and Roman Tragedy

HISB02Y Britain from the Eighteenth Century to

the Present

HISC23Y Tudor and Stuart England (Prerequisite: One Blevel history course) HUMA01Y Prologue HUMA11Y Greek and Roman-Mythology LINA01Y General Linguistics PHLB04F/S Philosophy of Literature

Major Programme in English

Supervisor: M. Cuddy-Keane (284-3175) Seven full-course equivalents in English are required. They should be selected as follows:

1 ENGA01Y English Literature: Practical Criticism and Interpretation

2 ENGA02Y English Literature: Historical Survey

3 Four additional full-course equivalents in English at the A. B, or C-level, one of which must be at the C-level. These four courses must include: a) one full-course equivalent in periods before 1800 (See List A) b) one full-course equivalent in

periods after 1800 (See List B) 4 One full-course equivalent in English

at the D-level

See also the Specialist Programme in Language and Literature.

LIST A:

Pre-1800 courses:

ENGB01Y Old English Language and Literature

ENGBIOY Shakespeare **ENGC30Y** Chaucer

ENGC32Y Prose and Poetry of the English Renaissance, 1500-1660

English Drama to 1642 ENGC35F/S Dryden and the Restoration

English Literature of the ENGC36F/S Early 18th Century ENGC37F/S English Literature of the

Late 18th Century

ENGC38Y Fiction before 1832

LIST B:

ENGC33Y

Post-1800 courses:

Twentieth-Century Litera-ENGA08Y

ENGBO7Y Canadian Literature **ENGBO8Y** American Literature: an Introduction

ENGB20F/S Contemporary Literature in English: Africa and the West

Indies

ENGB21F/S Contemporary Literature in English: Australia and India ENGB25F/S The Canadian Short Story ENGB34F/S The Short Story ENGC02Y Canadian Fiction in English ENGC07F/S Canadian Poetry in English ENGC12Y Major American Authors ENGC42Y The Romantics ENGC43Y Victorian Poetry ENGC46Y Fiction 1832-1900 **ENGC50Y** Modern Drama ENGC51Y Modern Poetry Fiction 1900-1960 ENGC52Y ENGC53F/S British Fiction Since 1960 ENGC54F/S American Fiction Since 1960 ENGC55F/S Drama Since 1960

ENGAO1Y English Literature: Practical Criticism and Interpretation An introduction to methods of literary criticism through the close reading of texts representative of various literary genres, and through frequent exercises

in analytical writing.

Why do we study literature rather than just read it? What is involved in analyzing a poem, a play, a novel, or an essay? Do different kinds of literature require different kinds of analysis? How do we use critical terms and concepts such as metaphor, narrative perspective, and tragi-comedy? This course will consider such questions, mainly through the close analysis of literary texts. Frequent written assignments should stimulate students to think critically, to formulate their ideas coherently, and to express themselves clearly and persuasively. The texts are The Norton Anthology of English Literature (Fifth Edition), Vols. 1 and 2, Hamlet, Pride and Prejudice, Great Expectations, and additional texts to be specified by the instructors.

Teaching will involve a mixture of lecture and discussion, with emphasis on active class participation. All sections will require the writing of essays (a total of at least 7500 words).

Session: Winter Day, Winter Evening Course Co-ordinator: W.J. Howard

ENGA02Y English Literature: Historical Survey

A survey of English literature from the Middle Ages to the twentieth century, in the context of relevant intellectual. aesthetic, social, and political developments. Normally taken in conjunction with ENGA01Y.

This course provides a general introduction to the main periods of English literary history - the Medieval.

Renaissance, Restoration, Eighteenth-Century, Romantic, Victorian, and Modern periods. Reading will be extensive, involving selections from at least twenty major writers. The texts are The Norton Anthology of English Literature (Fifth Edition), Vols. 1 and 2; Fielding, Joseph Andrews: Austen, Pride and Prejudice; and Dickens, Great Expectations; further texts will be announced.

This is a lecture and examination course. Students are advised to combine this course with English A01Y in order to balance their programme by means of small group discussions, close textual study, and practice in essay writing. Session: Winter Day E. P. Vicari, M. Cuddy-Keane

ENGAO8Y Twentieth-Century Literature

An introduction to critical reading and writing through a selection of modern literature.

This course will explore literature of the twentieth century, through the study of short stories and novels by such writers as Conrad, Lawrence, Forster, Hem-

Fitzgerald, and others; plays by Ibsen, Shaw, Eliot, Miller, Pinter, and others; and a selection of poetry. Essays based on the reading will provide practice in university-level writing and training in methods of analysis and exposition.

Note: this course is intended primarily as an alternative to ENGAO1Y, and therefore may be of particular interest to students who do not expect to take a Specialist or Major Programme in English. Session: Winter Day M. S. Tait

ENGBO7Y Canadian Literature in **English: An Introduction**

A study of a wide range of Canadian literature, including works by fiction writers, poets, playwrights, and critics, including Callaghan, MacLennan. Laurence, Grove, Davies, Lampman, D.C. Scott, Klein, Pratt, Birney, Avison, Atwood, and Frye.

This study of Canadian literature in English will be historical, following the development of writing in Canada from early times to the present, though most attention will be paid to literature of the twentieth century. Close and critical reading of individual works will also

be emphasized.

Texts will include An Anthology of Canadian Literature, (2 vols.) and two to four novels. Session: Winter Day R. Brown

ENGBIOY Shakespeare

A study of at least eleven plays by Shakespeare, both as unique works of art and in the larger context of his work as a Renaissance dramatist.

A list of Texts will be available in H525A. Session: Winter Day A.J.G. Patenall

L30

Reading will begin with the comedies (A Midsummer Night's Dream; As You Like It), and will include tragedies (King Lear; Romeo and Juliet; Antony & Cleopatra), histories (Henry IV, pt 1; Richard II), romances (A Winter's Tale: The Tempest). a Roman play (Coriolanus), and a problem comedy (Measure for Measure).

Assignments will stress close reading of Shakespeare's language, and will encourage familiarity with selected criti-

Session: Winter Evening M. Gadpaille

ENGBIIY Varieties of Drama

A study of drama from ancient Greece to the present day.

The course introduces students to a wide range of drama through the study of at least twelve plays, including Aeschylus, The Oresteia; Shakespeare, Macbeth, Measure for Measure: Jonson. The Alchemist; Congreve, The Way of the World: Shaw Heartbreak House: Wilde. The Importance of Being Earnest; O'Neill, Mourning Becomes Electra; Beckett, End Game: Howard Barker. The Power of the Dog, and at least one Canadian play. Students are encouraged to think about the relationship between dramatic texts and their theatrical production, and to consider the relevance of generic labels, such as tragedy, comedy, tragi-comedy, and such concepts as realism, expressionism, and the theatre of the absurd. Session: Winter Day E.P. Vicari

ENGB14Y Varieties of Fiction

A study of fictional strategies and techniques, drawing on a wide range of examples from early periods of narrative to the present day.

About 16 works will be studied. including short stories, novels, and novellas. Emphasis will be placed on the forms and conventions of fiction rather than on chronological development and historical background. The course will consider such aspects as the significance of beginnings and endings, the role of the narrator, and the relationship between realism and fantasy.

Texts to be announced. Session: Winter Day/Summer Evening T.B.A./V. Kennedy

ENGB20F Contemporary Literature in English: Africa and the West Indies A study of twentieth-century African and West Indian prose fiction.

Attention will be given to the cultural and political backgrounds as well as to the rhetorical traditions. The works of the most significant writers will be emphasized: e.g. Achebe, Amadi, Soyinka, Harris, Naipaul, Mittelholzer, Mais. Session: Winter Evening W.J. Howard

ENGB25S The Canadian Short Story A study of contemporary short stories written by Canadian authors.

This course will not be a historical survey, but an examination of collections by eight of the contemporary writers whose work has brought the Canadian short story into international prominence. Attention will also be paid to technical aspects of the short story as a literary form.

The course will use single author collections rather than an anthology. Reading will begin with Alistair MacLeod's The Lost Salt Gift of Blood and will include selections from: Alice Munro, The Moons of Jupiter; Margaret Atwood, Bluebeard's Egg; Mavis Gallant, The End of the World and Other Stories; and Hugh Hood, Flying a Red Kite. Session: Winter Day M. Gadpaille

ENGB34S The Short Story

An introduction to the short story as a literary form.

The course examines the special appeal of the short story for writers and readers; the particular effects it is best able to produce; and its origins and recent development. The reading will be drawn from different countries and periods in order to explore the variety of possibilities within the form. Session: Summer Evening G. Campbell

ENGB60Y Creative Writing I

An introduction to the writing of poetry and short fiction.

This course will provide students with the experience of writing, discussing and revising their own work in a group workshop. Exercises to be assigned will bear on special questions of technique and form and there will also be discussion of the work of some contemporary writers and visits by writers.

Limited enrolment: 16 Exclusion: (HUMB80), (LITB60Y) Prerequisite: Permission of instructor by interview or portfolio by September 5. Session: Winter Evening R. Brown

ENGC12Y Major American Authors

A close study of works by at least four and no more than six authors. Three of the authors will be drawn from the following list: Cooper, Dickinson, Emerson, Hawthorne, Melville, Whitman, Twain, lames, Eliot, Frost, Hemingway, Stevens, Faulkner.

Further information will be available in Room HS25A. Prerequisite: One full-course equivalent in English Exclusion: (ENGB24) Session: Winter Day J. Kay

ENGC30Y Chaucer

A study of most of the Canterbury Tales. The Book of the Duchess. The House of Fame, The Parliament of Fowls, the Prologue to the Legend of Good Women, Troilus and Criseyde. Background readings: Roman de la Rose, Consolation of Philosophy (in translation.) Texts: F.N. Robinson, ed. The Works of Chaucer.

Chaucer's poems are studied mainly as artistic productions, but also in relation to their historical and intellectual

backgrounds. Prerequisite: ENGA01, ENGA02 Exclusion: (ENGB02) Session: Winter Day E.P. Vicari

ENGC33Y English Drama to 1642

A historical study of English drama from its beginning in medieval religious plays through the full flowering of Elizabethan and Jacobean tragedy and comedy to the closing of the theatres in 1642.

In addition to selected medieval and Tudor plays, there will be special emphasis on Marlowe, Shakespeare, Ben Ionson, Webster, Middleton, Tourneur, and Ford. Some attention will also be paid to staging techniques and theatres. The texts are: Shakespeare, Comedy of Errors, Love's Labour's Lost, Much Ado about Nothing, Measure for Measure, Othello, The Winter's Tale: Brooke and Paradise, English Drama 1580-1642. Prerequisites: ENGA01, ENGA02; or ENGB11

Exclusion: (ENGB12) Session: Winter Day

A. Patenall

ENGC38Y Fiction before 1832

At least twelve works, including one or more by Richardson, Fielding, Sterne, Austen and Scott.

This is an historical course on the development of the novel from the early eighteenth century to the Romantic period. It includes the best comic novels in the language; serious moral, social, and psychological studies; and works that reveal and comment on some of the literary fads of the time-fashions for terror, pathos, and the nostalgic representation of the past. Works to be studied include Defoe, Moll Flanders; Richardson, Pamela; Fielding, Tom Jones; Sterne, Tristram Shandy; Smollett, Humphrey Clinker: Austen, Emma. Not for people who don't really like reading. Prerequisites: ENGA01, ENGA02; or ENGB14 Exclusion: (ENGB17) Session: Winter Day W.J. Howard

ENGC46Y Fiction 1832-1900

A study of the development of the English novel in the Victorian period.

This course cultivates an understanding of the English novel in its most assured period of creation through study of the following works: C. Bronte, Jane Eyre; E. Bronte, Wuthering Heights: Thackeray, Vanity Fair; G. Eliot,

Middlemarch; Dickens, David Copperfield, Hard Times; Trollope. The Way We Live Now: Hardy, Far from the Madding Crowd, Jude the Obscure; Moore, Esther Waters; James, What Maisie Knew.

Students are advised to read as many of these novels as possible before classes begin. Prerequisites: ENGA01, ENGA02; or ENGB14; or HISD21 Exclusion: (ENGB16) Session: Winter Day A. Thomas

ENGC51Y Modern Poetry

An analytical study of poetry from the advent of the modern period.

The course will explore the modern tradition in twentieth-century poetry. from its beginnings with Yeats, Eliot, Stevens, and Williams to the present. The course will consider the change in poetic theory and practice that took place in the first two decades of this century, and the development of the poets studied. In addition, individual poems will be studied in detail. Prerequisites: ENGA01, ENGA02; or ENGA08: or ENGB15 Exclusion: (ENGB32) Session: Winter Day

ENGC52Y Fiction 1900-1960

M.S. Tait

An intensive study of at least twelve works, including novels, novellas, and collections of short stories.

The early twentieth century was a period of radical innovation and experiment. This course explores the relationship between new ways of writing fiction and the new "modernist" consciousness of such things as the subjective nature of reality and the unconscious motivations of action. In addition, a selection of novels from the period after World War II will be studied to illuminate more recent trends. Texts will include Conrad, Lord Jim: Joyce, A Portrait of the Artist as a Young Man; Woolf, To The Lighthouse; Forster, A Passage to India. Students are urged to do some reading in advance and to use the editions specified. Prerequisites: ENGA01, ENGA02; or

ENGA08: or ENGB14 Exclusion: (ENGB33) Session: Winter Day M. Cuddy-Keane

ENGC53F British Fiction since 1960 Representative works by major British fiction writers of the past quarter cen-

Approximately eight works (novels, short story collections) will be studied. including Edna O'Brien, The Love Object; Fowles, The French Lieutenant's Woman; Drabble, The Waterfall; Barnes, Flaubert's Parrot. Prerequisites: ENGA01, ENGA02; or ENGA08; or ENGB14 Exclusion: (ENGB35) Session: Winter Day A. Thomas

ENGC55F Drama Since 1960

A study of developments in drama from 1960 to the present.

The course will focus upon the experimental impulse in the work of playwrights such as: Albee, Bond, Brenton, Churchill, Pinter, Shaffer, Shepard, and Stoppard. Students will be expected to attend performances of two or three contemporary plays as part of their work in the course. Prerequisites: ENGA01, ENGA02; or ENGA08; or ENGB11; or ENGC50 (ENGB31); or one DRA course Exclusion: (ENGB40)

ENGC59Y English Literary Criticism A study of the central issues of literary theory and criticism, their importance in English literary history, and their relationship to European thought.

What are the major issues and movements in literary theory? How have the questions critics have asked changed over time? The course aims at discussing the assumptions about literature and writing that are reflected in any critical position. Readings will be selected to acquaint students with both current critical debates and the history of theory and criticism.

Prerequisites: ENGA01, ENGA02, and two further full-course equivalents in English.

Exclusion: (ENGB95) Session: Winter Day

Session: Winter Day

K. Theil

T.B.A.

ENGD 10-58F/S Studies in Major Writers

In 1989/90, these courses will be as follows:

ENGD13S The Romance of The Faerie Queen

A reading of Spenser's The Faerie Queene, as narrative and as myth.

The Faerie Queene is a unique achievement, the most fully elaborated example in English of mythopoeic writing, that is, the myth-creating kind of poetry. The ancient myths of Greece and Rome, stories and legends in or generated by the Bible, the myth of Arthur and the Knights of the Round Table, and various Celtic myths, all contribute to the intricate web of stories that make the poem. Spenser did not merely retell already existent myths; he made up his own, but with echoes and counterechoes of old stories, re-interpreting them and creating new meanings.

We shall read through the six books of the Faerie Queene, pausing to consider the background of Spenser's ideas where necessary, but mainly concentrating on his story-telling techniques. Limited Enrolment: 20 Prerequisites: ENGA01, A02 and three further full-course equivalents in English; or ENGC30 (ENGB02); or ENGC32 (ENGB09) Session: Winter Day E.P. Vicari

ENGD17F Marlowe and Jonson A study of selected plays by Marlowe and Jonson.

Emphasis will be upon the unique qualities which distinguish these dramatists from Shakespeare and other playwrights of the English Renaissance.

Texts will include: Tamburlaine, parts 1 and 2; Dr. Faustus; Edward II; The Silent Woman; Volpone; The Alchemist

Limited Enrolment: 20
Prerequisites: ENGA01, ENGA02, and three further full-course equivalents in English; or ENGB10 and one further full-course equivalent in English; or ENGC32 (ENGB09); or ENGC33 (ENGB12) Session: Winter Day M. S. Tait

ENGD29F Hawthorne

A study of the major tales and romances of Nathaniel Hawthorne, including: Twice-Told Tales; Mosses From an Old Manse; Tanglewood Tales; The Scarlet Letter; The House of the Seven Gables; The Blithedale Romance; the Marble Faun.

Limited Enrolment 20
Prerequisites: ENGA01, ENGA02 and three further full-course equivalents in English; or ENGB08, ENGC12
Session: Winter Day
J. Kay

ENGD36F Thomas Hardy

A study of Hardy's development as an artist, through close analysis of four or five novels and selected poetry.

Some attention will be given to Hardy as representative of the transition from the Victorian to the Modern. Texts will include Under the Greenwood Tree, The Woodlanders, and Tess of the d'Urbervilles. Some biographical/autobiographical reading will also be required. Limited Enrolment: 20 Prerequisites: ENGA01, ENGA02, and three further full-course equivalents in English; or ENGC46(ENGB16) Exclusion: (ENGC84) Session: Winter Evening K. Theil

ENGD39S George Bernard Shaw

A study of the range of Shaw's dramatic work and of recurring patterns in his ideas. Some attention will be given to his dramatic criticism in The Quintessence of Ibsenism and Our Theatre in the Nineties. Plays to be read include Widower's Houses, Arms and the Man, Candida, The Devil's Disciple, Heartbreak House, Man and Superman, St. Joan. Limited Enrolment: 20 Prerequisites: ENGA01, ENGA02, and three further full-course equivalents in English; or ENGC50(ENGB31Y). Exclusion: (ENGC95) Session: Winter Day A. Thomas

ENGD43S D.H. Lawrence

A detailed study of characteristic themes and techniques in Lawrence's shorter fiction.

Works to be studied include: St.

Mawr, The Fox, The Captain's Doll, The

Man Who Died. Emphasis is upon the

ways in which Lawrence's ideas are communicated through style, structure, characterization and imagery.

Limited Enrolment: 20.
Prerequisites: ENGA01, ENGA02, and three further full-course equivalents in English; or ENGC52(ENGB33)
Exclusion: (ENGC90)
Session: Winter Day
M.S. Tait

ENGD45S Faulkner

A study of Faulkner's development as a writer, from his early romantic poetry to his most accomplished novels.

The course examines Faulkner's main concerns as a writer, his style, themes and the development of Yoknapatawpha County. Reading: Sartoris; The Hamlet; The Town; Go Down, Moses; and other material to be announced in class. Limited Enrolment: 20 Prerequisites: ENGA01, ENGA02, and three further further full-course equivalents in English; or ENGC12(ENGB24Y), Exclusion: (ENGC25) Session: Winter Day (S) Session: Summer Evening (F) J. Kay

ENGD51F Alice Munro

A study of five collections of Alice Munro's short fiction: Dance of the Happy Shades; Something I've Been Meaning To Tell You; Who Do You Think You Are?; The Moons of Jupiter; and The Progress of Love. The course will demand close analysis of assigned short stories, as well as bibliographical exercises and reports on critical articles and reviews.

Limited Enrolment: 20 Prerequisites: ENGA01, ENGA02, and three further full-course equivalents in English; or any two of ENGB07; ENGB25; ENGB34; or ENGC02 (ENGB27) Session: Winter Day M. Gadpaille

ENGD70-89F/S Selected Topics In 1989/90, these courses will be as follows:

ENGD75F The Twentieth-Century Short Story Sequence

A study of unified collections of short stories.

The subject of this course is an unusual but significant modern genre—the group of closely linked short stories that together make a unified work. Some questions to be considered are: What kinds of interrelationships serve to connect the stories? Can these works be considered episodic novels? What are

some of the factors that account for the increasing popularity of this form, particularly in Canada? Six to eight works will be chosen for intensive study, including: Joyce, Dubliners; Hemingway, In Our Time; Faulkner, Go Down, Moses. At least one Canadian work will be added.

Limited Enrolment: 20
Prerequisites: ENGA01, ENGA02, and three further full-course equivalents in English; or ENGA08 and one of ENGB14, ENGB34; or ENGC52(ENGB33Y).

ENGD79S Award-Winning Fiction in English

Exclusion: (ENGC99)

Session: Winter Day

M. Cuddy-Keane

Works of Fiction from the last two decades that have received major literary prizes, such as the Nobel and Booker Prizes and the Governor General's Award.

The course will focus both on a close analysis of the award-winning texts and on an examination of the critical reception before and after the granting of the award, to see what is revealed about standards, trends, and extraliterary influences.

Limited Enrolment: 20
Prerequisites: ENGA01, ENGA02, and three further full-course equivalents in English; or two of ENGB14, ENGB20, ENGB21; or ENGC02 (ENGB27); or ENGC52 (ENGB33)
Session: Winter Evening

W. I. Howard

ENGD98Y Senior Essay

A scholarly project, chosen by the student and supervised by one faculty member. Approval by the faculty in English must normally be obtained by the student before the end of the previous spring term.

The student writes a substantial essay on a literary subject under the supervision of a member of staff. It is the responsibility of the student to locate a supervisor; advice on this matter may be sought from the Discipline Representative. The following deadlines should be observed: by the last day of the previous spring term a brief statement of the area of the project, signed by the supervisor, is to be sent to Professor M. Cuddy-Keane. By November 15th a more specific statement of the project is to be sent to Prof. Cuddy-Keane, including the exact title of the proposed study and a short description of its subject and method. After the

Session: Winter Day

topic has been approved by the discipline, a second reader will be appointed. Prerequisites: Open only to students completing the last five courses for the four-year degree, and who have at least three full-course equivalents in English, at least one at the C-level Exclusion: (ENGC14)

Courses Not Offered in 1989-90

ENGBO1Y Old English Language and Literature ENGB08Y American Literature: An Introduction ENGB15Y **English Poetry** ENGB21F/S Contemporary Literature in English: Australia and India Canadian Fiction in English ENGC02Y Prerequisite: One fullcourse equivalent in English ENGCO7F/S Canadian Poetry in English Prereauisite: one full-course equivalent in English Exclusion: (ENGB26) ENGC32Y Prose and Poetry of the English Renaissance, 1500-Prerequisite: ENGA01, ENGA02; or ENGB15 ENGC35F/S Dryden and the Restoration Prerequisite: ENGA01. ENGA02: or ENGB15 Exclusion: (ENGB71) ENGC36F/S English Literature of the Early Eighteenth Century Prerequisite: ENGA01, ENGA02; or ENGB15 Exclusion: (ENGB72) ENGC37F/S English Literature of the Late Eighteenth Century Prerequisites: ENGA01, ENGA02: or ENGB15 Exclusion: (ENGB73) ENGC42Y The Romantics Prerequisites: ENGA01, ENGA02; or ENGB15 Exclusion: (ENGB05) ENGC43Y Victorian Poetry Prerequisites: ENGA01, ENGA02; or ENGB15 Exclusion: (ENGB06) ENGC50Y Modern Drama Prerequisites: ENGA01. ENGA02; or ENGA08 or ENGB11

Exclusion: (ENGB31)

ENGC54F/S American Fiction Since 1960 Prerequisites: ENGA01, ENGA02, ENGA08; or ENGB14 Exclusion: (ENGB36)

NOTE: At the D-level, English offers a wide variety of special studies in major writers and selected topics. A different combination of courses is offered each year in order to provide as much range as possible over a two or three-year period. Normally, prerequisites for D-level courses are: ENGA01, ENGA02, and three further full-course equivalents in English; or two courses in the area of specialty. For further information, consult the Discipline Representative.

Fine Art

Discipline Representative: Fine Art History: R. Siebelhoff (284 - 3334)Fine Art Studio: J. Hoogstraten (284 - 3370)The Fine Art curriculum offers courses in the two complementary fields of art history and studio. The courses offered in art history deal primarily with the development of the arts in the West from classical times to the present day. The studio curriculum has been designed to develop creative thinking and provides opportunities for a first hand acquaintance with materials, forms, and concepts of the visual arts.

Students are encouraged to take relevant courses in other disciplines in order to enhance their background knowledge and to become familiar with a variety of views of fine art.

Students who wish to supplement Scarborough offerings in arthistory with courses on the St. George campus should also pay careful attention to the requirements described in the calendar of the Faculty of Arts and Science. It should be noted that course offerings are not identical on both campuses. Requirements for a 300- or 400- level course on the St. George campus can be met at Scarborough by taking an A- and a B-level survey in the same area as the upper level course. (See also page 31 of this Calendar.)

Since the ability to read foreign languages is necessary in many advanced

fields of art history, and since admission to some upper level art history courses on the St. George campus depends upon a reading knowledge of certain foreign languages (particularly French, German, and Italian), specialization in art history will normally require competence in one of these languages. Students are encouraged to develop language skills throughout their programme of study.

Fine Art students may wish to refer to the following:

Specialist Programme in the Arts: Page 57 Co-operative Programme in Arts Administration: Page 99

Specialist Programme in Fine Art History

Supervisor: R. Siebelhoff (284-3334) Students must complete twelve fullcourse equivalents as follows:

- 1 FARA10F; FARA11S; FARA12F; FARA13S
- 2 Four B-level course equivalents with at least one half full-course equivalent from each of the following areas:

 Classical
 Medieval
 Renaissance
 Baroque
- Modern (1750 to the present)

 Four full-course equivalents in art history at C/D level (or at the 300/400 level on the St. George campus.)
- 4 Two full-course equivalents in cognate fields selected with the approval of the supervisor.

Major Programme in Fine Art History Supervisor: R. Siebelhoff (284-3334) Students must complete seven full-course equivalents as follows:

- 1 FARA10F; FARA11S; FARA12F; FARA13S
- 2 Three full-course equivalents at the B level with at least one half full-course equivalent in each of the following areas:
 Classical Medieval Renaissance Baroque Modern (1750 to the present)
- 3 Two full-course equivalents in art history at the C/D level (or at the 300/400 level on the St. George Campus).

NOTE: Students in the Specialist or Major Programmes may satisfy some of

their programme requirements through a Study Elsewhere programme operated by the University of Toronto at Siena.

Specialist Programme in Fine Art Studio

Supervisor: J. Hoogstraten (284-3370) Students must complete fourteen full-course equivalents: ten in studio; any two full-course equivalents in art history, one of which must be FARA13S; and two additional full-course equivalents in cognate disciplines.

The courses in studio must include:

- 1 FARA90Y
- 2 FARB70F/S; FARB72F/S; FARB75Y; FARB82F/S; FARB84Y
- 3 Three and one-half full-course equivalents from the remaining Blevel, and/or C-level chosen in consultation with the supervisor.
- 4 Two D-Level full-course equivalents Two additional full-course equivalents in cognate disciplines are to be chosen in consultation with the supervisor.

Major Programme in Fine Art Studio Supervisor: J. Hoogstraten (284-3370) Students must complete six and one-half full-course equivalents as follows:

- FARA90Y
- 2 FARA13S
- 3 FARB70F/S*
- 4 FARB72F/S*
- FARB74F/S*
- 5 FARB75Y*
- 7 Two and one-half additional courses, one of which must be at the D-level*.
- * Students should check these courses for prerequisites.

Fine Art History

FARA10S Ancient Art and Architecture

Art and architecture from Archaic Greece to the decline of Rome.

A survey of major monuments and trends in Greece and Rome. Emphasis on archaic sculpture, classical architecture and sculpture, Hellenistic art, Roman Republican portraiture, and Imperial architecture.

Session: Winter Day

F. Winter

FARAIIF Medieval Art

A survey of the arts in Europe from the late Roman Empire to the end of the Gothic period. The study will consider architecture, sculpture, painting, illumination, and the minor arts.

The objective of this course is to familiarize students with European artistic traditions from their origins in an early Christian, Mediterranean context through their development under the influences of classical, byzantine, moslem, and pagan forms, to the triumphant creation of an entirely new iconographic and stylistic language of expression which determined the nature of renaissance art. Texts will include E. Kitzinger, Early Medieval Art; R. Krautheimer, Early Christian and Byzantine Architecture: O. von Simson, The Gothic Cathedral, and others. Trips to the Royal Ontario Museum when galleries open. Session: Winter Evening M. Gervers

FARA12F Renaissance and Baroque

A survey of architecture, painting and sculpture from ca. 1400 to ca. 1750.

A selection will be made of the most important monuments, primarily from Italy and the Netherlands. These will include works by such artists as Leonardo da Vinci, Michelangelo, Rembrandt, Rubens, and Bernini, Slides and films will be used and visits will be made to the A.G.O. and the R.O.M. Texts: Frederick Hartt, Art, A History of Painting. Sculpture, Architecture. Vol. II. Renaissance, Baroque, Modern World. New York, Abrams, 1976. Session: Winter Evening G. Scavizzi

FARA13S Modern Art: 1750 to the Present

A selective study of Western European and North American painting, sculpture, and architecture from the period of the French Revolution to the Second World

Works of art will be chosen and analyzed on the basis of their key roles in the rapid succession of artistic movements during this period. By a thorough study of these works, the course will attempt to present a comprehensive view of artistic conditions in major centres throughout the modern Western world.

Session: Winter Day R. Siebelhoff

FARBIOS Carolingian and Romanesque Art and Architecture

A survey of the art and architecture of Europe from 800 to 1150, considered in light of the varied artistic developments of the contemporary Mediterranean world.

The course will consider the major artistic and architectural monuments of Europe from the Carolingian renaissance to the renaissance of the twelfth century. Works will be considered in their geographical context and in relation to the art and architecture of the later Roman Empire, Byzantium and Armenia. Islam, and to the art of the invasion period. The importance of monasticism and pilgrimage will also be discussed. Trips to The Royal Ontario Museum. Texts: E. Kitzinger, Early Medieval Art: G. Zarnecki, Romanesque Art; K.J. Conant, Carolingian and Romanesque Architec-

Prerequisite: FARA11S highly recommended Session: Winter Day M. Gervers

FARBIGY The Arts in Northern Europe ca. 1400-1500

A study of the Northern Renaissance. focusing on the emergence of the Burgundian Netherlands as a cultural unit.

The course will emphasize the development of painting from the Van Eycks to Hugo van der Goes against a background of patronage from court and city. The first few lectures will deal with the geography and topography of the Burgundian lands around 1400 and will proceed with a historical survey of the area during the fifteenth century, including aspects of the interaction between Flanders and Northern France. Then the origins of Netherlandish painting will be explored by looking at some of the major manuscript workshops and the panel painters who followed. The works presented will be used to illustrate some of the problems faced by art historians. such as attribution of works upon documentary, stylistic, and iconographic grounds. Two hours of lectures per week with class participation encouraged. Use of slides and films, visits to A.G.O., R.O.M., The course text is Ch. Cuttler. Northern Painting, New York, (soft cover edition) 1968. Session: Winter Day R.Siebelhoff

FARB19F Michelangelo

A survey of his activity in architecture. sculpture, and painting.

Study will focus on large decorative works and projects like the Sistine ceiling, the tomb of Julius II and the Medici Chapel. The course will emphasize special aspects of Michelangelo's ideas, above all the relationship of the artist with neoplatonism and with the religious trends of his time. Some time will also be spent on Michelangelo's theory of art and on his poetry.

Text: H. Hibbard, Michelangelo, New York, 1974. Session: Winter Day G. Scavizzi

FARB46F Post Impressionism

The painting and drawing of late nineteenth-century pioneers of modern art.

The course offers a detailed study of the major post impressionist artists. including Cézanne, Seurat, Van Gogh, and Gauguin; their roots in Impressionism; the highly independent directions of their careers; and their establishment of artistic principles that extend far into the twentieth century. One two-hour slide lecture weekly. Session: Winter Day T.B.A.

FARB54S New York in the Twentieth Century

A study emphasizing major New York painters and sculptors of the first half of this century.

The course surveys art in New York, as the city moved from a somewhat provincial position to a vivid awareness of modern European art at the time of the Armory Show in 1913, and eventually became an international art centre after the Second World War.

Prerequisite: Recommended preparation or companion courses: FARA13S or FARB48F/S

Session: Winter Day T.B.A.

FARCIIS Frans Hals, Rembrandt. and Vermeer

An advanced examination of the work of the three principal masters of the seventeenth century in Holland.

This study of Dutch Baroque painting explores artistic developments in Haarlem, Amsterdam, and Delft. The various styles will be considered from the point of view of the centre in which each artist worked and the generation to

which he belonged. The course will also focus on subject matter, technique, outside influences, and chronology. Lectures, slides, films, and visits to galleries. Prerequisite: One full-course equivalent at the B-level in Fine Art History, preferably FARB29Y Session: Winter Evening

FARC13F Nineteenth-Century Realism

R. Siebelhoff

A study of the most important artistic movement between Romanticism and Impressionism.

The aim of the Realist artist was to represent the real world in an objective and impartial way. Realism had major representatives in England and Germany. but its greatest flowering occurred in France between ca. 1840 and 1880. The course will trace the careers of Millet and Courbet in France, the Pre-Raphaelites in England, and several German artists. Bibliography includes Linda Nochlin, Realism (Penguin, 1971), and Realism and Tradition in Art 1848-1900 (Prentice-Hall, 1966).

Two hours of lectures per week with class participation encouraged. Slides and films will be used, and visits paid to the A.G.O. and, if possible, to the Albright-Knox gallery in Buffalo. Session: Winter Evening R. Siebelhoff

FARCI7F Leonardo da Vinci

A study of Leonardo's accomplishments in the various areas of his activity.

At the beginning the focus will be on Leonardo as an artist, from his early works in Verocchio's studio to the masterpieces of his mature period, like The Virgin of the Rocks, The Last Supper, and The Mona Lisa. Attention will then be paid to Leonardo's philosophical ideas. to his interest in nature, to the way his research became integrated into his art, and to his contribution to the birth of modern science. Finally, the course will deal with the approaches taken by Freud and other psychoanalysts in an effort to decipher Leonardo's unique personality. Prerequisite: One full-course equivalent at the B-level in art history. Session: Winter Day

G. Scavizzi

FARDO2F/S FARD03Y Supervised Reading in Classical Art FARD04F/S FARDOSY Supervised Reading in Medieval Art FARDO6F/S FARDO7Y Supervised Reading in Renaissance and Baroque Art FARDO8F/S FARDO9Y Supervised Reading in Modern Art

Prerequisite: At least one C-level fullcourse equivalent in art history; permission of instructor must be obtained by the first week of classes. A reading knowledge of a second language is recommended. Session: Winter Day Members of Faculty

Fine Art Studio

FARA90Y Foundation Studies in Studio

An introduction to basic problems in design and colour and the relation of these problems to the visual arts. There will be an emphasis in this class on each student's exploration and investigation of these problems.

There will be lectures, demonstrations and group critiques. Limited Enrolment: Class size is limited to 25 per section. Exclusion: FARA70 and FARA71 Prerequisite: Students may pre-register but will not be admitted to the course unless granted permission of the instructor during the first week of classes. A portfolio must be submitted within the first two weeks before classes. Session: Winter Day A. Brannen, J. Hoogstraten

FARB70F Introductory Drawing An introductory course for students wishing to explore the techniques and concepts of drawing.

This course is designed to introduce the student to the potentials inherent in drawing. Three hours per week of studio work including group and individual critiques. The student will be responsible for attending every class, keeping a definitive sketchbook, and submitting a

series of finished drawings at the end of Limited Enrolment: 20. Prerequisite: FARA90 or permission of instructor Session: Winter Day J. Hoogstraten

FARB72F Introduction to Printmaking (Screen Process Printing)

Materials and methods in edition print-

This course is designed to introduce the student to the art of printmaking through the use of the silk screen medium. The course will include lectures and demonstrations of the silkscreen, etching, and lithographic techniques of printmaking. The student will be expected to conceive and print several serigraphs. Trips to public and private galleries to view prints will be manda-

torv. Limited Enrolment: 15 Prerequisite: FARA90 or permission of instructor Corequisite: FARB70 Session: Winter Day D. Holman

FARB74S Intermediate Drawing

An investigation of the creative act of drawing and its use in the development of the artist's personal visual perception.

This course will give Fine Art students an opportunity to expand their knowledge and skills in the art of drawing. The class will meet three hours every week for work in the studio and for personal and group critiques. The student will be responsible for attending every class, keeping a definitive sketchbook and producing a number of finished drawings. The final portfolio must include all the drawings done for projects, drawings done from the models, and the sketchbook(s). Limited Enrolment: 20. Prerequisite: FARB70 or permission of instructor Session: Winter Day D. Holman

FARB75Y Introduction to Painting An introduction to principles and techniques of painting.

Emphasis will be placed on experimentation and the investigation of the possibilities of painting. There will be both group and individual critiques held

at appropriate intervals during the Limited Enrolment: 20. Prerequisite: FARA90 or permission of instructor Session: Winter Day J. Hooastraten

FARB82F Introduction to Lithography

An introduction to stone lithography edition printing, involving a detailed investigation of materials and techniques.

The course will include working demonstrations and lectures explaining and demonstrating the artistic nature of stone lithography. The student will be expected to draw and execute several lithographs. Limited Enrolment: 10

Prerequisite: FARA90; FARB72 or permission of instructor Session: Winter Day D. Holman

FARB83S Intermediate Lithography An extension of FARB82.

The objective of the course is to explore further the art of stone lithography in multi-colour printing. The content and method are the same as for FARB82H. Limited enrolment: 10

Prerequisite: FARB82 and permission of instructor Corequisite: FARB74

Session: Winter Day D. Holman

FARB84Y Introduction to Etching

An introduction to etching and mono printing exploring the use of materials and techniques involved in the process of creative 'Fine Art Printing'. Limited Enrolment: 15. Prerequisite: FARB72 or permission of instructor Session: Winter Evening

A. Brannen

FARB92Y Introduction to Sculpture Concepts

An investigation of current attitudes in sculpture.

This course will familiarize the student with current explorations of space. time, motion, and sound. Students will be required to produce a number of working drawings in response to these and other sculptural concerns. Texts will include Rosalind E. Krauss' Passages in Modern Sculpture, and Gregory

Battcock's Minimal Art: A Critical Anthol-Limited enrolment: 15. Prerequisite: FARA90 or permission of instructor. Session: Winter Day J. Hooastraten

FARC85B Intermediate Etching

A studio course designed to expand the student's knowledge of etching and mono printing. Limited Enrolment: 15. Prerequisite: FARB84 or permission of instructor

Session: Summer Evening A. Brannen

FARC82F/S

FARC83F/S FARC84F/S

FARC86F/S FARC87F/S FARC88F/S

Supervised Studies in Studio: Intermediate Level

These courses may be in any of the fields of drawing, painting, and printmaking. Students are required to submit a portfolio along with their proposal outlining intended research. The courses are intended for students who can demonstrate the need to pursue further study in any of the above areas. Students are also required to meet with instructors on a regular basis for critiques of work in progress. Limited enrolment: 3. Prerequisite: FARA90, and permission of instructor, which is based on the evaluation of the proposal and/or portfolio Session: Winter Day D. Holman, J. Hoogstraten

FARD21Y Advanced Studio: Individual Study in Painting

This course is only for students who would like to develop further a mature painting ability. Students must convince the instructors that they are able and willing to assume the responsibility of carrying this course without intensive guidance.

The student will have an opportunity to work independently while receiving ongoing, advanced criticism from the instructors. The content of this course, methods to be used, and evaluation of work are determined co-operatively by

the student and the instructors. Limited enrolment: 5. Prerequisite: Permission of instructor must be obtained by the first week of classes. Exclusion: (FARC21) Session: Winter Day J. Hoogstraten

FARD22Y Advanced Studio: Individual Study in Printmaking

The purpose of this course is to give the promising student an opportunity to work independently while receiving advanced criticism. The content, method, and evaluation of the course will be decided upon by both the student and the instructor. Limited enrolment: 5. Prerequisite: Permission of instructor must be obtained by the first week of

classes. Exclusion: (FARC22) Session: Winter Day D. Holman

FARD24F/S FARD25F/S Independent Studies in Studio: Advanced Level

These courses may be in any one of the fields of drawing, painting, and printmaking.

Students are required to submit a portfolio along with their proposal outlining intended research. These courses are intended for the student who can demonstrate the need to pursue independent study in one of the above areas. Students must meet with the instructors at appointed times, but they are expected to work independently. Content, method, and evaluation to be planned in cooperation with instructor. Limited enrolment: 3

Prerequisite: At least one B-level fullcourse equivalent in the field of study; a portfolio demonstrating proficiency in this field; permission of instructors. which is based on the evaluation of the portfolio.

Exclusions: (FARC24), (FARC25) Session: Winter Day D. Holman, J. Hoogstraten

FARD90F/S FARD91F/S Independent Studies in Studio: Advanced Level

These courses may be in any one of the fields of drawing, painting, and printmaking.

Students are required to submit a

portfolio along with their proposal outlining intended research. These courses are intended for the student who can demonstrate the need to pursue independent study in one of the above areas. Students must meet with the instructor at appointed times, but they are expected to work independently.

Content, method, and evaluation to be planned in co-operation with instructor. Limited enrolment, 3. Prerequisite: At least one B-level fullcourse equivalent in the field of study, a portfolio demonstrating proficiency in this field, and permission of instructor. which is based on the evaluation of the portfolio. Exclusion: (FARC91S) Session: Winter Day

Courses Not Offered in 1989-90

FARBO4F Archaic Greek Sculpture

D. Holman, I. Hooastraten

Fine Art History

(650-480 B.C.) FARBO5S Classical Greek Sculpture (480-300 B.C.) FARB15F Renaissance in Italy Baroque Painting in South-FARB27F ern Europe, 1600-1650 FARB29Y Baroque Painting in The Netherlands FARB37F/S Rococo to Romanticism FARB41F/S Architecture in the Western World Since 1750 FARB43F/S Impressionism FARB48F/S Art from 1900-1950 FARB60Y The Arts in Canada: 1670-1960 FARB62F/S Recent Canadian Art

Prerequisites for all C-level courses in Art History: One full-course equivalent at the B-Level or permission of the instructor.

FARCO5F/S Wallpainting in Ancient Egypt and the Bronze Age Aegean (ca. 3200 B.C. - ca. 1200 B.C.)

Exclusion: (FARB02) FARCO6F/S Gothic Architecture Advanced Studies in the FARC09F Renaissance

FARCIOF/S Italian Renaissance Architecture

FARC14F/S Art Around 1900

FARC15F/S Cubism and Related Movements

FARC16F/S Expressionist Trends FARC19Y The Canadian Landscape Exclusion: (FARB61Y) JHFC40Y Vienna and the Origins of

Contemporary Culture Prerequisites: Either one of LITA01, ENGA01, FREA30(FREB02Y) or a Blevel full-course equivalent in Fine Art History.

Courses Not Offered in 1989-90

Fine Art Studio

FARA70F Two and Three Dimensional Design FARA71S Colour FARB73Y Photographic Issues in the Visual Arts

Prerequisite/Corequisite: FARA90 or permission of instructor.

FARC76Y Intermediate Painting I

> Prerequisite: FARB75 or permission of instructor. Intermediate Painting II

FARC77B FARC80F/S Drawing from the Figure I Prerequisite: FARB74 or permission of instructor.

FARC81F/S Drawing from the Figure II Prerequisite: FARB74 or permission of instructor.

French

Discipline Representative: J. Curtis (284 - 3186)

The study of French at this campus of the University of Toronto provides a broad range of approaches to a major world language and culture. The unique role of French in a bilingual Canada and the richness of France's literary and cultural achievements justify the extensive variety of courses available to Scarborough students. Undergraduate studies of French normally begin with FREA10. Language Practice I, which serves to consolidate previous language experience. This course is also the prerequisite for all advanced language, literature, and linguistic courses in our programme of French studies.

The courses offered are designed primarily for students with OAC French (or Grade 13 French) who wish to continue their study of the language and/or literature of French Canada and France. Those

students who have significant "immersion" or "enriched" high school experience should consult Professor J. Kirkness (284-3315) concerning the appropriate language practice course for their purposes. Students without OAC French or equivalent are urged to obtain credit for FREA06 and/or A16 on a "study elsewhere" basis, for example, by attending a summer immersion programme. Further information is available from our Supervisor of Study Elsewhere, Professor C. Bertrand-Jennings (284 - 3186).

Once FREA10 (or its equivalent) is completed, students intending to continue their French studies may choose courses from a variety of areas: these are described below. Please consult the Programme Supervisors and members of the French staff for more detailed advice about course selection and for information about our Specialist and Major Programmes.

Areas of study in French include:

a) Practical language studies:

- i) for general purposes: A10, B10, C10
- ii) for special purposes: translation: B08, C09, C18 pronunciation: B48 business: B18, C18

b) Literature

- i) Our introductory course (FREA30) prepares students for more advanced studies in literature in French and is strongly recommended for those who intend to pursue their interests in literature.
- ii) The literature of French Canada is studied in the following courses: B36, B37, B38, C39.
- iii) A wide range of courses on all genres and periods of the literature of France is offered regularly. Special interests include the theatre (B29, B30, B31, B41) and the novel (B49, B70, C23, C26, C34).

Students interested in more comprehensive studies in literature are invited to consider the offerings in such related areas as English. Literature, Humanities, and modern and classical languages (Classics, German, Italian, Spanish).

c) Linguistics Courses in linguistics may be descriptive as in B25, B48, and C09, or historical as in B42 (France), and B43 (Canada).

Students interested in more comprehensive studies in linguistics are invited to consult the listings under Linguistics. LINAO1, A05, and B05 are of particular relevance to French studies.

d) Civilization Courses in the civilization and culture of French Canada and of France cover all periods and provide opportunities to intensify understanding of the settings within which the literature and the language of these communities have developed. Relevant courses include B20, B21, B22, B23, B80, B81, and C33.

The College's "Study Elsewhere Programme" offers ideal opportunities for French students to fulfill some of their programme requirements while studying French elsewhere. For example, the University of Toronto sponsors programmes at Laval (Quebec) and Aix-en-Provence (France). If interested, please consult the Supervisor of Study Elsewhere, Professor C. Bertrand-Jennings (284 - 3186)

Normally, a student may not take an A-level French course at the same time as or after a B-level French course. Also, only one full-course equivalent in the area of civilization may be counted as part of the requirements for each of the Specialist and Major programmes in French.

Other courses and suggestions likely to interest students of French may be found under Language and Literature and Language Studies.

Specialist Programme in French

Supervisor: P. Moes (284-3307) Students should complete twelve fullcourse equivalents, including ten French courses as specified below (items 1-5) and two others (see item 6) as follows:

- the sequence FREA10Y, FREB10Y, FREC10Y, (except where substitution of other French courses is permitted for students with special proficiency in the French language)
- one of the following courses: FREB25Y, FREB42Y, FREB48Y, FREC09Y

- three full-course equivalents in French Literature and French Canadian Literature, one of which should deal with a period prior to 1800 and one with a period after 1800
- four full-course equivalents at C- or D-level (or from the 300 and 400 series courses on the St. George Campus). Both FREC10Y and supervised reading courses may count toward this requirement.
- It is recommended that the student include in his/her Programme one full-course equivalent from the series FRED02-D07, FRED90 (Supervised Reading) involving individual research in a specific area. (Such a course may also count toward satisfying requirements in (2), (3) and (4) above.) Normally, no more than two full-course equivalents in the area of supervised reading may be credited for requirements for the Specialist Programme.
- Two full-course equivalents outside French but from related areas of study, to be agreed upon in consultation with the Supervisor.

Students interested in literature are urged to take FREA30Y early in their Programme.

The following may not count toward a Specialist Programme:

- any A-level French course, with the exception of FREA10, and FREA30
- 2 FREB17, FREB18, FREC18.

Major Programme in French Language and Literature

Supervisor: P. Moes (284-3307) Students should complete seven fullcourse equivalents, including:

- 1 FREA10Y, FREB10Y, (except where substitution of other French courses is permitted for students with special proficiency in the French language)
- one of the following courses: FREBO8F/S, FREB25Y, FREB42Y, FREB48Y, FRECOSY, FRECIOY, FREC16Y
- three full-course equivalents from the remaining courses in French and French Canadian literature and civilization
- one additional full-course equivalent in French, to be chosen in the area either of language study or of literature and civilization
- students may include in their Major Programme a maximum of one supervised reading course.

Students interested in literature are urged to include FREA30Y in their

Programme.

The following may not count toward a Major Programme in French Language and Literature:

1 any A-level French course, with the exception of FREA10, and FREA30 2 FREB18, and FREC18.

Note: Students intending to pursue their studies in French at the graduate level are advised that only the Specialist Programme qualifies them for admission to the Graduate Department of French at this University.

Language requirements will be waived by the Supervisor for students judged to have advanced knowledge of French. Equivalent courses from the discipline's offerings will be substituted. Students are strongly advised to discuss their programme as soon as possible with the Supervisor.

See also Specialist Programme in Modern Languages (listed under Language Studies) and Language and Literature.

Major Programme in French Language

Supervisor: U. Lesser-Sherman (284 - 3151)

Students should complete seven fullcourse equivalents, including:

- 1 FREATOY, FREBIOY, FRECTOY (except where substitution of other French courses is permitted for students with special proficiency in the French language)
- two full-course equivalents from the following: FREBO8F/S, FREB18Y, FREB25Y, FREB42Y, FREB43F/S. FREB48Y, FREC09Y, FREC16Y. FREC 18F/S.
- two other full-course equivalents in French, only one of which may be chosen from group (2).
- Students may include in their Programme a maximum of one supervised reading course.

The following may not count toward a Major Programme in French Language: any A-level French course, with the exception of FREA10, and FREA30. Note: Students intending to pursue their studies in French at the graduate level are advised that only the Specialist Programme qualifies them for admission to the Graduate Department of French at this University.

FREATOY Language Practice I

This course is designed to help students reinforce and develop those language skills (writing, reading, understanding, and speaking) which are necessary for taking advantage of upper level courses.

Three hours per week of grammar review, vocabulary-building exercises. reading and discussion of texts representing various styles and cultures, composition, debates, and exercises that class and instructor may choose to devise. One laboratory period a week specifically designed for oral-aural practice.

For students planning to specialize in French, FREA30Y is recommended as a companion course. Exclusion: (FREBO6), native or nearnative proficiency in French Prerequisite: OAC French or Grade 13 French or FREA16 or equivalent. Session: Winter Day J. Kirkness and Staff

FREA16A Introductory French II Spoken and written French studies for students who have completed Grade 11 French or equivalent.

Classes are devoted to the study of written and spoken French. There is also at least one laboratory period a week for oral-aural practice. This course prepares students to enter FREA10. Textbooks: Elan, by Y. Lenard, and accompanying Cahier de laboratoire. Regular class attendance and participation are essen-

Exclusion: OAC French or Grade 13 French or equivalent Prerequisite: FREA06 or Grade 11 French or equivalent Session: Summer Evening C. Evans

FREA30Y Introduction to Literary **Analysis**

An introduction to methods of critical analysis through the study of selected works from the fields of French and French Canadian drama, fiction, and poe-

FREA30 is intended to prepare the student for more advanced study in French and French-Canadian literature. It deals with a wide range of themes, styles, and genres, and can also provide. for the non-specialist, an introduction to several major writers of the modern period.

Two hours of classes a week are

devoted to lecture expliquée, class discussion and student presentations. Exclusion: (FREB02) Prerequisite: OAC French or Grade 13 French or FREA16 or equivalent. Corequisite: FREA10(FREB06) Session: Winter Day F. Mugnier-Manfredi

FREBO8F/S Practical Translation

Translation practice from French to English and English to French.

Texts from fields such as literature, business, politics, law, science and technology, art, and advertising will be translated, analysed, and discussed in terms of type of language and style of expression.

Class time is devoted to increasing the student's proficiency. Evaluation will be based on class participation, written and oral assignments, and an examination. Prerequisite: FREA10 or equivalent Session: Winter Day S. Mittler and J. Kirkness

FREB10Y Language Practice II

A continuation of FREA 10 work, including grammar, composition, oral practice, readings, and language laboratory work. Not normally open to native speakers of French.

This course is concerned with the development of fluency, accuracy of expression, and style. Exclusion: (FREB16), native proficiency in French. Prerequisite: FREA10(FREB06) or equivalent Session: Winter Day/Winter Evening

C. Evans and C. Bertrand-Jennings FREB18Y Commercial French

The French language in a commercial or economic context.

This course is of interest to students in French, to Business and Economics Majors, and to all who wish to improve their skills in preparation for entry into a specialized area of the job market. In order to provide the student with the basic elements of commercial techniques as practised in the business communities of Quebec and France, the programme will consist of theoretical and practical sessions. Class meetings will also be devoted to correspondence writing and to exercises that include the vocabulary and structures involved in the language of business.

This course may not count towards a Specialist Programme in French, or the

Major Programme in French Language and Literature. Prerequisite: FREA10(FREB06), or permission of the instructor Session: Winter Day/Winter Evening W.J. Bancroft

FREB20Y History of French Civilization

A study of French culture as it developed through the ages. The course deals primarily with historical and artistic issues. Literary and other texts will be used for their cultural content.

This course provides an overall understanding of French culture useful to students wishing to undertake further studies in French language and literature, and could also be valuable to students in other fields.

Textbook will be I. Thoraval. Les Grandes Etapes de la civilisation. Prerequisite: FREA10(FREB06) Session: Winter Day F. Muanier-Manfredi

FREB24Y French Thought and Literature in the Age of Enlightenment An introduction to French Literature of the eighteenth century.

This course deals with the nature of the French Enlightenment and the way in which its principal ideas and ideals find expression in works of fiction as well as non-fiction. Texts include works by the philosophes Montesquieu, Voltaire, Rousseau; by the novelist Prévost; and by the dramatist Beaumarchais. Prerequisite: FREA 10(FREB06) Session: Winter Day P. Moes and J. Curtis

FREB25Y Introduction to French Linguistics

A study of the linguistic structure of French and of linguistic theories from the beginning of the twentieth century as applied to modern French. Prerequisite: FREA 10(FREB06) Session: Winter Day J. Kirkness

FREB26Y The Romantic Current in French Literature

Analysis of Romanticism in nineteenthcentury literature, with attention to the main writers of the period.

Some introductory lectures will be devoted to exploring the origins of French Romanticism, the spread of Romanticism in Europe, and historical events and social

changes which contributed to the formation of the Romantic Movement. The remainder of the course will alternate between lectures, discussions, and analyses of specific works by prominent authors from the first half of the nineteenth century. Prerequisite: FREA 10(FREB06) Session: Winter Day C. Bertrand-Jennings

FREB36F French-Canadian Novel to 1945

A study of major French-Canadian novels from the mid-nineteenth century to the end of the Second World War.

FREB36 is intended for the general student of French as well as the specialist. Much more than its companion course. FREB37 (which students successfully completing FREB36 are strongly advised to take), it deals with historical, cultural, and social developments in French Canada. Some knowledge of Canadian history in the period in question is, therefore, a decided asset.

Prerequisite: FREA 10(FREB06) Session: Winter Evening L.E. Doucette

FREB42Y General History of the French Language

The nature and pattern of change in the language from Latin to contemporary French.

In the fall term, the course will follow the chronological development of French from its beginnings in Latin; it will thus review the origins and characteristics of Old and Middle French with specific reference to phonology and morphology. Sound changes will be studied in detail. In the spring term, attention will be given to the social and regional variations in the language of Modern France and to the impact on the vocabulary of social and technological change and of other languages.

Prerequisite: FREA10(FREB06) Session: Winter Day

C. Evans

FREB48Y Theoretical and Practical Phonetics

A study of modern French pronunciation. This course will comprise the following: general principles of French phonetics, phonetic readings, phonetic transcription, corrective pronunciation, the study of the relationship between spelling and pronunciation, and recordings by students themselves.

Basic textbook required: P. León,

Prononciation du français standard. Limited enrolment per section: 25 Prerequisite: FREA10(FREB06) Session: Winter Day/Winter Evening C. Besnard

FREB49Y The Twentieth Century: The Search for Identity

A study of the social, political, and philosophical ideas of such writers as Camus. Sartre, Malraux, and Saint Exupéry.

Attention will focus on the thematic content of specific texts. Novels will not necessarily be studied in chronological order, although some historical background will be provided.

Students interested in taking FREB49Y might wish to consult a general account of the twentieth century French novel, e.g., An Age of Fiction by Germaine Brée and Margaret Guiton. Prerequisite: FREA10(FREB06) Session: Winter Day S. Mittler/J. Bancroft

FREB81S Women's Consciousness in French Literature

This course will attempt to trace the history of women's role in French literature and to analyze the concept of femininity as experienced and described by prominent female authors from the nineteenth century to the present.

Authors studied might include Duras, Sand, Colette, de Beauvoir, and Wittig. Lectures and discussions will alternate. Both will be conducted in French. Active participation in class is urged. Prerequisite: FREA10(FREB06) Session: Winter Day C. Bertrand-Jennings

FRECO9Y Comparative Stylistics

A comparative study of expression in English and French, including practice in translating and analysis of selected examples of the translator's art.

Basic terminology and concepts of comparative stylistics will be studied in Stylistique comparée du français et de l'anglais by Vinay and Darbelnet (pub. Beauchemin; text and workbook). On the practical side, there will be translating and discussion of passages in English and in French representing various styles and levels of expression: formal, colloquial, technical, literary, journalistic. Classes involve discussion and practical work. Prerequisite: FREB10(FREB16) and FREB08 Session: Winter Day J. Curtis

FREC10Y Language Practice III

A continuation of FREB10 (FREB16), including reading, grammar, composition, translation and stylistic exercises, discussion, and/or debates. This is a course designed to bring the student to an advanced level of competence in written and oral skills. Vocabulary building exercises and grammar studies are combined to develop effective communication skills.

Emphasis in this course will be put equally on the oral and written components of French through (a) the study of grammar, (b) the reading and analysis of texts in modern prose, (c) the writing of essays in French, (d) discussions in the classroom.

Exclusion: FREC06 Prerequisite: FREB10(FREB16) Session: Winter Day F. Mugnier

FREC18S Translation for Business and Professional Needs

A continuation of FREB18, devoted to the study of the French language in a commercial, professional, and technical context.

Through in-class practice in translation from French to English and English to French, students will have the opportunity to widen their knowledge of the vocabulary and structures particular to the language of business as well as to such fields as legal services, social work, health care, industrial relations, insurance, and software.

Class work is directed toward increasing the student's proficiency. Evaluation will be based on class participation, written and oral assignments, and an examina-

Prerequisite: FREB10, FREB18 or equivalent Session: Winter Day S. Mittler

FREC23F The French Novel in the Seventeenth Century

The evolution in the seventeenth century of the novel as a literary form and as a social phenomenon.

After an outline of the historical and literary background of the seventeenth century novel, theories (and theoreticians) of the novel in the classical period will be discussed. In the study of the forms of the seventeenth century novel, the following works will be dealt with in some detail: Sorel, Histoire comique de Francion, Scarron. Le Roman comique, Furetière, Le Roman Bourgeois, Mme de La Fayette, La Princesse de Clèves.

The teaching method will involve

lectures and discussion. Prerequisite: One B-level course in the group FREB10(FREB16)-B81, excluding FREB17, FREB18.

N.B. FREB40 and/or FREB41 are strongly recommended as background courses. Session: Winter Day J. Kirkness

FREC25Y Literature of the Renaissance

A study of sixteenth-century French literature, including Rabelais, Montaigne, and the major poets.

During the fall term, the major schools of poetry and their exponents (Marot, Ronsard, Du Bellay, d'Aubigne) will be studied. Although some of the texts will be read in modernized versions, a good deal of time will be devoted at first to introducing the student to sixteenth-century French, The second term is devoted to the works of Rabelais and Montaigne. Texts will include Ronsard, Poémes; Du Bellay, Défense et illustration and poetic works; Rabelais, Oeuvres complétes; Montaigne, Essais. For useful background reading, see I. Cruikshank, French Literature and its Background: The Sixteenth Century; and D. Stone, France in the 16th Century. Prerequisite: One B-level course in the group FREB10(FREB16)-FREB81, excluding FREB17, FREB18, FREB19. Session: Winter Day J. Curtis, L.E. Doucette

FRED02F FRED03S FRED04F FRED05S FREDO7S

FRED90Y Supervised Reading

These courses offer the student an opportunity to carry out independent study of an advanced and intensive kind, under the direction of a faculty member. Student and instructor work out in consultation the course's objectives, content, bibliography, and methods of approach. The material studied should bear some relation to the student's previous work, and should differ significantly in content and/or concentration from topics offered in regular courses.

Interested students should contact Professor J. Curtis. Exclusions: (FREC02, FREC03, FREC04, FREC05, FREC07, C90) Prerequisite: One B-level course in the group FREB10(FREB16)-FREB81, excluding FREB17, FREB18. Session: Winter Day

Courses No	t Offered in 1989-90	FREC22Y	Introduction to Medieval
FREA06Y	Introductory French I		French Language and Litera- ture
	Exclusion: Grade 12 French		Prerequisite: One B-level
EDED 1 7F /C	or equivalent Intermediate Conversation II		course in the group
FREDI/F/S	Prerequisite:		FREB10(FREB16)-FREB81,
	FREA10(FREB06Y) or	FRFC24F/S	excluding FREB17, FREB18. The French Novel in the
	eguivalent	1112021170	Eighteenth Century
	Corequisite: FREB19		Exclusion: (FREB32);
FREB21F/S	France Today		(FREB33)
	Prerequisite: FREA10(FREB06Y)		Prerequisite: One B-level
FREB22F/S	The Society and Culture of		course in the group FREB10(FREB16)-B81,
	French Canada I		excluding FREB17, FREB18.
	Prerequisite: FREA10Y	FREC26Y	Prose Fiction From 1800
	(B06Y) or equivalent (consult		to 1900: From Romanticism
EDERSSE/6	instructor) The Society and Culture of		to Naturalism
FREDZ 3F/3	French Canada II		Exclusions: (FREB32); (FREB33); (FREB34)
	Prerequisite: FREA10Y		Prerequisite: One B-level
	(B06Y) or equivalent (consult		course in the group
EDEDDOR (6	instructor)		FREB10(FREB16)-B81,
FREBZAE\2	French Drama of the Eighteenth Century	EDECODE (C	excluding FREB17, FREB18.
	Prerequisite: FREA10	FREC33F/3	French Civilization: Con- tinuity and Change
	(FREBO6)		Prerequisite: One B-level
FREB30F/S	French Theatre of the Early		course in the group
	Modern Period		FREB10(FREB16) - FREB81,
	Prerequisite: FREA 10 (FREB06) or equivalent		excluding FREB17, FREB18;
FREB31F/S	Contemporary French Thea-	FRFC34F/S	or permission of instructor Cross-currents in Contem-
	tre	I KLCJ4I/J	porary French Fiction
	Prerequisite: FREA10		Prerequisite: One B-level
Energy are co	(FREBO6) or equivalent		course in the group
FREB3/F/S	French-Canadian Novel since 1945		FREB10(FREB16) - FREB81,
	Prerequisite: FREA10	FRFC39F/S	excluding FREB17, FREB18. French-Canadian Poetry
	(FREBO6) or equivalent	111200170	Prerequisite: One B-level
FREB38F/S	The Theatre of French		course in the group
	Canada		FREB10(FREB16)-FREB81.
	Prerequisite: FREA10 (FREB06) or equivalent	FREC40Y	excluding FREB17, FREB18. Modern French Poetry from
FREB40F/S	French Classicism: Poetry	FRECTOI	Baudelaire to Valery
	and Prose		Prerequisite: One B-level
	Prerequisite: FREA10		course in the group
EDEDA1E/C	(FREB06Y) or equivalent French Classicism: The Thea-		FREB10(FREB16)-FREB81,
FRED-TIF/3	tre		excluding FREB 17, FREB 18.
	Prerequisite: FREA10		
	(FREB06) or equivalent		
FREB43F/S	The French Language in		
	Canada Prerequisite: FREA 10 (B06)		
	or equivalent		
FREB70Y	The Twentieth Century: In		
	Search of the Novel		
	Prerequisite: FREA10		
FRERANF/S	(FREB06) or equivalent Representation of Women in		
	French Literature		
	Prerequisite: FREA10		

(FREB06) or equivalent

Geography

Assistant Chair: M.F. Bunce The Geography curriculum offers courses dealing with the processes, problems and management of physical and human environments. There are Major and Specialist Programmes, and courses in Geography are listed as options in Canadian Studies, Women's Studies, the Co-op Programmes in Administration and in International Development Studies, Terrain and Earth Science and Economics. Specific courses, such as those on Soil Management, should be of general interest to students specializing in Physical and Life Sciences. while those on Urban Geography and Rural Geography may appeal to students specializing in other disciplines in Social Sciences.

Geography Programmes can be taken for either a B.A. or a B.Sc. degree depending on the courses selected. In general courses in human geography qualify for a B.A. and those in physical geography lead to a B.Sc.; courses which count towards a B.Sc. are listed in the section on Degree Requirements at the front of this calendar.

Specialist Programme in Geography Supervisor: A. Price

The requirements for this Programme are twelve full-course equivalents, which must include:

- GGRA04F/S and GGRA05F/S
- GGRB31F/S
- GGRD01Y 3
- At least three full-course equivalents in Geography at the C-level or Dlevel, other than GGRD01Y.
- Two full-course equivalents in disciplines other than Geography to be agreed on in consultation with the Supervisor.

Major Programme in Geography

Supervisor: A. Price

The requirements for this Programme are seven full-course equivalents in Geography, which must include:

- GGRA04F/S and GGRA05F/S
- 2 At least two full-course equivalents in Geography at the C-level or D-level

GGRA04S Concepts and Methods of **Human Geography**

The conceptual and methodological foundations of human geography. The concepts examined will include place. location, distance and proximity; spatial scales, linkages and disparities; and the relationships between people and environments. The methods studied will include land use survey and analysis. graphic representation and interpretation of numerical data, population analysis, and the use of descriptive statistics.

Teaching method: 2 hour lectures, 1 hour lab. Session: Winter Day

E.C. Relph

GGRAOSF Introduction to Physical Geography

The course is designed to illustrate the principles underlying the geographical way of analyzing and understanding how natural systems operate. A consideration of the flow of both energy and mass through natural systems is used to explain system characteristics, from the shape of the landscape to the generation of weather. The physical processes forming natural systems are considered at many different scales, from point to global processes; from soil erosion at the field level to plate techtonics. The impact of human activity on system processes is also surveyed, with particular reference to vegetation change, soil degradation and atmospheric pollution. using specific case studies. The course requires no geography background, only an interest in natural systems. Teaching method: 2 hour lecture, 1 hour lab.

Session: Winter Day

A. Price

IDSB02Y International Development Studies: Physical and Ecological Resource Management

Introduces students to the physical and ecological bases of natural resource management, and their role in constraining development in Third World countries. The course includes study of: basic climatic processes, climatic differentiation; the hydrologic cycle and its role in water resource management: principles of soil development and nutrient cycling; processes of plant colonization and community development. It will include case studies of natural resource management and mismanagement in developing countries. Students will be encouraged to develop specific regional interests in course tutorials.

Session: Winter Day R. Bryan/A. Price

GGRB03Y Climatology

A scientific analysis of Earth's climate through study of the governing physical and dynamical controls. The first term focuses on basic elements of Earth's meteorology. Major topics include: atmospheric composition, nature and significance of atmospheric radiation, physical controls on surface and global energy budgets, atmospheric moisture and cloud development, and atmospheric motion, including air mass and front concepts and upper air circulation.

The second term examines Earth's major climates. Topics include comparisons and contrasts of: mid-latitude temperate climates, and Asian/African monsoons. The remainder of the term is devoted to an examination of the nature and theories of climatic change. Two hours of lectures per week plus an additional lab/tutorial hour as needed. Prerequisite: GGRA05 or an A-level science course with permission of instruc-

Session: Winter Day A. Sawchuk

GGRB05Y Urban Geography

An introduction to the geography of the North American city, emphasizing the importance of historical development to our understanding of the present.

The first half of the course looks at cities as reflections of, and influences upon, North American society. The second half deals with the internal organization of the city, with the operation of the land market, patterns of residential, commercial and industrial land use, with planning and urban politics. Examples will be drawn in part from Canadian cities.

Prerequisite: GGRA04 or an A-level course in the Social Sciences or the Humanities.

Session: Winter Day/Summer Evening TBA

GGRB09F/S Hydrology, Land Use and Water Quality

Particular land uses involve very specific hydrologic, geomorphis and chemical interrelationships at and near the ground surface. Any change in land use necessarily changes the water balance at the surface, which modifies the other surface processes, usually to the detriment of soil and water quality both on and off the site. In this course, the fundamental controls on the motion of water through vegetation canopies and soil are outlined, and specific examples of changes in water quality caused by changing land use are analyzed. Emphasis will be placed on the hydrologic consequences of land use change, but attention will also be given to the chemical changes in water and soil which result from changes in near-surface water fluxes.

Teaching methods: 2 hour lecture, 1 hour lab per week. Prerequisites: IDSB02 or GGRA05 Session: Winter Day A. Price

GGRB13Y Modern Urban Landscapes

An examination of the appearance of modern cities, especially in terms of architecture and urban planning and with reference to two questions: How have cities come to look as they do? What can be learned about modern societies by studying their visual environments? The fall term will be devoted chiefly to an historical survey of architectural styles and town planning approaches from 1880 to the present: the spring term emphasizes the analysis. evaluation and interpretation of urban landscapes. Session: Winter Day

GGRB17Y Rural Geography

E.C. Relph

The geography of rural environments in the context of an urbanizing world. Topics will include concepts of rurality, the evolution, elements and patterns of rural settlement, the rural resource base. agricultural land use, problems of contemporary change in rural society, economy and landscape; the rural urban fringe, the recreational use of rural areas and rural policy problems.

The aims are to acquaint students

Geography

with some of the recent literature on the subject, and to introduce them to the methodological and conceptual patterns of studying rural areas.

Prerequisite: GGRA04 or an A-level course in the Social Sciences or the Humanities

Session: Winter Day

M.F. Bunce

GGRB19Y General Geomorphology

Processes of surficial material development and landform evolution; weathering processes and soil development; hillslope form and process; principles of fluvial geomorphology and drainage system analysis; introductory coastal geomorphology; processes of landform evolution in arid regions; the geomorphic role of climatic changes; Pleistocene and present day glaciation; geomorphology as an applied geotechnical field. Field excursions, laboratories, lectures.

Prerequisite: GGRA05 or GLGA01, or IDSB02 with permission of instructor Session: Winter Day

TBA, B. Greenwood

JEGB27F Location and Spatial Development

An examination of the use of competitive location theory in the analysis of regional economic growth and decline. Topics include Ricardian rents and spatial equilibrium, trade flows and spatial price equilibrium, geographical market areas and spatial pricing policies, the location of a firm with mobile resources. industry location in equilibrium, trade theory and regional specialization, and the regional growth theories of Borts-Stein and Myrdal. Two hours of lectures and one tutorial hour per week. Prerequisite: ECOA01 Session: Winter Day. J. Miron

CCBP21C Data Amala

GGRB31S Data Analysis in Geography: An Introduction

Topics include probability models, frequency and sampling distributions, population parameters and statistical estimation, hypothesis testing, correlation and regression analysis, sampling theory, and analysis of variance. Applications to geography include spatial sampling, trend surfaces, evaluation of spatial patterns, and spatial autocorrelation. Extensive use is made of a package of computer programs for statistical analysis. Two hours of lectures

and one tutorial hour per week.
Exclusion: Any university-level half or
full course in statistical methods
Prerequisite: GGRA04 or GGRA05
Session: Winter Day
J. Miron

GGRCO4F Urban Residential Geography

An examination of the residential geography of North American cities, with an emphasis on the Toronto Metropolitan area.

In the lectures, patterns of residential land use will be discussed, together with their causes and their social and political consequences. Within this framework, topics will include the separation of home from work; class, ethnic and gender segregation; neighbourhood change; suburbanization and whitepainting. In research projects students will be given the opportunity to apply these ideas to Toronto. Prerequisites: GGRB05 and GGRB30 Session: Winter Day TBA

GGRC06S Gender and the City

This course will look at differences in the geographical experience of men and women. It will focus on the way gender roles are reflected in, and reproduced by, the geography of the city. Topics will include the separation of home and "work", the nature of the home environment; the use of public space, and citysuburban differences. It will also consider the problems of creating an environment that provides equal opportunities for men and women. Specific issues include electronic "homework" and day care. Students will be encouraged to carry out field research in Toronto.

Prerequisite: GGRB05 or JHSA01 Session: Winter Day

TDA

GGRC13F Urban Political Geography A geographical approach to the politics

A geographical approach to the politics of contemporary cities. Emphasis will be placed on North American, and especially Canadian cities, since 1945.

Lectures will review recent trends in political activity, the causes of these trends and their social consequences. Topics to be discussed will include the nature and organization of the state, especially at the local level; the political powers of the property industry, of planners, of business, labour, and community based organizations; reform

movements. Throughout, emphasis will be placed on the ways in which the geography of the cities and local government have shaped, and been shaped by, urban political activity. Prerequisite: GGRB05; also GGRB30 and GGRC04 are recommended. Session: Winter Day.

GGRC18F Urban Transportation Policy Analysis

This course examines current problems in urban transportation planning using a policy-analytic framework. Topics include the setting of community goals, economic and social cost-benefit analysis, evaluation of redistributive impacts, impacts of transport projects on land values and urban form, travel demand forecasting, congestion, travel time valuation, mass transit subsidies, pollution from traffic, and energy use in all policy in the course of lectures and one tutorial hour per week.

Prerequisite: GGRB31 or equivalent and GGRB05 or JEGB27 (GGRB27)
Session: Winter Day

TBA

GGRC20F Issues in Rural Development

An examination of the special problems of rural areas in an urbanizing world and associated development strategies. Particular attention will be paid to the underlying causes of rural poverty and disadvantage, to the role of rural economies in national development, and to the basic theories of rural development.

Prerequisite: One of GGRB01, GGRB17, GGRB28S, IDSB01, IDSB02 Session: Winter Day

M.F. Bunce

GGRC23F Computer Modelling in Physical Geography

The course aims to introduce students to the nature and role of computer modelling in physical geography. There will be a strong emphasis on numerical modelling with examples from climatology, geomorphology, and hydrology. Students will be taught the FORTRAN 77 language and, by the end of the course, should be competent to write programmes to fulfil most of their computing needs. Two hours of lectures and a

two hour lab period per week.
Prerequisites: Any two of GGRB03,
GGRB19, GGRB24; GGRB31 strongly
recommended
Session: Winter Day
A. Sawchuk

GGRC26Y Coastal Geomorphology

The mechanics of coastal processes leading to morphological change in the coastal zone will provide the focus for studying the evolution of Canada's present shorelines, especially those of the lower Great Lakes. Field and laboratory studies will complement lectures on the theoretical aspects of sediment erosion, transport and deposition in the coastal zone. The course should be of interest to students in limnology, geology and marine studies. Exclusion: (GGRB15) Prerequisites: GGRB19; courses in science and quantitative methods (e.g. GGRB31) will be useful. Corequisite: GGRB19 Session: Winter Day B. Greenwood

GGRC27Y Soil Management and Conservation

Application of soils geography to problems of resources use and management. Soil erosion and conservation procedures. Drainage and reclamation of wet soils; reclamation of polder soils. Soil survey and agriculture. Problems of soils in Arctic and Sub-Arctic environments. Soils of arid and semi-arid lands; irrigation salinization, reclamation. Exclusion: (GGRB29Y) Prerequisite: GGRA05 or GLGA01 or IDSB02 Session: Winter Day

R. Bryan

GGRC28Y The Hydrology of Surface and Subsurface Waters

A quantitative study of the processes governing the behaviour of water at or near the surface of the earth. Conventional techniques of analysis and prediction are considered as well as some of the applications to problems of water resources management planning.

Many of our problems, particularly those involving extreme hydrologic events, stem from two sources: our lack of understanding of the operation of natural hydrologic processes; and our inability to predict and understand the consequences of our manipulations of those processes. It is hoped that this course will result in a better

understanding of hydrologic processes. and in a working knowledge of ways in which "hydrologic risk" can be assessed. Two hours of lectures and one one-hour laboratory per week.

Prerequisites: One of GGRB03, GGRB09, GGRB19, GGRB24, IDSB02; and GGRB31 or equivalent

Session: Winter Day A.G. Price

GGRC29S Problems in Modern Agricultural Land Use

Examination of the land use problems created by rapid changes in modern agriculture. Emphasis will be placed on the impact of high technology, corporate economics and urbanization upon agricultural land use and landscapes.

The course is thematic in approach and will include such topics as changes in land tenure, chemical applications in farming, the agribusiness, fragmentation, land abandonment and conversion, urbanization of farmland. One two-hour seminar each week plus individual con-

Prerequisite: One of GGRB17, GGRB01, GGRB24, IDSB01, IDSB02 Session: Winter Day

GGRC30S Boundary Layer Climates

A rigorous introduction to radiative and turbulent energy exchanges in the lowest 2 km of the Earth's atmosphere. The central focus will be on computing these exchanges for a variety of atmospheric conditions and surface types. Approaches used will include both instrumentation and mathematical/numerical (i.e. computer) modelling. Students will receive handson experience with both approaches.

Specific topics include: modelling radiation fluxes in a variety of media (e.g. the atmosphere, plant communities), heat transfer within the ground and water bodies, and the eddy correlation, flux-gradient, and aerodynamic models of turbulent transfer. One two-hour lecture and one two-hour laboratory per week.

Prerequisite: GGRB03 and GGRC23 Session: Winter Day A. Sawchuk

GGRC31S Development and Planning of Metropolitan Regions

An advanced analysis of the recent growth history of metropolitan regions, its causes, the public policy issues raised by them, and the roles and impacts of

public planning policies.

The course is designed for students interested in either urban geography or urban and regional planning. It focusses on the insights which can be gained from recent empirical research. Firsthand readings of important studies will help the stu-dent to develop a critical awareness of approaches and issues in research in this area. Two hours of lectures and one hour tutorial per week. Prerequisite: GGRB31 or equivalent, and one of GGRB05 or JEGB27 Session: Winter Day J. Miron

GGRC34F Landscape Interpretation Ways of interpreting and analyzing landscapes through field investigations of specific places, both urban and rural. The course involves a number of field trips (held in class time) followed by discussion and analysis of observations. with an emphasis upon individual landscape features and methods of observation and interpretation. Limited enrolment: 20. Prerequisite: GGRB13 and GGRB30 Session: Winter Day

GGRD01Y Supervised Research

E.C. Relph

A research project under the supervision of a member of faculty. Topics may be suggested by students or faculty, but in either case must be identified and approved by the intended supervisor in time to allow for possible field work in the summer prior to formal registration in the course. Frequent discussions with the supervisor are expected. Research may be based on library or archival investigations, field studies, laboratory experiments, the analysis of census or other published data, or some combination of these.

Evaluation will be based on 1) an extended proposal or progress report submitted on or before October 31. value 20 per cent of final grade; 2) a complete draft of the final report submitted on or before February 28, value 20 per cent of final grade; 3) a written report or dissertation of professional quality in its presentation, submitted on or before March 31, value 60 per cent of final grade. The final report will be

evaluated by at least two members of faculty and the student may be asked to defend it at an oral examination. Exclusion: (GGRC01) Prerequisites: Any fifteen full-course equivalents including at least five fullcourse equivalents in Geography and one full-course equivalent from GGRB30, GGRB31, GGRC23, GGRC24 Session: Winter Day Staff

GGRD03S Theoretical Geomorphology

History and philosophy underlying modern theories of landform evolution. Emphasis will be placed on readings and seminar work dealing with the modelling of geomorphic systems and the constraints imposed by space and time. Limited enrolment: 20 **Exclusion: GGRC05** Prerequisite: GGRB19 and either GGRC26 or GGRC27 or GGRC28; a background in science will be useful. Session: Winter Day B. Greenwood

GGRD05F Hillslope Geomorphology

The course will involve a review of the development of major concepts of hillslope evolution, detailed theoretical and practical study and measurement of hillslope processes, and application of the principles of hillslope geomorphology to problems of landuse management, such as soil erosion and lake bluff collapse. Limited enrolment: 15. Exclusion: (GGRC35) Prerequisites: GGRB19 and one of

GGRC26 or GGRC28 Session: Winter Day

GGRD06F Climatic Change

The course will focus on the myriad nature of climatic change. Climatic change will be considered from instrumental and proxy data points of view and from various theories that have been involved to explain it. The last part of the course will examine several numerical models (e.g. radiative, energy balance models) that have been applied to simulate climatic change. Exclusion: (GGRC37) Prerequisites: GGRB03 and GGRC23 Session: Winter Day

A. Sawchuk

Courses Not Offered in 1989-90

Resource Management GGRB01Y Prerequisite: GGRA04 or

GGRA05.

GGRB30F Geographic Methods Prereauisite: GGRA04 or

GGRA05

GGRC07F Countryside Conservation Prerequisite: GGRB17, or

GGRB05 or GGRB13

GGRC24F Advanced Quantitative Methods in Geography

Prerequisite: A university level half-course in quantitative methods such as GGRB31 or equivalent

GGRC32F/S Research Seminar in Soil

Management

Prerequisite: GGRC27 (GGRB29)

GGRD02F Environmental Philosophies

Exclusion: GGRC12 Prereauisite: Any ten fullcourse equivalents; by the end of the year in which this course is taken at least five other full-course equivalents in Geography

must have been completed. **GGRD04F/S** Sedimentary Models

Exclusion: (GGRC25) Prerequisite: GGRB19 and either GGRC26 or GGRC28

or GGRD05

Terrain and **Environmental Earth** Sciences

Specialist Programme in Terrain and **Environmental Earth Sciences**

Supervisor: N. Eyles (284-3254) There is increasing global concern with the effects of environmental pollution and geological hazards on society. This is reflected in an escalating demand in industry, education and government for graduates with an environmental geology training. The Terrain and Environmental Earth Sciences (TEES) Specialist Programme provides students with a comprehensive multidisciplinary background necessary to understand and work with current environmental problems. The Programme comprises 16 courses drawing on expertise and facilities both on the Scarborough and St.

George campuses. Field work courses are designed to provide first hand field experience in a variety of terrains in North America.

First year: Introduction to Geology GLGA01Y MATA26Y Calculus ОГ Calculus with Analysis) (MATA55Y CHMA02Y General Chemistry PHYA03Y Physics for the Physical and Life Sciences must be taken within the first 10 courses of the programme. BIOA03Y Introductory Biology must be taken within the first 15 courses of the Programme.

Second year: Principles of Stratigraphy GLGB02S and Sedimentology Introductory Mineralogy GLGB05F Optical Mineralogy GLGB06S General Geomorphology GGRB19Y MATB41F Techniques of the Calculus of Several Variables I STAB22F Statistics CSCA04S How Computers are Used CSCA56F Computer Programming OF CSCA58F Introduction to Computing GLGB03S Field Camp I: The Appalachian Mountains Third year: Introductory Petrology I GLG318F GLG319S Introductory Petrology II GEO326F/

Sub-surface Waters Physical Chemistry I CHMB03Y CHMB02Y Analytical Chemistry **Exploration Techniques in** GLGC10F Hydrogeology

ogy*

GLGC06S

GGRC28Y

Glacial and Periglacial Geol-

Hydrology of Surface and

Fourth year: GLGD01S Contaminant Hydrogeology GLG400H Environmental Geochemis-GGRD04H Sedimentary Models GLG429F Sedimentology of Clastic

Rocks GLG332F Geometry and Kinematics of Tectonic Structures

GLGD05F

Field Camp II: The Western Prairies and the Rocky Mountains

*Note: This course is given on the St. George Campus

Geology

Discipline Representative: K. Howard (284 - 3248)

Geology is concerned with the origin and evolution of the Earth as evidenced primarily through the study of rocks. The subject is multidisciplinary in nature and draws heavily upon the physical and biological sciences. Students wishing to pursue a specialist programme in Geology on the Scarborough Campus should register in the Terrain and Environmental Earth Sciences (TEES) Programme. Further details on the Geology programme at the University of Toronto can be obtained from the Discipline Representative.

GLGAO1Y Planet Earth: an Introduction to Geology

Fundamental concepts of physical and historical geology are discussed. The first part of the course deals with the composition, structure and origin of the Earth and the physical processes that operate on and in it. The second part details the chronological succession of physical and biological events on the Earth as revealed in the rock record. Prerequisite: None, but one OAC Mathematics and OAC Chemistry or Biology or Physics are recommended. Session: Winter Day J. Westgate

GLGA03S Geological Hazards This course will focus on the geological background and possible solutions to major hazards affecting man and his environment, including such topics as landslides, erosion, earthquakes, volcanic eruptions and asteroid impacts. flooding, glaciation, subsidence, and the disposal of toxic wastes. It will be of interest to a wide range of students in the life, social, and physical sciences, and offers an opportunity for the nonspecialist to understand "headline"

making geological events of topical interest. No prior knowledge of the Earth Sciences is required. Session: Winter Evening N. Eyles

GLGB02S Principles of Stratigraphy and Sedimentology

Physical and chemical processes of sedimentation, properties and classification of sedimentary rocks, sedimentary environments and facies, diagenesis, stratigraphic nomenclature and classification. Prerequisite: GLGA01Y Session: Winter Day N. Eyles

GLGB03S Field Camp I: The Appalachian Mountains

The stratigraphy, sedimentology, and structure of Palaeozoic rocks of the Appalachian Mountains and adjacent craton will be examined during this twoweek field camp. Independent mapping will be done in the Lehigh Gap and Delaware Gap areas of Pennsylvania. The camp will be held in May, after the final Spring examinations.

Prerequisites: GLGB05F and GLGB02S Session: Winter Day

J. Westgate

GLGB05F Introductory Mineralogy Crystallography, physical properties, origin and occurrence of minerals; and the descriptive mineralogy of approximately eighty common and useful minerals. Prerequisites: GLGA01Y, CHMA02Y Exclusion: GLGB01Y Session: Winter Day D. Gorman

GLGB06S Optical Mineralogy

Optical mineralogy and identification of the principal rock-forming minerals in thin section by the use of the polarizing microscope; introduction to petrography.

Prerequisite: GLGB05F Exclusion: GLGB01Y

Session: Winter Day (Enrolment limit of 20)

J. Gittins

GLGC06S Glacial and Periglacial Geology

The course builds on fundamentals of physical glaciology and thermal regime as a basis for understanding sedimentation by ice masses. Glacial sedimentation in seas and lakes is stressed; cold climate processes are reviewed. Field and project work includes local Ontario field trips.

Prerequisite: GLGB02S or GGRB19Y Session: Winter Day N. Eyles

GLGC10F Exploration Techniques in Hydrogeology

Following an introduction to the principles of hydrogeology and the mechanics of groundwater flow, emphasis is directed towards practical methods of groundwater exploration and assessment. These methods include drilling. surface and borehole geophysics, pumping test analysis and resource evaluation. Session: Winter Day Prerequisites: GLGA01Y, MATA26Y or (MATASSY) Exclusion: (GLGC01Y) (GLGB04F) K.W.F. Howard

GLGD01S Contaminant Hydrogeology

The first part of the course deals with natural hydrochemical processes and investigates the use of major ions, minor ions, trace metals and environmental isotopes in studying the occurrence and nature of groundwater flow. The second part concerns point and non-point sources of groundwater contamination and the mechanisms of contaminant

Session: Winter Day Prerequisites: GLGC10F (GLGB04F) and CHMA02Y, or MATB41F and CHMB03Y or CHMB02Y Exclusion: (GLGC01Y) (GLGC09S)

K.W.F. Howard

GLGD02H/D03Y Research Project

This course is designed to give students experience in the design, implementation, and reporting of a substantial research project involving laboratory and/or fieldwork. Existing faculty research allows a broad range of possible topics. The project may be designed as a half or full course and should be undertaken after the end of the 3rd Year, subject to faculty availability. Faculty permission and supervision is required

and the course is only open to those students who have either completed or are undertaking specialist courses in the area of intended study. Exclusion: (GLGC03H or Y) Session: Winter Day Staff

GLGD05F Field Camp II: The Western Prairies and the Rocky Mountains

The third year field camp is designed to familiarize the student with several geological settings and modern environments. The camp is set in Alberta and will traverse the western prairies, the foothills and the Rocky Mountains, offering field mapping and project work in a wide range of sedimentary terrains. Particular emphasis is placed on structural, hydro and petroleum geology, and sedimentary environments in time. including a visit to the Tyrrell Museum of Palaeontology at Drumheller. This course will be held during the first week of the fall term.

Prerequisites: GLGB02S, GLGB03S and GLGC06S or GEO326F and GLGC10F (B04F)

Exclusion: (GLGC05S) Session: Winter Day N. Eyles and K.W.F. Howard

Courses Not Offered in 1989/90

GLGD04S Readings in Quaternary Geology Exclusion: (GLGC08S)

German

Discipline Representative: H. Wittmann (284 - 3197)

Courses in German provide opportunities for the study of the language and of the literature of Germany, Austria, and part of Switzerland. Language and literature courses may be combined in various ways by students who have completed the prerequisite courses. Also available is a Major Programme in German Language. Students of German are encouraged to take courses in Fine Art, History, Humanities, Linguistics, Literature, Philosophy, and in other languages as an enrichment of their programme. Courses in German Literature in translation are listed under Literature.

A Workstudent Programme in the Federal Republic of Germany for June, July, August, with a guaranteed job and travel, will be available for qualified stu-

Major Programme in German Language

Supervisor: U. Lesser-Sherman

(284 - 3151)

The Programme consists of the following

Intermediate German

courses:

GERA10Y Introductory German and GERA09H Language Practice I

GERB20Y

GERB19Y Language Practice II GERCO1F/S The Last Hundred Years GERC02F/S History of the German

Language

GERCO3F/S Language in a Literary Con-

GERCIOY Advanced Conversation and Composition

General Linguistics (a more theory-oriented course)

LINA01Y

LINA05Y Practical Language Study

Language requirements will be waived by the Supervisor for students judged to have advanced knowledge of German. Equivalent courses will be substituted in consultation with the Supervisor. Courses in German Literature in the Original will continue to be available under the rubric of supervised read-

See also the following courses in

translation: JHFC40Y

Vienna and the Origins of Contemporary Culture LITA01Y Introduction to Literature JDHB16Y Dramatic Literature and Pol-

itical Revolution

LITB19F/S Twentieth Century Prose LITB44Y The Holocaust in Modern

Literature

LITB50F/S Science, Power and Hell: The Story of Dr. Faustus

GERA10Y Introductory German The fundamentals of grammar and syn-

In this course the students will acquire a basic knowledge of the German language. One comprehensive textbook will be used and a variety of reading materials will be introduced to initiate conversation.

The students are exposed to the four language skills from the beginning of the course (listening, speaking, reading,

writing). They are encouraged to practise these skills in a variety of combinations. There are four hours of intensive grammar and structural work per week. Corequisite: GERA09 Session: Winter Day Staff

GERAO9H Language Practice I

A practicum offered in conjunction with GERA10Y. The focus is on pronunciation and elementary oral composition.

This practicum is designed to reinforce and supplement by oral drills and practice the grammar work done in GERA 10Y, as well as to expand the students' skills of expression and comprehension in German. There are two hours of supervised language laboratory and oral drills. Corequisite: GERA 10 Session: Winter Day Staff

GERB20Y Intermediate German Intensive language work focusing on

readings and oral and written composition.

The course is designed to expand the active and passive vocabulary of the students through a variety of reading materials. A thorough grammar review accompanies the reading selections. As the course progresses, the emphasis will shift to literary discussions and conversation. Short stories will supplement the textbook. Mimeographed material on current events will be introduced from time to time to spark class discussion. Prerequisite: OAC German or Grade 13 German or GERA09 and GERA10 Corequisite: GERB19 Session: Winter Day H. Ohlendorf

GERB19Y Language Practice II

A practicum offered in conjunction with GERB20Y. The focus is on oral and written composition at the intermediate level.

This practicum is designed to increase the students' vocabulary and fluency in German. There are three hours of supervised discussion, essay writing and reading each week. Prerequisite: OAC German or Grade 13 German or GERA09 and GERA10 Corequisite: GERB20 Session: Winter Day U. Lesser-Sherman

GERCO2S History of the German Language

A seminar on the history of the German language from the Middle ages to the present.

German

Working with representative texts from the various historical periods, students will come to a better understanding of the modalities and structures of contemporary German. Exclusion: (GERB33S)

Prerequisites: OAC German or Grade 13 German or GERA09 and GERA10 Session: Winter Day U. Lesser-Sherman

GERCO3F Language in a Literary Context

An introduction to the techniques of critical analysis.

The course will look at short works of literature as examples of particularly refined use of language. It is intended to familiarize the language student with elementary techniques of literary analysis. All sessions are informal tutorials with free-flowing discussions and a high degree of student involvement. Each student is asked to prepare a number of short presentations. Prerequisite: GERB19 and GERB20 Session: Winter Day H. Wittmann

GERC10Y Advanced Composition and Conversation

A continuation of language work done in GERB19Y and B20Y.

A variety of language exercises will be centered on different texts. A review of grammar and syntax on an advanced level will reinforce the students' ability to read, write, speak, and translate. Material on current events will be used to spark class discussion and encourage oral and written analysis in German. The course intends to further the students' ability to write and converse in German with ease and fluency. Prerequisite: GERB19 and GERB20 Session: Winter Day.

GERD10, 11, 12F GERD13, 14, 15S GERD16Y Supervised Reading

H. Ohlendorf

Courses are designed to give students an opportunity to study German Literature in the original and to follow up on ideas generated during the more formal courses of instruction. Topics and/or

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projects are formulated in close consultation between student and supervisor chosen by student.

Prerequisite: GERB19 and GERB20 Exclusions: (GERC30F, GERC33F, GERC43F GERC36S, GERC40S, and GERC46S)

Session: Winter Day

Staff

Courses Not Offered in 1989-90

GERCO1F GERDO1Y The Last Hundred Years
Exclusion: (GERB24F/S)
Advanced Language Practice

Exclusion: (GERC50Y) Prere-

quisite: GERC10Y

Greek

GRKC30-34F

Courses are offered in introductory Classical Greek, (GRKA01 and GRKB02 (GRKA10)). Greek literature of the classical period (GRKB11), GRKC30, etc.), and modern Greek (GRKB10, GRKC22, etc.) GRKA01Y introductory Greek GRKB02F Introduction to Greek Authors Intermediate Modern Greek **GRKB10Y** GRKB11S Plato: Apology GRKC23F Modern Greek Cinema and Theatre GRKC24S Classical Themes in Modern Greek Literature

GRKC35-39S Supervised Reading GRKC40Y

For further information see under Classical Studies.

Greek and Roman History

GRHB01Y
Greek History from the
Bronze Age to the Death of
Alexander
GRHB02Y
Greek and Roman History
from the Death of Alexander to the Gracchi
Ancient Historiography
Studies in Roman History:
Roman Britain

For further information see under Classical Studies.

History

Discipline Representative: J.P.B. Kenyon (284-3205)

The study of history is intended to enhance our understanding of human society by examining the experiences of particular peoples and their societies in the past. Its findings depend upon the precise evaluation of specific evidence. History's concerns and goals are humanistic; its methods draw from all forms of scholarly endeavour. History courses, therefore, can play a part in a number of interdisciplinary programmes and can serve as an adjunct to courses in Politics, Philosophy, Literature, Economics, and Sociology.

The History curriculum combines a variety of approaches and teaching in order to satisfy a number of purposes. HISA01Y provides both a general introduction to the study of history at the university level, and the preparation for further studies in European history. A series of survey courses (HISB02-09) provides a comprehensive foundation of knowledge in their particular areas, and also serves as preparation for more detailed and advanced studies. In upperlevel courses students investigate more specific areas, periods, or problems. Dseries courses are conducted as seminars. In them students make close and thorough studies of particular questions and present their findings in discussions and major essays. There are sequences of courses at all levels in the following areas: Medieval European, Modern European, British, American, Canadian, Russian, and Ancient Greek and Roman.

Specialist Programme in History Supervisor: W.M. Dick (284-3150) Students must complete twelve fullcourse equivalents as follows:

Ten must be in History (HIS or GRH). These ten must include HISA01Y and five upper-level courses. Upper-level courses must be chosen from HISC10Y-HISD99Y, GRHC24F/S-GRHC29Y, or HIS300 and 400 level courses on the St. George campus. Of the ten at least two must deal with the period prior to 1815 (see list). Students are also required to take courses in at least three different areas (Greek and Roman, Medieval European, Modern European, British, Canadian, United States, Russian), and to take upper-level courses in at least two different areas

with at least two of these in the same

В

Two must be full-course equivalents in disciplines other than History and be agreed upon in consultation with the Supervisor.

Pre-1815 courses

LIST A

Full-year courses exclusively within a period before 1815 GRHB01Y Greek History from the Bronze Age to the Death of Alexander Greek and Roman History GRHB02Y from the Death of Alexander to the Gracchi GRHB03Y Roman History from the Gracchi to Nero GRHC25Y* Studies in Greek History I GRHC26Y* Studies in Greek History II GRHC27Y* Studies in Roman History: Pompeii GRHC29Y* Studies in Roman History: Roman Britain

GRHC29Y* Studies in Roman History:
Roman Britain
HISB06Y Europe in the Middle Ages
HISC11Y* France from Reformation to

Revolution, 1500-1789
HISD14Y* The European Mentality in the Early Modern Period
HISC18Y* Europe under the

Enlightened Despots
HISC23Y* Tudor and Stuart England
HISD32Y* The American Colonies and

the British Empire

The Beginnings of France:
Constantine to Charlemagne

HISC83Y* Europe in the Reformation Era, 1500-1650

HISD62Y* The Crusades

LIST B

Half-year courses exclusively within a period before 1815
GRHC24F/S Ancient Historiography
HISC84F/S* Popular Culture in Early
Modern Europe
HISD11S* Crime and Punishment
HISD13S* The Scientific Revolution
HISD34F/S* Revolutionary America
1760-1790

LIST C

Full-year courses covering a period before 1815 in the first half of the year (equivalent to half-year course credit) HISAO1Y The European World HISB07Y Russia from the Thirteenth
Century to the Present
HISC10Y* The Sexes since 1350
HISC46Y* Atlantic Canada
* Students should check these courses
for prerequisites.

Specialist Programme in Economics and History

For details refer to Economics.

Major Programme in History Supervisor: W.M. Dick (284-3150) Students must complete seven fullcourse equivalents in History (HIS or GRH). These seven must include HISA01Y and three upper-level courses. Upper-level courses must be chosen from HISC10Y-HISD99Y, GRHC24F/S -GRHC29Y, or HIS300 and 400 level courses on the St. George campus. Of the seven at least one must deal with the period prior to 1815 (see list). Students are also required to take courses in at least two different areas (Greek and Roman, Medieval European, Modern European, British, Canadian, United States, Russian), and to take at least two upper-level courses in one of these two areas.

Pre-1815 courses

LIST A

Full-year courses exclusively within a period before 1815

GRHB01Y History of Greece from 2000 B.C.

GRHB02Y Greek and Roman History from the Death of Alexander

GRHB03Y Roman History from the Gracchi to Nero

GRHC25Y* Studies in Greek History I
GRHC26Y* Studies in Greek History II
GRHC27Y Studies in Roman History:

GRHC29Y* Pompeii
Studies in Roman History:

Roman Britain
HISBO6Y Europe in the Middle Ages

HISC11Y* France from Reformation to Revolution, 1500-1789 HISD14Y* The European Mentality in

the Early Modern Period
HISC18Y* Europe under the

Enlightened Despots
HISC23Y* Tudor and Stuart England
HISD32Y* The American Colonies and

The American Colonies and the British Empire

HISC61Y* The Beginnings of France: Constantine to Char-

lemagne

HISC83Y* Europe in the Reformation Era. 1500-1650

HISD62Y* The Crusades

LIST B

Half-year courses exclusively within a period before 1815

GRHC24F/S Ancient Historiography HISC84F/S* Popular Culture in Early Modern Europe

HISD11S* Crime and Punishment HISD13S* The Scientific Revolution HISD34F/S* Revolutionary America

1760-1790

LIST C

Full-year courses covering a period before 1815 in the first half of the year (equivalent to half-year course credit)

HISA01Y The European World HISB07Y Russia from the Thirteenth Century to the Present

HISC10Y* The Sexes since 1350 HISC46Y* Atlantic Canada

* Students should check these courses for prerequisites.

HISA01Y The European World: An Introduction to History

A survey of European history from the Middle Ages to the present.

This course examines the most prominent changes in social and economic organization, in thought, and in politics, as Europe developed from a feudal and agrarian to a modern and industrial order. The teaching method is based on lectures and tutorials. A set of readings from primary and secondary sources will be assigned, but further reading by the stu-

dent is essential.

Session: Winter Day L.J. Abray, M. Eksteins

HISB02Y Britain from the Eighteenth Century to the Present

An examination of the political, social, economic, and religious forces which transformed an aristocratic society into an industrial power, and of the reasons for the decline of British power in the twentieth century.

The course will be concerned with the problems caused by the transformation of an agrarian into a highly industrialized economy, of an aristocratic into a liberal democratic society, and of a society based on the ideology of the Enlightenment into one committed to

that of evangelical humanitarianism. It will also consider why, in the twentieth century, the British have abandoned their imperial role and have concentrated on the establishment of a welfare state. Two lectures and one tutorial perweek.

Session: Winter Day J.P.B. Kenyon

HISBO3Y History of the United States

Major themes from the Revolution to the present. The course will focus on such questions as independence, political organization, political parties, territorial expansion, nationalism and sectionalism, reform movements, the slavery and civil rights question, the response to industrialization, progressivism, and the United States as a world power. Two lectures and one tutorial per week. Session: Winter Evening W.M. Dick

HISBO4Y Introduction to Canadian

An introduction to the history of Canada from the first European contacts to the present.

Topics studied include: exploration and settlement; the institutions and life of New France: the British Conquest and its results; the impact of the American Revolution on British North America; development of the British colonies in North America; the confederation movement; the political, economic, social, and cultural history of the new nation-state established in 1867. Two hours of lectures and one tutorial hour per week. Regular attendance at and participation in tutorials are required. Session: Summer Evening, Winter Day I.R. Robertson

HISBOGY Europe in the Middle Ages A chronological survey of economic, political, religious, and social developments in Western Europe (including Britain) from the late Roman period to the fifteenth century.

The object of this course is to familiarize students with the foundations of Western society as they evolved in conjunction with the early settlement, colonization, and subsequent expansion of Europe. Particular attention is paid: (i) to the peculiar circumstances which determined national boundaries and which led to the divisions and conflicts of the modern world, and (ii) to the origin and development of our own

religious, legal, educational and political institutions. Readings are from P. Brown, The World of Late Antiquity: G. Duby. Rural Economy and Country Life in the Medieval West; D. Hay, The Medieval Centuries; R.W. Southern, Western Society and the Church in the Middle Ages; and others. Two hours of lectures and one tutorial per week. Session: Winter Day M. Gervers

HISBO7Y Russia from the Thirteenth Century to the Present

The Russian people, state, and culture, with emphasis on the major social, institutional, and ideological changes from the rise of Moscow to the present.

Wherever possible readings have been selected from primary source materials so that students will become acquainted not only with the facts but the flavour of Russian history. Lectures and tutorials.

Session: Winter Day E.W. Dowler

HISC10Y The Sexes Since 1350

An explanation of changing definitions of femininity and masculinity from the Renaissance to the recent past.

Topics will include: changes in expectations for men and women in their domestic, parental, and public roles (with the latter including education. employment, politics, and war); relations between the sexes: feminism and antifeminism. The focus will be on the British Isles, Western Europe, and Canada, and on the nineteenth and twentieth centuries. Lecture and discussion: three hours.

Exclusion: (HISB10) Prerequisite: One of HISA01, HISB02, HISB03, HISB04, or JHSA01 Session: Winter Evening L.J. Abray

HISC18Y Europe in the Enlightenment, 1700-1789

An examination of the ideals of the Enlightenment against the background of the social and political reality of Europe in the eighteenth century.

Emphasis will be placed on the incongruity of theory and practice in the writings and policies of the enlightened despots. In the first term the course will focus on the ideas of the Enlightenment and the social, economic, and intellectual milieu which spawned them. In the second term the attempts of the socalled enlightened despots to apply

Enlightenment ideas to the life of their states will be examined.

Lectures and tutorials. Exclusion: (HISB18) Prerequisite: HISA01 Session: Winter Day E. W. Dowler

HISC23Y Tudor and Stuart England England from the end of the Wars of the Roses to the Glorious Revolution, 1485-1688.

The course gives an overview of political, economic, social, and cultural patterns. Special attention will be given to four themes: the powers and personalities of the rulers; Parliament and the rule of law; the great religious crisis and its spillover into civil war; the cultural heritage. Two lecture hours and one tutorial per week.

Exclusion: (HISB23)

Prerequisite: Any B-level full-course

equivalent

Session: Winter Evening

TBA

HISC25Y British Imperialism in India

The impact of imperialism on India. Topics will include the motive behind British imperialism; the problems of administration; the transfer of power: neo-colonialism. Two lectures a week. Exclusions: (HISB22) (HISB25) Prerequisite: HISB02 or permission of instructor

Session: Winter Day J. P. B. Kenyon

HISC35Y Twentieth-Century **America**

A topical study of the United States since the turn of the century.

A traditionally rural culture of individual opportunity and national isolationism faces the problems created by urbanization, industrialization, and world power. The tensions created by the appearance of large-scale organization, by the expansion of governmental power, and by the changing role of the U.S. in world affairs, are the themes of this course. One two-hour session and one tutorial per week. A second tutorial will be opened if necessary. Exclusion: (HISB35)

Prerequisite: HISB03 Session: Summer Evening, Winter Day W.M. Dick

HISC46Y Atlantic Canada

An examination of the Maritime provinces and Newfoundland from the first European contacts to Confederation in each province.

Subjects to be investigated include: native peoples and the impact of European contact; French regime and the development of a distinctive Acadian people; the dispersal of the Acadians; British settlement: responses to the American Revolution; the Loyalist impact; colonial economies and social structures: literary and intellectual developments; struggles for responsible government, and its eventual loss in Newfoundland: religious and ethnic tensions: fishermen's movements in Newfoundland; the coming of Confederation. One two-hour lecture per week. and the class will be divided into two tutorial groups, each meeting once every two weeks. Written work will include two research papers. Exclusion: (HISB46) Prerequisite: HISB04 Session: Winter Day

HISC49S Canada Between the World Wars

An intensive examination of the leading themes in Canadian, political, economic, social, and cultural history in the 1920s and 1930s.

Two consecutive hours of lectures and one hour of tutorial per week. Topics will include the impact of World War I, the rise of Mackenzie King, the development of Canadian autonomy, social and economic trends in the 1920s, the Great Depression of the 1930s, the situation of labour, the political upheavals of the era, and the problem of external relations as war approached again.

Prerequisite: HISB04 Session: Winter Day I. R. Robertson

I.R. Robertson

HISC87Y Germany in the Nineteenth and Twentieth Centuries

A thematic treatment of German history from the end of the Holy Roman Empire to the present.

The course will concentrate on social, economic, and cultural interpretations of Germany's political experience.

Two consecutive hours of lectures and one hour of tutorial per week. A set

of readings from primary and secondary sources will be assigned, but extensive further reading is essential. Exclusion: (HISB17) Prerequisite: HISA01 Session: Winter Day M. Eksteins

HISDO1F HISDO2S

HISDO3Y Independent Studies A directed reading course for students in their final year of undergraduate study who have demonstrated a high level of academic maturity and competence. Qualified students will have an opportunity to investigate an historical field which is of common interest to both student and supervisor and which is not available for study otherwise. Candidates must find a willing supervisor and must submit a written application before the dates given below. Students meet regularly with the supervisor to discuss progress in their investigations and complete a 7.500-10,000 word paper for a term course and a 15,000-20,000 word paper for a year course. Prerequisite: At least one B-level fullcourse equivalent in History; permission of instructor to be obtained in the previous term, by 15 April for HISD01(HISC01) and HISD03(HISC03) and by 1 December for HISD02(HISC02). See History Supervisor for detailed application procedures. Exclusions: (HISC01/02/03) Session: Winter Day The History Faculty

HISD15Y Social History

A seminar in the history of "ordinary people" in Europe and North America from the late eighteenth century to the early twentieth century.

The course examines how revolution, population pressure, and industrialization altered pre-industrial society, how early forms of social protest changed into mass organizations, and how governments and "governing classes" responded to pressures from below. In short, this is the study of the evolution of modern society. Three-hour seminar. Limited enrolment: 15 Exclusions: (HISB15) HISC15 Prerequisites: HISA01 and two other courses in post-1815 history, either European or North American. Session: Winter Day W. M. Dick

HISD19S Weimar Culture

An examination of the social and political foundations of "modernism", using the cultural ferment of Germany between 1918 and 1933 as model.

Individual artists and thinkers will be considered, but the emphasis will nevertheless be on culture as a social manifestation. Seminar. Limited enrolment: 15.

Prerequisite: HISA01 and one B-level full-course equivalent in History Exclusion: (HISC19) Session: Winter Day M. Eksteins

HISD24Y Apartheid, South Africa, and the British Empire

An investigation of the reasons why South Africa has become one of the most racist societies in the World, discussing in particular its early frontiertype settlement, its strong religious character, the changes resulting from major economic developments in the 20th century, the influence of British Imperial policy.

Limited enrolment: 20 Exclusions: (HISB21) (HISB24) (HISC24) Prerequisite: HISB02 or permission of instructor

Session: Winter Day J.P.B. Kenyon

HISD62Y The Crusades

An examination of the Crusades of the eleventh through fourteenth centuries.

This seminar will consider the Crusades as a continuation of Christianity's centuries-old struggle with paganism, as a form of colonial expansion, and as a papal weapon against heresy and political dissension within christendom. The movement will be compared and contrasted with the foundation and activities of the military orders, particularly the Hospitallers, Templars, Teutonic Knights, and associated orders in Spain and northeastern Europe. During the first semester students will read severally from the most significant scholars in the field and, in class, compare and contrast the wide variety of viewpoints and interpretations which have arisen since the completion of Gibbon's Decline and Fall of the Roman Empire in 1781. The second semester will be devoted to a similar reading (in translation) and critical analysis of original Western European, Byzantine, Arabic. and Jewish chronicles of the crusading movement. Term papers will concentrate on the careful study of a secondary work and a source not covered in class. Bibliography available from Prof. Michael Gervers.

Exclusion: (HISC62) Prerequisite: HISB06 Session: Winter Day M. Gervers

HISD78Y The Russian Intelligentsia A study of the origins, beliefs, role, and personalities of the intelligentsia in Russia during the nineteenth and early twen-

tieth centuries.

The historical importance of the Russian intelligentsia is unparallelled in the history of any other country. Not a class. but yet a major intellectual, social, and political force, the intelligentsia embraced the great thinkers of the Russian right and left from Dostoevsky to Lenin. The bulk of the course will consist of a detailed examination, through the writings of some of the leading intelligenty, of intelligentsia ideas and personalities. The fate of the intelligentsia in the Soviet Union and the 20th-century connotations of the word will also be explored. The course will be taught by seminars. Limited enrolment: 20. Exclusion: (HISC78) Prerequisite: HISB07 or RUSA01

Courses Not Offered in 1989-90

Session: Winter Day

E.W. Dowler

HISA02S The Twentieth-Century World HISC11Y France from Reformation to Revolution, 1500-1789 Exclusion: (HISB11) Prerequisite: HISA01 HISC16Y Modern France, 1750 to the Present Exclusion: (HISB16) Prerequisite: HISAOI or permission of instructor. HISC31F Slavery in the American South Exclusion: (HISB31) Prerequisite: HISB03 HISC33F/S Society and Politics in the United States 1790-1850 Exclusion: (HISB33) Prerequisite: HISB03 HISC42Y French Canada: Origins to the Present Exclusion: (HISB42) Prerequisite: HISB04

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HISC47Y	The Canadian Left, 1867 to
	the Present
	Exclusion: (HISB47)
HISC48Y	The History of the Canadian
	Mosaic
HISC61Y	Prerequisite: HISB04
miscoli	The Beginnings of France, Constantine to Char-
	lemagne
	Exclusion: (HISB61)
	Prerequisite: Any B-level
	full-course equivalent in
	History or Greek and
	Roman History
HISC83A	Europe in the Reformation
	Era
	Exclusion: (HISB13)
*******	Prerequisite: HISA01
HISC84F	Popular Culture in Early
	Modern Europe
	Exclusion: (HISB14), (HISC14)
	Prerequisite: HISA01
HISD11S	Crime and Punishment in
	Early Modern Europe,
	1500-1800
	Prerequisite: HISA01 and
	one B-level or C-level full-
	course equivalent in His-
HISD13F/S	tory
11130137/3	The Scientific Revolution Exclusion: (HISC13)
	Corequisite: HISC14
	Prerequisite: HISA01 and
	one B-level or C-level full-
	course equivalent in His-
	tory
HISD14Y	The European Mentality in
	Early Modern Period, 1500-
	1700 Exclusion: (HISC14)
	Prerequisite: One B-level
	History full-course
	equivalent
HISD 1 7Y	European Society and Cul-
	ture in the Twentieth Cen-
	tury
	Exclusion: (HISC17)
	Prerequisite: HISA01 and
	one B or C level full-course
HISD32Y	The American Colonies and
	the British Empire
	Exclusion: (HISD32)
	Prerequisite: HISB02,
	HISB03, HISB04 or
	HISCl8(HISB18)
HISD34F	Revolutionary America,
	1760-1790
	Exclusion: (HISC34)
	Prerequisite: Any one of HISB02 or HISB03 or HISB04
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HISD45Y History of Canadian, Social. Political, and Historical Thought Exclusion: (HISC45) Prerequisite: HISB04 The History of Ideas What has man made of man? The History of Ideas studies the impact of major ideas on the development of western civilization. The Programme described below will enable you to develop a solid grounding in the intellectual and social history of mankind, and will help you to sharpen your skills in practical critical thinking. You will focus your studies in areas of your own interest. The two courses in your last year of study will help you to concentrate your studies around a central problem of your choice, drawing together issues and ideas you have studied in your previous years. Major Programme in History of Ideas Supervisor: W.C. Graham (284-3279) Students must complete at least eight full-course equivalents (at least 2 at the C-or D-level) as follows: HUMAOlY 2 PHLA01Y 3 HISA01Y 1 full-course equivalent in the Social 1 full-course equivalent in Mathematics or the Natural Sciences (Life Sciences or Physical Sciences) 2 full-course equivalents in History and/or Philosophy at the B- or Clevel in consultation with the Super-I full-course equivalent at the C- or 7 D-level in the area of concentration chosen by the student in consultation with the Supervisor

Humanities Discipline Representative: C. Ponomareff (284 - 3258)The Humanities are concerned with man's never-ending reflection on the human condition, with the development and communication of his thought, and with the creation and enjoyment of the beautiful. They are thus an integral part of liberal education. The majority of courses in the Humanities are offered by the various under the discipline heading in this calendar, along with the Specialist particular discipline. The Humanities involve students in a wide range of Humanities disciplines: these pro-

disciplines comprising the Humanities Division and are listed alphabetically and/or Major Programme centered on a Division, however, also offers a Specialist Programme in the Humanities and a College Programme in the Humanities which grammes are outlined below. Following these programmes is a list of courses which will appeal to students who wish to explore the Humanities outside the traditional disciplinary framework. For the most part, these courses offer an alternative to examination within current precise national, historical, and disciplinary boundaries, opting instead to restructure subjects of interest around a theme which itself creates its own reasoned limits. Students may find this a particularly attractive point of view from which to study an enduring human myth, a more unified approach to literature, an aspect or aspects of a loose historical period, or a movement of broad cultural relevance.

Students taking Humanities courses may also wish to consider LITAO1Y.

Humanities courses fall into the following broad categories, for all of which HUMA01Y serves as a useful, though not always a required, prologue:

Civilization .	and Culture
HUMA01Y	Prologue
HUMB03Y	Celtic Mythology and
	Medieval Celtic Civilization
HUMB07F/S	Russian Culture
HUMB12F/S	The Paris Commune, 1871
	to the Present
HUMB13Y	The Russian Revolution of
	1917: Promise and

The Russian Revolution of 1917: Promise and Fulfillment, Ideals and Realities

HUMB16F/S The Image of the Self in Liberal Society **HUMB19F/S** Beyond Consciousness HUMC09F/S The Civilization of Spain I HUMC13F/S The Civilization of Spain II HUMC14Y Topics in Latin American Culture and Literature HUMC11Y The Darwinian Revolution JHFC40Y Vienna and the Origins of Contemporary Culture see also: CLAA01Y Classical Civilization CLAB30F/S The Age of Pericles CLAB31F/S The Age of Augustus CLAB32F/S The Age of Nero CLAB33F/S The Age of Homer Myth, Religion and Reality HUMA10Y Introduction to the Study of Religion **HUMA11Y** Greek and Roman Mythol-HUMB04S Celtic Christianity 400-1500 HUMB20Y Primitive Christian Literature and Myth HUMB26Y Women in the Major Western Religions HUMB28Y Major Religious Traditions. East and West HUMB29F/S Religion and Western Culture HUMC12Y Studies in Greek Mythology and its Influence See also: ANTB23Y Comparative Mythology Literature in Translation HUMB11F/S Russian Short Fiction of the 19th and 20th Centuries HUMB42Y The Modernist Adventure HUMB45S The Spanish Civil War: Fact to Fiction HUMB58Y The Nineteenth Century Russian Novel, 1830-1880 HUMB62Y Women and Literature HUMC53F Beyond Nihilism: Three Ways to Salvation IDHB16Y Dramatic Literature and Political Revolution Women's Studies JHSA01Y Introduction to Women's Studies JHSD01H Senior Project in Women's

Studies
HUMC61F/S Women in Ancient Greece

Sciences

Introduction to Biological

Science and Humanities

JBHB01Y

Film Studies

HUMB70Y IHIC71F/S Introduction to Cinema

Italian Cinema

see also: GRKC23F

Modern Greek Cinema and Theatre

Arts Studies

HUMB90Y

Introduction to Arts Administration

HUMD30Y

Senior Seminar on Arts Administration

Specialist Programme in the Humanities

Supervisor: W.C. Graham (284-3279) The Humanities Specialist Programme is designed for the student who, while pursuing a four-year degree, wishes to concentrate his or her studies in the Humanities. After an introduction to a wide range of disciplines within the Division, the student has the option (see item 7) of doing more specialized work in a specific discipline or of taking advantage of our wide interdisciplinary offerings (listed under HUM) to develop a less traditional area of specialization.

Twelve full-course equivalents are required, as follows:

- HUMAOIY PHLACIY
- HISA01Y
- Two consecutive courses (two fullcourse equivalents) in a language foreign to the student
- One full-course equivalent in the arts: DRA, FAR, MUS
- One full-course equivalent in literature or linguistics: CLA, DRA, ENG, FRE, HUM, ITA, LIN, LIT.

NOTE: A course taken to satisfy one area requirement may not be used to satisfy another area requirement. Students intending to take a DRA or HUM course to fulfil one of the area requirements should consult with the Supervisor about the appropriateness of a particular course. A course in MAT or AST may replace one of requirements 2, 3, 5, or 6.

7 Four and one-half further full-course equivalents in Humanities subjects. at least three of which must be at the C- or D-level. (For the purpose of the Programme, Mathematics is also considered to be a Humanities subject.) These five courses should focus on one area or theme and should involve some depth of coverage. Students may elect to fulfil this

requirement through the Individual Study Year (HUMD95-99Y). Choice of courses must be approved by the Supervisor.

8 HUMC10H

College Programme in the Humanities

Supervisor: W.C. Graham (284-3279) The Humanities College Programme is designed for the student who wishes what has been known as a "liberal education". The Programme will seek to develop the critical intellectual skills of the student and to acquaint him with basic forms of approach in several areas of human endeavour. It will accomplish this by developing a coherent group of courses, within the framework established below, for each student registered in the Programme.

Nine full-course equivalents are required, as follows:

- **HUMAO1Y**
- PHLA01Y
- HISA01Y
- One full-course equivalent in the arts: DRA, FAR, MUS
- One full-course equivalent in language, literature, or linguistics: CLA, DRA, ENG, FRE, GER, HUM, ITA, LIN. LIT. RUS. SPA.

NOTE: A course taken to satisfy one area requirement may not be used to satisfy another area requirement. Students intending to take a DRA or HUM course to fulfil one of the area requirements should consult with the Supervisor about the appropriateness of a particular course. A course in MAT or AST can replace one of the requirements 2, 3, 4, or 5 above.

- 6 One full-course equivalent emphasizing major ideas in the sciences or social sciences: ANTAO1Y, ANTB23Y, ASTA03Y, JBHB01Y, POLB70Y, POLC74Y, SOCB03Y. Other courses offered by the Divisions of Life Sciences, Physical Sciences, and Social Sciences may be chosen to fulfil this requirement upon approval by the Supervisor.
- Three further full-course equivalents in Humanities subjects, at least two of which must be at the C- or D-level focusing on one area or theme. (For the purposes of this Programme, Mathematics is also considered to be a Humanities subject). Choice of courses must be approved by the Supervisor.

HUMA01Y Prologue*

Twenty books of central importance in Western civilization.

A comprehensive examination will be given at the completion of each subset of ten books. There is a one-hour tutorial for each book. The examination will stress the student's ability to relate the books in his/her own way, rather than to remember minute aspects of plot and character. At weekly informal sessions guest leaders will present aspects of each work through lectures or other media. Fall Term: The Bible (selections); Homer, The Odyssey; Sophocles, Oedipus Rex. Herodotus, Histories; Plato, The Last Days of Socrates; Vergil, Aeneid; Ovid, Metamorphoses: Augustine, Confessions; Dante, Inferno; Gottfried von Strassburg, Tristan. Spring Term: Boccaccio, Decameron: Machiavelli. The Prince: Rabelais, Gargantua and Pantagruel; Voltaire, Candide; Goethe, Faust: Marx, Communist Manifesto; Darwin, Origin of Species; Dostoevsky, Notes from Underground; Nietzsche, Thus Spoke Zarathustra; Freud, Interpretation of Dreams.

NOTES: For information on appropriate editions of these works, see the coordinator. Titles may change if editions become unavailable.

* What's past is prologue Shakespeare, The Tempest, Act 2, Sc. i. Session: Winter Day Co-ordinator: W.C. Graham.

LITAOIY Introduction to Literature

An introduction to the understanding and enjoyment of literature through the reading of novels, short stories, plays, and poems drawn from literatures of various countries. All readings will be in translation.

The course will be taught jointly by faculty from German and Spanish, and will feature guest lectures from such disciplines as Classics, English, French, Fine Arts, Music, History, Philosophy and Russian

Session: Winter Day H. Wittmann/P. León

JHSA01Y Introduction to Women's Studies

This is an interdisciplinary course which brings the perspectives of philosophy. psychology, political theory, sociology, anthropology, history, language, literature, and the arts to the study of the position of women in western civilization. The goal is to enable students not only to enter into the contemporary feminist debates but to understand the significance of these

debates within the disciplines under discussion. Issues to be addressed include: the patriarchal foundations of our culture; the politics of the family including the psychological dynamics of socialization. women's work in the home and the paid labour force; contemporary feminist issues including reproductive freedom. sexual politics, and the relationship between a politics of sisterhood and the dynamics of mothering. Session: Winter Day Co-ordinator: C. Guberman

HUMA11Y Greek and Roman Mythology

The emergence and treatment of myths and legends in the Greco-Roman World.

The course will examine the more important myths and legends and their representation in classical literature. drama, and art, and will partly be concerned with ancient and modern theories of myth. This course will be useful to students engaged in literary and arthistorical studies and will serve as an introduction to other courses in classics. Session: Winter Day, Winter Evening

HUMBO3Y Celtic Mythology and **Mediaeval Celtic Civilization**

The history of Celtic civilization from c.800 B.C to the end of the medieval period.

Emphasis is placed on the religious, political, and mythological structure of the Celtic world-view with particular attention to the cultural connections with neighbouring civilizations.

Celtic mythology is not simply the study of a pantheon of gods; it cannot be separated from historical and literary traditions.

The tutorials will include discussions of Early Irish Myths and Sagas, The Mabinogion, Caesar's Conquest of Gaul, Beroul's Tristan, Geoffrey of Monmouth's History of the Kings of Britian, The Voyage of Saint Brendan and the Lays of Marie de France.

Session: Winter Day Claude Evans

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HUMB04S Celtic Christianity 400-1500 A.D.

A study of the Celtic Church in the Mid-

dle Ages.

The Celtic Church is commonly held to have ended with the council of Whitby (663 A.D.). Its influence in fact lasted much longer. The pre-Christian tradition and the eastern monastic tradition combined in Celtic Christianity to form a unique expression of spiritual life within a monastic setting. The development of Celtic Christianity, its contributions to the re-birth of Europe in the Carolingian period, the spread of its monasteries and missionary work in Europe, and its lasting effect on the liturgical life of the western church, will be the focus of this course. Two lecture hours plus one tutorial a week.

Session: Winter Evening J. Anderson

HUMBO7F Russian Culture

An introduction to Russian Culture from the tenth century to the present.

The course covers aspects of Russian Culture from Religion, Social Anthropology, History, Language, Literature, Music. and the Arts. Films and slides will be part of the presentation. No knowledge of Russian language required. The course makes use of invited speakers (two-hour session per week); tutorials follow each presentation (1 hour per week).

Exclusion: (RUSA01) Session: Winter Day

Co-ordinator: C.V. Ponomareff

IDHB16Y Dramatic Literature and Political Revolution

A study of plays which deal with the various aspects of political revolution.

Political revolution is perhaps the most striking feature of modern political change. From about 1800, dramatists have been fascinated with the political, social, and psychological issues raised by the apparent either/or of revolutionarv change.

Texts will be drawn from European and North American literatures. All texts will be read in English. Exclusion: (JHGB50)(LITB15Y) Prerequisites: LITA01 or ENGA01 or FREA30(FREB02Y) or one full-course equivalent in literature. Session: Winter Day

Co-ordinator: H. Ohlendorf

HUMB19F Beyond Consciousness

An examination of the limits of consciousness from the point of view of various disciplines in the Humanities. The specific content will vary but will focus on one of the following: communication, religion and philosophy, myth-making and poetry.

In 1989-90, suggestion and the unconscious will be studied insofar as they relate to the educational process and emphasis will be placed on yoga. music therapy, East-European and Western work in memory training and communication theory. Bibliography: A detailed bibliography for this course will be provided on the first day of class. Students interested in taking the course might wish to consult the following: Brown, New Mind, New Body; Eliade, Yoaa: Immortality and Freedom; and Schroeder, Psychic Discoveries Behind the Iron Curtain and Superlearning, Problems of Suggestology. Prerequisite: At least one full-course equivalent in either Psychology or Philosophy or English or another literature. Session: Winter Day W.J. Bancroft

HUMB45S The Spanish Civil War: Fact to Fiction

An exploration of the impact of the Spanish Civil war, 1936-39, on the literary imagination within and outside Spain.

This is not a course on the history of the Spanish Civil War but one in which a brief examination of its origins, progress, and aftermath will lead to analysis and discussion of the varying modes of artistic response (narrative, dramatic, lyrical, documentary) to the military, political, and social realities of the conflict. Authors to be considered will probably include: Avala, Hemingway, Malraux, Orwell, Sender, Spender et al.

The texts will be read and the course conducted in English in a lecture-tutorial format.

Exclusion: (LITB32)

Prerequisite: LITA01 or ENGA01 or FREA30(FREB02Y) or one full-course equivalent in literature.

Session: Winter Day R. Skyrme

HUMB70Y Introduction to Cinema An introduction to the vocabulary of film criticism, major aesthetic approaches, and general history (silent and sound). Tutorials start the first week of classes. Session: Winter Day M.O. Schonberg

HUMB90Y Introduction to Arts Administration and Policy

The theory and practice of arts administration and policy in Canada.

The course will examine all aspects of arts administration and policy, from the economic and financial problems of artists, arts organizations, service and funding agencies, to the formulation of municipal, provincial and federal arts policies. Topics include marketing of artistic works; publicity, and promotion. fund-raising, audience development, corporate, foundation and government support, and Canada's domestic and international arts policies. The teaching method will include lectures, class participation, term papers and guest speakers.

Session: Winter Day P. Schafer

HUMCIOS Humanities Seminar

A special half-credit seminar course. taken normally after the completion of ten credits. Each member of the seminar undertakes an individual project and gives a report on it.

This seminar is required for those registered in the Specialist Programme in Humanities, in the History of Ideas, and in the Arts, and in the College Programme in Myth and Religion: it is taken after completion of ten full-course equivalents. Topics for the seminars should be chosen in consultation with the Supervisor. They should build upon work taken in other courses, and should attempt to relate material from two or more disciplines. Exclusion: HUMB15 (HUMB10) Prerequisite: Any ten full-course equivalents.

Session: Winter Day Co-ordinator: W.C. Graham

HUMC12Y Studies in Greek Mythology and Its Influences

A detailed examination of selected themes or figures in Greek mythology, with special emphasis on their later influence in art, literature, music, film,

religion, and psychology.

The content will vary from year to year, and will be selected from such figures as: Orpheus, Odvsseus/ Ulysses, Hercules, Narcissus, Theseus, The Ama-

Recommended Preparation: HUMA11 Exclusions: HUMB34, HUMB35, HUMB36, (HUMB11)

Session: Winter Day J. Warden, I. McDonald

HUMC14Y Topics in Latin American Culture and Literature

A study of the political, social, cultural, and literary evolution of Latin America through selected topics such as: Pre-Columbian America, myths and religious practices; the Spanish conquest, construction or destruction?; the Mexican and Cuban revolutions, a study in contrasts; contemporary Latin American fiction, themes and concerns; and the present day political scene.

No knowledge of the Spanish language is required.

One two-hour lecture/discussion session per week. Tutorials to be arranged. Exclusion: SPAB38 (HUMB14) Session: Winter Day P. León

ITAC31Y Dante and Medieval Culture

An introduction to Medieval Italian literature with special reference to Dante.

This course aims to introduce the student to the problems, mentality, and social and cultural patterns of man in the Middle Ages with specific reference to literary phenomena such as Provencal lyrics and Old French poetry and epics. The lectures will examine the origins and development of medieval literature up to Dante's The Divine Comedy, the masterpiece of the Middle Ages. A brief survey of Dante's minor works and their significance in terms of the life and culture of the times will be included. Class participation and students' comments are strongly encouraged.

Lectures will be in English. Students wishing to count the course towards a Programme in Italian will read the texts and do their assignments in Italian: an

additional one hour tutorial will be provided for them.

Exclusion: (ITAB31)

Prerequisite: For those taking the course as part of a Programme in Italian, ITABO1 or ITAB11; for others, LITA01 or ENGA01 or FREA30(FREB02Y) or one course in

Session: Winter Day D. McAuliffe

HUMC53F Beyond Nihilism: Three Ways to Salvation

A study of the writings of Thomas Mann. Albert Camus, and Vladimir Nabokov.

The course explores these authors as they transmute their ideas into art, the essay into fiction, and examines their respective visions that affirm and justify human existence, be it in the face of death, inhumanity, or the Absurd. The following texts will be read: Thomas Mann's Goethe and Tolstoy and the Magic Mountain: Albert Camus' The Myth of Sisyphus and The Plague; and Vladimir Nabokov's, Speak, Memory, Pnin, and Pale Fire. Lecture and tutorial, three hours a week. Exclusion: (LITB51)

Prerequisite: LITA01 or ENGA01 or FREB02 or one full-course equivalent in

literature. Session: Winter Day C. Ponomareff

JHSD01H Senior Project in Women's Studies

A research project chosen by the student, approved by the Supervisor in Women's Studies, and supervised by one faculty member. After the topic has been approved, a second reader will be appointed.

The student will write a substantial essay or give a major presentation on an approved topic in Women's Studies.

The course is designed for students completing the Major Programme in Women's Studies and is normally taken after completion of ten full-course equivalents.

Students are advised to design a project in an area in which they have already done some concentrated study and, where possible, to build upon work taken in previous courses.

Arrangements with the faculty in Women's Studies and the supervisor must be made by the student before the end of the pre-registration period in the

Exclusion: (IHSC01H)

Prerequisite: Open to students majoring in Women's Studies who have already completed ten full-course equivalents. Session: Winter Day

Staff

HUMD30Y Senior Seminar in Arts Administration

The course will deal with selective problems and issues in arts administration and policy.

Capitalizing on the practical experience students have had in the field, this seminar will analyse such basic problems and issues as board management relations, corporate sponsorships, dealing with the creative personality, motivating volunteers, crisis management, the roles and responsibilities of governments and arts councils, and future directions in Canada's internal and external arts policies. Students will be expected to make presentations on these topics for discussion and evaluation in class. Extensive use will be made of case studies.

Enrolment is limited to students who have completed at least one work term in the Specialist Co-operative Programme in Arts Administration, or by permission of the instructor. Exclusion: (HUMC30)

Session: Winter Day

P. Schafer

HUMD91F HUMD92S

HUMD93Y Supervised Readings Independent study of an advanced and intensive kind, under the direction of a faculty member. The material studied should bear some significant relation to the student's previous work, and should differ significantly in content and/or concentration from topics offered in

The student should submit to the Supervisor of the Humanities Programme a statement of objectives and proposed content for the course; this should be done by 15 April for F and Y courses and by 1 December for S courses. If the proposal is approved, two faculty members from relevant disciplines will supervise

and evaluate the work. Exclusion: (HUMC91-C93)

Prerequisite: Three B-level full-course equivalents in the Division of Humani-

ties.

Staff

Session: Winter Day

HUMD95-D99Y Individual Study

An opportunity for advanced students to spend a year following their own studies under the supervision of faculty drawn from the various disciplines within the Division of Humanities. Students will be expected to produce major papers or projects in their chosen areas, and will take an oral examination at the end of the year before appropriate faculty. Those interested in enrolling should contact the Supervisor of Studies. Prerequisite: Permission of the Supervisor of Studies. Exclusion: (HUMC95-C99) Session: Winter Day

Courses Not Offered in 1989-90

HUMA10Y Introduction to the Study of Religion IBHB01Y Introduction to Biological

> Sciences Exclusion: (NSCA02) Not open to students who have taken BIOA03

HUMB11S Russian Short Fiction of the 19th and 20th Centuries Exclusion: (LITB17) Prerequisites: LITA01 or ENGA01 or FREA30(FREB02)

HUMB12F/SThe Paris Commune, 1871 to the Present

HUMB13Y The Russian Revolution of 1917: Promise and Fulfillment, Ideals and Reali-

HUMB16F/SThe Image of the Self in Liberal Society

HUMB20Y Primitive Christian Literature and Myth Prerequisite: No formal prerequisite, but some knowledge of the biblical literature will be presupposed. Greek is desirable

but not required. HUMB26Y Women in the Major Western Religions HUMB28Y

Major Religious Traditions.

East and West

HUMB29S Religion and Western Cul-

ture

HUMB42Y The Modernist Adventure Exclusions:

(RUSB24)(SPAB33)(LITB22) Prerequisites: LITA01 or ENGAO1 or FREA30(FREB02) or one course in literature.

HUMB58Y The Nineteenth-Century Russian Novel, 1830-1880

Exclusions:

(RUSB11)(LITB07) Prerequisites: LITA01 or

ENGA01 or FREA30(FREB02) or one course in literature. HUMB60F/SWomen Artists in Society

HUMB62Y Women and Literature Exclusion:

(HUMB64)(LITB42)(LITB45) Prerequisites: LITA01 or ENGA01 or FREA30(FREB02) or one course in literature.

HUMC09F The Civilization of Spain I Exclusions: HUMB15.

(HUMB09)

The Darwinian Revolution **HUMCI1Y** Prerequisite: BIOBO5 or BIOC06 (BIOB11) or PHLB70 or JBPC70 and permission

of the instructor. HUMC13S The Civilization of Spain II

Exclusions:

HUMB15(HUMB10)

JHFC40Y Vienna and the Origins of Contemporary Culture

Prerequisites: Either one of LITA01, ENGA01, FREA30(FREB02) or a B-level

course in Fine Art History. or one course in literature.

HUMC61S Women in Ancient Greece

Exclusion: (HUMB61) Prerequisite: JHSA01 or one course in CLA

JHIC71S Italian Cinema Exclusions: (HUMB71),

(JHIB71), (JHIB90)

Italian

Discipline Representative: D. McAuliffe (284-3315)

Scarborough College offers a wide range of courses on the language and literature of Italy from the Middle Ages to the present. For students who have no previous training in the language, the study of Italian begins at the elementary level with ITAA01/A02 or ITAA11. ITAA01/A02 students may then take ITABO1: students

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from ITAA11 may take ITAB11. One of the two courses (ITABO1 and ITAB11) is pre- or corequisite to all other ITA courses. Students with other types of language preparation should consult the Discipline Representative before choosing their course of study. In all courses, emphasis is given to spoken as well as written aspects of the language.

Courses offered by other disciplines may prove directly valuable to students in Italian as adjuncts to their plan of study or as an enrichment of their total programme. Similarly, certain aspects of Italian literature complement other areas of interest, such as Fine Art, Music, English, French, Latin, Spanish, Humanities, and Literature.

Students enrolled in Italian, some of whom may later wish to enrol in the Faculty of Education or to continue their studies at the graduate level, are strongly urged to confer with their instructors at the earliest possible date in order to establish a comprehensive and coherent plan of study.

Students are not allowed to take any A-level courses in Italian while taking or after completing any B-level course in Italian.

Students may be excluded from any course if their knowledge of Italian is deemed by the instructor to exceed the level of the language of that course.

Students in the Major Programmes may satisfy some of their Programme requirements through a Study Elsewhere Programme operated by the University of Toronto at Siena.

Major Programme in Italian Language Supervisor: U. Lesser-Sherman (284-3151) Seven full-course equivalents, as follows: Option A (for students who have no prior knowledge of Italian or its

đi	alects):	
l	ITAA01Y	Introductory Italian
	and	
	ITAA02H	Language Practice
2	ITAA03S	Conversation II
	or	
	ITAB03F	Intermediate
		Conversation I
3	ITAB01Y	Intermediate Italian I
4	ITACOIY	Language Practice
5	ITAC22F/S	Introduction to Modern
		and Contemporary
		Literature
6		One and one-half full-
		course equivalents from

among the following:

ITAC05F/S, ITAC20F/S,

ITABO6S, ITAC04H,

7	LINA05Y	ITAC23F/S, JHIC71F/S Practical Language Study
	or LINA01Y	General Linguistics (a more theory-oriented
_		course than LINA05Y)

Option B (for students with some prior knowledge of Italian or one of its dialects): Elementary Italian

	arcoto,.	
1	ITAA 1 1 Y	Elementary Italian
2	ITAA03S	Conversation II
3	ITAB11Y	Intermediate Italian II
4	ITAC01Y	Language Practice
5	ITAC22F/S	Introduction to Modern and Contemporary
		Italian Literature
6		Two full-course
		equivalents from among
		the following: ITAB03F,
		ITABO6S, ITACO4H,
		ITAC05F/S, ITAC20F/S,
		ITAC23F/S, JHIC71F/S
7	LINA05Y	Practical Language
		Study
	or	
	LINAOLY	General Linguistics (a more theory-oriented

Language requirements will be waived by the Supervisor for students judged to have advanced knowledge of Italian. Appropriate courses from the Discipline's offerings will be substituted. Students are strongly advised to discuss Programme as soon as possible with the

course than LINA05Y)

Major Programme in Italian Language and Literature

Supervisor: D. McAuliffe (284-3315) Seven full-course equivalents as follows:

1 Three full-course equivalents in Italian Language

Supervisor.

- 2 Three full-course equivalents, including ITAC22F/S, ITAC23F/S and ITAC31Y, in Italian Literature.
- 3 One full-course equivalent selected in consultation with the Programme Supervisor from among the offerings in Italian or from LIT or HUM course offerings which concentrate on Italian culture, civilization, and literature.

Language requirements will be waived by the Supervisor for students judged to have advanced knowledge of Italian. Equivalent courses from the discipline's offerings will be substituted. Students are strongly advised to discuss their

Programme as soon as possible with the Supervisor.

See also the Specialist Programmes in Modern Languages (under Language Studies) and Language and Literature.

ITAA01Y Introductory Italian

An elementary course for students with no knowledge of Italian which must be taken together with ITAA02H. Elements of Italian grammar, with attention given to oral practice. Short contemporary texts will be studied.

Our aim is to provide a relaxed friendly atmosphere in which to study basic standard Italian grammar and syntax. Importance is given to exercises which develop the practical skills of understanding and speaking needed for the corequisite course A02H. The basic Italian textbook is supplemented by dialogues made up by the students and easy readings commencing as early as progress in the textbook permits. A programme is also provided in the language laboratory. Students are expected to participate in classroom exercises, hand in written assignments completed outside the classroom, and write monthly tests.

Exclusion: OAC Italian or Grade 13 Italian or ITAA11

Corequisite: ITAA02, It is also recommended that students enrolled in ITAA01 and ITAA02 take ITAA03 concurrently with them in the Spring term. Session: Winter Day D. McAuliffe

ITAA02H Introductory Italian Language Practice

Practical application of the language structures introduced in ITAA01.

As with the corequisite A01Y, our aim is to provide a relaxed, friendly atmosphere in which to learn basic standard Italian. Classtime is devoted entirely to conversing in Italian. At the beginning students are given set dialogues which they practise with one another. As they gain confidence and knowledge of the language they are encouraged to prepare their own dialogues and conversations based on situations and topics of interest. Exclusion: OAC Italian or Grade 13 Italian Corequisite: ITAA01 Session: Winter Day D. McAuliffe

ITAA03S Conversation II

Practical application of the language structures introduced in ITAA01 and

Students are encouraged to speak Italian in a relaxed, informal classroom atmosphere. Conversations are based on situations that the student is likely to encounter in Italy as well as on readings prepared at home from literary works. newspapers, and magazines. Among the topics chosen are the geography, history, politics, economics, and cultural life of contemporary Italy. Students are expected to participate in classroom discussion, make oral presentations, and take an oral examination. Corequisite: ITAA01 or ITAA11 Session: Winter Day S. Mittler

ITAA11Y Elementary Italian

An elementary course for native speakers with little or no knowledge of standard Italian usage.

The course aims at giving a basic knowledge of speaking, reading, and writing Italian. The main objective is to free the student from phonological, lexical, and grammatical interference arising from the use of dialects and English in the Italian community. Basic grammar rules will be studied and modern prose passages will be analyzed from the point of view of grammatical structure, lexical choice, and idiomatic expressions. The course will be conducted almost entirely in Italian. Use of the language laboratory is highly recommended. Exclusion: OAC Italian or Grade 13 Italian

or ITAA01

Corequisite: It is strongly recommended that students enrolled in this course take ITAA03H concurrently with it. Session: Winter Day J. Campana

ITABOLY Intermediate Italian I A continuation of ITAA01. Intensive review of grammar, with drills, exercises, and compositions.

The course concentrates on explaining and practising the more difficult parts of Italian grammar. This will alternate with reading and discussion of passages of modern Italian prose and poetry. The student will be asked to prepare written grammar exercises, as well as to write comments on or summaries of the readings discussed in class. The course

will be conducted in Italian whenever possible

Exclusion: ITAB11

Prerequisite: ITAA01 or OAC Italian or

Grade 13 Italian

Corequisite: It is strongly recommended that students enrolled in this course take ITAB03 concurrently with it.

Session: Winter Day

C. Montalto

ITABO3F Intermediate Conversation I

An advanced course in conversation for those students with sufficient knowledge of Italian. Attention will be given to idioms and special constructions in readings or in discussions focusing on Italian culture and civilization.

This course offers the opportunity to improve oral and aural skills in Italian. Students will be expected to prepare topics of common interest for discussion in class by doing background reading on selected topics and by preparing the specialized vocabulary of those topics. At least one oral report and two skits (one prepared and one improvised) will be required of each student.

Corequisite: ITAB01 or ITAB11 Session: Winter Day

J. Campana

ITABILY Intermediate Italian II

A continuation of ITAA1 IY. The course concentrates on explaining and practising the more difficult parts of Italian grammar. This will alternate with reading and discussion of passages of modern Italian prose and poetry. The student will be asked to prepare written grammar exercises, as well as to write compositions on the readings discussed in class or on topics of general interest. The course will be conducted in Italian.

Exclusion: ITAB01
Prerequisite: ITAA11

Corequisite: It is strongly recommended that students enrolled in this course take ITAB03 concurrently with it.

Session: Winter Day

J. Campana

ITACOLY Language Practice

An advanced language course focusing on complex problems of Italian grammar.

This course is designed to give students an opportunity to improve their knowledge of written and oral Italian on an advanced level. Specific points of grammar, syntax, and style will be discussed and exemplified with drills and exercises. Students will be asked to write short compositions. A selection of passages by

modern Italian authors will provide the necessary material for stylistic analyses, summaries, and paraphrases. Prerequisite: ITAB01 or ITAB11 Session: Winter Day C. Montalto

ITACO4F Advanced Composition

Study and analysis of modern Italian prose structures, idioms, and stylistics.

The purpose of the course is to enable the student to acquire fluency of expression in written Italian, both in free compositions and in summaries of passages of modern Italian writers. Difficulties of grammar, idioms, and stylistics will be discussed and explained during the two-hour class meeting every second week. Individual student compositions will be analyzed in detail during tutorial session. Exclusion: (ITAB04)
Corequisite: ITAB01 or ITAB11
Session: Winter Day
J. Campana

ITACOSS Practical Translation

Practice in translating from English to Italian and from Italian to English, combined with analysis and discussion of a wide variety of texts in terms of type of language and style of expression. Examples of colloquial, journalistic, literary, technical and business expression will be translated and analysed.

Class time is devoted to increasing the student's proficiency. Evaluation will be based on written and oral assignments, class participation and an examination. Exclusion: (ITAB05)
Corequisite: ITAB01 or ITAB11
Session: Winter Day
S. Mittler

ITAC13S Modern Italian Poetry

An examination of the major Italian poets from Pascoli to the present.

This course is designed to provide insight into the works of the major poets of our century. Students will read and discuss selected poems from Pascoli, the Crepuscolari and Futurist poets, Ungaretti, Quasimodo, Montale, and other modern poets.

The teaching method will involve

lectures and discussion in Italian. Exclusion: (ITAB13)
Prerequisite: ITAB01 or ITAB11; a course in Italian literature, such as ITAC22 and ITAC23, is recommended but not required.
Session: Winter Day
J. Campana

ITAC20S Modern Italy

An introduction to the events and ideas which have contributed to the making of modern Italy.

This course aims to help the student understand the complex social and cultural milieu in which life is conducted in present-day Italy. Readings from a variety of literary and historical texts form the basis for the three weekly hours of discussion of topics outlined by the instructor. These will be complemented by audio-visual material such as slides, tapes, and films. The student is expected to contribute to the classroom discussion and make at least one oral presentation and write at least one essay on a topic agreed upon with the instructor.

Exclusion: (HUMB18), (ITAB20)
Prerequisite: ITAB01 or ITAB11
Session: Winter Day
J. Campana

ITAC22F Introduction to Modern and Contemporary Literature

An introduction to literary movements, masterpieces, and authors from the eighteenth century to contemporary times.

Selections from the works of influential novelists, poets, and dramatists will be examined in relation to the different linguistic and cultural backgrounds from which they sprang, and to the major modern theme of the individual in society. Texts include works by Goldoni, Manzoni, Leopardi, Verga, D'Annunzio, Pirandello, Pavese, and Calvino.

This course will be conducted in Italian and will be a combination of lectures and discussion.

Exclusion: (ITAB22)

Prerequisite: ITAB01 or ITAB11

Session: Winter Day

D. McAuliffe

ITAC23S Survey of Italian Literature from the Middle Ages to the Renaissance

An introduction to the main literary movements, masterpieces, and authors from the beginning of Italian literature to the end of the seventeenth century.

This course is intended to give the student a knowledge of the early development of Italian literature in its historical context as well as to develop the student's ability to read the early literary language of Italy. The passages to be read and discussed will include selections from "Dolce Stil Novo," Dante's Divine Comedy, Petrarch's Canzoniere, Boccaccio's Decameron, Poliziano's Stanze, Machiavelli's Principe, Ariosto's Orlando Furioso, and Tasso's Gerusalemme Liberata.

Lectures and discussion in Italian. A one hour tutorial will be provided for those who need additional help with the Italian language.

Exclusion: (ITAB23)

Prerequisite: ITAB01 or ITAB11

Session: Winter Day

D. McAuliffe

ITAC31Y Dante and Medieval Culture

An introduction to Medieval Italian literature with special reference to Dante.

This course aims to introduce the student to the problems, mentality, and social and cultural patterns of man in the Middle Ages with specific reference to literary phenomena such as Provencal lyrics and Old French poetry and epics. The lectures will examine the origins and development of medieval literature up to Dante's The Divine Comedy, the masterpiece of the Middle Ages. A brief survey of Dante's minor works and their significance in terms of the life and culture of the times will be included. Class participation and students' comments are strongly encouraged.

Lectures will be in English. Students wishing to count the course towards a Programme in Italian will read the texts and do their assignments in Italian: an additional one hour tutorial will be provided for them.

Exclusion: (ITAB31)
Prerequisite: For those taking the course as part of a Programme in Italian, ITAB01 or ITAB11; for others, LITA01 or ENGA01 or FREA30(FREB02Y) or one course in literature.

Session: Winter Day

D. McAuliffe

ITAD50F-54F ITAD55S-59S

ITAD60Y Supervised Reading

These courses are designed to provide advanced students with an opportunity to pursue independent study on specific aspects of Italian language and literature of their own choice. The students are expected to do most of the reading on their own and to meet regularly with a faculty member to discuss problems arising from the chosen topic of study. The teaching method and the evaluation will vary according to the subject matter and the individual student. Interested students should contact the Discipline Representative.

Prerequisite: One full-course equivalent in Italian literature.

Exclusions: (ITAC50-54F, ITAC55-59S,

ITAC60Y)

Session: Winter Day

Staff

Courses Not Offered in 1989-90

Intermediate Conversation ITAB06S Corequisite: ITAB01 or ITAB 1 1

ITAC05F

Practical Translation Exclusion: (ITAB05) Corequisite: ITAB01 or

ITAB11

ITAC12F/S The Twentieth Century

Novel

Exclusion: (ITAB12) Prereauisite ITAB01 or ITAB11; a course in Italian literature, such as ITAC22 and ITAC23, is recommended but not required.

ITAC27F/S Modern Italian Theatre from Pirandello to the Present

Dav

Exclusions: (HUMB54), (LITB16), (ITAB27) Prerequisite: ITAB01 or ITABII: a course in Italian literature, such as ITAC22 and ITAC23, is recom-

JLIC32S

mended but not required. Petrarch and Boccaccio Exclusion: (ITAB32) Prerequisite: For those taking the course as part of a Programme in Italian. ITAB01 or ITAB11; for others. LITA01 or ENGA01 or FREA30 (FREB02Y) or one full-course equivalent in literature.

JLIC33F/S Machiavelli and Aspects of the Italian Renaissance

Exclusions: (HUMB50), (LITB35), (ITAB33) Prerequisite: For those tak-

ing the course as part of a Programme in Italian, ITAB01 or ITAB11; for others. LITA01 or ENGA01 or FREA30 (FREB02Y) or one

full-course equivalent in literature.

ITAC34F/S Chivalric Poetry of the Renaissance

Exclusion: (ITAB34) Prerequisite: ITAB02 or ITAB11: a course in Italian literature, such as ITAC22 and ITAC23, is recommended but not required.

ITAC35F/S Italian Sixteenth-Century

Theatre

Exclusion: (ITAB35) Prerequisite: ITAB01 or ITABIl: a course in Italian literature, such as ITAC22 and ITAC23, is recommended but not required.

ITAC36F/S Lyric Poetry of the Renaissance (from Poliziano to

Michelangelo)

(ITAB36) Prerequisite: ITAB02 or ITABII; a course in Italian literature, such as ITAC22 and ITAC23, is recom-

mended but not required. ITAC40F/S Reformation and Baroque

Literature Exclusion: (ITAB40) Prerequisite: ITAB01 or ITAB11: a course in Italian literature, such as ITAC22

and ITAC23, is recommended but not required.

ITAC41F/S Italian Eighteenth Century Theatre

Exclusion: (ITAB41) Prerequisite: ITAB02 or ITAB11: a course in Italian literature, such as ITAC22 and ITAC23, is recommended but not required.

ITAC43F/S Foscolo and Leopardi Exclusion: (ITAB43)

Prerequisite: ITAB01 or ITAB11: a course in Italian literature, such as ITAC22 and ITAC23, is recommended but not required.

ITAC44S Manzoni

Prerequisite: ITABO1 or ITAB11: a course in Italian literature, such as ITAC22 and ITAC23, is recom-

mended but not required. ITAC45F The Nineteenth-Century

Italian Novel in Transition Exclusion: (ITAB45) Prerequisite: ITAB01 or ITAB11; a course in Italian literature, such as ITAC22 and ITAC23, is recom-

mended but not required. JHIC71S Italian Cinema

Exclusion: (JHIB71) Prerequisite: For those taking the course as part of a Programme in Italian. ITAB01 or ITAB11: for oth-

ers, none.

Joint Courses

For a description of these courses please refer to the disciplines concerned:

Biology and Chemistry

JBCC35Y Introductory Biochemistry JBCC36H Laboratory in Biochemistry

Biology and Humanities

IBHB01Y Introduction to Biological Sciences

Biology and Philosophy

BJPC70 Theoretical Foundations of Biology I

BIPC71 Theoretical Foundations of Biology II

Commerce and Economics

JCEC02Y Corporation Finance JCEC54S Industrial Relations JCEC72F Analysis for Decision Making I

JCEC73S Analysis for Decision Making II

JCED70F Advanced Corporate Finance

ICED75S Investments

Commerce and Sociology JCSB27Y Organizational Behaviour

Drama and Humanities

JDHB16Y Dramatic Literature & Political Revolution

Geography and Economics

JEGB27F Location and Spatial

Development

Humanities and Fine Art

IHFC40Y Vienna and the Origins of Contemporary Culture

Humanities and Italian JHIC71S Italian Cinema

Humanities and Social Science JHSA01Y Introduction to Women's

Studies

JHSD01H Senior Project in Women's

Studies

Linguistics and Psychology

ILPB55H **Psycholinguistics** JLPC24S Developmental Psycho-

linguistics

JLPD55S Disorders of Speech and

Language

Mathematics and Computer Science

JMCC31H Combinatorics

IMCC32H Graph Theory and Algo-

rithms for its Applications

Spanish and Drama

JSDD16Y Golden Age Spanish Drama

Language and Literature

Specialist Programme

Supervisor: R. Skyrme (284-3205) Students wishing to follow this Specialist Programme should complete the Major in Language and Literature in two

of the following disciplines: English

French

Classical Studies (Greek or Latin)

Italian

In addition, one full-course equivalent should be chosen from the following, the choice to be approved by the Super-

visor: **ENGC59Y**

English Literary Criticism FARA 10F Ancient Art and Architec-

ture FARA11S Medieval Art

FARA12F Renaissance and Baroque

FARA 13S Modern Art 1750 to the

Present Prologue

HUMA01Y **HUMA11Y** Greek and Roman Mythol-

HUMC12Y Studies in Greek Mythology and its Influence LITAOLY Introduction to Literature

PHLB03F/S Philosophy and Art Philosophy of Literature PHLB04F/S

Languages Studies

Centre for University Studies in Language

Co-ordinator: U. Lesser-Sherman Room R4006 (284-3151) The Centre was created to ensure coherent and integrated language programmes based on innovative and current teaching methods. The Centre's resource room (R4104) provides a stimulating environment for all language students. An experienced staff member will assist and encourage you to explore our computer programmes, videos, and tapes.

Please come in and browse through our books, foreign newspapers, and magazines, or simply meet other students.

Students interested in language studies (modern and classical) should consult with the Co-ordinator, who is the Supervisor for all language Programmes.

The following Programmes are offered in Languages:

Specialist Programme in Modern Languages

The Modern Languages Specialist Programme enables a student to gain a high degree of fluency in two languages, or in one language together with a concentration in Linguistics. In the case of every combination, there is a common core for the Programme consisting of one course in Linguistics, and a choice from a set of courses which relate languages to broader social and historical or cultural areas. There are ten possible combinations as follows: French and German, French and Italian, French and Spanish, German and Italian, German and Spanish, Italian and Spanish, French and Linguistics. German and Linguistics, Italian and Linguistics, Spanish and Linguistics.

Students in these Programmes may satisfy some of their Programme requirements through a Study Elsewhere Programme operated by the University of Toronto at: (French) Aix-en-Provence, (Italian) Siena, and (Spanish) Granada.

German offers a summer work programme.

For every combination, students must satisfy the following requirements:

- 1 The courses listed under the Major Programmes in two of: French, German, Italian, Linguistics, Spanish.
- LINA05Y Practical Language Study (or, with permission of Supervisor, LINAO1Y General Linguistics) except where already included in the Major Programme.
- 3 LATAO1Y or OAC French or Grade 13 French.
 - One full-course equivalent from the following, the choice to be approved by the Supervisor, for every combination other than French/Spanish: Language and Culture ANTB30Y HISA01Y European World HUMA01Y Prologue LINB05Y Romance Languages

Major Programme in French

Seven full-course equivalents, including:

- FREA10Y, FREB10Y, FREC10Y
- two full-course equivalents from the following: FREB08F/S, FREB18Y, FREB25Y, FREB42Y, FREB43F/S. FREB48Y, FREC09Y, FREC16Y, FREC18F/S.
- two other full-course equivalents in French, only one of which may be chosen from group (2).
- 4 Students may include in their Programme a maximum of one supervised reading course.

The following may not count toward a Major Programme in French Language: any A-level French course, with the exception of FREA10, and FREA30. Note: Students intending to pursue their studies in French on the graduate level are advised that this Programme does not qualify them for admission to the Graduate Department of French at this University.

Major Programme in German Language

Seven full-course equivalents as follows: GERA10Y Introductory German and GERA09H Language Practice I **GERB20Y** Intermediate German and GERB19Y Language Practice II GERCO1F/S The Last Hundred Years GERCO2F/S History of the German Language

_	ERC03F/S	Languaga in a Litanama Can	35-i B	
G	EKCO31/3	Language in a Literary Con- text	Major rro Language	gramme in Spanish
G	ERC I 0Y	Advanced Conversation and		course equivalents as follows:
		Composition	SPAA01Y	•
	INA05Y	Practical Language Study	Introductor	ry Spanish (Note: Students
01	-			DAC Spanish or Grade 13
LI	NA01Y	General Linguistics (a more		ist complete, in place of
		theory-oriented course)		d A02, one and one-half full-
				ivalents from SPA or HUM
M	lajor Prog	ramme in Italian Language		ich concentrate on Spanish
26	even iuii-co	ourse equivalents, as follows:		ulture, or literature, to be
		r students who have no		ith the Supervisor.)
	ialects):	edge of Italian or its	SPAA02H	Introductory Spanish
1	,	Introductory Italian	CDADOLV	Language Practice
1	and	introductory italian	SPABO1Y SPABO2H	Intermediate Spanish
	ITAA02H	Language Practice	3FABUZII	Intermediate Spanish Language Practice
2		Conversation II	SPAB04F	Phonetics
_	or	Conversation in	SPAB12S	History of the Spanish
	ITAB03F	Intermediate Conversa-	JI ADIES	Language I
		tion I	SPAC01Y	Advanced Spanish
3	ITAB01Y	Intermediate Italian I	HUMC09F	The Civilization of Spain I
4	ITAC01Y	Language Practice	HUMC13S	The Civilization of Spain II
5	ITAC22F/		or	ino cirindanon di opum n
		and Contemporary	HUMC14Y	Topics in Latin American
		Literature		Culture and Literature
6		One and one-half full-	SPAC21F	Stylistics and Translation
		course equivalents from	SPAC22S	History of the Spanish
		among the following:		Language II
		ITABO6S, ITACO4H.		
		ITAC05F/S, ITAC20F/S,	N.B. Tangu	age requirements for any of
7	LINIAGEN	ITAC23F/S, JHIC71F/S		rogrammes will be waived by
1	LINA05Y	Practical Language	the Supervi	sor for students judged to
		Study		ced knowledge of the
	OF LINAO1Y	General Linguistics (a		Equivalent courses will be
	LUMAVII	General Luivuisiics (a		

Option B (for students with some prior knowledge of Italian or one of its dialects):

General Linguistics (a

more theory-oriented

course than LINA05Y)

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71F/S
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course than LINA05Y)

Students might also refer to the following Programmes:

substituted in consultation with the

Classical Studies - with Latin Classical Studies - with Greek Language and Literature Linguistics

Supervisor.

The following courses are offered in Languages. (For full course descriptions. pre- and corequisites, etc., see under French, Classics, German, Italian, Russian, Spanish. Courses in brackets are not offered this year.)

(FREA06Y FREA10Y	Introductory French I)
FREA16Y	Language Practice I Introductory French II
FREBO8F	Practical Translation
FREB10Y/B	Language Practice II

<u> </u>	
(FREB17S	Intermediate Conversation
(II)
FREB18Y	Commercial French
FREB25Y	Introduction to French
	Linguistics
FREB42Y	General History of the
	French Language
(FREB43F	The French Language in
	Canada)
FRECO9Y	Comparative Stylistics
FREC 1 OY	Language Practice III
FREC18S	Translation for Business
	and Professional Needs
(FRED16B	Advanced French)
GERA10Y	Introductory German
GERAO9H	Language Practice I
GERB20Y	Intermediate German
GERB19Y	Language Practice II
GERCO2F/S	•
CERCARE/C	Language
GERCO3F/S	
GERC 1 OY	text Advanced Composition and
GERCIUI	Conversation
(GERDO1Y	Advanced Language Prac-
(GEKDUII	tice)
	tice)
GRKA01Y	Introductory Greek
(GRKA05Y	Introductory Modern
(0	Greek)
GRKB02F	Introduction to Greek
	Authors
GRKB10Y	Intermediate Modern Greek
ITAA01Y	Introductory Italian
ITAA02H	Introductory Italian
	Language Practice
ITAA03S	Conversation II
ITAA11Y	Elementary Italian
ITABO 1 Y	Intermediate Italian I
ITAB03F	Intermediate Conversation I
(ITABO6S	Intermediate Conversation
	II)
ITAB11Y	Intermediate Italian II
ITAC01Y	Language Practice
ITAC04F	Advanced Composition
(ITACUSF/	S Practical Translation)
LATA01Y	Introductory Latin
LATBO2F	Introduction to Latin
PUIDOFL	Authors
RUS	Introductory and Intermedi-

ate Language courses are

not currently offered. Stu-

knowledge of the language

dents with an advanced

RUSC02H-C05H Super-

mav take:

vised Reading

SPAA01Y	Introductory Spanish
SPAA02H	Introductory Spanish
	Language Practice
SPABO1Y	Intermediate Spanish
SPAB02H	Intermediate Spanish
	Language Practice
(SPABO4F	Phonetics)
(SPAB12S	History of the Spanish
•	Language I)
SPAC01Y	Advanced Spanish
SPAC21F	Stylistics and Translation
SPAC22S	History of the Spanish
01110110	Language II
See also con	rses in LINGUISTICS

See also courses in LINGUISTICS

Latin

Courses are offered in introductory Latin (LATA01, LATB02) and Latin literature (LATB11), LATC30, etc.).			
	ntroductory Latin		
LATB02F I	ntroduction to Latin		
<i>F</i>	Authors		
LATB11S (Catullus		
LATC30F-34F			
LATC35S-39S	Supervised Reading		
LATC40Y	-		
LATD01F-02S	Independent Studies		

For further information see under Classical Studies

Linguistics

Discipline Representative: J.D. Woods (284-3346) Linguistics is the science of language. For the linguist, language is a phenomenon of the human mind and of human society. Not all linguists are exclusively concerned with the description of language (an interest reflected in, e.g., LINAO1, LINB11, and LINDO4). Linguists draw on the findings of Philosophy, Psychology, Sociology, and Biology to create new frontiers of research. This new science is reflected in LINB14. LINC15, JLPB55, JLPC24, and other courses. (See too the Programme in Cognitive Science.)

Language is, of course, of interest to many people who see it as a humanistic and not a technical concern. To meet this interest we have designed such courses as LINA04 and LINB27.

Students of foreign languages may find LINA05 and LINB05 of use.

Specialist Programme in Linguistics Supervisor: I.D. Woods (284-3346) The Specialist Programme in Linguistics involves a core of three basic full-course equivalents, as follows:

1 LINAOIY General Linguistics LINA05Y Practical Language Study

2 LINBITY Syntax 3

Two of: LINB02S Phonology LINB09F **Phonetics** LINCO6F/S Language Change

4 Four full-course equivalents on the C- or D-level in LIN or JLP, or in a related discipline, as approved by the

Supervisor of studies.

Two further full-course equivalents in LIN or JLP. If LINCO6F/S has contributed to satisfying both requirement 3 and requirement 4, two and a half further full-course equivalents in LIN or JLP are necessary. Only one of LINAOIY and LINAO5Y may be counted towards the Specialist Programme. LINAO4S and LINBO5Y cannot be counted towards the Specialist Programme.

One full-course equivalent from among the following courses:

ANTB30Y* Language and Culture ENGB01Y Old English Language and Literature FREB25Y* Introduction to French Linguistics FREB42Y* General History of the French Language FREB43F/S* The French Language in Canada FREB48Y* Theoretical and Practical **Phonetics** GERCO2F/S* Practicum in the History and Structure of the

German Language PHLB80F Philosophy of Language SPAB04F/S* Phonetics

SPAB12F/S* History of the Spanish Language I *Students should check these

courses for prerequisites. Two full-course equivalents in a language which is not the student's native language.

In addition to his/her native language and the language taken under (7), the student must have some knowledge of a third language; this requirement can be satisfied by either: (a) a demonstration that the

student's knowledge is equivalent to that acquired in one full course at the university level (to be decided in consultation with the Supervisor), or (b) the student's taking one further course in such a language at the university level.

Major Programme In Linguistics Supervisor: J.D. Woods (284-3346) Students must complete seven fullcourse equivalents, as follows:

1 LINAO1Y General Linguistics

LINA05Y Practical Language Study

2 LINBILY Syntax

3 Two of:

LINB02S Phonology LINBO9F **Phonetics** LINCO6F/S Language Change

Students must also complete either four further full-course equivalents in LIN or JLP, of which at least two must be on the C- or D-level; or three further full-course equivalents in LIN or JLP, of which at least one must be on the C- or D-level, plus one C-level full-course equivalent in a language. (Only the first option is permitted when this programme is taken as part of the Modern Languages Specialist Programme.) Only one of LINA01Y and LINA05Y can be counted towards the Major. LINA04S and LINB05Y cannot be counted towards the Major.

LINAO1Y General Linguistics

An introduction to various methods of linguistic analysis, to the nature of the systems of rules and principles which underlie language, and to the relationships between language and society and between language and biology.

Topics such as the following will be included: sound patterns in languages, word formation, sentence structure, meaning, different varieties of language and social attitudes towards them, how languages change, how children learn language, language and the brain. Enrolment limited to 55 students per section.

Exclusion: (LINA05Y) Session: Winter Day R.I. Binnick

LINAO4S Introduction to Language

A general introduction to the nature of language. This is a non-technical introduction and cannot serve as a prerequisite for further linguistics courses (unless specified).

Topics such as the following will be covered: the relationship between human and animal systems of communication, and between language and culture: language change; how children learn language; bilingualism in Canada. There will be lectures, discussions, films, Exclusion: LINA04 may not be taken by students who have credit for LINAO1 or LINA05. LINA01 and LINA04 may not be taken in the same session. Session: Winter Day D.M. James

LINA05Y Practical Language Study

This course is intended for students who are interested in studying language theory in order to apply it to further studies in languages offered at Scarborough College.

Areas of study will include traditional grammar, word formation and sentence structure, phonetics and sound systems, meaning and language use. Exclusion: (LINA0lY)

Prerequisite/Corequisite: One fullcourse equivalent at the university level in a language offered at Scarborough College.

Session: Winter Day J.D. Woods

LINBO2S Phonology

The sounds of language and their analysis: theoretical approaches to the sound patterns of various languages.

An introduction to phonological theory and method, especially such areas as segmental phonology, phonological patterns, distinctive phonological rules, underlying representations, rule ordering, derived representations, nonphonological effects, and natural phonology. We will discuss material from the text and problems which are to be solved.

Students are strongly urged to take LINBO9F before LINBO2S. Prerequisite: LINA01 or LINA05 Session: Winter Day J.D. Woods

LINBO9F Phonetics

The physiological and acoustic bases of speech.

An examination of the means by which speech sounds are produced, and of the physical properties of these sounds. Emphasis will be placed on such practical considerations as phonetic transcriptions. We will discuss material from the prescribed readings and problems which are to be solved. Students are strongly urged to take LINBO9F before LINBO2S. Prerequisite: LINA01 or LINA05 Session: Winter Day J.D. Woods

LINBITY Syntax

The study of sentence structure in language.

Students will learn how to analyze linguistic data so as to determine the principles and constraints which govern sentence formation and the expression of meaning via sentence structure. Further, attention will be paid to those features of syntax which appear to be universal in languages; a focus of concern will be the question of what general theory of syntax can best explain these universals.

Prerequisite: LINA01 or LINA05 Session: Winter Day D.M. James

LINB14F Interpersonal Communication

TBA

Aspects of interpersonal communication. including face to face interaction. The focus will be on: strategies that govern a speaker's choice of linguistic forms appropriate to specific social situations: concepts imposed by linguistic rules and prevailing social norms on the acceptability of speech acts; the interrelation of all aspects of the participants' behaviour in communication, both verbal and nonverbal; the influence of the setting of the interaction.

Prerequisite: LINAO1, LINAO5, or SOCAO1: or LINA04 with permission of instructor. Exclusion: (LINB07) Session: Winter Day

LINB16F Morphology

The study of word-formation in language.

Morphemes, the minimal units of meaning; types of morphemes; the derivation of words through affixation, compounding, etc.; similarities and differences in morphological phenomena across languages; and the relationship of morphology to other components of grammar: phonology, syntax, and seman-

Prerequisite: LINA01 or LINA05. Session: Winter Day

R.I. Binnick

JLPB55S Psycholinguistics

Theories and experiments that address the question: how is language comprehended and produced and how is the ability to use language related to other psychological abilities?

Lectures and discussion. Prerequisite: PSYA0l or LINA0l Session: Winter Day TBA

LINCO6S Language Change

Language change and language relationships.

Topics such as the following will be included: the ways in which language changes; social motivations for language change; language families; language contact; language universals. Exclusion: (LINB04) Prerequisite: LINA01 or LINA05 Session: Winter Day R.I. Binnick

LINC15S Varieties of Language Speech varieties: national language.

regional or social dialect, jargon, argot, register, and style.

Speech varieties available to a member of a speech community in relation to the roles in that community. Speech varieties as indices of social identity and representative symbols of group affiliation. Monolingual and multilingual speech communities, the diverse linguistic, social, and political factors resulting in language maintenance, language shift, and language spread, and the creation of new languages such as pidgins, creoles, and lingua francas. Prerequisite: LINA01, LINA05, or SOCA01: or LINA04 with permission of Instructor. Exclusion: (LINB07, LINB15) Session: Winter Day TBA

LINC28F Language and the Sexes Ways in which males and females differ in how they use language, and what languages can tell us about how males and females are viewed by their speak-

The first part of the course addresses such questions as: Who talks more? Interrupts more? Uses more forceful language and gestures? Speaks more "correctly"? Particular attention is paid to the significance for behaviour of differences in the relative status of males and females. The second part of the course deals with such matters as expressions used to describe human beings and entities of unknown or no sex; the proposition is considered that English and at least some other languages reflect a specifically male perspective on the world. Limited enrolment: 25 Prerequisite: One full-course equivalent on the B-level in LIN, SOC, ANT, or PSY. Exclusion:(LINB28) Session: Winter Day D.M. James

LIND21Y Investigation of a Language

Linguistic theory put to work through analysis of a language which is not familiar to the students in the course. The language will vary from year to year. depending on who is involved in the course.

The aim of this course is to allow advanced students of Linguistics to apply their theoretical knowledge of the field to the practical problem of creating a grammar of a language. Normally, we work on a non-Indo-European language. with the help of a native speaker of that language. The course requires a great deal of participation and teamwork from all its members. We aim to produce a grammar of the language by the end of the vear. Exclusion: (LINC21)

Prerequisite or Corequisite: LINB02. LINB11

Session: Winter Day J.D. Woods

JLPD55F Disorders of Speech and Language

The study of abnormalities in the processes of language use and language development discussed in JLPC24(JLPB24) and JLPB55.

In the course we will discuss various types of aphasias and their relationship to brain injury, developmental disorders

such as dysphasia and autism, and disorders of language that are related to general disorders such as deafness and blindness. We will discuss these disorders in relationship to normal language processing and development. Lecture and discussion. Enrolment limited: Overall maximum 45, including no more than 25 Psychology majors or specialists. Exclusion: (LINB29F, JLPC55)

Prerequisites: Either JLPB55, PSYB60, or PSYB65, and one C-level half-course equivalent in PSY; or one B-level fullcourse equivalent in LIN. Exclusion: (LINB29F, JLPC55)

Session: Winter Day

TBA

LINDO1F/S LIND02F/S LINDO3F/S LINDO4F/S

LINDO5Y Supervised Reading

Interested students should contact Professor J.D. Woods, Supervisor of Studies. The aim of these courses is to allow the advanced student of Linguistics to engage in research; this research is normally at a level which is more advanced than other Linguistic courses which the student has already taken, and in an area which is of the student's own choosing. Methods of research and of evaluation are as varied as the possible areas of research.

Prerequisite: At least one B-level fullcourse equivalent in Linguistics; permission of instructor.

Session: Winter Day

Staff

LINB05Y

Courses Not Offered in 1989-90

Exclusion: (HUMC14Y) LINBO8F Scripts Interpersonal Communica-LINB14F Exclusion: (LINB07)

Romance Languages

Prerequisite: LINAO1. LINA05, or SOCA01; or LINA04 with permission of

instructor

LINB27F/S Animal Communication and the Nature of Language

> Prerequisite: One fullcourse equivalent in LIN or PSY or SOC or ANT

LINC12S Semantics

Prerequisite or Corequisite:

LINB11

JLPC24S Developmental Psycho-

linguistics

Exclusion: (LIN15), (JLPB24) Prerequisite: One fullcourse equivalent at the Blevel in LIN or PSY

LINC25F Second Language Learning

Literature

Discipline Representative: H. Wittmann (284 - 3197)

As an enduring expression of human existence, literature has been defined as "the organisation of words to give pleasure; through words, literature elevates and transforms experience; through them, literature functions in society as a continuing symbolic criticism of values."

At Scarborough College, students have available a diverse array of courses and programmes designed to nourish their interests and to deepen their understanding of the major western literatures. Courses and programmes in literature are described elsewhere in this Calendar, under these rubrics:

l. Classical Studies; the literatures of classical Greece and Rome.

2. English: the literatures of the English-speaking world with special reference to English, Canadian, and American writing.

3. French: the literatures of France and of French Canada.

Italian: the literature of Italy.

5. Humanities: literature in translation. Other courses and programmes with a major focus on literature, its history and analysis, are listed under DRAMA and PHILOSOPHY. The College offers a general introduction to literature as described below.

Major Programme in Literature Supervisor: H. Wittmann (284-3197) This Programme is no longer being offered; however, students currently enrolled will be allowed to complete it. LITA01Y Introduction to Literature An introduction to the understanding and enjoyment of literature through the reading of novels, short stories, plays, and poems drawn from literatures of various countries. All readings will be in transla-

The course will be taught jointly by faculty from German and Spanish, and will feature guest lectures from such disciplines as Classics, English, French, Fine Arts, Music, History, Philosophy, and Rus-

sian.

Session: Winter Day H. Wittmann/P. León

For additional courses in Literature or courses previously listed under LiT, see Humanities.

Courses Not Offered in 1989/90

Twentieth Century German

Prose

Prerequisite: LITA01 or **ENGA01 or FREA30** (FREB02Y) or one full-course equivalent in literature. (GERB19 and GERB20 for students studying in the original)

Exclusion: HUMB56F LITB40F

Disaster and the Literary

Imagination Prerequisite: LITA01 or

ENGA01 or FREA30 (FREB02Y) or one full-course

equivalent in literature Exlusion: (HUMB44)

LITB44Y The Holocaust in Modern

Literature Prerequisite: LITA01 or **ENGA01 or FREA30** (FREB02Y) or one full-course

equivalent in literature Exclusion: (JHGB52)

LITB50S Science, Power, and Hell: The

Story of Dr. Faustus Prerequisite: LITA01 or ENGA01 or FREA30 (FREB02Y) or one full-course

equivalent in literature

Mathematics

Staff member responsible for curriculum: E. Mendelsohn (284-3342)

The development of mathematics was induced by the inherent need to describe and analyse elements of the physical world as accurately as possible. Applied mathematics and statistics are still concerned with the building of models for use in real-world contexts. Pure mathematics is concerned with systems of axioms and the true statements or theorems which can be deduced from them. While pure mathematics is not necessarily initially motivated by practical considerations, there are numerous instances where the solution of problems in other branches of science has been based upon previously developed pure mathematical theory. The wide applicability of both the techniques of the subject and the method of reasoning employed suggests that most students could profit by taking some courses in mathematics.

Comparison of A Level Calculus Courses

MATA26Y Calculus

Techniques of Calculus MATA27Y

MATA26 is a practical course taught at a high level. The emphasis is on applications rather than theorems. Students who complete MATA26 may take in second year: MATB41F, MATB42S, MATB43S, STAB47S, and if they have MATA04Y as well, MATB25Y, MATB70S, MATB44F.

MATA27 is intended for those Commerce and Economics students who do NOT expect to take MATB41F, MATB42S in second year.

Specialist Programme in **Mathematics**

Supervisor: E. Moore (284-3352) The Specialist Programme is designed to give students a thorough grounding in the main areas of Mathematics. It is aimed at those students who may wish to pursue a career in mathematical research, teaching or in applications within government and industry.

In this Programme a total of eleven full-course equivalents is required:

First year: MATA04Y or (MATA40F. MATA45S), MATA26Y, CSCA58F and CSCA68S

Second year: MATB25Y, MATB41F and MATB42S and MATB43S or (MATB05Y) or (MATB50F and MATB55S), MATB44F, MATB49S, STAB47S

Third year: MATC49S, MATC51F. MATC56S, MATC53Y, MATC60F, MATC65S

Fourth year: One further half-course from MATB70S, MATC43F, MATC54F, JMCC31F, JMCC32F, CSCC51F, (JMCC51), STAC42S, STAC52S, STAC67F

In any given year, some C-level courses may not be offered. Students should check on this with the divisional office.

Students are urged to choose at least two additional courses in other disciplines where mathematics is applied, such as Astronomy, Biology, Chemistry, Computer Science, Economics and Physics.

Major Programme in Mathematics Supervisor: H. S. Rosenthal (284-3352) The Major Programme is designed for students who wish a good basic understanding of mathematical technique rather than the full development of the theory. Students with a serious interest in the applications of mathematics and statistics could usefully combine this Programme with a Major Programme in a field involving such applications.

In this Programme a total of eight full-course equivalents is required:

MATA26Y or (MATA55Y)

- MATA04Y or (MATA40F, MATA45S), MATB44F, CSCA58F, CSCA68S and STAB47S.
- 3 MATB41F and MATB42S or (MATB05Y) or (MATB50F and MATB55S). MATB43S is strongly recommended.
- One and one half full course equivalents from: MATB43S. MATC5 IF, MATC56S, MATC53Y, MATC60F, MATC65S.
- One full course equivalent from: STAC42S, STAC52S, STAC67F, CSCB28S, CSCB58F, CSCC50S, CSCC51F, (JMCC51F).
- One half course equivalent from: MATB25Y, MATB49S, MATB70S, MATC43F, MATC49S, MATC54F. JMCC31F, JMCC32F.

In any given year, some C-level courses may not be offered. Students should check with the divisional office.

MATA04Y Linear Algebra I

Systems of linear equations, vector spaces, subspaces, basis dimension. Linear transformations, range and kernel. matrix representations. Complex numbers and polynomials. The determinant and characteristics equation of a matrix. Eigenvectors and eigenvalues for a linear transformation. Change of basis and canonical forms.

Prerequisite: Grade 13 Calculus and one other Grade 13 Mathematics or OAC Calculus and OAC Algebra

Exclusions: (MATA40), (MATA45)

Session: Winter Day

MATA26Y Calculus

Limits and continuity, derivatives, related rates, extremum problems, graph sketching. Newton's method, indefinite and definite integrals, numerical integration. Taylor approximation and differential equations.

Students must have a calculator with memory and the exponential logarithmic and trigonometric functions and their inverses.

MATA26Y introduces the basic techniques of calculus with a strong emphasis on methods of approximation. The course will develop these ideas by the investigation of specific examples.

MATA26Y is a demanding course which will equip the student for most sciences and for further work in mathematics. Exclusion: MATA27; (MATA55) Prerequisite: Grade 13 Calculus or OAC

Calculus and OAC Algebra

Session: Winter Day

MATA27Y Techniques of Calculus Limits and continuity, derivatives, applications to related rates and extremum problems, graph sketching, Rolle's theorem and Mean Value Theorem, indefinite and definite integrals. L'Hopital's rule, partial differentiation, Lagrange multipliers, first order differential and difference equations, ele-

mentary matrix algebra. Students must have a calculator with memory and the exponential, logarithmic and trigonometric functions and their

inverses.

MATA27 is intended for those Commerce and Economics students who are NOT expecting to take MATB41F, MATB42S.

Exclusion: MATA26; (MATA55) Prerequisite: Grade 13 Calculus or OAC Calculus and (OAC Algebra or OAC Finite

Mathematics)

Session: Winter Day

MATB25Y Geometry

Isometries in Euclidean plane and space. Similarities. Inversion in a circle. The inversive plane. Circle preserving transformations. Non-Euclidean geometry. Projective and affine geometry. Finite geometries. Free completions. Desargues's theorem and Pappus's theorem. Projectivities, homologies, elations. The fundamental theorem of projective geometry.

This course explores some facets of present-day geometric research. In addition, the interplay between geometry and algebra is emphasized.

Prerequisites: MATA04 or (MATA45) Corequisite: MATB44

Session: Winter Day

MATB41F Techniques of the Calculus of Several Variables I

Vector algebra in Rn, lines and planes in R³, complex numbers, matrices, determinants and linear equations. Functions of several variables, partial derivatives, tangent planes, Jacobian matrix, chain rule and total derivative. Vector fields in Rⁿ. Gradient, divergence and curl. Multiple integrals, spherical and cylindrical coordinates, law of transformation of variables.

Exclusion: (MATB05Y) (MATB50) Prerequisite: MATA26 (preferred).

MATA27 or (MATA55) Session: Winter Day

MATB42S Techniques of the Calculus of Several Variables II

Paths and path integrals. Surfaces, parametric representations of surfaces, surface integrals. Divergence, Gauss' and Stokes' theorems. Sequences and series of numbers and functions. Taylor series and complex Fourier series. Extremal problems. Extremal problems with constraints and Lagrange multipliers. Exclusion: (MATB05Y)(MATB50, MATB55) Prerequisite: MATB41

Session: Winter Day

MATB43S Introduction to Analysis

The least upper bound principle for R. limits in R and R², continuous functions in one and two variables, space filling curves and nowhere differentiable functions, existence of extrema on closed and bounded sets, mean value theorems and the fundamental theorems of the calculus, the Riemann integral.

This course is designed for students whose interest in mathematics has been stimulated by their experience in the A26 - B41 - B42 stream, and who wish to acquire the analytic techniques which are essential for more advanced work. In particular MATB43S together with MATB42S may be used instead of MATB55S for prerequisite purposes. There will be a fundamental emphasis on rigorous analytic proofs. Exclusions: MATA27, (MATA55)(MATB05),

(MATB50)

Prerequisites: MATA26, MATA04 or (MATA45)

Corequisite: MATB42 Session: Winter Day

MATB44F Algebraic Structures I

Groups: subgroups, normal subgroups, quotient groups, homomorphisms, permutation groups. Rings: ideals, quotient rings, homomorphisms, Euclidean rings, polynomial rings. Extension fields, roots of polynomials.

Exclusion: (MATC44)

Prerequisites: MATA04 or (MATA45)

Session: Winter Day

MATB49S Linear Algebra II

Dual spaces, the transpose of a linear transformation, polynomial algebras over a field, prime factorization in F(x), determinants, Cayley-Hamilton theorem, invariant and cyclic subspaces, Jordan and rational canonical forms. Exclusion: (MATB40)

Prerequitie: MATB44 Session: Winter Day

MATB70S Introduction to Number Theory

Some properties of integers. Prime numbers. Congruences. Quadratic residues. Diophantine equations. Rational approximation. Three lectures per week. Prerequisites: MATA04 or (MATA45) Session: Winter Day

JMCC31F Combinatorics

A brief survey of the field of discrete mathematics with emphasis on problem solving. Elementary counting, generating functions and difference equations, permutations with restriction, Polya counting, graphs, network flow problems, balanced incomplete block designs, incidence structures.

Prerequisite: MATB44 (or CSCB38) and at least one other B-level course in mathematics or computer science.

Session: Winter Day

MATC49S Algebraic Structures II Isomorphism theorems, Sylow theorems. Finite fields, algebraic closure, the fundamental theorem of Galois theory. The problem of constructing a regular n-gon and trisecting an angle.

Prerequisite: MATB49 Session: Winter Day

MATC51F Differential Equations I

First order equations; separable, homogeneous, linear, exact, integrating factors. Brachistochrone, exponential growth, cooling bodies. Second order equations: reducible, linear, constant coefficients, Euler equations. Wronskian, undetermined coefficients, variation of parameters, Initial value problems. Higher order linear equations. Vibrations, electric circuits, laws of Kepler and Newton. Power series solutions and method of Frobenius. Laplace transforms. Three lectures per week. Prerequisites: MATA04Y: MATA26Y or (MATA55)(MATB05) or MATB41F and MATB42S. (The prerequisites from this group may be taken concurrently with C51)

Session: Winter Day

MATC53Y Real Analysis

Sets and functions, Zorn's lemma, cardinal arithmetic, Schroder-Bernstein theorem. Lebesque measure and integration, convergence theorems, derivatives and integrals. Continuity compactness and connectedness in metric and topological spaces, Baire category, Banach spaces and the basic tools of functional analysis. Hilbert space and linear opera-

Exclusion: (MATC50), (MATC55) Prerequisites: MATB49 (MATB40) and (MATB05) MATB41F and MATB42S and

MATB43 or (MATB55). Session: Winter Day

MATC56S Differential Equations II Existence and uniqueness of solutions. Global qualitative analysis of solutions. Stability Theory. Poincar(lac)e-Bendixson. First order linear systems. Boundary value problems. Sturm-Liouville. Fourier series, Partial differential equations. Separation of variables. Heat, wave and Laplace equations. Bessel functions. Introduction to calculus of variations or difference equa-

Prerequisite: MATC51 (or MATB51) Session: Winter Day

MATC60F Complex Analysis I

Complex arithmetic. Polynomials and elementary functions. Differentiation and the Cauchy Riemann equations. Cauchy's integral formula for differentiable functions and their Taylor expansion. Properties of analytic functions including Liouville's theorem, identity theorem, maximum modulus theorem and open mapping theorem. Laurent expansion and classification of isolated singularities. Residue calculus. Prerequisites: (MATB05) or (MATB55) or MATB42

Session: Winter Day

MATC65S Complex Analysis II

Applications of complex analysis to geometry, physics and number theory. Fractional linear transformations and the Lorentz group. Solution to the Dirichlet problem by conformal mapping and the Poisson kernel. The Riemann mapping theorem. The prime number theorem. Prerequisite: MATC60 Session: Winter Day

STAB22F Statistics

This course is an introduction to probability and statistics. The emphasis of the course is on motivation and applications and the treatment is essentially nonmathematical. A statistical computer package is used for most computations: however, no previous experience with a computer is required. The course covers: descriptive statistics, probability and expectation, correlation and regression, sampling, experimental design and methods of statistical inference. Exclusions: ANTC35, BIOB28, ECOB11, GGRB31, PSYB07, SOCB06 Session: Winter Day

STAB47S Introduction to **Mathematical Statistics**

This course is an introduction to the mathematical theory of probability and statistics. The course covers: probability models, marginal and conditional probability, expectation, the Weak Law of Large Numbers and the Central Limit Theorem, statistical models, the likelihood function, estimation, hypothesis testing, linear models. Prerequisite: MATA26/27 It is strongly recommended that students take STAB22F prior to taking

STAB47S. Session: Winter Day

STAC42S Multivariate Analysis

The multivariate normal distribution and associated distribution theory. Statistical inference for the multivariate normal. principal components analysis, factor analysis, discriminant analysis. Corequisite: MATB4 l

Prerequisite: STAB57 (MATB57)

Session: Winter Day

STAC67F Regression Analysis

The statistical analysis of linear models. Transformations. The analysis of covariance, Bioassay. Computational procedures.

Exclusion: (MATC67)

Prerequisite: STAB57 (MATB57)

Session: Winter Day

Courses Not Offered in 1989-90

MATA55Y Calculus with Analysis MATBO5Y Analysis JMCC32F Graph Theory and Algorithms for its Applications MATC43F Linear Algebra III MATC54F Differential Geometry STAC52S Experimental Design STAC62F Stochastic Processes

Medieval Civilization

Courses in the following Programmes encompass the breadth of European and Mediterranean culture running from the late Roman period and culminating, in the West, in the Renaissance of the fifteenth century.

Specialist Programme in Medieval Civilization

Supervisor: J.H. Corbett Students will be expected to complete ten full-course equivalents from the following areas:

 The Arts (Fine Art, Archaeology. Drama and Music)

History

3 Language and Literature

Philosophy and Religion

Students are to select three full-course equivalents each from three of the four areas, and one from the remaining area. HISB06Y is required of all participants. Two of the ten full-course equivalents must be C- or D-level seminars or C- or D-level reading courses requiring major research papers. Independent study in areas not otherwise covered, such as historical geography and linguistics, may be undertaken through reading courses. The curriculum can be supplemented according to the rules of the College by courses on the St. George campus. Course selection must be approved by the Supervisor.

Arts

ANTC52A* Field Methods in Archaeol-ANTD03Y* Analysis of Archaeological Material DRAB03Y The History of Theatre I DRAB12B Medieval and Early Tudor Drama: Texts and their Production FARA11S Medieval Art FARB10F/S Carolingian and Romanesque Art and Architecture FARB16Y The Arts in Northern Europe ca. 1400-1500 FARCO6F/S* Early Medieval Art FARCO7F/S* Gothic Architecture HUMC09H The Civilization of Spain I

MUSB04F/S Music of the Renaissance

History

ANTB55Y Cultures of the Middle East and the Islamic World ANTDOIS* Pre-Industrial Technology GERC02F/S* History of the German Language **GRHB03Y** Roman History from the Gracchi to Nero HISB06Y Europe in the Middle Ages HISB07Y Russia from the Thirteenth Century to the Present HISC61Y* The Beginnings of France:

Constantine to Char-

lemagne

HISD20F/S* Anglo-Saxon England The Crusades HISD62Y*

Language and Literature

ENGBOLY	Old English Language and
	Literature
ENGC30Y*	Chaucer
ENICC22V*	English Drama to 1642

ENGC33Y English Drama to 1642 FREB42Y* General History of the French Language

FREC22Y* Introduction to Medieval French Language and Literature

GERC02F/S* History of the German Language

ITAC23S* Survey of Italian Literature from the Middle Ages to the Renaissance

Dante and Medieval Culture ITAC31Y* ITAC32F/S Petrarch and Boccaccio ITAC34F/S* Chivalric Poetry of the Renaissance

LATAOIY Introductory Latin LATC30-34F*Supervised Reading LATC35-39S*Supervised Reading LATC40Y* Supervised Reading SPAB12S* History of the Spanish Language I

Philosophy and Religion

CLAC21Y* Greek and Roman Religion CLAC23F/S Christianity in the Greco-Roman World

HUMA11Y Greek and Roman Mythol-

Primitive Christian Litera-HUMB20Y

ture and Myth HUMB28Y Major Religious Traditions.

East and West HUMC12Y Studies in Greek Mythology

and its Influences PHLB40F/S Plato and His Predecessors I

PHLC40S* Plato and His Predecessors

Aristotle I PHLB42F PHLC42S* Aristotle II

Philosophers of the Middle PHLB44F Ages I

PHLC44S* Philosophers of the Middle Ages II

Philosophy of Religion PHLB61F/S PHLC61F/S* Studies in Philosophy of Religion

* Students should check these courses for prerequisites.

Major Programme in Medieval Civilization

Supervisor: J.H. Corbett Students will be expected to complete seven full-course equivalents from the following four areas:

- The Arts (Fine Art, Archaeology, Drama and Music)
- History
- Language and Literature 3 4 Philosophy and Religion
- Students are to select two full-course equivalents each from three of the four areas, and one from the remaining area. HISB06Y is required of all participants. One of the seven full-course equivalents must be a C or D level seminar or a C or D level reading course requiring a major research paper. Independent study in areas not otherwise covered, such as historical geography and linguistics, may be undertaken through reading courses. The curriculum can be supplemented according to the rules of the College by

courses on the St. George campus.

Course selection must be approved by

Music

the Supervisor.

Discipline Representative: TBA (284-3163) Music courses on the Scarborough Campus are designed for students who would like to study music at the university level but who have no intention of becoming professional performers or composers. Students who have taken music as a subject at high school or elsewhere will find a selection of historical. theoretical, and practical courses available, while students with no previous musical background can begin musical studies here and proceed to any of the upper-level courses. Most of these upper-level courses assume that the student has some ability in reading music of a simple nature, and all continuing students are encouraged and helped to acquire this skill as soon as possible. All students should consider taking advantage of the various opportunities that exist in the College for practical music making, particularly the series of Supervised Performance Courses. A Major Programme in Music History and Literature is offered (see below) and music is also a component of the Specialist Programme in the Arts and the Specialist Programme in Arts Administration. (see pages 57 and 99.)

Major Programme in Music History and Literature

Supervisor: TBA (284-3163) Students are required to complete a total of six full-course equivalents in Music and related areas. The six courses will be made up as follows:

1 MUSA10F Introduction to Music MUSB17F Materials of Music I MUSB30S Introduction to Music History and Literature MUSC04S Materials of Music II

2 Three full-course equivalents chosen from MUS courses. At least one and one-half courses in this section should be at the C or D level.

To satisfy the requirements of this section, students may substitute, in consultation with the Supervisor, one or more of the MUS courses offered on the St. George campus (but see information on limitation of courses).

One additional full-course equivalent in Music or another relevant discipline. The following courses are recom-

mended: DRAB03Y The History of Theatre I **HUMB90Y** Introduction to Arts Administration Vienna and the Origins of JHFC40Y Contemporary Culture ITAC33F/S Machiavelli and Aspects of the Italian Renaissance PHLB03F Philosophy and Art SOCC18F Sociology of Art and Culture

MUSA10F Introduction to Music I A study of the basic materials, principles of design, and cultural significance of representative works of Western music,

including popular music, from the 17th to the late 19th centuries.

Using music of the period from 1600 to 1900 students are introduced to ideas of musical style and design. These concepts prove to be of great help in listening to and understanding works by composers as different from each other as Monteverdi, Bach, Mozart, Beethoven, Chopin, and Brahms. We also look at the ways in which culture and society influence what composers write. Through intelligent, directed listening and through discussion and writing, students learn how to approach each piece of music on its own terms and, at the same time, how to communicate their ideas to others. No previous musical training is required, but students with some

background in performance should also find this introduction valuable. Exclusion: (MUSA01) Session: Winter Day TBA

MUSA20S Introduction to Music II

A continuation of MUSA 10F, concentrating on music of the late 19th and the 20th centuries and introducing the music of the Middle Ages and the Renaissance.

This course is designed for those students who would like to complete the survey of styles begun in MUSA 10F but who do not intend to continue with musical studies. Technical discussion will be kept to a minimum. There will be two hours of lecture per week,

Exclusion: (MUSA01) MUSB30S Prerequisite: MUSA10 Session: Winter Day

MUSBO1F Music of the Twentieth Century

Tracing the various trends of music in the present century from Debussy to the most recent electronic and multi-media presentations.

Selected compositions of Debussy, Schoenberg, and Stravinsky are analysed in detail to demonstrate the nature of the revolution which took place in music during the early years of the century. The course continues with a survey of the most significant composers and techniques of the succeeding seventy years. Topics to be discussed include the continuing commitment of some composers to tonality: developments in twelve-tone serialism; the influence of jazz; electronic music; the emergence of new aesthetic attitudes. There will be two lecture hours per week. Prerequisite: MUSB30S (MUSA01) Session: Winter Day TBA

MUSB03S Music in the Middle Ages A study of music in the period between the birth of Christ and the early 15th century.

This course is a survey of the major forms of music, both sacred and secular. found in Europe during the Middle Ages. The history of chant in the Roman Church, the secular song of the troubadours and trouveres, and the rise of polyphony are included. In addition, the aesthetic, philosophical, and sociological context for medieval music will be considered.

There will be two lecture hours per

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week. Prerequisite: MUSB30S (MUSA01Y) Session: Winter Day

MUSB17F Materials of Music I The basic materials of music from the 17th to the 19th centuries.

A study of elementary harmony and musical forms designed to equip the student with simple analytical and compositional techniques. Aural aspects of the subject will be emphasized, providing a secure foundation for the development of the student's "inner ear" -- that is, the ability to hear mentally what is written and to write down what the inner ear perceives.

There will be two hours of lecture/practical session per week. Prerequisite: MUSB30S (MUSA0I) Session: Winter Day

MUSCO4S Materials of Music II A continuation of MUSB17F

Exclusion: (MUSB24) Prerequisite: MUSB17

MUSB30S Introduction to Music History and Literature

A continuation of MUSA10F, concentrating on music of the late 19th and 20th centuries and introducing the music of the Middle Ages and the Renaissance. An introduction to elementary theoretical and analytical concepts.

This course is designed for those students who intend to progress to higher-level music courses. The repertoire section of the course (two hours per week) is taken in common with students in MUSA20S. The remaining two hours will be a seminar in which students will be introduced to basic analytical techniques. There will be two hours of lecture and two hours of seminar per week.

Exclusions: (MUSA01) MUSA20 Prerequisite: MUSA10 Session: Winter Day TBA

Performance Courses

The following performance courses are also available to students on a noncredit basis and are open to all faculty and staff members. Entrance for all participants is by audition. Credit students should preregister but will not be admitted to the course unless granted

permission of the Instructor during the first week of classes. Students may not take more than three

half-course equivalents for credit in these

MUSB20H Supervised Performance I Chorus

The practical study of a wide range of music from the choral repertoire. Students work as members of Scarborough College Chorus, a chamber choir which performs compositions drawn from the literature of the Renaissance to the present day. The choir gives public performances in each term.

In addition, credit students may be required to prepare works in conjunction with members of the instrumental performance programme. Previous experience is desirable but not essential. The course meets 2 hours per week for rehearsal with MUSB21H and MUSB25H. Exclusions: (MUSB09) and (MUSB10) Prerequisite or Corequisite: MUSA10 (MUSA01) Session: Winter Day

MUSB21H Supervised Performance II - Chorus

A continuation of MUSB20H. Exclusion: (MUSB10) Prerequisite: (MUSB09) or MUSB20 Session: Winter Day

MUSB22H Supervised Performance I Instrumental

The practical study of ensemble performance.

Students work in small ensembles (duets, trios, quartets) arranged to suit the abilities of individual performers. and prepare works for public performance within the College. The emphasis of the course is on the particular problems of ensemble performance and it assumes a basic competence on the chosen instrument.

Each group will meet for 2 hours per week, one hour with all students of MUSB22H and MUSB23H in a master class and one hour for group rehearsal and/ or coaching.

See timetable for time of master class; group rehearsal times to be arranged in first week of term. Exclusions: (MUSB09/B10) Prerequisite or Corequisite: MUSA10 (MUSA01) Session: Winter Day

MUSB23H Supervised Performance II - Instrumental

A continuation of MUSB22H. Exclusion: (MUSB10) Prerequisite: MUSB22 or (MUSB09) Session: Winter Day

MUSB25H Supervised Performance III - Chorus

A continuation of MUSB21. Prerequisite: MUSB21 Session: Winter Day

MUSB26H Supervised Performance III - Instrumental

A continuation of MUSB23H. Prerequisite: MUSB23 Session: Winter Day TRA

MUSD01F MUSD02S

MUSDO3Y Independent Studies A directed reading course for students who have demonstrated a high level of

academic maturity and competence. Qualified students will investigate a field of musical scholarship which is of common interest to both student and supervisor and which is not available for study otherwise. Candidates must find a willing supervisor and must submit a written application before the dates given below. Students meet regularly with the supervisor for consultation and prepare a 7,500-10,000 word paper for a term course or a 15,000-20,000 word paper for a year course. Students who have demonstrated exceptional ability in MUSB17F and MUSCO4S may in certain circumstances pursue a course of composition, producing a portfolio of original works in place of the essay. Prerequisite: At least two full-course equivalents in music at the B- and Clevel; permission of instructor to be obtained by the last date of classes in

Courses Not Offered in 1989-90

the previous term.

MUSBO2F/S Music of the Classic Period Prerequisite: MUSB30S (MUSA01)

MUSBO4F/S Music of the Renaissance Prereauisite: MUSB30S (MUSA01)

MUSBO5F/S Music of the Baroque Era Prereauisite: MUSB30S (MUSA01) MUSBO6F/S Music of the Romantic Period Prerequisite: MUSB30S (MUSA01) MUSB14F/S Jazz MUSCO5F/S The Symphony Prerequisite: MUSB30S (MUSA01) MUSCO6F/S Music for the Theatre Prerequisite: MUSB30S (MUSA01) Permission of instructor MUSCO7F/S Bach Prerequisite: MUSB30S (MUSA01) MUSCO9F/S Canadian Music Prerequisite: MUSB30S (MUSAO1) MUSC 1 1F/S Beethoven Prerequisite: MUSB30S

Myth and Religion

(MUSA01)

This Programme combines an examination of human perception and experience of our religious and mythic heritage and institutions from the anthropological, historical, philosophical, sociological, and literary points of view.

College Programme in Myth and Religion

Supervisor: J. Corbett (284-3280) Nine full-course equivalents to be completed as follows:

HUMA01Y Prologue 2 HUMAIOY Introduction to the Study of Religion HUMAllY Greek and Roman Mythology 3 PHLA01Y Fundamental Questions of Philosophy 4 ANTAOLY Introduction to Anthropology SOCA01Y Introduction to Sociol-Ogy **HISAOIY** The European World: An Introduction to History

5 One full-course equivalent from Group (A) and one full-course equivalent from Group (B)

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	(A)	
	HUMB20Y	Primitive Christian
	********	Literature and Myth
	HUMB28Y	Major Religious
		Traditions: East and
	HUMC12Y	West Studies in Greek
	nomC121	Mythology and its
		Influence
	CLAC23F/S	Christianity in the
	CEACESI75	Greco-Roman World
	PHLB61F/S	Philosophy of Religion
		The state of the s
	(B)	
	ANTB23Y	Comparative Mythology
	ANTC05Y	Anthropological Study
		of Religion
	SOCB03Y	History of Social
		Thought
•	HUMC10F/S*	
		half further full-course
	equivalents of	rawn from (2), (4) and
	(5) above and	from the following: Systems of Thought
	CLAC04Y	Greek and Roman
	CLACO41	Tragedy
		Exclusion: DRAB14
	CLAC21Y	Greek and Roman
		Religion
	HISB06Y	Europe in the Middle
		Ages
	HISD14Y*	The European Mentality
		in the Early Modern
		Period, 1500-1700
	HISC61Y*	The Beginnings of
		France: Constantine to
	1110000314	Charlemagne
	HISC83Y*	Europe in the Reformation Era, 1450-
		1650
	HISC84F/S	Popular Culture in Early
		Modern Europe
	HISD62Y*	The Crusades
	HUMB26Y	Women in the Major
		Western Religions
	HUMB29F/S	Religion and Western
		Culture
	PHLB44F/S	Philosophers of the
	DI II D C : = -0	Middle Ages I
	PHLB61F/S	Philosophy of Religion
	PHLC44F/S*	Philosophers of the
	SOCB21Y*	Middle Ages II Sociology of Religion
	SOCD211	POCIOIORA OF MEHIRIOU

^{*} Students should check these courses for prerequisites

Neurosciences

The Neurosciences encompass aspects of a variety of disciplines that have a common goal of understanding how the nervous system works. Techniques borrowed from constituent disciplines like anatomy, physiology, biochemistry, psychology and pharmacology are being used to unravel some of the mysteries of the brain and its mechanisms of action. Investigators in the Neurosciences have also made fundamental contributions in the clinical aspects of medicine and behaviour.

The Specialist Programme in Neuroscience is administered jointly by Psychology and Biology and primarily includes courses from these disciplines. It has been designed for students who are interested in pursuing graduate training in the Neurosciences. The Programme consequently has a heavy laboratory component and students are encouraged to become actively involved in ongoing research. The subdisciplines represented at Scarborough College include behavioural neuroscience, neuroanatomy, neurophysiology, neurochemistry and cell biology (applied to nervous system).

Specialist Programme in Neurosciences

Supervisor: N.W. Milgram (284-3353) Office: S-513

Note: Entry into this Programme is limited to a maximum of 25 students each year and will be based on grades obtained in PSYA01Y, BIOA03Y, and CHMA02Y.

Balloting for acceptance into the Programme will occur in the Spring term. Acceptance at the end of second year is possible depending on availability of space. Students should consult the Supervisor of Studies.

The Programme requires completion of 13 full-course equivalents. Relevant Neuroscience courses from the St. George or Erindale campuses may only be used to satisfy a requirement with the permission of the Supervisor of Studies.

1 All of the following 8.5 full-course equivalents: BIOA03Y Introductory Biology PSYA01Y Introduction to Psychology

	CHMA02Y	General Chemistry
	PSYB07F/S	Data Analysis in
	or	Psychology
	BlOB28F/S	Elementary Statistics for
		Biologists
	BIOB17Y PSYB60F/S	Animal Physiology Brain Mechanisms and
	F31B00F/3	Behaviour: I
	PSYC61F/S	Brain Mechanisms and
		Behaviour: II
	PSYC63Y	Physiological Psychol-
	CHMB05Y	ogy Laboratory Organic Chemistry I
	JBCC35Y	Introductory Biochemis-
	•	try
2	At least 1.5 f	ull-course equivalents
	from the foll	owing with no more
	the supervise	course equivalent from ed study courses:
	PSYD60F/S	Current Topics in Phy-
		siological Psychology
	PSYD62F/S	Neuroplasticity:
		Mechanisms and Func-
	DEVIDERE /C	tion
	PSYD67F/S PSYD68F/S	Psychobiology of Aging Developmental Psycho-
	131000175	biology
	BIOC31F/S	Invertebrate Neurobiol-
		ogy
	NROC90/	Cumanusad Study in
	C93F/S/H	Supervised Study in Neuroscience
	NROD98Y	Thesis in Neuroscience
3	At least 1.0 f	ull-course equivalent
	from the foll	owing:
	PSYB01F/S	Psychological Research
	PSYC08F/S	Laboratory Experimental Design in
	F31C00F/3	Psychology
	PSYC42F/S	Learning Laboratory
	PSYC58F/S	Experimental Psychol-
		ogy Microcomputer
	ЈВСС36Н	Laboratory Laboratory in Biochem-
	JECCJOH	istry
	BIOB25F/S	Vertebrate Histology:
		Celis and Tissues
	BIOD19F/S	Molecular Biology of the
4	At least 1.0 f	Gene ull-course equivalent
4	from the foll	owing:
	BIOBOSY	Genetics
	BIOB23Y	Developmental Biology
	BIOB32F/S	Vertebrate Morpho-
		genesis
	BIOC20Y	Cell Biology
	BIOC33F/S	General Biology of Ver-
	BJPC70F/S	tebrates Theoretical Foundations
	מ/יונע	of Piology I

of Biology I

5	At least 1.0 full-course equivalent from the following:		
	PSYB32F/S	Abnormal Psychology	
	PSYB50F/S	Sensation and Percep- tion	
	PSYB51F/S	Perception and Cogni- tion	
	PSYB57F/S	Memory and Cognition	
	PSYD40F/S	Current Topics in Animal Learning	
	PSYD41F/S	Research in Operant Conditioning	
	PSYD85F/S	History of Psychology	
	JLPD55F/S	Language and Speech Disorders	
•	Studente planning on graduate work		

Students planning on graduate work in Neurosciences are advised that undergraduate courses in Physics and Calculus may be required for that graduate programme.

Major Programme in Neuroscience Supervisor: N.W. Milgram (284-3353) Office: S-513

This Programme is no longer offered, but students currently enrolled will be able to complete it.

NROC90F/S/H NROC93F/S/H Supervised Study in Neuroscience

A reading or research project. These courses provide an opportunity to investigate an area in depth after completing basic coverage in regularly scheduled courses. They are not intended as substitutes for advanced courses in fields where these are available. The student must demonstrate that his or her background is adequate for the project proposed and should present a clear rationale to prospective supervisors. Frequent consultation with the supervisor is necessary and extensive library research and/or data collection will be required. Such a project will culminate in a written submission. These courses cannot be repeated for credit. Prerequisite: Three full-course equivalents in Psychology or Biology:

permission of instructor. Exclusions for NROC90: PSYC90, BIOD01 (BIOCO1) Exclusions for NROC93: PSYC93, BIOD01 (BIOCO1)

Session: Summer Day, Summer Evening, Winter Day, Winter Evening

Supervision by a faculty member

This course is intended to offer to qualified students the opportunity to engage in a year-long research project under the supervision of an interested member of the faculty in the Neuroscience areas (Psychology or Biology). The project will culminate in a written report in the form of a thesis and a defence of that report. During the course of the year, at appropriate times, students will meet to present their own research proposals, to appraise the proposals of others and to discuss the results of their investigation.

Students will meet as a group with the coordinator as well as individually with the supervisor.

Prerequisite: Satisfactory completion of fifteen full-course equivalents in any discipline, but including PSYB07; one laboratory half-course in Psychology or Biology, consent of a faculty member in Psychology or Biology to serve as research supervisor.

Exclusions: (NROC98), PSYD98 (PSYC98), BIOD02 (BIOC02) Session: Winter Day

Session: Winter Day
Coordinator: TBA

Philosophy

Discipline Representative: W.E. Seager (284-3197)

Philosophy consists of a critical analysis of the ideas and concepts fundamental to such major areas of human concern as science, society, religion, morality, and art. Its aim is to scrutinize the basic notions in these areas, to clarify the principles on which they are founded, to evaluate such beliefs for their soundness, and to explore their implications for a comprehensive understanding of the world in which we live. Philosophy originates in the desire to know, and its value consists of the systematic development of a questioning attitude and critical awareness.

Course offerings in Philosophy form a two- or three-year cycle: courses not offered in one academic year will normally be available in one of the following years. PHLAO1, PHLBO1, PHLB20, PHLB50, and PHLB60 are normally offered every year. It should be noted that in almost all subject areas Fall/Spring sequences are offered which, when combined, provide the equivalent of a full course whose first half is at the B-level,

and whose second half is at the C-level. Courses in a sequence are usually scheduled in the same time slot. The B-series of courses is arranged in decade units according to areas within Philosophy, not in order of difficulty, and this arrangement is followed at the C-level (except for seminar courses).

Note to Majors and Specialists:

Many of the philosophy courses can be offered only on a two- or three-year rotation. The courses listed as Not Offered in 1989-90 are likely to be offered the following year, and some of this year's offerings will be dropped to make room for them. You should try to plan your programme a year or two ahead to be sure of getting the courses you want. See the Discipline Representative for further information. Friday 2-4 p.m. is reserved for the Philosophy Club. Interested Students and staff should try to leave these hours free.

Specialist Programme in Philosophy Supervisor: W.E. Seager (284-3197) Students must complete at least fourteen full-course equivalents including:

1 PHLAO1Y Fundamental Questions of Philosophy
PHLBO1F/S Ethics
PHLB2OF/S Belief, Knowledge, and

Truth F/S Symbolic Logic

PHLB50F/S Symbolic Logic
PHLB60F/S Existence and Reality

- 2 Four half-courses from PHLB40F/S to PHLB48F/S and PHLC40F/S to PHLC48F/S
- 3 Four full-course equivalents in Clevel or D-level Philosophy courses.
- 4 Three additional full-course equivalents in Philosophy courses.
- 5 Two full-course equivalents from cognate courses in other disciplines agreed upon after consultation with the Supervisor.

Major Programme in Philosophy Supervisor: W.E. Seager (284-3197) Students must complete at least seven full-course equivalents in Philosophy including:

1 PHLA01Y Fundamental Questions of Philosophy

2 Two of the following half-courses: PHLB01F/S Ethics PHLB20F/S Belief, Knowledge and Truth

PHLB50F/S Symbolic Logic

PHLB60F/S Existence and Reality
3 Two half-courses from PHLB40F/S to
PHLB48F/S and PHLC40F/S to
PHLC48F/S

4 Two full-course equivalents in Clevel or D-level Philosophy courses.

5 Two additional full-course equivalents in Philosophy courses. NOTE:

In certain cases students combining a Major Programme in Philosophy with a Programme in another discipline may elect to modify the Major Programme. Students electing modifications must have the approval of the Supervisor.

Coanate Courses

Philosophy students should seriously consider the advantages of studying a foreign language, especially French, German, Greek, or Latin. Two full-course equivalents in a foreign language will give students access to much philosophical thought in its original language and to many secondary sources not available in English.

There is a variety of courses in Classics, English, Fine Art, History, and Humanities which will help to supplement the Programmes of many students. In particular, students should consider the following courses: HUMAO1Y, Prologue; HISAO1Y, European World; ASTAO3Y, Introduction to Astronomy; JBHBO1Y, Introduction to the Biological Sciences; such courses provide important intellectual and historical background for the study of Philosophy.

PHLA01Y: Fundamental Questions of Philosophy

A discussion of some of the fundamental questions of philosophy. What is good reasoning? What is morality and can it be justified? Is it reasonable to adhere to a religion? What is knowledge? Are social practices justifiable? Is materialism true? Are humans free?

LO 1

Some of the world's major philosophers will be studied with a view to answering some of the basic questions which have confronted humans from ancient times to the present. A more detailed description of this section will be available in the Spring of 1989.

Session: Winter Day TBA

LO2

We will study philosophers from ancient Greece to the present and consider some central questions concerning "The Good," "The True," and "The Beautiful" as issues in personal, moral, social, and political life, the relation between thought and action, life and death, and the role of imagination in human existence. We will study such philosophers as Heraclitus. Plato (The Last Days of Socrates, Gorgias. The Symposium). Aristotle (On Friendship), Thoreau (On Civil Disobedience), Kant (The Foundations of a Metaphysics of Morals), Nietzsche (On the Genealogy of Morals, Beyond Good and Evil), de Beauvoir (The Ethics of Ambiguity), Goldmann, and selected examples of imaginative literature. Session: Winter Day W.C. Graham

LO3

An historical approach will be taken to these questions. We will begin with the philosphers of ancient Greece, then consider their influence on Christianity in the medieval period. We will then study the philosophers of the early modern period, and conclude with a look at contemporary philosophy. Study and lectures will be about evenly divided between descriptions of the history of philosophy and first-hand acquaintance with the philosopher's own writings. The text will be Classics of Western Philosophy, ed. Steven M. Cahn. Session: Winter Day G. Nagel

L04

A basically historical approach to these questions will be taken. However, the course begins with a brief examination of logic and the patterns of incorrect reasoning (the fallacies). We will then read Plato's Republic, Descartes' Meditations on The First Philosophy, Hume's Enquiry Concerning Human Understanding, and, time permitting, Kant's Prolegomena to any Future Metaphysics. Session: Winter Day W.E. Seager

L30

This course will examine what it is that philosophers have done, with the aim of finding worthwhile pursuits for anyone who wishes to be reasonable. We will examine philosophers engaged in a number of tasks in their historical contexts and will draw what conclusions we can. Selections from the works of Plato, Augustine, Anselm, Descartes, Hume, Mill, and others will be studied. Session: Summer Evening T. Mathien

PHLBO1F Ethics I

A study of philosophical problems and postures in ethics, such as the relativity of values, the justification of morality, moral scepticism, ethical egoism, utilitarianism, deontologism.

This course is an introduction to the problems and concepts of ethical theory as found in four pre-eminent texts: The Republic by Plato, Nichomochean Ethics by Aristotle, An Enquiry Concerning the Principles of Morals by Hume, and Kant's Foundations of the Metaphysics of Morals.

Lectures will be on philosophical issues concerning the nature of morality, and on grounds for its authority. Topics in "applied ethics" - or applications of philosophical reasoning to moral issues of euthanasia, abortion, and the like - may be taken up in essays.

Session: Winter Day

J.H. Sobel

PHLBO3F Philosophy and Art A study of the nature and purposes of art.

We will study history of aesthetics from Plato to Camus. Each week will involve readings, lectures, and discussion of another theory. The theories vary in their topics and concerns. Plato. Tolstoy, and Camus discuss art in its social function - its power to influence people. Burke is interested in the psychology of the aesthetic response. Kant borrows from Burke and adds his own theory of pure art. Hegel and Schopenhauer regard art metaphysically, as an expression of the most fundamental features of the universe. Text: Peyton Richter, Perspectives in Aesthetics. Session: Summer Evening G. Nagel

PHLB05S Social Issues

An examination of the moral questions surrounding some of the following: abortion, capital punishment, human sexual relations (homosexuality, adultery, etc.), eugenics, ecology, civil disobedience, policies towards the Third World and towards the poor. Session: Winter Day, Winter Evening T.B.A.

PHLB10F Political Philosophy
A study of the philosophical problems of
the state and society such as the individual in society, the coercive state, the
stateless society.
Session: Winter Day,
D.B. Cook

PHLB20F Belief, Knowledge, and Truth

An examination of such questions as certainty, the problem of scepticism, the scope and limits of human knowledge, the subjectivity of perception, rationality, and theories of truth.

A more detailed description will be available in the Spring of 1989.
Session: Winter Day
TBA

PHLB30S Existentialism

A study of the views and approaches characteristic of such writers as Kierkegaard, Husserl, Jaspers, Heidegger, and Sartre.

We will study three existentialist thinkers - each with a distinctive approach to authenticity, the realization of self, the meaning of life, and other such themes: Kierkegaard, who relates the themes to religion; Heidegger, whose approach is metaphysical; and R.D. Laing, a psychiatrist. Readings: A. Kierkegaard Anthology edited by Robert Bretall, Basic Writings, Martin Heidegger, Self and Others, R.D. Laing. Session: Winter Day G. Nagel

PHLB42F Aristotle I

A study of central themes in the philosophy of Aristotle.

The Aristotelian Revolution in Philosophy, which sought to establish a radically new basis for the relation between human beings and the natural and social worlds, provides a key to the significance of Aristotle for the present

We will discuss Aristotle's conception of philosophy in relation to philosophers who came before him. We will study his thought in four main areas: ethics, psychology, nature, and aesthetics. His approach is open, alive, not dogmatic. He raises questions and lays out problems which remain at the centre of philosophical inquiry today. We will raise such questions as, what is soul? What kind of life is worth living? What is truth? How can we interpret the world in which we live? Session: Winter Evening W.C. Graham

PHLB46F Philosophy of the Early Modern Age I

Philosophy in the seventeenth century.

The political, religious, and scientific developments in the sixteenth century upset the medieval reconciliation of faith and reason. In this climate of uncertainty, the philosophers of the seventeenth century try to find a new reconciliation. The course will be a survey of their efforts.

Text: Richard Popkin, The Philosopohy of the Sixteenth and Seventeenth Centuries. Lectures and discussion. Session: Winter Day G. Nagel

PHLB50F Symbolic Logic I

An introduction to formal techniques of reasoning, sentential logic, and quantification theory or predicate logic.

An introduction to formal techniques of reasoning, deductive and inductive, the course covers sentential logic, and quantification theory. The emphasis is on appreciation of and practice in techniques, for example, for formal analysis of English statements and arguments, and for construction of clear and rigorous proofs. Topics of more theoretical interest are presented in lectures. D. Kalish, R. Montague and G. Mar, Logic: Techniques of Formal Reasoning. Exclusion: JMPB50 Session: Winter Evening J.H. Sobel

PHLB60S Existence and Reality A consideration of problems in metaphysics.

A more detailed description will be available in the Spring of 1989.
Session: Winter Evening TBA

PHLB61F Philosophy of Religion
A study of such topics as the nature and
existence of God, immortality, God and
morality, and religious language and
symbolism.

The theme around which the course is organized is the problem posed by evil: if God is all good and all powerful, why is there pain and suffering? A discussion of the issue in the Jewish and Christian traditions takes us through topics such as the relationship between religion and ethics; the possibility of miracle; immortality; and the reasonableness of theistic

Session: Winter Day P.W. Gooch

belief.

PHLB81F Theories of Mind

An examination of various philosophical issues regarding the relation of the mind to the body and the nature of psychological explanation.

An examination of questions concerning the nature of mind and thinking. Traditionally, the mind has been conceived as a mysterious component of human beings, existing in relative independence from the conditions of physical life. Modern research into the structure and function of the brain have thrown doubts on this view, and work in computer science suggests that minds and thinking can even be attributed to machines. We will examine the nature of the mind, and such questions as what thinking is, and whether or not machines can have a "mental life." Texts to be announced. Session: Winter Day W. Seager

PHLCO1S Ethics II

Major twentieth-century ethical theories are studied: for example, G.E. Moore's non-naturalism, W.D. Ross' intuitionism, J.L. Mackie's moral scepticism, and R.M. Hare's universal prescriptivism.

Lectures will be on metaphysical issues to do with morality, for example, with whether or not its distinctions are "real" and its authority "non-subjective." Topics in "applied ethics" - or applications of philosophical reasoning to moral issues of euthanasia, abortion, and the like - will be taken up in class reports, and perhaps also in essays. Exclusion: (PHLCO2) Session: Winter Day J.H. Sobel

1.56 - I

PHLC46S Philosophy of the Early Modern Age II

Philosophy in the eighteenth century.

The rapid political and economic changes of the early modern period, the abandonment of classical ideas in the arts, and the progress of science all combine to force eighteenth-century thinkers to abandon the seventeenth-century search for a stable rational order. In its place they put criticism and naturalism: the assessment of constantly changing ideas, and the accommodation of man to a world of change. This course will be a survey of the main thinkers of the period.

Lewis White Beck, Eighteenth Century Philosophy. Lectures and discussion. Exclusion: (PHLB47) Prerequisite: One full-course equivalent or half-course in Philosophy Session: Winter Day G. Nagel

PHLC53S Games and Decision

A survey of theories of rational decision. of the interaction of rational agents, and of the proper bearing of individual preferences on social policy.

Connections with doctrines and issues in ethical and political theory will often be obvious and will sometimes be developed. There are no specific prerequisites, but a certain intellectual sophistication and capacity for abstract thought is required. Prerequisite: One full-course equivalent (not necessarily in Philosophy). Session: Winter Day J.H.Sobel

PHLC54S Metalogic

An introduction to the metatheory of standard logic.

This course will take up formal interpretations of sentential and predicate logic, proofs of completeness and soundness, theorems concerning various limitations of logical systems, and possible philosophic implications of these things.

Prerequisite: PHB50 Session: Winter Day W. Seager

BJPC70F Theoretical Foundations of Biology I

An examination of the conceptual and logical aspects of explanation, theory, and model construction in Biology.

The following topics will be covered: the concept of cause and its role in law and causal explanation in biology, the logical structure of the modern synthetic theory of evolution, tempo and mode in evolution (punctuated equilibria and phyletic gradualism), and the rationality of science. Exclusion: PHLB70 (PHLB71)

Prerequisite: BIOA03 Session: Winter Day P. Thompson

BIPC71S Theoretical Foundations of Biology II

An examination of current theoretical controversies in evolutionary biology.

The following topics will be covered: the controversy over the units of selection; "Punctuated Equilibria" as a new and general theory of evolution; culture and the evolutionary process; and cladistic versus evolutionary systematics. Exclusion: (PHLC71) Prerequisite: BJPC70 Session: Winter Day P. Thompson

PHLC75F/S-C94F/S Seminar in Philosophy

A study in depth of a philosopher or philosophers or of a philosophical problem. Limited enrolment: 15.

PHLC83F Seminar in Philosophy: **Emotions**

A study principally of attempts by Spinoza and others to construct a theory of emotions, but some readings from contemporary authors. We will consider whether the emotions can and should be brought under rational controls, whether a person is always the best judge of her or his own emotions, and whether it makes sense to regard certain emotions (e.g. pity) as good and others (e.g. contempt) as bad. Prerequisite: Two B-level half-courses in Philosophy Session: Winter Day G. Nagel

PHLC84S Seminar in Philosophy: Political Philosophy in the Twentieth Century

An interpretation of central themes in recent political philosophy, including a study of such thinkers as Weber, Sartre, Camus, Adorno and the Frankfurt School, Prerequisite: Two B-level half-courses in Philosophy

Session: Winter Day

D.B. Cook

PHLC85F Seminar in Philosophy: Feminism

This course will focus on selected themes in the philosophical tradition in dialogue with central issues in contemporary feminist theory: especially 1) the distinction between public and private. production and reproduction from Plato to Marx: 2) the relation between a politics of sisterhood and the "recovery" of motherhood; 3) the relation between self and other in the development of female identity with reference to the theories of Hegel, Freud, and Lacan.

Prerequisite: Two B-level half-courses in Philosophy.

Session: Winter Day

TBA

PHLC89S Seminar in Philosophy: Friedrich Nietzsche and Jacques

Friedrich Nietzsche is recognized as one of the most important and controversial philosophers of the modern age. In the past two decades Nietzsche's writings have gained importance as being relevant to present philosophical concerns and problems.

One of the contemporary philosophers strongly influenced by Nietzsche is Jacques Derrida, the controversial founder of philosophical "deconstruction."

We will study Nietzsche's basic writings and his theories of the will to power, the superman, etc., and the basic views of Jacques Derrida. Prerequisite: Two B-level half-courses in Philosophy Session: Winter Evening

W.C. Graham

PHLC93S Seminar in Philosophy: Topic to be Announced

Detailed information will be available in the Spring of 1989.

Prerequisite: Two B-level half-courses in Philosophy Session: Winter Day

PHLC94S Seminar in Philosophy: Indian Philosophy

The aim of this course is to provide an introduction to traditional philosophical thought in India. While to many, Indian philosophy suggests the mysterious and the mystical, its philosophical tradition is no more mysterious or mystical than the Western Philosophical tradition. exploring as it does all the issues familiar to anyone who has studied Western Philosophy.

The first part of the course will survey the vast philosophical landscape of classical India. The hope is to provide students with some idea of the diversity and richness of classical Indian philosophical thought and to orient them for the careful reading of an important and representative philosophical text which will comprise the second part of the course. The text addresses the metaphysical issue of knowledge, namely, what is knowledge and how is it acquired. Prerequisite: Two B-level half-courses in Philosophy

Session: Summer Evening B. Gillon

PHLD10Y Senior Thesis

An opportunity for you to engage in philosophical research and to write a major philosophical essay on a topic approved by the faculty in Philosophy.

It is your responsibility to choose a topic and to submit it, together with a proposed working outline and preliminary bibliography, to the Programme Supervisor before the end of the second week of the fall term (ideally, before the end of the previous spring term). If the topic is approved you will consult with relevant faculty members during your work on the thesis.

In the spring term, and before submitting the completed thesis for evaluation, you will present a seminar report on your work to fellow students and staff. The seminar must be held prior to the final two weeks of classes, and you are responsible for setting a date for it in consultation with the Programme Supervisor.

The thesis will be evaluated by at

Physics

least two philosophy faculty members. Prerequisite: You should be completing the last year of a four year (twenty course) degree, and have at least six full-course equivalents in philosophy, at least two at the C-level. Session: Winter Day Staff

PHLD95F/S PHLD96F/S PHLD97F/S PHLD98F/S PHLD99Y Independent Studies

These courses are designed for students who wish to engage in advanced-level work on a well-defined topic. Hence, when requesting permission of the Programme Supervisor, students will be required to provide a written 200-300word proposal which must include: a rationale for including the course in his/her programme of study, a clear indication of what he/she expects to achieve in the course, and a tentative bibliography. Students who require assistance should consult with the Programme Supervisor.

Note:

Independent studies courses are normally open to Majors and Specialists in Philosophy during their final five full courses of study. Application should be made to the Programme Supervisor, preferably in the preceding term, stating the topic to be pursued in a description of about one page. The Supervisor will arrange to have the study directed by an appropriate member of faculty. Prerequisites: At least 3 full-course equivalents in Philosophy including at least one at the C-level; permission of Supervisor.

Exclusions: (PHLC95-C99) Session: Winter Day

Staff

Courses Not Offered in 1989/90

PHLBO4F/S Philosophy of Literature PHLBO6F/S Moral Theory and Nuclear Deterrence

PHLB11F/S Philosophy of Law

PHLB12F/S Marx and Marxism PHLB14F/S Philosophy of Social Sci-

ence Prerequisite: One full-

move and influence each other. The course equivalent in Philosophy or in the Division of Social Sciences.

PHLB15F/S Philosophy of Education PHLB16F/S Philosophy of History

PHLB17F/S Anarchism

PHLB40F/S Plato and his Predecessors I PHLB44F/S Philosophers of the Middle

Ages I

PHLB48F/S Philosophy in the Late

Modern Age I

PHLB53F/S The Art of Thinking PHLB70F/S Philosophy of Science

Exclusion: BJPC70F (PHLB71) Prerequisite: One fullcourse equivalent or halfcourse in Philosophy or in the Division of Physical or

Life Sciences

PHLB80F/S Philosophy of Language

PHLC05F/S Biomedical Ethics Prerequisite: PHLB05 or

PHLB01 PHLC11F/S Topics in the Philosophy of Law

PHLC40F/S Plato and his Predecessors П

PHLC42F/S Aristotle II

Exclusion: (PHLB43) Prerequisite: One fullcourse equivalent or half course in Philosophy

PHLC44F/S Philosophers of the Middle Ages II

Exclusion: (PHLB45) Prerequisite: One fullcourse equivalent or halfcourse in Philosophy

PHLC48F/S Philosophy in the Later

Modern Age II PHLC50F/S Symbolic Logic II Exclusion: JMPC51 Prereauisite:

JMPB50/PHLB50 PHLC52F/S Modal Logic and Probability PHLC61F/\$ Studies in Philosophy of

Religion Prereauisite: PHLB61

PHLC92F/S Ways of Interpreting the World

Physics

Discipline Representative: Prof. J. King. (284-3318)

Physics is the study of the basic laws which describe how material objects effect of a star on the motion of a planet, or of the Earth on the motion of a satellite, the effect of a molecule on a neighbouring atom, or of an atomic nucleus on an electron, may be accurately

described in terms of the general laws of physics. Although Newton's laws of motion adequately describe some of these situations, in most cases it is necessary to apply the more recently discovered refinements of these laws quantum mechanics and the theory of relativity together with the understanding of electric and magnetic effects so beautifully synthesized in Maxwell's theory of electromagnetism. From these basic principles many of the properties of gases, liquids, solids, plasmas, and nuclear matter may be understood in terms of the interactions among the individual units of which these forms of matter are composed.

Physics allows us to describe the properties of light, sound and heat up to the point where these enter our senses and of x-ray, radio, cosmic and other radiations of which we are not directly aware. The remarkable properties of some materials under extreme conditions of temperature and pressure, and of other materials when an electric current passes through them, form the basis of a wide range of applications of the subject.

It is possible to develop, in mathematical language, theories that run so closely parallel to the development of physical phenomena that they may be used to accurately describe and even predict the results of many carefully controlled experiments. The study of physics, therefore, requires some studies both of mathematics and of the techniques that are needed in the performance of accurate experiments.

At Scarborough College, a student interested in Physics can take the Major Physics Programme or the Specialist Physics Programme. (The latter Programme is given jointly with the Department of Physics on the St. George Campus.) In addition, there is a Joint Specialist Programme in Computer Science and Physics (see Computer Science), and a Specialist (Co-operative) Programme in Computer Science and Physics (see Cooperative Programmes).

The listed prerequisites and corequisites imply others not explicitly listed; details are available from the Supervisor and the Registrar's Office. Students interested in physics

should also refer to: ASTC10Y Relativity and Cosmology

Specialist Programme in Physics Supervisor: J. King (284-3318) In conjunction with the Physics Department on the St. George campus, Scarborough College offers a Specialist Programme in Physics. This consists of 15 full-course equivalents as listed below. The first two years are given on the Scarborough campus but the majority of the required courses in the third and fourth years must be taken on the St. George campus. A special arrangement allows Scarborough students who are registered in the Physics Specialist Programme to do so. This Programme is very demanding and only students with considerable ability and interest in physics and mathematics should register in it. It is essential that students choose the appropriate set of Mathematics courses from the beginning since transfers between the sets are restricted. Students are strongly recommended to take at least one half-course in Com-

All Scarborough Physics Professors teach and do research in the Physics Department on the St. George Campus. This makes it easy to keep in contact with Scarborough students in the Physics Specialist Programme when they are in their third and fourth year.

All students registered in this Programme should see Prof. King during their second year of studies.

First year:

puter Science.

PHYA03Y Physics for the Physical and

Life Sciences MATA26Y Calculus

(MATA55Y Calculus with Analysis) MATA04Y Linear Algebra I

Second year:

MATC5 1F

PHYB01S Electricity and Magnetism PHYB03F Introductory Electronics PHYB04F Waves and Vibrations PHYB08H Intermediate Physics Laboratory PHYB17S Quantum Physics A PHYB19S Thermal Physics A MATB41F Techniques of the Calculus of Several Variables I MATB42S Techniques of the Calculus of Several Variables II

Differential Equations I

Third year:

PHY326H/325Y Quantum Physics Laboratory

(PHYC05H Advanced Physics Labora-

PHY351F Advanced Classical Mechan-

PHY352S Electromagnetic Fields and

Waves

Macroscopic Physics PHY354S PHY355F Quantum Mechanics I PHY356S Quantum Mechanics II APM346H Differential Equations MAT334H Complex Variables

(MATC60F Complex Analysis I)

Fourth year:

Three and one-half full-course equivalents from 400-level PHY courses on the St. George campus, with the same restrictions as apply to students in the Faculty of Arts and Science.

NOTE: Provided that students in this Programme are registered in at least one of the required St. George campus courses, students who have at least 9.0 credits at the beginning of the session are exempt from the rule on equivalent courses on other campuses and students who have at least 14.0 credits at the beginning of the session are exempt from the rule on overall limits on courses on other campuses.

Major Programme in Physics

Supervisor: J. King (284-3318) In this Programme, students must complete eight full-course equivalents in Physics and Mathematics as specified below. After completing this Programme, the student will have a good education in the basic principles and applications of modern physics. It is ideal for physics students who do not plan on doing graduate studies after their B.Sc. All the courses listed are given at the Scarborough Campus.

It is strongly recommended that students in this Programme also take at least one half-course in Computer Science.

First year:

PHYA03Y Physics for the Physical and

Life Sciences

MATA26Y Calculus

OF

(MATA55Y Calculus with Analysis)

Second year:

PHYB01S Electricity and Magnetism PHYB03F Introductory Electronics PHYB04F Waves and Vibrations PHYB08H Intermediate Physics Laboratory

PHYB17S Quantum Physics A PHYB19S Thermal Physics A MATB41F Techniques of the Calculus

of Several Variables I MATB42S Techniques of the Calculus

of Several Variables II

Third year:

MATC51F Differential Equations One and one-half additional full-course equivalents from PHYC04F, PHYC05H, PHYC07F, PHYC08S and PHYC09S.

For Specialist Programme in Computer Science and Physics see Computer Science.

For Specialist (Co-operative) Programme in Computer Science and Physics see Co-operative Programmes.

PHYA03Y Physics for the Physical and Life Sciences

Topics include: classical mechanics. motion under a uniform acceleration. planetary orbits, collisions, rotational motion, potential energy and work; wave motion. Einstein's special theory of relativity, E = mc². Electricity and magnetism, Maxwell's theory of electromagnetic waves. Quantum theory, a particle in a box, applications to nuclei, atoms and solids, nuclear fission and radiation.

Two lectures and one tutorial per week, and a three-hour laboratory every second week.

Corequisite: MATA26 or MATA27 or (MATA55)

Session: Winter Day

PHYBO1S Electricity and Magnetism Coulomb's law, electric fields, Gauss' law,

electric potential, capacitance, dielectrics, magnetic forces and fields, inductance, magnetization.

Prerequisite: PHYA03 Corequisite: MATB41

Other recommended courses: PHYB03:

PHYB08; MATB42 Session: Winter Day

PHYB03F Introductory Electronics Linear circuit theory (DC.AC and transients), simple filters. Non-linear elements, including diodes and transistors;

rectifier, amplifier, and pulse circuits. Logic gates, Boolean algebra, and digital electronics.

Two lectures per week, a three-hour laboratory every second week, and a one-hour tutorial every second week. alternating with the laboratory. Prerequisite: PHYA03

Session: Winter Day

PHYB04F Waves and Vibrations

Damped simple harmonic oscillator: power absorption and resonance; normal modes in coupled oscillators; standing waves in continuous systems (strings, membranes and bars); running waves and pulses; polarization; reflection and transmission at boundaries; interference and diffraction of waves.

Prerequisite: PHYA03, MATA26 or (MATA55)

Session: Winter Day

PHYB08H Intermediate Physics Laboratory

Experiments in basic electricity and magnetism, electronics, solid state physics, and atomic and nuclear physics (illustrating material covered in lecture courses PHYB01 and PHYB03). Optional concentration in electronic circuits in the second term is available. Limited enrolment: 20.

A six-hour laboratory period once every two weeks. A single experiment may extend over more than one period. Students are expected to plan their experiments thoroughly beforehand, discussing their approach with one of the instructors or demonstrators. Observations including numerical data must be recorded carefully and thoroughly. The Intermediate Physics Laboratory Manual, available in the laboratory, contains references to other sources, a number of which are available for consultation in the laboratory.

Prerequisite: PHYA03 Corequisite: PHYB03 Session: Winter Day

PHYB17S Quantum Physics A

An introductory course in quantum physics; simple models of the atom; waveparticle duality and experimental facts requiring a quantum explanation; the Schrodinger wave equation and its application to a number of simple (but important!) problems.

Prerequisite: PHYB04; MATB41 Session: Winter Day

PHYB19S Thermal Physics A

Introduction to statistical methods of dealing with large systems in equilibrium; canonical and grand canonical ensembles; meaning of temperature and chemical potential; partition functions and free energies for simple systems; properties of ideal Fermi, Bose and Boltzmann gases. Corequisite: PHYB17 Session: Winter Day

PHYCO4F Physics of Solid State Devices

An introduction to the basic principles of solid state physics which underlie devices of modern technology. The quantum physics needed to understand the electronic properties of semiconductors and metals is discussed with emphasis on device characteristics and operation. Topics include semiconductor diodes, P-N junctions, field-effect transistors and other elements of large-scale integrated circuits, superconducting magnets, Josephson junctions, liquid crystal displays. Prerequisites: PHYB01; PHYB03; PHYB17;

PHYB19

Session: Winter Day

PHYCO5H Advanced Physics Laboratory

A selection of a number of advanced and detailed experiments illustrating fundamental principles and techniques in physics. Limited enrolment: 20.

This course is designed to involve students in more complex experiments. introducing them to vacuum techniques. X-rays, nuclear instrumentation, etc. Students will work with a minimum of supervision and will be expected to take the initiative in overcoming experimental difficulties. One six-hour laboratory period every second week. A single experiment may extend over more than one period.

Prerequisite: PHYB01; PHYB08 Corequisite: PHYB17

Session: Winter Day

PHYCO7F Quantum Physics B

A continuation of PHYB17S. One dimensional scattering and barrier penetration problems; quantum mechanics of angular momentum and spin; the hydrogen atom: diatomic molecules; the periodic table; simple models of nuclear structure. Prerequisites: PHYB01; PHYB17 Session: Winter Day

PHYCO9S Laser Optics

Modern optics with emphasis on developments made possible by lasers; wave motion, Fourier analysis, Maxwell's equations. Incoherent and coherent sources of electromagnetic waves, propagation in infinite media (free space, non-conductors, conductors). Lasers. Poynting vector. Dispersion. Reflection and refraction, mirrors and lenses, illumination in optical systems, polarized light. Interference, diffraction, image formation and image processing. partial coherence, holography. Prerequisite: PHYB01; PHYB04; MATB41 Corequisite: MATC51 Session: Winter Day

Courses Not Offered in 1989/90

PHYCO8S Thermal Physics B Prerequisite: PHYB19

Political Science

Assistant Chairman: A. Rubinoff Political Science consists of a variety of approaches to the study of politics. Politics is the process of attempting to resolve conflicts among competing interests and values, and over how societal resources will be allocated. The discipline includes not only the study of policies and arrangements created to facilitate non-violent resolution of conflict at the level of the nation state. but also the institutional and informal means by which a group may enhance its power (that is, its ability to have its views and interests implemented) from the level of the municipality to the international realm.

Political Science is divided into the following fields: Canadian government. comparative politics (industrial countries), comparative politics (developing countries), public administration, and public policy, international relations, and political theory. In the study of

Canadian Government students will become familiar with the process and structures of decision making in Canada. Public Administration deals with the institutions or organizational structures through which public policies are implemented. Courses in Comparative Government Politics focus on the political practices and policies of a wide variety of nations and thus broaden the student's awareness of foreign political systems. International Relations is devoted to the analysis of the foreign policies of various nation states and of the relations amongst nation states. Political Theory explores the reasons advanced for various political doctrines and policies; that is, it attempts to clarify the place of politics in relation to various conceptions of the "quality of life".

Levels of courses range from A to D; the lettering corresponds to increasing degrees of concentration and difficulty of subject matter. D-level courses are advanced seminars and assume a strong background in political science and/or related fields such as economics, geography, history, philosophy, and sociology, Students are advised to consult the instructors of D-level courses or the Supervisor of Studies prior to enroling

in them.

Limited Enrolment: Pressures of demand for places have made it necessary to place enrolment limits on many Political Science courses. These limits will take effect in the 1990/91 session. In limited enrolment courses. priority is given to students for whom the course is required in a given year of a programme. Students will be informed prior to the end of classes in April on how to apply to limited enrolment courses.

Prerequisites: Because appropriate academic preparation for advanced work in political science can vary greatly from one course to another, specific prerequisites are not always stated for higher-level courses. Where prerequisites are stated, they will be strictly enforced. Students who knowingly or unwittingly register for courses for which they do not have the necessary prerequisites will be denied access to those courses.

Specialist Programme in Political Sci-

Supervisor: G. Skogstad

Note: Beginning in 1990/91, registration in this Programme will be limited.

Applications for admission to the Specialist Programme are accepted after students have completed at least four full-course equivalents (i.e. generally after completing the first year of the degree programme). Applicants must have completed or be in the process of completing POLAO1Y. Students will be selected to enter the second year of the programme on the basis of their GPA for those four courses taken to date (including POLAO1Y) in which their grades are highest. Students wishing to register at a later date may be admitted at the discretion of the Supervisor.

Students must complete ten fullcourse equivalents in Political Science. The courses must be approved by the Supervisor and must include the following:

- 1 POLA01 Introduction to Political Studies
- 2 POLB50 Introduction to Canadian Pol-
- Two courses in political theory from: POLB70, POLC70, POLC74, POLC75. POLD71, POLD72, POLD73
- One course from each of any three of
- Canadian Government POLB51. POLC52-C55, POLD51, POLD65
- Public Administration and Public Policy POLB53, POLB61, POLB62, POLC60, POLC61, POLC63, POLC64, POLD50, POLD62.
- International Relations: POLB80. POLC81, POLC82, POLC83, POLC84
- Comparative Politics, Industrial Countries: POLB86, POLB87, POLC68, POLC85, POLC87, POLC89, POLC90
- Comparative Politics, Developing Countries: POLB91, POLC95, POLC96, POLC97, POLC98, POLD93, POLD94 Students in the Specialist Programme may not take more than fourteen fullcourse equivalents in Political Science. In selecting courses from other disciplines. they should consult with the Supervisor

or with a member of the Political Science

staff.

Major Programme in Political Science Supervisor: G. Skogstad

Political Science

Note: Beginning in 1990/91, registration in this Programme will be limited.

Applications for admission to the Major Programme are accepted after students have completed at least four fullcourse equivalents (i.e. generally after completing the first year of the degree programme). Applicants must have completed or be in the process of completing POLAO1Y. Students will be selected to enter the second year of the programme on the basis of their GPA for those four courses taken to date (including POLAO1Y) in which their grades are highest. Students wishing to register at a later date may be admitted at the discretion of the Supervisor.

Students must complete at least six full-course equivalents in Political Science. The courses must be approved by the Supervisor and must include the following:

- 1 POLA01 Introduction to Political Studies
- 2 POLB50 Introduction to Canadian **Politics**
- 3 One course in political theory from: POLB70, POLC74, POLC75, POLD72.
- One course from each of any three of
- A Canadian Government POLB51, POLC51, POLC52, POLC54, POLC55. POLD65
- B Public Administration and Public Policy POLB53, POLB61, POLB62, POLC60. POLC61, POLC63, POLC64, POLD50. POLD62
- C International Relations: POLB80, POLC81, POLC82, POLC83, POLC84
- Comparative Politics, Industrial Countries: POLB86, POLB87, POLC68, POLC85, POLC87, POLC90
- E Comparative Politics, Developing Countries: POLB91, POLC95, POLC96, POLC97, POLC98, POLD93, POLD94

Specialist Programme in Economics and Political Science (see under Economics)

POLA01Y Introduction to Political Studies

This course seeks to introduce students to political inquiry by a focus on the applicability of theories and notions respecting the liberal-democratic state to the Canadian situation. Comparisons

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will be made with the way these issues have been dealt with in other industrialized nations.

Session: Winter Evening, Winter Day L. Johnston

IDSB01Y Political Economy of International Development

Introduces students to major development problems, the principal social, economic and political factors that condition these and the impact on them of various development strategies pursued in a sample of Third World countries. Prerequisite: One course in either Economics or Political Science Session: Winter Day R. Sandbrook

POLBSOY Introduction to Canadian Politics

A study of Canadian political institutions and processes. Specific topics include: the constitution, federalism, civil liberties, federal-provincial relations, political regionalism, French Canada, the West, social class and politics, public opinion and political culture, elections, political parties, interest groups, Cabinet and Prime Minister, Parliament, the public service. Two lectures a week and a tutorial once every two weeks. Class size is limited to 80 per section. Session: Winter Day, Winter Evening, Summer Evening G. Skoastad, R. S. Blair

POLB51F Government and Politics

Political structures and processes in Ontario: Cabinet government; the interaction of Cabinet, Legislature, and public service; political parties and the party system; provincial-municipal rela-

Class size is limited to 80 per section. Exclusion: (POLB37) Prerequisite: POLB50 (or POLB01)

Session: Winter Day

R. S. Blair

POLB53F Public Policies in Canada

A study of the patterns of growth in federal and provincial policies for economic progress, social order, and human development; of the relationship between changing public policies and Canadian political development; and of the contributions made by instruments

of government toward the achievement of basic political values. Class size is limited to 80 per section. Exclusion: (POLB35) Prerequisite: POLA01 or POLB50 Session: Winter Day R. Manzer

POLB61F Canadian Public Administration: Institutions and **Processes**

The growth of public bureaucracy in the Canadian federal and Ontario provincial governments. Descriptive analysis of the basic types of administrative organizations - ministerial departments, central agencies, regulatory tribunals, public corporations, and advisory bodies - of selected administrative processes financial and personnel administration. administrative co-ordination, reorganization, and intergovernmental administration. Problems of administrative power and accountability. Class size is limited to 80 per section. Exclusion: (POLB60) Session: Winter Evening I. Esberey

POLB62S Public Policy-Making

Analysis of the process of formulating and implementing public policy in modern democratic states with particular attention to Canadian policy-making but with some reference to American and European experience. Topics include agenda-building, planning priorities, governing instruments, program implementation, and policy analysis. Class size is limited to 80 per section. Exclusion: (POLB60) Prerequisite: POLA01 or POLB50 Session: Winter Day R. Manzer

POLB70Y Political Thought from Plato to Locke

An examination of the central political texts from Plato to the early modern period.

Students will be expected to read Plato's Republic, Aristotle's Politics, Machiavelli's The Prince, Hobbes' Leviathan (Parts one and two) and Locke's Second Treatise of Government. The political writings of St. Augustine and St. Thomas Aguinas will also be studied. Class size is limited to 80 per section. Session: Winter Day E. Andrew

POLBSOY International Relations

A study of the nature of the international system, the factors that motivate foreign policies, and the institutions for the conduct of international relations. Class size is limited to 80 per section. Prerequisite: Not open to first year students without permission of instructor Session: Winter Day A. Rubinoff

POLB86Y Soviet Government and **Politics**

The development of Soviet political and social institutions since 1917, with emphasis upon the process of modernization and its effects.

The course examines the formation and consolidation of the Soviet political order and the urgent problems confronting Soviet society today. Class size is limited to 80 per section. Exclusion: (POLB23) Session: Winter Day S. Solomon

POLB87Y U.S. Government and Politics

This course explores politics in the United States by analyzing the American federal system, examining the institutions and processes of government, and by focusing on selected policy issues. Class size is limited to 80 per section. Session: Winter Day M. Donnelly

POLB91Y Politics of the Third World

The effects which various Western, especially North American, policies and practices have had upon development in the Third World. The policies and practices to be surveyed include those relating to foreign aid, the multi-national corporation, and Western security. Case material will be drawn from four countries in Latin America and Africa which illustrate a diversity of approaches to development: Cuba, Chile, Ghana, Kenya. Class size is limited to 80 per section. Session: Winter Day

J. Teichman

POLC52Y Canadian Constitution

Historical origins of the Canadian constitution and its evolution since 1867; the law and customs of the constitution; judicial interpretation of the Constitution Act 1867 and its effect on federalism and civil liberties: constitutional change and

the Constitution Act 1982; contemporary constitutional issues. Class size is limited to 60 per section. Exclusion: (POLB52) Prerequisite: POLB50 Session: Winter Day R. S. Blair

POLC54F Intergovernmental Relations In Canada

An examination of some of the problems of intergovernmental relations which arise in a federal state and of the governmental machinery which has been developed to deal with these issues. Emphasis on modern Canada. Class size is limited to 60 per section. Exclusion: (POLB54) Prerequisite: POLB50 Session: Winter Day G. Skogstad

POLC55S Comparative Provincial Government

A comparative analysis of the political systems of the ten provinces. Topics will include: - constitutions; party systems; elections; interest groups; legislatures; cabinet systems; public administration; policy making. Class size is limited to 60 per section. Exclusion: (POLB51) (POLB55) Prerequisite: POLB51 Session: Winter Day R. S. Blair

POLCOOF Administrative Politics

Analysis of politics in the administrative processes of democratic states with particular attention to Canadian public administration but with some reference to American and European experience. Selected theories of administrative politics the constitutional and political framework of administrative politics in Canada, typical relationships of administrative conflict and co-operation, and issues of administrative politics and political democracy. Class size is limited to 60 per section. Prerequisite: POLB61 or POLB62 Session: Winter Day R. Manzer

POLC63S Administrative Theories and Policy-Making

Theories of bureaucratic organization. public administration, and policymaking. Classical theories of bureaucracy and management; neo-classical decision- making theory; and theories of bureaucratic pathologies, human relations in formal organizations, and

bureaucratic elites. Pluralist, elitist, and class theories of public policy-making and their contribution to understanding the role of public bureaucracy in the policy-making processes of democratic states.

Class size is limited to 60 per section.
Prerequisite: POLB61 or POLB62
Session: Winter Day
R. Manzer

POLC64S Comparative Public Administration

The growth of public bureaucracies in selected industrial countries; comparisons of administrative institutions and processes; variations in the relationship of administration and politics and in the contribution of public bureaucracies to public policy development.

Class size is limited to 60 per section.

Exclusion: (POLB63)

POLC68S Comparative Intergovernmental Relations

Session: Winter Evening

J. Esberey

This course aims to develop an understanding of how intergovernmental relations in Canada compares with that of other Western industralized nations and to assess the significance of the growth of intergovernmental relations to the overall pattern of politics. It begins with a brief overview of the gowth of intergovernmental relations, including summitry, in the post war period. It will then explore the structures and processes which have developed to accommodate it. Finally an attempt will be made to assess the strengths and weaknesses of specific federal and devolutionary alternatives. Examples will be drawn mainly from Australia and Western Europe. Class size is limited to 60 per section. Prerequisite: either POLC54S or POLC87Y Session: Winter Day J. Esberey

POLC74Y Political Thought of the Eighteenth and Nineteenth Centuries A study of the major political philosophers of the eighteenth and nineteenth centuries.

Particular emphasis will be placed on Rousseau's Discourse on Inequality and Social Contract; Burke's Reflections on the Revolution in France, de Tocqueville's Democracy in America, and selected writings of J.S. Mill and Marx. Class size is limited to 60 per section. Exclusion: (POLB71) Prerequisite: POLB70 Session: Winter Evening E. Andrew

POLC75Y Political Analysis

An examination of the methods of analysis used in the empirical study of politics. The purpose of the course is to enable the student who read political literature to identify underlying values and assumptions, to differentiate good from poor logic of argument, to distinguish between adequate and inadequate use of evidence and between warranted and unwarranted conclusions drawn from that evidence. Special attention will be paid to the questions surrounding the "science of politics". Class size is limited to 60 per section. Exclusion: POLB65 (1985-86) (POLB72) Session: Winter Day S. Solomon

POLC95Y Politics and Society in Tropical Africa

The three major questions with which the course grapples are the following. To what extent is the fate of poor African countries determined by such external factors as the colonial legacy and what is often referred to as "neocolonialism" or "neo-imperialism"? To what extent are progressive developmental policies blocked by the power of new vested interest groups created by rapid political and economic change in African countries? What are some of the major political institutions and development strategies through which governments seek to direct change, and how effective are their efforts, given the constraints upon their freedom of action? Class size is limited to 60 per section. Exclusion: (POLB92) Prerequisite: none, but a course in introductory political science would be helpful

Session: Winter Evening R. Sandbrook

POLC98Y Politics and Society in Latin America/South-East Asia

This lecture/seminar course will survey the evolution and current traits of political institutions in either Latin America or South-East Asia, with particular emphasis upon the role of domestic and international forces in shaping them.
Class size is limited to 60 per section.
Prerequisite: IDSB01Y or POLB91Y
Session: Winter Day
J. Teichman

POLD50F Organized Interests and Public Policy in Canada

This course examines the interrelationship between organized interests and the state in the formulation and implementation of public policy in Canada. A focus of concern is the impact of the organization of the state on the structure, functioning, and influence of organized interests. In turn, the capacity of the state to undertake independent policy initiatives and to work in concertation with organized interests is also examined.

Class size is limited to 20 per section. Session: Winter Day G. Skoastad

POLD62S Organized Interests and the State

The course examines the growth functioning and changing role of organized interests in the modern capitalist state. The central theme is that the organization and role of the state and interest groups is interdependent, each importantly affects the other. Various theoretical frameworks, including liberal pluralism and corporatism are examined for their ability to explain the emergence. effectiveness, and impact of interest groups, and reference is made to specific examples in industrial democracies to test the adequacy of these general frameworks. Class size is limited to 20 per section.

Exclusion: (POLC62)
Prerequisite: POLA01 or POLB50 (now B60) or POLC87(POLB85)
Session: Winter day
J. Esberey

POLD93F Selected Topics on Developing Areas

A detailed examination of particular problems in the study of developing areas. The topics will be announced annually in the Spring.
Class size is limited to 20 per section. Prerequisite: POLB91 or permission of instructor.
Session: Winter Day R. Sandbrook

POLD94S Selected Topics on Developing Areas

The topic to be examined this year is the role of the state in facilitating economic development in the Third World. Both capitalist and socialist patterns receive attention. Comparisons to Western and Japanese experience are drawn. Class size is limited to 20 per section. Exclusion: (POLC94) Prerequisite: A social science course on the Third World or development Session: Winter Day R. Sandbrook

POLD98F Supervised ReadingAdvanced reading programme in special topics.

This course is meant only for those students who, having completed the available basic courses in a particular field of Poltical Science, wish to pursue further intensive study on a relevant topic of special interest.

Class size is limited to 20 per section. Exclusion: (POLC98)

Prerequisite: One B-level course in Political Science; Permission of Instructor. Session: Summer Evening, Winter Day, Winter Evening

Staff

POLD99S Supervised Reading Advanced reading programme in special tonics.

This course is meant only for those students who, having completed the available basic courses in a particular field of Political Science, wish to pursue further intensive study on a relevant topic of special interest.

Class size is limited to 20 per section.

Exclusion: (POLC99)

Prerequisite: One B-level course in Political Science; Permission of Instructor.

Session: Summer Evening, Winter Day, Winter Evening

Courses Not Offered in 1989-90

POLB66Y Psychology and Politics
Limit 80
U.S. Government and Politics
Limit 80
POLC61S Policy Development and
Political Evaluation
Limit 60
Prerequisite: POLB53 or

POLB62 or POLB61

Psychology

POLC70Y Twentieth Century Political Thought Limit 60 POLC81S The Psychology of International Relations Limit 60 Exclusion: (POLC11H/S) Prerequisite: POLB66 or POLB80 POLC82Y American Foreign Policy Limit 60 Exclusion: (POLB82) Prerequisite: POLB80 or POLB87 POLC85Y Comparative Communism Limit 60 Prerequisite: One B-level course in Political Science POLC86H Intergovernmental Relations in the European **Economic Community** Limit 60 Exclusion: (POLB34H/S) POLC87Y Comparative Politics of **Industrial Societies** Limit 60 Exclusion: (POLB85) Prereauisite: One course in Political Science or Permission of Instructor POLC88Y **Urban Politics** Limit 60 Exclusion: (POLB36) POLC89Y Politics and Society of lapan Limit 60 Exclusion: (POLB89) POLC96Y The Chinese Political System Limit 60 Exclusion: (POLB17) POLC97Y Government and Politics in India Limit 60 Exclusion: (POLB94) POLD51S Topics in Canadian Government Limit 20 Exclusion: (POLC51) Prereauisite: POLB50 POLD65F Topics in Political Leadership Limit 20 Exclusion: (POLC65F) Prerequisite: POLA01 or POLB50 Canadian Political Ideas POLD71Y Limit 20 Exclusion: (POLC71) Prerequisite: One of POLBSO, POLBSO, POLC74(POLB71), HISB04

POLD72F Selected Topics in Political Philosophy
Limit 20
Prerequisite: POLB70,
POLC74(POLB71Y), or permission of instructor.

POLD73S Selected Topics in Political Philosophy
Limit 20
Exclusion: (POLC73)
Prerequisite: POLB70,
POLC74(POLB71Y) or Permission of Instructor

Psychology

Psychology is that branch of science which seeks to understand behaviour and mind. Why organisms - human and infrahuman - act as they do is one of the most compelling and longstanding questions in the history of human thought. Philosophers, artists, novelists, theologians and others have sought the answer through reason and intuition. Psychology uses the methods of scientific enquiry to address the question.

The areas of interest encompassed by the discipline of psychology include: how organisms perceive their environments; how they learn, adapt, and remember; how they change over their lifetimes; how they choose among alternate courses of action; how they respond to motivating forces; how they are affected by the presence of other organisms in social settings; how their behaviour relates to their physiological functions; and how individuals and species differ from one another. Our course offerings in Psychology include all of these topics, covering how psychologists go about answering the important questions in each, and what we have learned about each.

The Specialist Programme in Psychology includes courses from each of the main sub-areas within the discipline. This Programme is intended both for students with a strong interest in the field and for those who wish to pursue graduate work in psychology after the first degree. Students considering graduate study should plan to include the thesis course (PSYD98Y) in their undergraduate programme.

The Major Programme in Psychology also is designed to introduce students to the main areas within the discipline. Students opting for this Programme

generally do so because they are interested in a less intensive exposure to the field. Often, students desire to concentrate their studies in two areas, in which case a double Major Programme combining psychology with another discipline is ideal.

Students particularly interested in the relation of brain to behaviour should consider the Specialist Programme in Neurosciences described earlier in this Calendar. Those particularly interested in the study of knowledge - language, communication and thought - may wish to consider the Major and Specialist Programmes in Cognitive Science described earlier.

Planning your Programme in Psychology

Students should be aware that the A, B, C. D course structure in Psychology dictates the sequence in which courses should be taken, but not the year of study in which a given course must be taken. That is, A, B, C, and D do not correspond to first, second, third and fourth year. As two examples, it is recommended that PSYB07F/S and PSYC08F/S be taken consecutively in the two terms of second year and that the same be done with PSYB60F/S and PSYC61F/S. Students are encouraged to plan carefully so that they will meet their educational objectives over the years of their degree. Discussions with the Supervisor of Studies can be very valuable in this regard.

Specialist Programme in Psychology

Supervisor: G. B. Biederman, 284-3211 The programme requires completion of 12 full-course equivalents, and fulfills the Programme requirements for the 4-year B.A. degree in Psychology. The requirements for the B.Sc. degree are met by the addition of one further half-course (.5 full-course equivalent) in a science (including psychology) at the B-, C- or D-level.

- A. 10 full-course equivalents in Psychology, as follows:
- 1 PSYA01Y Introduction to Psychology (1 full-course equivalent)
- 2 Statistical Methods (I full-course equivalent)
 - (a) PSYB07F/S Data Analysis in Psychology and

(b) PSYC08F/S Experimental Design in Psychology

3 Laboratory Methods (I full-course equivalent)

- (a) PSYB01F/S Psychological Research Laboratory and
- (b) one half-course (.5 full-course equivalent) from among the following:
- PSYC11F/S Social Psychology Laboratory
- PSYC34F/S Psychometric Methods Laboratory
- PSYC42F/S Learning Laboratory
- PSYC58F/S Experimental Psychology Microcomputer Laboratory
- PSYC63Y* Physiological Psychology Laboratory
 (*NOTE: Students selecting
 PSYC63Y also receive 0.5 course credit towards satisfaction of Requirement 5b or 7.)
- 4 PSYB02S Scientific Communication in Psychology (.5 full-course equivalent)
- 5 Courses at the B-level and/or C-level (3 full-course equivalents)
 Students are required to take one full-course equivalent at the B-level and/or C-level from each of the three content groups listed below:
 - (a) Social, Developmental and Personality courses (listed in the 10-, 20-, and 30-series);
 - (b) Learning and Physiology courses (listed in the 40- and 60-series);
 - (c) Perception, Language and Cognition courses (listed in the 50-series).
- 6 Courses at the D-level (2 full-course equivalents)
 In selecting two full-course equivalents at the D-level, students may not include more than 1.5 full-course equivalents from any one of the content groups listed under 5a, 5b, or 5c.
 - NOTE: STUDENTS MUST BALLOT FOR D-LEVEL COURSES; PLEASE READ THE INSTRUCTIONS BELOW.
- 7 Additional courses in Psychology (1.5 full-course equivalents)
 Students must choose 1.5 further full-course equivalents from any of the remaining courses in psychology.
 The choice is unconstrained. Specialists are encouraged to plan on enrolling in the thesis course (PSYD98Y) in their third or fourth year, particularly if they intend to pursue a career in Psychology or a related discipline.

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B. Other Disciplines (2 full-course equivalents) Students must select at least two full-course equivalents at the B-level or higher in a discipline or disciplines other than Psychology.

Major Programme in Psychology

Supervisor: G. B. Biederman, 284-3211 The Programme requires completion of 6.0 full-course equivalents in Psychology and normally results in the 3-year B.A. in Psychology. For the 3-year B.Sc. degree, the student must take one additional full-course equivalent at the B-level or above in any science (including psychology).

- 1 PSYA01Y Introduction to Psychology (1 full-course equivalent)
- PSYB01F/S Psychological Research Laboratory (.5 full-course equivalent)
- PSYB07F/S Data Analysis in Psychology (.5 full-course equivalent)
- Courses at the B-level and/or C-level (1.5 full-course equivalents) Students are required to select one half-course (.5 full-course equivalent) at the B-level and/or C-level from each of the three content groups listed below:
 - (a) Social, Developmental and Personality courses (listed in the 10-, 20-, or 30-series):
 - (b) Learning and Physiology courses (listed in the 40- or 60-series);
 - (c) Perception, Language, and Cognition courses (listed in the 50series).
- 5 Course at the D-level (.5 full-course equivalent) Students must choose one halfcourse (.5 full-course equivalent) from the D-level offerings in Psychol-

NOTE: STUDENTS MUST BALLOT FOR D-LEVEL COURSES: PLEASE READ THE INSTRUCTIONS BELOW.

Additional courses in Psychology (2 full-course equivalents) Students must choose 2 further fullcourse equivalents from any of the remaining courses in Psychology, At least one full-course equivalent from these must be at the C- or D-level.

BALLOTING IN PSYCHOLOGY: In March. students will be required to ballot for all D-level courses they wish to take the following year. Prerequisites for those Dlevel courses must be completed in advance of taking the D-level course. Ballots will be available from the

Supervisor of Studies and from the Office of the Chair of Life Sciences. The completed ballot must be returned to one of these offices on or before April 28, and must be accompanied by a stamped, self-addressed envelope. Students will be notified via a ballot confirmation form in June of D-level courses in which they are permitted to register. No student may register in any D-level course without this confirmation form. (NOTE: For this confirmation to be valid, the student must register through the Registrar's Office by the earlyregistration deadline).

While admission to D-level courses in Psychology is restricted by balloting. both Majors and Specialists may take more than the required number of Dlevels if space is available. The aim is to provide at least some small-group discussion courses in the Programme, and to assure that everyone has an opportunity to take these courses.

PSYA01Y Introduction to Psychology

The basic principles and methods of contemporary psychology, emphasizing their contribution to an understanding of how organisms, both human and infrahuman, perceive their environments. how their behaviour is modified by experience, and how their activities are instigated, sustained, and directed.

The physiological basis of behaviour. particularly the functioning of the nervous system; learning and the importance of past experience in behaviour; perceiving, thinking, and reasoning; intelligence; language; motivation and emotion; social behaviour; personality, and abnormalities of behaviour and

Session: Summer Evening, Winter Day, Winter Evening The Faculty

PSYB01F Psychological Research Laboratory

The intent is to present the principles of the scientific method as they apply to experimental psychology. Using examples from a variety of research areas in Psychology, the development of research projects in psychology will be described. The nature of hypothesis testing through the design of experiments provides the nucleus of the course. Out of this grows discussion of issues important in planning and conducting research: generating research problems, experimental control, sampling of

subjects, scaling and measurement, interpretation and evaluation of results. theory construction, and preparation of the research report. The social psychology of the experiment and ethical issues in research will also be considered.

Topics will survey the entire range of experimental psychology. Research methods will be introduced in lectures and illustrated in laboratory exercises. This course is required for both the Major and the Specialist Programmes, and provides the basic skills necessary to take the other laboratory courses in psychology. Prerequisite: PSYA01

Session: Winter Day T.B.A.

PSYB02S Scientific Communication in Psychology

The purpose of this course is the development and enhancement of practical and professional skills based on current standard discourse in the field of psychology. The primary focus is on improving the student's ability to think, organize information and communicate clearly, critically and effectively within the discipline. Activities will be organized around the de-construction and construction of empirical studies, literature reviews and theoretical articles. Related skills often helpful for the production of sound arguments and communication, such as aspects of computer literacy and strategies for literature search, will be incorporated into the course.

This course is a requirement for the Specialist Programme in Psychology and is recommended to be taken in the student's second year. Prerequisites: PSYB01, PSYB07 Session: Winter Day D. Bors

PSYBO7F Data Analysis in **Psychology**

Data reduction techniques: frequency distributions, measures of central tendency and variability, linear transformations, correlation and regression; and hypothesis testing procedures based on the binomial, chi-square, normal, and t distributions.

The course examines the role of statistical decision-making procedures in drawing reasonable inferences from research findings. It details the mechanics of a variety of commonly used data analysis procedures and explores their underlying logic. A working knowledge

of elementary algebra (to the solution of simple linear equations in one unknown) is assumed. Four hours of lecture and one hour of tutorial per week. Exclusions: ANTC35 (ANTB43), BIOB28, ECOBII, GGRB31 (GGRB02), STAB47 (STAB57) (MATB57), SOCB06 Session: Summer Evening, Winter Day B. Forrin

PSYB10F Introduction to Social **Psychology**

Surveys social influence (conformity and obedience), prejudice, sexism, attitude change, group behaviour (crowding, crowd behaviour, panics), aggression, cooperation and competition, nonverbal communication, person perception, attraction and emotions.

Social Psychology focuses on the problem of how human behaviour is influenced by others. The course is designed to demonstrate phenomena of social behaviour and to present theories and research evidence relating to these phenomena.

Prerequisite: PSYA01 Session: Winter Day J. Bassili

PSYB20F Introduction to Developmental Psychology

Developmental processes during infancy and childhood.

This course is divided into two parts. The first examines broad frameworks which have been offered to explain human development; e.g., psychoanalytic theory, Piaget's cognitive developmental theory, social learning view. The second part focuses on selected research areas which deal with different aspects of social and cognitive development in the infant and child; e.g., social attachment, intelligence, sex-roles and achievement.

Three lecture hours per week. Prerequisite: PSYA01 Session: Winter Day T.B.A.

PSYB30S Personality

An introduction to some of the influential theories of personality and the research which they have guided. Specific theories covered vary from year to year. A typical selection might include behavioural psychology, cognitive psychology and artificial intelligence, psychoanalysis, and transpersonal psychology.

The aim of this course is to acquaint the student with the diversity of theoretical assumptions and research

methods with which basic questions about human nature have been approached. Readings are from primary sources.
Prerequisite: PSYA01
Session: Winter Day
A. Kukla

PSYB32F/S Abnormal Psychology Definition and identification of abnormality, historical-cultural influences on attitudes, practices, theories, and research; a variety of past and current viewpoints in the development of hypotheses, model and theory, including genetic, physiological, stress, medicalpsychiatric, psychoanalytic, sociallearning, and sociological; classification systems, including problems in their reliability and validity; description of a variety of neuroses, psychoses, and other behavioural disorders of adults and children, including cognitive, emotional, sensory-perceptual, psychomotor, and motor aspects, approaches, methods of investigation, and findings in psychological, psychophysiological, genetic, and epidemiological research; management, control, and modification of abnormal behaviour within and outside institutions, including pharmacological, psychotherapeutic, learning-based, and social engineering approaches.

The conceptual problem of defining abnormality and categorizing its varieties will be emphasized.
Prerequisite: PSYA01
Session: Winter Evening
1. Pauker

PSYB45F Behaviour Modification: Origins and Applications

A survey of attempts to understand and regulate human behaviour in non-laboratory settings founded on principles derived from the learning and conditioning laboratory. A critical analysis of current applications and systems of behaviour modification and control.

Philosophical underpinnings; basic concepts and models of behavioural change; research strategies; operant procedures; reinforcement schedules, extinction, shaping, self-reinforcement, fading, chaining, instructions, the token economy, behavioural contracting, biofeedback, punishment and its side effects; cognition and behaviour therapy, attribution, placebo effects, cognitive therapy, rational-emotive therapy, thought stopping, problem-solving, modeling; establishment of new behaviours, fear extinction, assertive

training; treatment of depression; systematic desensitization; treatment of anxiety; aversive counterconditioning; treatment of alcohol and drug abuse. Prerequisite: PSYA01 Session: Winter Evening F. Klainer

PSYB5OF Sensation and Perception The physics, mathematics and physiology of processes underlying perception, emphasizing the energies involved in different senses.

Stimuli for the human senses, especially light and sound; receptors and sensory pathways with emphasis on vision; sensitivity; colour; spatial and temporal resolution; contrast; perception of space and movement; perception of pattern and form. The teaching method will be lectures, for which preparatory reading will be important, and classroom demonstrations of many phenomena under discussion.

Prerequisite: PSYA01
Session: Summer Evening, Winter Day J. Kennedy

PSYB51S Perception and Cognition Theory and empirical research on visual and tactile perception, representation, and communication.

Topics include perception and depiction in the handicapped and normal perceiver, perceptual information and projection, illusion, stability and instability in perception, possible and impossible scenes, human and computer sceneanalysis, ambiguity in perception, literal and metaphoric pictures, perception of objects and images, outline representation, effects of incomplete information. The empirical research is on adults and children, a range of human cultures, and different species. Demonstrations and exercises form part of the course work. Prerequisite: PSYA01 Session: Winter Evening I. Kennedy

JLPB55S Psycholinguistics

Theories and experiments that address the question: How is language comprehended and produced and how is the ability to use language related to other psychological abilities?

Lectures and discussion.
Prerequisite: PSYA01 or LINA01
Session: Winter Day
T.B.A.

PSYB57S Memory and Cognition
Discussion of experiments and theories
in human memory and cognition. This
course provides an analysis of the
research on encoding, storage and
retrieval of information in human
memory. Also surveyed are the related
topics of attention, thinking, and problem solving, and their role in a general
model of information processing.

Three lecture hours per week.
Prerequisite: PSYB01
Corequisite: PSYB07
Session: Winter Day
C. MacLeod

PSYB60F Brain Mechanisms and Behaviour: I

The relation between behaviour and the structure and function of the nervous system. Topics covered include: neuroanatomy, structure and function of neurons, neurochemistry, neural mechanisms and movement, and the physiological basis of perception. Students with prior credits for PSYB65 may take PSYB60 for credit.

The objective is to give the student a firm grasp of the structure and function of the nervous system and its role in the behaviour of an organism. Neuroanatomy, structure and function of neurons, neuropharmacology, and neural mechanisms of sensation and movement.

Three hours lecture and one hour lab or tutorial per week.
Prerequisite: PSYAOI; PSYB65 is recommended for students with no Biology background.
Session: Winter Day
N. Milgram

PSYB65F Biological Foundations of Behaviour

An examination of the structural and physiological basis of behaviour. The course is geared toward non-biologically oriented students.

The structure and function of the nervous system are covered sufficiently to allow the student an understanding of the basis of human behaviour. Once these fundamentals are covered, the course then focuses on the following: higher brain function in humans; hemispheric specialization, disorders of the central nervous system (multiple sclerosis, epilepsy, organic brain damage, strokes, senility, and speech disorders); psychopharmacology and drugs of use and abuse; and the biological basis of psychiatric disorders.

Three hours of lecture per week.
Prerequisite: PSYA01
Exclusion: Students with prior credit for PSYB60 may not take PSYB65 for credit.
Session: Winter Day
T. Petit

PSYCO8S Experimental Design in Psychology

The analysis of variance as a research tool and the rationale and mechanics of its application to a variety of experimental designs: simple randomized, repeated measures, factorial. Additional topics discussed include: homogeneity of variance, multiple comparisons, trend analysis.

The course extends the range of techniques examined in PSYB07. Procedures are considered which permit the analysis and interpretation of data from complex experiments involving the simultaneous manipulation of several independent variables. The course is highly recommended for all students contemplating supervised individual research in Psychology. Three hours of lecture and one hour of tutorial per week.

Prerequisite: PSYB07, BIOB28, or STAB47 (STAB57) (MATB57) plus one additional B-level half-course in PSY. Exclusion: STAC52 (MATC52), (PSYB08) Session: Winter Day B. Forrin

PSYCI1F Social Psychology Laboratory

Introduces conceptual and practical issues concerning research in social psychology, and provides experience with several different types of research.

This course is designed to consider in depth various research approaches used in social psychology (such as attitude questionnaires, observational methods for studying ongoing social interaction). Discussion and laboratory work. Limited enrolment: 25. Prerequisite: PSYB01, PSYB07, PSYB10 Exclusion: (PSYB11) Session: Winter Day K. K. Dion

PSYC12S Advanced Social Psychology

A detailed examination of selected social psychological topics introduced in PSYB10.

Attitudes play a central role in our social lives. This course examines the nature of attitudes, their development, organization and change. Practical

issues such as the measurement of attitudes and the relation between attitudes and behaviour will be covered. In addition, the course examines belief systems and their manifestation in political and moral ideologies.

Teaching method: lectures. Prerequisite: PSYB07, PSYB10 plus one additional B-level half-course in PSY Exclusion: (PSYB12) Session: Winter Day I. Bassili

PSYC34S Psychometric Methods Laboratory

An intensive exploration by means of lectures and workshops of the principles and methods underlying the construction of psychological tests, the interpretation of the scores they yield, and the assessment of their worth as diagnostic and predictive devices in educational. industrial and clinical settings, illustrated by reference to a wide variety of measures of talent, interest, and charac-

The course focuses upon testing rather than upon tests. It seeks to impart those psychometric skills broadly applicable to the range of assessment procedures; it does not take as a significant objective the development of skill in the administration and scoring of particular tests. Limited enrolment: 25 Prerequisite: PSYB01, PSYB07 (or equivalent) Exclusion: (PSYB34) Session: Winter Day B. Forrin

PSYC42S Learning Laboratory

Critical review of basic theories and issues in the psychology of learning. with selected laboratory exercises in animal learning. An introduction to problems and techniques in the study of the acquisition of behaviour. Topics include: reinforcement, motivation, classical and instrumental conditioning principles, theory construction.

The course provides theoretical and empirical experience relevant to basic concepts and current problems in learning and motivation. Prerequisite: PSYB01, PSYB07 (or equivalent) Exclusion: (PSYB40) Session: Winter Day G. Biederman

PSYC45S Applied Psychology of Learning

The purpose of this course is to present principles of scientific psychology in relation to selected areas in the applied psychology literature and to review the logic and validity of modern applied learning techniques and measurement strategies in these areas: e.g. remediation strategies in atypical subject populations (e.g. autistic, MR, learning disabled). Cognitive, Piagetan, and operant approaches will be considered, with the emphasis on the experimental literature rather than on testing.

Course emphasizes critical evaluation of the literature and will have essay examinations and one major paper as a course requirement. Prerequisites: PSYB01, PSYB07, PSYB45. PSYC34 (PSYB34) and PSYC42 (PSYB40) also recommended. Session: Winter Evening G. B. Biederman

PSYC54F Cognition and Representation

Recent theories of perception and representation relevant to skill in the use of pictures and language.

Topics may include making and interpreting metaphors, recognizing cross-modal equivalence, learning how to draw and symbolize, acquiring the capacity to read and write narrative, the training of talent, and effects of perceptual and cognitive handicaps on the development of skills with patterns normally found in vision and audition. The research to be considered will emphasize studies on child development.

Teaching method includes lectures and student presentations. Prerequisites: PSYB07, a PSYB20-series and a PSYB50-series half-course in PSY Session: Winter Day J. Kennedy

PSYC58S Experimental Psychology **Microcomputer Laboratory**

Examination of the widespread impact of computers in experimental psychology. This laboratory course emphasizes the use of microcomputers in preparing, controlling, and analyzing experiments. Students will use a simple programming language, and will have considerable "hands-on" experience with laboratory microcomputers. The aim is to develop the skills necessary to program experiments in psychology, with particular emphasis on research in cognition.

The teaching method will consist of lectures on using the computer as a tool for psychological research, and lectures on the programming language. No previous computer experience is expected or required. Limited enrolment: 20. Prerequisite: PSYB01, PSYB07 (or equivalent) Exclusions: (PSYB53), any course in Computer Science Session: Winter Day C. MacLeod

PSYC61S Brain Mechanisms and Behaviour: II

A continuation of PSYB60, emphasizing motivation and learning. Topics covered under the category of motivation include: physiological basis of eating, drinking and sexual behaviour, sleep. and the neural correlates of reward. Topics covered under learning include: physiological processes and memory, structural basis of learning and memory. biochemistry and memory.

The course is designed to provide students with an understanding of the physiological substrates underlying behaviour. Discussions will centre around current topics in physiological psychology and will draw on recent research to support or challenge current theories in motivation and learning. In motivation, the general areas of feeding, sexual behaviour, and reinforcement will be discussed from neurological and neuropharmacological perspectives. The neurophysiological basis of learning and memory will be examined and then integrated with motivational models to provide a basis for understanding brain function in behaviour.

Three hours of lecture per week. Prerequisite: PSYB60, plus one other Blevel half-course in PSY; PSYB07 and PSYC08 are recommended. Exclusion: (PSYB61) Session: Winter Day T. Petit

PSYC63Y Physiological Psychology Laboratory

Instruction in a variety of techniques used in investigations of nervous system function. The course is mainly intended for students who are pursuing a Specialist Programme in the Neurosciences.

The course starts out with a dissection of a sheep brain. Subsequently, the procedures covered include: (i) histology (preparing, cutting and staining neural tissue); (ii) lesioning specific regions of the central nervous system;

(iii) anatomical tracing of neural pathways; (iv) electrical stimulation of the brain; (v) programming relay circuitry; (vi) electrophysiological recording techniques.

Two hours of lecture and three hours of scheduled laboratory work per week. Students will also be required to spend additional hours working in the student laboratory. The course involves a series of three to five laboratory projects. Prerequisite: PSYA01 and permission of instructor Corequisite: PSYB60, PSYC61 (PSYB61): PSYB07 and PSYC08 (PSYB08) are recommended Exclusion: (PSYB62) Session: Winter Day G. Ivy and N. Milaram

PSYC82F Theoretical Psychology An introduction to the problems and methods of theoretical analysis in

psychology.

The emphasis of the course is on developing sophistication in the techniques of theoretical analysis. The aim is to enable the student to read and evaluate the current literature in theoretical psychology. Prerequisite: PSYB07 or permission of instructor. Exclusion: (PSYC80) Session: Winter Day A. Kukla

PSYC90F/S/H PSYC93F/S/H Supervised Study in **Psychology**

A reading or research project.

These courses provide an opportunity to investigate an area in depth after completing basic coverage in regularly scheduled courses. They are not intended as substitutes for advanced courses in fields where these are available. The student must demonstrate a background adequate for the project proposed and should present a clear rationale to prospective supervisors. Frequent consultation with the supervisor is necessary and extensive library research and/or data collection will be required. Such a project will culminate in a written submission. Prerequisite: Three FCEs in Psychology; permission of instructor Exclusions for PSYC90: NROC90 **Exclusions for PSYC93: NROC93** Session: Summer Day, Summer Evening, Winter Day, Winter Evening Supervision by a faculty member

PSYD15F Current Topics in Social **Psychology**

An intensive examination of selected issues and research problems in social psychology. Limited enrolment: 15. Prerequisite: PSYC11 (PSYB11), PSYC12 (PSYB12) or PSYB10 plus one C-level half-course in PSY Exclusion: (PSYC15) Session: Winter Day 1. Bassili

PSYD16F Critical Analysis in Social **Psychology**

Progress in psychology is predicated on developments in both theory and methodology. The primary goal of the course is to enhance skills for critically analyzing both domains in Social Psychology. European and North American approaches to criticism are compared. Evolutionary and revolutionary models of development are contrasted. Disciplinary and professional aspects of social psychology are discussed in relation to scientific progress. Special emphasis is placed on social and personality factors which shape theory construction and validation. Examples are drawn from both cognitive and motivational approaches to social phenomena. Finally, the analogy between Piaget's account of intellectual development in the child and developments in social psychology is considered. Limited enrolment: 15.

Prerequisite: PSYC11 (PSYB11) or PSYC12 (PSYB12) or PSYB10 plus one C-level half-course in PSY Exclusion: (PSYC16) Session: Winter Day G. Cupchik

PSYD18S Psychology of Gender

This course focuses on theory and research pertaining to gender and gender roles. The social psychological and social-developmental research literature concerning gender differences will be critically examined. Other topics also will be considered, such as gender-role socialization. Teaching method: seminar. Limited enrolment: 15. Prerequisite: PSYB10 plus two C-level

half-courses in PSY Exclusion: (PSYC18) Session: Winter Day

K. Dion

PSYD20S Current Topics in Developmental Psychology

An intensive examination of selected issues and research problems in developmental psychology.

The specific content will vary from year to year with the interests of both instructor and students. Lectures, discussions, and oral presentations by students. Limited enrolment: 15. Prerequisite: PSYC21 (PSYB21) or JLPC24 (JLPB24) or PSYB20 plus one C-level half-course in PSY Exclusion: (PSYC20) Session: Winter Day J. Grusec

PSYD22F Socialization Processes

The processes by which an individual becomes a member of a particular social system (or systems). The course examines both the content of socialization (e.g., development of specific social behaviours) and the context in which it occurs (e.g., family, peer group, etc.). Material will be drawn from both social and developmental psychology. Limited enrolment: 15. Prerequisite: PSYB10 and PSYB20 plus one C-level half-course in PSY Exclusion: (PSYC22) Session: Winter Evening K. Dion

PSYD32S Abnormal Child

J. Pauker

Psychology Topics will be selected from within the broad area of abnormal child psychology, and will include descriptions of child and adolescent behaviour problems, classification systems and methods, biological and socio-cultural contributors to abnormality, treatment and management approaches and follow-up studies. Lectures, class discussion, and student presentations. Limited enrolment: 15. Prerequisites: PSYB32; PSYC21 (PSYB21) or PSYB20 plus one C-level half-course in Exclusion: (PSYC32) Session: Winter Day

PSYD53F Psychology and the Law

The course will focus on the application of psychology to the law, particularly the perceptual and memorial processes which influence the giving of testimony. Limited enrolment: 15. Prerequisite: a B50-series half-course plus one C-level half-course in PSY **Exclusion: (PSYC53)** Session: Summer Evening, Winter Day M. C. Smith

JLPD55F Disorders of Speech and Language

The study of abnormalities in the processes of language use and language development discussed in JLPC24 (JLPB24) and JLPB55.

We will discuss various types of aphasias and their relation to brain injury, developmental disorders such as dysphasia and autism, and disorders of language that are related to general disorders such as deafness and blindness. We will consider these disorders in relation to normal language processing and development. Lecture and discussion.

Enrolment limited to 25 Psychology Majors or Specialists, 45 overall. Prerequisites: Either JLPB55, PSYB60 or PSYB65, and one C-level half-course in PSY or one B-level FCE in LIN Exclusions: LINB29; (JLPC55) Session: Winter Day T.B.A.

PSYD62S Neuroplasticity: Mechanisms and Function

Neuroplasticity refers to the modification of neural tissue in response to experience which provides the foundation for learning, memory, and other complex mental processes. This course will explore the mechanisms underlying neuroplastic change and its functional significance. There are two major goals: (1) to survey and critically discuss the most important contemporary research on neuroplastic processes; (2) to provide the necessary background so that students are capable of giving a sophisticated answer to the question of what changes occur in the nervous system during learning and memory and what mechanisms underlie these changes. Limited enrolment: 15. Prerequisite: PSYB60 Exclusion: (PSYC62)

Corequisites: PSYC61 (PSYB61), and PSYC63 (PSYB62)

Session: Winter Day N. Milgram

PSYD67S Psychobiology of Aging

Aging is a complex biological phenomenon which is a universal and inevitable fact of life. This course will characterize various anatomical. biochemical and physiological changes that occur in the nervous system with age and will explore the association between these changes and cognitive deterioration. We will examine the characteristics of several age-related disease states and evaluate the validity of current theories and experimental models of aging.

Two hours of lecture per week. Limited enrolment: 15 Prerequisite: PSYB60 Corequisites: PSYC61 (PSYB61) Exclusion: PSYC60 in 1986/87 Session: Winter Day G. Ivy

PSYD80S Current Topics in Theoretical Psychology

An intensive examination of selected issues in theoretical psychology. The specific content will vary from year to

Limited enrolment: 15 Prerequisite: PSYC82 Exclusion: (PSYC80) Session: Winter Day A. Kukla

PSYD85F History of Psychology

A survey of developments in Western philosophy and science which influenced the emergence of modern psychology in the second half of the Nineteenth Century. Twentieth Century schools of psychology are discussed, including functionalism, structuralism, Gestaltism, Phenomenology, Behaviourism and Cognitivism. The course is designed for students who want to integrate their knowledge of the different areas of psychology and offers good preparation for graduate school.

This course examines changes in the treatment of three basic problems: mind-body, epistemology (the science of knowledge) and behaviour ethics. We begin with the ancient Greek philosophers who established the foundations of Western thought and science. The contributions of European philosophers and scientists (both physical and natural) from the Fifteenth through Nineteenth Centuries are then discussed. Topics also considered include: the process of paradigm or theory change in science and the relative contribution of

individual genius and Zeitgeist or intellectual climate to scientific developments. Limited enrolment: 15.
Prerequisite: One C-level half-course in PSY
Exclusion: (PSYC85)
Session: Winter Day
G. Cupchik

PSYD98Y Thesis in Psychology
This course offers the opportunity to
engage in a year-long research project
under the supervision of an interested
member of the faculty in Psychology.
The project will culminate in a written
report in the form of a thesis and a
defense of that report. During the
course of the year, at appropriate times,
students will meet to present their own
research proposals, to appraise the proposals of others, and to discuss the
results of their investigation.

Students will meet as a group with the coordinator as well as individually with the supervisor. This course is restricted to qualified Specialists in Psychology. Students planning to pursue graduate studies are especially encouraged to enrol in the course. Prerequisites: PSYB01, PSYB07, PSYC08 (PSYB08), Psychology Specialist Exclusion: (PSYC98), NROD98 (NROC98) Session: Winter Day Coordinator: B. Forrin/C. MacLeod

Courses Not Offered in 1989-90

Advanced Developmental

PSYC21F

Psychology Prerequisites: PSYB07. PSYB20 plus one additional B-level half-course in PSY Exclusion: (PSYB21) JLPC24S Developmental Psycholinguistics Prerequisites: One fullcourse equivalent at the Blevel in LIN and/or PSY Exclusion: LINC15 (LINB15). (ILPB24) PSYD30F Current Topics in Personality and Motivation Prerequisite: PSYB30 plus one C-level half-course in PSY Exclusion: (PSYC30) PSYD40S Current Topics in Animal Learning Prerequisites: PSYB01, PSYC42 (PSYB40) Exclusion: (PSYC40)

PSYD41S Research in Operant Conditioning Prerequisite: PSYB01, PSYC42 (PSYB40) Exclusion: (PSYC41) PSYD60F Current Topics in Physiological Psychology Prerequisite: PSYC61 (PSYB61) Exclusion: (PSYC60) PSYD68F Developmental Psychobiol-Prerequisite: PSYC61 (PSYB61)

Quaternary Studies

Major Programme in Quaternary Studies

Exclusion: (PSYC68)

Supervisor: J.C. Ritchie (284-3155)

This programme is no longer offered, but students currently enrolled will be allowed to complete it.

Russian

Discipline Representative:
C.V. Ponomareff (284-3258)
A millenium has shaped Russia's destiny. Today she is a major world power. It is especially important for us to understand her culture and her historical and cultural impact on Western society. Interested students should consider the courses listed below. Elementary and intermediate courses in language are currently not offered, but students with a reasonable knowledge of the language may read the texts in the original in the supervised reading courses RUSCO2H-CO5Y.

HUMB07F Russian Culture
HUMB11F/S Russian Shorter Fiction of
the 19th and 20th Centuries
HUMB13Y The Russian Revolution of
1917: Promise and
Fulfilment

HUMB58Y
Russian Novel, 1830-1880
HUMC53F/S
Beyond Nihilism: Three
Ways to Salvation
LITA01Y
Introduction to Literature

The Modernist Adventure

RUSCO2H RUSCO3H RUSCO4H

HUMB42Y

RUSCO5Y Supervised Reading

Supervised reading courses are designed for individual students who wish to pursue specific lines of interest in Russian language and/or literature. Classes meet every other week and students are expected to write a research paper or examination on their selected topic of work.

Prerequisite: At least two years of Russian language or permission of instructor.

Society, Values and Medicine

The Programme provides a focus for the study of social, political and ethical aspects of medicine in North America and cross-culturally.

There has in the last decade been an increasing awareness of the large extent to which social, political and ethical judgements and concepts are involved in the theory and practice of medicine. There has also been a growing awareness that, while an increased ability on the part of physicians to deal with these aspects of medicine is desirable and clearly needed - an excellent reason for those contemplating a medical career to consider seriously this programme these are matters about which society and not medicine alone should deliberate and make judgements. However, this requires that individuals be exposed to the issues and be provided with the analytic skills that enable them to think as clearly as possible about the issues. This Programme is designed to meet these requirements.

Major Programme in Society, Values and Medicine

Supervisors:

M. Hammond (Sociology 284-3193); P. Thompson (Philosophy 284-3309) The Programme requires completion of six full-course equivalents as described below.

- 1 ANTC51Y; ANTD16F/S or ANTD23F/S; PHLB05F/S; PHLC05F/S; PSYB32F/S; PSYB65F/S; SOCB17F/S
- 2 Two full-course equivalents from the following group: ANTC41Y; ANTC47Y; BJPC70F/S; BJPC71F/S; (PSYC66F/S); SOCC28F/S; SOCC32Y; SOCC36F; and whichever course of ANTD16F/S or ANTD1272F/S.

ANTD23F/S was not selected in 1 Note: ANTA01Y and PSYA01Y are normally prerequisites for ANT and PSY courses in this Programme.

Sociology

Assistant Chair: J. Hannigan
Sociology is the scientific study of
interaction among people, the social
relations which they establish, and the
social groups which they form. Sociology attempts to explain how society is
ordered and how it functions, what
accounts for social cohesion, social
stratification, social mobility, and social
change. It studies the consequences of
co-operation, competition, and conflict.

Students may wish to take Sociology courses as a part of a general education, in anticipation of the usefulness of certain courses in future occupations or professions, or as part of a Specialist or Major Programme.

The introductory course, SOCA01, is intended to familiarize students with the special theories, methods and questions of sociology as a part of a liberal education. In addition, the SOCA01 course provides a minimum background of knowledge about sociology, and hence is a prerequisite to many of the more

Students who want to learn about certain areas of sociology which may be useful in later occupational situations may consult faculty advisors who are prepared to assist them in course selection and provide informal advising. There are no formal requirements for these special areas and they will not be

advanced courses.

designated on diplomas.

The faculty advisers for special areas of concentration are:

Social Work - TBA

Urban Studies - Prof. J. Hannigan

Science and Medicine - Prof. M. Hammond Education - Prof. J.A. Lee

Specialist Programme in Sociology Supervisor: J. Tanner

The Programme requires completion of ten full-course equivalents as described below. No more than fourteen fullcourse equivalents in Sociology may be included in a four-year degree.

- **SOCA01Y Introduction to Sociology**
- SOCBO1Y Methods in Social Research SOCB06F/S Social Statistics
- SOCB03Y History of Social Thought
- One B-level macrostructure course (see list under Major Programme).
- One B level microstructure course (see list under Major Programme).
- SOCC05Y Contemporary Social Theory
- One full-course equivalent at C-level from courses C01-C29.
- One and one-half full-course equivalent at D-level
- One other B- or C-level full-course equivalent in Sociology following the usual prerequisite rules applying to chosen courses.

Note: SOCB06F/S counts toward the requirements in 9 above. LINB14F and LINC15S may be applied toward require-

Major Programme in Sociology

Supervisor: J. Tanner

The Programme requires completion of seven full-course equivalents in Sociology including:

- 1 SOCAOLY Introduction to Sociology
- 2 SOCBOLY or SOCBOLY Methods in Social Research or History of Social Thought
- 3 One B-level macrostructure course from the following (full-course equivalents): SOCB04Y, SOCB05Y, SOCB10Y, SOCB13Y, SOCB20Y, SOCC33Y, SOCC34Y, SOCC35Y, or ICSB27Y.
- 4 One B-level microstructure course from the following (full-course equivalents): SOCB02Y, SOCB07Y, SOCB12Y or SOCB18Y.
- Two full-course equivalent at the Clevel in Sociology.
- One other B- or C-level full-course equivalent in Sociology following the usual prerequisite rules applying to chosen courses.

SOCA01Y Introduction to Sociology An introduction to the basic concepts. principles and methods of sociology as a discipline for the study of society. Major topics studied include: the nature of social groups, social processes, culture, socialization, deviant behaviour, population, community, stratification, social institutions and social change. Session: Winter Day, Winter Evening T.B.A. & R. Beals

SOCBOIY Methods in Social Research

The course will be divided into three basic units. It will start with a critical overview of the logic and methods of social scientific research. Topics will include the logic of research, research design and causal analysis, and methods of data collection. Once the fundamentals have been covered, an effort will be made to teach students how to "read" and critically evaluate research reports. Several studies will be examined in detail, and then students will be given the opportunity to do their own evaluations. The final goal will be to provide some practical experience in doing research. Using data sets provided by the instructor, students will be taught how to interpret tables and to employ data to test hypotheses.

Prerequisite: One full-course equivalent in Sociology

Session: Winter Day

Session: Winter Day

J. Lee

A. Tuzlak

SOCB02Y Structure of Interpersonal Relations

Patterns of interaction and influence in interpersonal relations. The course begins with a consideration of the problem of social order; i.e., how do we constrain individual desires and induce people to act morally. We will also examine the problem of the "absurd", using Camus' Outsider. This will be followed by an examination of impression management and exchange theories. Special attention will be given to the role of other persons in "altercasting" our behaviour, with examples drawn from research on mental illness and stereotyping. Other topics include status and power relations in small groups, social influence processes, and the social psychology of class, sex and race rela-Prerequisite: One full-course equivalent in Sociology

A consideration of elementary statistics including the summarizing of data, the

necessary for the student who wants to become an informed reader of social research. A working knowledge of elementary algebra is required. However, the lecturer will undertake brief reviews of mathematics as the need arises. This course is intended to supplement

STAB47

Session: Winter Day

A. Tuzlak

SOCBO3Y History of Social Thought A study of the development of social thought from the ancient periods to contemporary sociology. The focus will be on the ideas of those thinkers who have historical significance and contemporary relevance. The course begins with a basic discussion of the nature and types of social thought. It will then look at the ideas on society in Ancient China, Greece and Rome, and the Medieval times. It will then analyze the beginnings of modern social thought with special emphasis on the emergence of sociology and the work of such theorists as Comte, Marx, Durkheim, Spencer, Simmel and Weber. Finally, contemporary schools of sociological theory will be considered. Prerequisite: One full-course equivalent in Sociology Session: Winter Day R. O'Toole

SOCBO4Y Political Sociology

Political Sociology is concerned with power in its social context. The course will examine Liberal-pluralist and Marxist conceptions of power; the rise of democracy and social classes; political ideologies; political parties and social movements; war and warfare; race and politics. Prerequisite: One full-course equivalent in Sociology

Session: Winter Day

I. Tanner

SOCBO6S Social Statistics

logic of statistical decision-making and a number of common statistical tests. Statistics is a basic tool used by sociologists. An understanding of statistics is SOCB01. Exclusion: ANTC35, ECOB11, PSYB07, Prerequisite: One full-course equivalent in Sociology

SOCB12Y Sociology of the Family The sociological study of the family in contemporary Western society. At a micro level, the focus is on the the family as a small group, emphasizing the family life cycle, member roles, interaction patterns and interpersonal problems in family relations. At a macro level, the focus is on the family in its community, institutional and historical setting, emphasizing the various social factors which affect family life and its

Exclusion: (SOCB08F and SOCB09S)

Prerequisite: SOCA01Y Session: Winter Evening T.B.A.

changing nature.

SOCB17S Medical Sociology

Social factors in sickness and health. training of doctors and nurses, organization of health care services, and alternatives to conventional medical care. This course is designed to meet the needs of students in both the natural and the social sciences.

Session: Winter Day M. Hammond

SOCB18Y Sociology of Deviant Behaviour

The analysis of the social processes by which behaviour is defined and treated as criminal, immoral, disgusting, sick, or merely eccentric; the establishment and administration of sanctions, treatment and other controls; deviant subcultures; specific categories of deviance, such as, crimes against persons, "victimless crimes": mental illness, sexual deviation and alcoholism. Prerequisite: SOCA01Y Session: Winter Day 1. Lee

SOCB20Y Ethnic and Race Relations

A study of the structure and processes in a society made up of a variety of ethnic and racial groups. The focus will be on Canada. The course will study ethnic stratification immigration, prejudice and discrimination, ethnic social mobility and ethnic conflict, assimilation and ethnic identity retention, and the problem of integration of society. Specific topics will include: conflict of generations, stereotyping, Canadian bilingualism and multiculturalism and others. Prerequisite: One full-course equivalent in Sociology Session: Winter Day

W.W Isajiw

SOCB21Y Sociology of Religion A sociological analysis of religion as a social institution. Consideration of the problem of a definition of the phenomenon; analysis of major theoretical and empirical contributions to the field: and investigation of forms of religion in historical and contemporary contexts.

Prerequisite: SOCA01 and one B-level full-course equivalent in Sociology. Session: Winter Day R. O'Toole

JCSB27Y Organizational Behaviour Social factors in administration, the structuring of intra-organizational and interorganizational relationships, and the distribution of power and dependency in society. Empirical studies used in the first term will focus on single organizations. Those used in the second term will focus on industries and other inter-dependent organizations. Prerequisite: One full-course equivalent in Sociology, Commerce, Economics, or Political Science Session: Winter Day, Winter Evening

SOCCO1F Sociology of Revolution The phenomenon of revolution as defined, described and analyzed from comparative and historical perspectives. Specific case-studies are utilized in order to explain the causes and courses of revolutionary leadership, mobilization, and strategy.

Particular attention is paid to revolution as both cause and effect of major social change. Prerequisite: SOCA01 and one B-level full-course equivalent in Sociology Session: Winter Day I-L. deLannov

SOCCO2S Research on Small Groups A laboratory course consisting of a design of research for the study of the process of social interaction in small groups in relation to the stages of group development and the emergent internal structures of social relationships. Prerequisites: SOCB01 and SOCB07 or permission of the instructor Session: Winter Day A. Tuzlak

SOCCO3F Collective Behaviour The study of uninstitutionalized group behaviour - crowds, panics, crazes, riots and the genesis of social movements. Prerequisite: SOCA01Y and one B-level full-course equivalent in Sociology Session: Winter Day

SOCCO4S Social Movements The development of an approach to

J. Hannigan

social movements which includes the following: the origin of social movements, mobilization processes, the career of the movement and its routinization. The course readings will be closely related to the lectures, and a major concern will be to link the theoretical discussion with the concrete readings on movements. Prerequisite: SOCA01Y and one B-level full-course equivalent in Sociology Session: Winter Day J. Hannigan

SOCCOSY Contemporary Social Theory

A consideration of basic questions underlying sociological thinking as they arise in the work of contemporary theorists and theoretical schools. Students will be expected to develop an informed. critical perspective on current debates within the discipline. Though not formally required, a previous course in social and/or political theory (e.g. SOCB03Y) would be a distinct asset. Prerequisite: SOCA01 and one B-level full-course equivalent in Sociology Session: Winter Day M. Hammond

SOCCO6F Applied Sociology Use of sociological theory and methodology to clarify policy issues in organizations. Evaluation of agency services. assessment of community need or demand for services, analysis of unanticipated consequences. Prerequisite: Two full-course equivalents in Sociology Session: Winter Day T.B.A.

SOCCO7F Sociology of Occupations and Professions

This course examines the relationship of people to their work in contemporary capitalist society. Topics will include: industrialization and the rise of capitalism; Labour force trends; the nature and

meaning of work; the sociology of Labour Markets; women and work. Prerequisite: SOCA01Y and one B-level full-course equivalent in Sociology Session: Winter Day J. Tanner

SOCC13S Industrial Sociology

A companion to SOCC07, this course will examine such issues as: work organizations; unions and industrial relations; industrial conflict, unemployment; work in transition. Prerequisite: SOCA01Y and one B-level full-course equivalent in Sociology

(ICSB27 recommended) Session: Winter Day

I. Tanner

SOCC17F Social Change in the Third World

Sociological studies of stratification, politics, religion, education, and kinship organization in countries of Africa, Asia. Latin America.

Prerequisite: Two full-course equivalents in Sociology, one of which must be a Blevel. SOCC33(SOCB14Y) and SOCC35(SOCB16Y) recommended Session: Winter Evening J-L. deLannoy

SOCC18S Sociology of Art and Culture

A seminar on the organization, production and appreciation of art and culture in various societies. Lectures and discussions will focus on literature, film and painting, but students may choose from any form of "high culture" for special research.

Exclusion: (SOCC18Y) Prerequisite: SOCA01 and one B-level full-course equivalent in Sociology Session: Winter Day W. W. Isajiw

SOCC28F Sociology of Aging

An examination of the latter stages of the family life cycle, with special reference to the period following middle age, and including social and psychological dimensions of aging, changing roles, departure of children, the significance of retirement, problems of adjustment to aging, the place of the aged person in the modern family, and bereavement. Prerequisite: SOCAO1Y and one B-Level full-course equivalent in Sociology Session: Winter Day T.B.A.

SOCC29F Variant Family Forms

A review and sociological analysis of non-traditional family forms and innovative life styles representing departures from conventional marriage and family patterns in the 1970's. Included will be "singleness", "living together", androgeny as a life style, non-monogamous forms. voluntary childlessness, communes and co-operatives, and "swinging". Special reference to structural and functional dimensions, role changes, special problems and community response. Prerequisite: SOCB12 (SOCB08F and SOCB09S) Session: Winter Evening

SOCC30S Criminal Behaviour

A. Tuzlak

An advanced study of the causes and consequences of criminal behaviour, with special emphasis on Canada. Prerequisite: SOCB18 Session: Winter Day A. Tuzlak

SOCC32Y Sociology of Science A study of the relationship between sci-

ence and society. In the first term, the effects of different social structures on the development of science and scientific ideas will be analyzed in a number of historical contexts. During the second term, the effects of science on contemporary societies will be studied, with particular attention given to the Canadian situation. For instance, we will consider from a sociological perspective such topics as nuclear energy and genetic engineering. This course will be of interest to students of both the natural and social sciences. Session: Winter Day M. Hammond

SOCC34Y Sociology of Mass Media and Communications

The study of the social organization of the mass media - radio, TV, newspapers. magazines and trade publications - and of the effects of the contents of mass communications on the general public. Exclusion: (SOCB15Y) Prerequisite: SOCA01 Session: Winter Day J. Hannigan

SOCC37S Environment and Society This course links studies in the classical sociology of resources and territory (as in the works of Harold Innis, S.D. Clark. and the Chicago School), with modern topics in ecology and environmentalism. The course will include empirical research, and theoretical issues, in the relationship of various social systems to their natural environments. Prerequisite: Two full-course equivalents in Sociology. Session: Winter Day J.A. Lee

SOCC40F/S Supervised Independent Research

Student research by field methods, survey analysis or library or archival research. Regular supervision of data collection and analysis, culminating in a research report. Prerequisite: Completion of at least fifteen full-course equivalents and permission of instructor. Session: Summer Evening, Winter Day, Winter Evening Staff

SOCD41F/S Supervised Independent Research

Student research by field methods, survey analysis or library or archival research. Regular supervision of data collection and analysis, culminating in a research report. Exclusion: (SOCC41) Prerequisite: SOCA01 and one B-level full-course equivalent in Sociology Session: Summer Evening, Winter Day, Winter Evening

SOCD42F Advanced Seminar in Sociological Theory

Special topics in contemporary social theory, designed as a final year course for students taking a Specialist Programme in Sociology. Exclusion: (SOCC42F) Prerequisites: SOCB01, SOCB03, and SOCB06 Session: Winter Day W. W. Isajiw

Courses Not Offered in 1989-90

Staff

SOCBO5Y Urban Sociology Prerequisite: One fullcourse equivalent in Sociol-

SOCB07Y	Small Groups
	Prerequisite: Two full-
	course equivalents in
	Sociology, one of which
SOCB10Y	must be a B-level course. Social Class and Social
20CP101	Stratification
	Prerequisite: SOCA01Y
SOCB13Y	Canadian Society
555225	Prerequisite: SOCA01Y
SOCB23Y	Population
	Prerequisite: One full-
	course equivalent in Sociol-
	ogy or JCSB27
SOCB26Y	Sociology of Education: Primary and Secondary Levels
	mary and Secondary Levels
	Exclusion: (SOCB24 and
	SOCB25) Prerequisite: SOCA01
SOCCIOE/S	Sex, Self and Society
500010175	Prerequisite: SOCA01 and
	one B-level full-course
	equivalent in Sociology
SOCC11F/S	Sociology of Law and Law
	Enforcement
	Prerequisite: SOCA01 and
	one B-level full-course
00001004	equivalent in Sociology
2000191/2	Sociology of Conflict
	Prerequisite: SOCA01 and one B-level full-course
	equivalent in Sociology
SOCC19F/S	Sociology of Knowledge
	Prerequisite: SOCB03
SOCC22F/S	Qualitative Methods in
	Social Research
	Prerequisite: SOCA01 and
	one B-level full-course
0000045/0	equivalent in Sociology
30CC24F/S	Changing Family Life in Canada
	Prerequisite: SOCA01 and
	one B-level full-course
	equivalent in Sociology
SOCC25F/S	Comparative Race Relations
	Prerequisite: Two full-
	course equivalents in
	Sociology, one of which must be a B-level course.
0000000	
SOCC26F/S	Sociology of Urban Growth
	Prerequisite: SOCA01 and one B-level full-course
	equivalent in Sociology
SOCC27F/S	Social Class in Canadian
	Society
	Prerequisite: SOCA01 and
	one B-level full-course
	equivalent in Sociology

SOCC33Y SOCC35Y SOCC36F/S Sociobiology SOCD43S SOCD44F SOCD45S

Modern Languages Specialist Programme may satisfy some of their Programme requirements through the Study Elsewhere Programme operated by the University of Toronto in Granada, or the summer courses offered by the University of Windsor, in Madrid, Major Programme in Spanish

Language

Supervisor: U. Lesser-Sherman (284-3151) Seven full-course equivalents are required as follows:

SPAA01Y

Introductory Spanish (Note: Students who have OAC Spanish or Grade 13 Spanish must complete, in place of SPAA01 and A02, one and one-half full course equivalents from SPA or HUM courses which concentrate on Spanish language, culture, or literature, to be arranged with the Supervisor.)

SPAA02H	Introductory Spanish
	Language Practice
SPAB01Y	Intermediate Spanish
SPAB02H	Intermediate Spanish
	Language Practice
SPAB04F	Phonetics
SPAB12S	History of the Spanish
	Language I
SPACOLY	Advanced Spanish
HUMC09F	The Civilization of Spain I
HUMC13S	The Civilization of Spain II
or	-
HUMC14Y	Topics in Latin American
	Culture and Literature
SPAC21F	Stylistics and Translation
SPAC22S	History of the Spanish
511.0445	Language II
	tanguage ii

Language requirements will be waived by the Supervisor for students judged to have advanced knowledge of Spanish. Equivalent courses will be substituted in consultation with the Supervisor.

SPAAOIY Introductory Spanish

An elementary course for students with no knowledge of Spanish. Elements of Spanish grammar are studied and special emphasis is placed on oral practice.

This course stresses the development of the practical skills of understanding and speaking needed for the corequisite SPAA02H. Specially written dialogues are the working basis for both A01Y and A02H: the textbook is for reference only. Special classrooms provide a relaxed and friendly atmosphere. Students are also encouraged to use the Language Resource Room (R4104) to

Spanish

Discipline Representative: R. Skyrme (284 - 3205)

Students enrolling in Spanish are offered a wide range of courses in the Spanish language.

Comparative Social Struc-

Prerequisite: SOCA01 and

Prerequisite: SOCA01 and

Exclusion: (SOCB14Y)

one B-level full-course

Exclusion: (SOCB16Y)

one B-level full-course

equivalent in Sociology

Exclusion: (SOCB19Y)

Prerequisite: Two full-

course equivalents in

Advanced Seminar in

Exclusion: (SOCC43S)

SOCB03 and SOCB06

Prerequisites: SOCB01,

Advanced Topics in Sociol-

Prerequisite: 15 full-course

and permission of instruc-

Advanced Topics in Sociol-

Prerequisite: 15 full-course

and permission of instruc-

equivalents in Sociology

equivalents in Sociology

Research Methods

Social Change

Sociology

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Courses in Humanities, Linguistics, and in other languages and literatures. may prove valuable to these students as adjuncts to their plan of study or as an enrichment of their total programme.

Students intending to enrol in the Specialist Programme in Modern Languages should consult the Calendar under Language Studies.

Students who wish to study Spanish Literature in the original may do so under Supervised Reading.

It is important that students enrolled in Spanish confer with the Supervisor at the earliest possible date in order to arrange a coherent and appropriately scheduled Programme.

Students in this Programme, or in the

practise grammar and vocabulary skills with the help of specific computer programmes.

Exclusion: OAC Spanish or Grade 13

Spanish

Corequisite: SPAA02 Session: Winter Day

T.B.A.

SPAA02H Introductory Spanish Language Practice

Practical application of language structures introduced in SPAA01Y.

As with the corequisite SPAA01Y, a relaxed and friendly atmosphere is provided in specially equipped language classrooms. Classtime is devoted to conversing in Spanish. Students participate in language games, develop dramatic skits, and prepare dialogues and conversations based on situations and topics introduced in the dialogues of SPAA01Y. Exclusion: OAC Spanish or Grade 13

Spanish Corequisite: SPAA01 Session: Winter Day

T.B.A.

SPABO1Y Intermediate Spanish

A continuation of SPAA01Y.

The same format and methodology will be followed at a more advanced level. Three hours per week: one hour grammar: two hours oral practice. Prerequisites: OAC Spanish or Grade 13 Spanish or SPAA01 and SPAA02 Corequisite: SPAB02 Session: Winter Day T.B.A.

SPABO2H Intermediate Spanish Language Practice

A companion course to SPAB01Y.

Through reading material, composition, translation, and play-acting, this course forms an essential complement to the predominantly oral approach of SPABO1Y. Two hours per week in tutorial format.

Prerequisites: OAC Spanish or Grade 13 Spanish or SPAA01 and SPAA02

Corequisite: SPABO1 Session: Winter Day

T.B.A.

SPACO1Y Advanced Spanish

Intensive study of grammar and syntax: translation, composition, and oral prac-

Detailed examination of the subtleties of Spanish grammar through intensive practice in translation from and into Spanish, composition, and conversation. Three hours per week in lecture/tutorial format. Course required for Spanish Major, but open to all qualified students. Prerequisite: SPABO1 Session: Winter Day R. Skyrme

SPAC21F Stylistics and Translation The examination of Spanish literature in relation to the resources of the language.

The translation and analysis of texts and the challenge of creative composition offer students who enjoy the shaping of language the opportunity to refine their reading and writing skills by exploring the expressive flexibility of Spanish used in a variety of literary contexts. Two hours per week in a workshop format which requires active class participation. Exclusion: (SPAB21) Prerequisite: SPAB01 R. Skyrme

SPAC22S History of the Spanish Language II

The Spanish language from the medieval period to the present.

Through analysis of texts from the ninth to the twentieth centuries, this course will focus on inherent changes in and external influences on the development of Castilian from a dialect in the medieval period into one of the major languages of modern times.

Three hours per week in tutorial format.

Exclusion: (SPAB22) Prerequisite: SPAB12 R. Skyrme

SPAD01-D05F SPADO6-D10S

SPAD11-15Y Supervised Reading

Students who wish to enter the Spanish Supervised Reading programme should enrol in any of the above courses (Y, F or S as appropriate). They should then contact a particular instructor in the discipline to discuss a proposed topic. Students should have sufficient background in the area they want to study more closely, and they should provide a rationale for choosing a specific topic.

They will be expected to read much of the material on their own, and to meet with their tutor once a week. The exact arrangements will depend on the nature of the texts and the level of ability of

Specific topics in Peninsular Spanish and Latin American literature, linguistics and culture.

Exclusions: (SPAC02-C06), (C07-C10), (C11-C15)

Prerequisite: SPAB01 Session: Winter Day P. León, R. Skyrme

See also the following courses offered under Humanities:

HUMB42Y The Modernist Adventure HUMB45S The Spanish Civil War: Fact

to Fiction

HUMC09F The Civilization of Spain I HUMC13S The Civilization of Spain II HUMC14Y Topics in Latin American Culture and Literature

JSDD16Y Golden Age Spanish Drama

This is an advanced seminar course on the Spanish drama of the 16th and 17th centuries. Representative works by the major playwrights will be closely examined and both literary and practical aspects will be considered. Videotapes of historical productions will be discussed. Students will be required to present one theoretical and one staging seminar. The course will be conducted in English. Texts will be read in translation.

Prerequisites: One B-level Drama fullcourse equivalent and permission of the Instructor.

Session: Winter Day P. León

Courses Not Offered in 1989-90

SPAB04F

Phonetics

SPAB12S

Corequisite: SPAA01 History of the Spanish Language I

Prerequisite: SPAB04

Statistics

Staff member responsible for curriculum: M. Evans (284-3360)

Probability and statistics have developed over a period of several hundred years as attempts to quantify uncertainty. With its origins in modelling games of chance, probability theory has become a sophisticated mathematical discipline with applications in such fields as demography, genetics and physics.

Statistics is concerned with the proper collection and analysis of data. both to reduce uncertainty and to provide for its assessment via probability. Applications range from pre-election polling to the design and analysis of experiments to determine the relative efficacies of different vaccines.

STAB22F and STAB47S serve as an introduction to the discipline. STAB47S is required in the Computer Science Specialist Programme and the Mathematics Major and Specialist Programmes. The C-level courses build upon the introductory material to provide a deeper understanding of statistical methodology and of its practical implementation.

Major Programme In Statistics Supervisor: M. Evans (284-3360) The Major Programme in Statistics is designed for students who want a good basic understanding of statistical theory and methodology. The emphasis is on providing students with the opportunity to learn the skills most commonly

required in statistical applications.

First Year MATA26Y or A27Y or (A55Y) MATA04Y* (MATA40, A45) CSCA58F SCSCA68S

Second Year STAB22F STAB47S MATB41F, MATB42S MATBOSY (MATB50, B55)

Third Year STAC67F or STAC62F STAC42S or STAC52S

In addition four half courses are required. Eligible courses are any C-level Statistics courses or Statistic courses on the St. George Campus numbered 300 or higher or CSCC54F.**

- * MATA04Y (MATA40, A45) may be taken in the second year.
- ** In fulfilling the optional course requirements it is preferable that students consult with the supervisor of studies before making their selections.

STAB22F Statistics

This course is an introduction to probability and statistics. The emphasis of the course is on motivation and applications and the treatment is essentially nonmathematical. A statistical computer package is used for most computations: however, no previous experience with a computer is required. The course covers: descriptive statistics, probability and expectation, correlation and regression, sampling, experimental design and methods of statistical inference. Exclusions: ANTC35, BIOB28, ECOB11, GGRB31, PSYB07, SOCB06, (STAB52) Session: Winter Day

STAB47S Introduction to **Mathematical Statistics**

This course is an introduction to the mathematical theory of probability and statistics. The course covers: probability models, marginal and conditional probability, expectation, the Weak Law of Large Numbers and the Central Limit Theorem, statistical models, the likelihood function, estimation, hypothesis testing, linear models. Prerequisite: MATA26/27

Exclusion: (STAB57) It is strongly recommended that students take STAB22F prior to taking STAB47S.

Session: Winter Day

STAC42S Multivariate Analysis

The multivariate normal distribution and associated distribution theory. Statistical inference for the multivariate normal. principal components analysis, factor analysis, discriminant analysis. Prerequisite: MATB41F, STAB47S

STAC67F Regression Analysis

The statistical analysis of linear models. Transformations. The analysis of covariance. Bioassay. Computational procedures.

Prerequisite: STAB47S Session: Winter Day.

Courses Not Offered in 1989-90

STAB52F Probability and Statistics I STAB57S Probability and Statistics II STAC52S Experimental Design STAC62F Stochastic Processes

Women's Studies

Major Programme in Women's Studies

Supervisor: M. Latta (284-3153). The Major Programme in Women's Studies provides an interdisciplinary perspective on women's roles, women's work, and women's contributions past and present to society. It is designed to acquaint students with the substantial body of scholarship on women and the critical concepts and methodologies used to examine women in the major academic disciplines. The interdisciplinary nature of the Programme is supported through the course offerings in Humanities, Life Sciences and Social Sciences listed below. To obtain a Major in Women's Studies students are required to take six full-course equivalents and choose a concentration of study in Humanities or Social Sciences. In many cases students will be able to combine a major in Women's Studies with a Major in one of the College's disciplines. Students are encouraged to consider this option if preparing for a career in research, teaching, administration or social work. These careers involve consideration of women and women's issues and a Major in Women's Studies would be a definite asset. The Women's Studies Programme offers two core courses supervised by Women's Studies Faculty, a wide variety of Programme courses, and a number of courses that can be taken with the approval of the Women's Studies Supervisor and the course instructor. Students are urged to consult with the Supervisor of Studies regarding course selections and to consult the calendar for the availability of courses and the necessary course prerequisites.

The Major Programme in Women's Studies with an emphasis in Humanities

Students must select six full-course equivalents as follows:

- JHSA01Y Introduction to Women's Studies
- Three full-course equivalents from list A
- One and one-half full-course equivalents from list B
- JHSD01H Senior Project in Women's Studies

The Major Programme in Women's Studies with an emphasis in Social Sciences

Students must select six full-course equivalents as follows:

- JHSA01Y Introduction to Women's Studies
- Three full-course equivalents from list B
- One and one-half full-course equivalents from list A
- JHSD01H Senior Project in Women's Studies

List A: Humanities ENGD32F/S George Eliot ENGD44F Virginia Woolf ENGD71F/S* Women Poets ENGD72F*

19th-Century Women Writ-FREB80F* Representations of Women

in French Literature FREB81F/S* Women's Consciousness in

French Literature HISC10Y* The Sexes Since 1350 HUMB26Y Women in the Major Reli-

gions HUMB62Y Women and Literature HUMC61F/S Women in Ancient Greece LINC28F/S* Language and the Sexes

PHLB05F/S Social Issues PHLC11S Women and the Law

List B: Social Sciences

ANTB15Y Biological Anthropology Anthropology of Women ANTC11Y ANTB20Y Introduction to Social Organization

ANTC40Y* Anthropological Demography

ANTC54Y Anthropology of Sex ANTC55Y Women in Development ANTD12F* Social Behaviour of Non-**Human Primates**

GGRC06S Gender and the City PSYB10H/S* Introduction to Social

Psychology

PSYD22F/S* Socialization Processes PSYD18F/S* Psychology of Gender SOCB12Y Sociology of the Family SOCC10F/S* Sex, Self, and Society SOCC24F/S* Changing Family Life in Canada SOCC28F/S* Sociology of Aging SOCC29F/S* Variant Family Forms

Optional Courses (with permission of Supervisor and course instructor) ANTC48Y* Childhood in Contemporary Culture Personnel Administration COMC22S

Supervised reading courses focused on women may be included.

* Students should check these courses for prerequisites.

IHSA01Y Introduction to Women's Studies

This is an interdisciplinary course which brings the perspectives of philosophy. psychology, political theory, sociology, anthropology, history, language, literature and the arts to the study of the position of women in western civiliza-

The goal of this course is to enable students not only to enter into the contemporary feminist debates but to understand the significance of these debates within the disciplines under discussion. Issues to be addressed include: the patriarchal foundation of our culture; the politics of the family including the psychological dynamics of socialization; women's work in the home and the paid labour force; the transmission and perpetuation of images of women; and contemporary feminist issues including reproductive freedom, sexual politics, violence against women, and pornography.

Session: Winter Evening Co-ordinator: G. Guberman

JHSD01H Senior Project in Women's Studies

This course is designed for students completing the Major Programme in Women's Studies and is normally taken after completion of ten full course equivalents. Women's Studies students choose a topic of special interest to them and undertake an in-depth investigation of the topic under the supervision of a Women's Studies Faculty member. Arrangements with the supervising faculty member must be

made by the student before the end of the spring pre-registration period.

Students are strongly urged to choose an area in which they have done some concentrated study and, where possible, to build upon work taken in previous courses. A substantial essay, research project, or major presentation on the approved topic will be given to the supervising faculty member and a second evaluator will be appointed. Session: Winter Day Staff

Stratford Summer Seminars

Every August, in Stratford, Ontario, the Division of Humanities organizes weeklong Shakespeare Seminars. These seminars accommodate 80 members in each week, who are of all ages and who come from all over Canada and the United States. The seminars do not carry degree credit, but are designed as adjuncts to undergraduate and graduate academic study of Drama and Theatre.

Each week members are provided with tickets to seven productions in Stratford, participate in house seminars which provide an academic background to the plays, and attend seminars conducted by the leading actors, directors, and designers of the Stratford Festival. In 1988 the seminars counted among their guests such actors as Bernard Hopkins, Colm Feore, and Nicholas Pennell.

The seminar programme maintains a large mailing list by which prospective members are given full details of the programme for each summer. Students at Scarborough College are invited to contact either Professor Andrew Patenall or the secretary (284-3185), who will be pleased to provide them with further details of the programme. For inclusion on the mailing list students should contact the secretary (H525A), who will provide them with current newsletters, and ensure that they receive future newsletters. Full-time students to the age of 25 are provided with generous bursaries to defray the cost of theatre

The seminar programme also organizes theatre outings during the academic year, and occasionally brings distinguished actors into the College for

seminars and master classes during the term.

However, in 1989, due to the research leave of the Director, the Stratford Summer Seminar Programme will be suspended.

Following its successful inception in 1987, a programme of London Theatre Seminars is conducted during Reading Week each February. The 1989 seminar is devoted to the Victorian Playhouse. Enrolment is limited to forty members. Return airfare, transportation, hotel and breakfast, six theatre tickets, tours to such places as Bristol or Stratford-upon-Avon, and seminars are included in the cost of each session.

EQUIVALENT COURSE LIST

SCARBOROUGH COLLEGE - ST. GEORGE CAMPUS

STUDENTS WISHING TO TAKE COURSES ON THE ST. GEORGE CAMPUS SHOULD CONSULT THIS LIST.

STUDENTS WHO EXPECT TO RECEIVE CREDIT TOWARDS THEIR PROGRAMME(S) FOR FULLY OR PARTIALLY EQIVALENT COURSES MUST CONSULT WITH THEIR SUPERVISORS.

SUPERVISORS.	1	ı
ST. GEORGE COURSE	FULLY EQUIVALENT SCARBOROUGH COURSE	PARTIALLY EQUIVALENT SCARBOROUGH COURSE
	If a course appears here: a) Students are normally expected to take the Scar- borough course.	If a course appears here: There is significant over- lap in the content of this course and the St. George course.
	b) Students may not receive credit for both this course and the St.	Therefore, students may not receive credit for both this course and the
YEAR: 1989/90	George course.	St. George course.
Actuarial Science		
ACT323H	1	CSCC51H (IMCC51H)
Anthropology		
ANT100Y	ANTA01Y	
ANT203Y	ANTB15Y	
ANT204Y	ANTB20Y	
ANT241Y	ANTB21Y	
ANT311Y	ANTC52Y	
ANT316H	ANTC37H	
ANT326Y	ANTB30Y	<u> </u>
ANT332Y		ANTC16Y
ANT334Y	ANTC47Y	
ANT340H	ANTC32H	
ANT361Y	ANTD24Y	
ANT441H		ANTC19H
ANT443Y		ANTB03F
Applied Mathematics		
APM256H		MATC51H/C56H
APM331H		MATC51H/C56H
APM346H		MATC56H
Astronomy		1
AST100Y	ASTA03Y	ASTA02Y
AST120Y	ASTA02Y	ASTA03Y
AST200H	<u> </u>	ASTA02Y, A03Y
AST210H	ASTB03H	
AST225H	ASTB02H	
AST321H		ASTBOLY
AST425H	ASTC01H	
AST1300Y (SGS)	ASTC10Y	
Biochemistry		
BCH320Y	JBCC35Y	
BCH321Y		JBCC35Y
BCH370H	ІВССЗ6Н	
BCH371H		ІВССЗ6Н

ST. GEORGE COURSE	FULLY EQUIVALENT SCARBOROUGH COURSE	PARTIALLY EQUIVALENT SCARBOROUGH COURSE
Biology		
BIO110Y	BIOA03Y	
BIO227Y	BIOBOSY	
BIO240Y	BIOBOSY	
BIO233Y	BIOB12Y	
BIO300H	ВІОС03Н	
BIO301H	BIOC16H	
Botony		
BOT210Y	BIOC37H+BIOC38H	
BOT220Y	BIOB06Y	
BOT222Y	BIOB06Y	
BOT240Y		BIOC20Y
BOT324H	BIOD30H	
BOT325H		BIOB06Y
BOT330Y	BIOC46H+BIOC47H	
BOT340Y	BIOC37H+BIOC38H	
BOT430Y	BIOD10H+BIOD11H	
BOT460Y	BIODOLY or DO2Y	
Chemistry		
CHM135Y	CHMA02Y	
CHM136Y	CHMA02Y	
CHM150Y		CHMA02Y
CHM219H		CHMB02Y
<u>CHM222Y</u>		СНМВОЗУ
CHM229H		СНМВОЗУ
CHM239H		CHMB01Y:CHMC01Y
CHM240Y	CHMBOSY	
CHM249H		CHMBOSY
CHM328H		СНМВОЗУ
СНМ329Н		CHMC02Y
СНМ339Н		CHMB01Y:CHMC01Y
CHM349H		CHMC03Y
CHM418Y	CHMD46Y	
CHM420H)**		
CHM421H)***		
CHM422H)**		
CHM423H)		
CHM424H)**		CHMD50H*
CHM425H)***		
CHM426H)**		
CHM427H)	a	
CHM428Y	CHMD46Y	
CHM429H***		CHMD50H*
CHM432H)		
CHM433H) CHM434H)		CHMD48H* or D52H*
CHM435H)		
CHM439Y	CHMD46Y	
CHM4391 CHM440H)	CRMD401	
CHM440H)		!
CHM441H)		CUMPAGUE OF DE 1114
CHM443H)		CHMD49H* or D51H*
CHM447H)		1
CHM449Y	CHMD46Y	
		•

ST. GEORGE COURSE	FULLY EQUIVALENT SCARBOROUGH COURSE	PARTIALLY EQUIVALENT SCARBOROUGH COURSE
* (consult with instructor -		
content of these courses		
change from year to year)		
** not offered after 1988/89		4
*** first offered 1989/90		
Classics		
CLA100Y		HUMA01Y,CLAC03Y,
CLA105H		CLAC04Y
·		HUMA11Y, C12Y
CLA130Y CLA200Y	· · · · · · · · · · · · · · · · · · ·	CLAA01Y
CLA2001	CLACONI	PHLB40H.C40H.B42H.C42H
CLAZUZH	CLACO1H	
	Topic changes year to year Consult with instructor	
CLA205Y	HUMA11Y	HUMC12Y
CLA215H+225H	CLAC03Y	
	CLACUST	CLAB33F
CLA216H (formerly GRH221H)		GRHC24H
CLA217H		CRUCALL
(formerly GRH223H)		GRHC24H
CLA225H+215H	CLAC03Y	
(formerly GLL227H)	CLACOST	
CLA240Y	GRHB01Y	
(formerly GRH200Y)	GKHBOTT	
CLA241Y	GRHB02Y	
(formerly GRH216Y)	GRIBOZI	
CLA250Y	GRHB03Y	CLAB31H
CLA255Y	- OMIDUST	CLAUSINI
(formerly GRH209Y)		Į.
CLA270Y		GRKC22Y, GRKC24H
(formerly GLL250Y)	<u></u>	June 221, Oktobril
CLA300Y	CLAC04Y	
(formerly GLL300Y)		
CLA303H		CLAC02H
		Topic changes year to year
		Consult with instructor
CLA340Y	!	GRHC25Y, C26Y
(formerly GRH309Y)		
CLA345Y	CLAB30H	GRHC25Y, C26Y
(formerly GRH312Y)		
CLA351Y		GRHB03Y, CLAB31H, CLAB32H
CLA355H		HISC61Y
(formerly GRH319H)		
Commerce		
COM120H/121H	COMA01Y	
(formerly COM102H/103H)		
COM203H		COMA01Y* (COM203 not
		necessarily acceptable
	1	prerequisite for COMBOIY)
COM220Y	COMBOLY	
COM221H		COMB01Y (COM221 not
(formerly COM204H)		necessarily acceptable
•		prerequisite for COMC01Y)
	I	l

	FULLY EQUIVALENT	PARTIALLY EQUIVALENT SCARBOROUGH COURSE
ST. GEORGE COURSE	SCARBOROUGH COURSE	SCAR BOROUGH COURSE
COM222H	COMA01Y	
(formerly COM205H)	1	
(with COM102H)	COMCOLY	
COM320Y	ICED75H	
COM330H	JCED/3H	
(formerly COM324H)	ICEC02Y	
COM331Y	ICEC02Y	
COM337Y	COMC04H/C05H	
COM350Y		
COM351H	COMC04H	
(formerly COM349H)	POLB61H+POLB62H	
COM360Y	POLBOINTPOLBOZH	1
(formerly COM301Y)	ICSB27Y	
COM362H/363H	JC3b271	
(formerly COM341H/342H)	COMC30Y	
COM390Y	COMCSOI	
(formerly COM300Y)	COMD80H	
(formerly COM437H)	COMPANY	
COM420Y		COMDS5H
COM421H	сомреон	
(formerly COM430H)	COMPONI	
COM423Y	COMC15Y	
COM426H	COMD50H	
(formerly COM326H)	COMBSON	1
COM428H	COMC10H	
COM423H	CONCIO	JCED70H
(formerly COM424H)		, , , , , , , , , , , , , , , , , , , ,
COM438H		ICED70H
COM452H		СОМС05Н
(formerly COM410H)		
COM453H	COMD07H	
(formerly COM435H)		
COM460H	COMC22H	
(formerly COM443H)		
COM470Y	JCEC72H+C73H	\
(formerly COM422Y)		
COM492H	COMD20H	
Computer Science		
CSC104H	CSCA04H	
CSC108H	CSCA56H	CSCA58H
(formerly CSC201H)		
CSC118H	CSCA66H	CSCA68H
(formerly CSC202H)		
CSC148H	CSCA58H	CSCA56H
CSC150H	CSCA58H	CSCA56H
CSC158H	CSCA68H	CSCA66H
CSC160H	CSCA68H	CSCA66H
CSC209H	СЅСВОЭН	
CSC228H	CSCB28H	
CSC238H	CSCB38H	
CSC258H	CSC858H	
CSC324H	CSCC24H	
CSC324H		CSCC50H
C3C33011	•	-

ST. GEORGE COURSE	FULLY EQUIVALENT SCARBOROUGH COURSE	PARTIALLY EQUIVALENT SCARBOROUGH COURSE
CSC350H	CSCC50H	
(formerly CSC451H)		
CSC351H	CSCC51H (IMCC51H)	
CSC354H	CSCC54H	€
(formerly CSC474H)		
CSC364H	CSCC64H	
<u>CSC378H</u>	CSCC78H	
ELE385H	CSCC85H	
CSC494H	CSCD94H	
CSC495H	CSCD95H	
<u>Drama</u>		
DRM100Y	ENGB11Y	
DRM200Y	DRAB01Y	
DRM230Y		DRAC02Y
DRM260H+262H	DRAB03Y	
DRM264H+266H	DRAB04Y	
DRM268H		DRAB06Y
DRM300Y	DRAC01Y	
(formerly DRM250Y)		
DRM390Y	DRAD20Y - D24Y	
	(to be considered on a	
	course to course basis)	
DRM400Y	DRADOIY	
(formerly DRM350Y)		
Economics		
ECO100Y	ECOA01Y	
ECO101Y		ECOB82Y
ECO200Y	ECOB03Y (B01 + B02H)	
ECO201Y		ECOB82Y
ECO202Y	ECOBO7Y (B05 + B06H)	
ECO206Y		ECOB03Y (B01H and B02H)
ECO208Y		ECOB07Y (B05H and B06H)
ECO220Y	ECOB11H + B12H	ANTC35H, GGRB31H, PSYB07H, STAB52H, SOCB06H
ECO221Y		ECOB81Y
ECO222Y		ECOB81Y
ECO227Y		ECOBITH + ECOBI2H
ECO236Y	ECOC31H + C32H	
ECO239Y		ECOC51H
ECO244Y		ICEC54H
ECO305Y		ECOB81Y
ECO310Y		ECOC41H or (ICEC40H)
ECO312H		(ICEC40H)
ECO317H		ECOD18H
ECOSTAN		in 1986/7 only
ECO320H	ECOC37H	13007 0119
ECO322Y	ECOC25H and C26H	
ECO324Y	ECOC66H + ECOC67H	
ECO325H	ECOC14H	
ECO326H	ECOC13H	(FCOCORU)
ECO327Y	ECOCITY FOR SERVICE STATE OF SERVICE STA	(ECOC08H)
ECO328Y	FCOC61H and C62H	FCORCOL
ECO330Y	I	ECOB68H

ST. GEORGE COURSE	FULLY EQUIVALENT SCARBOROUGH COURSE	PARTIALLY EQUIVALENT SCARBOROUGH COURSE
ECO331H		ICEC72H
ECO334Y		ECOD14H (88/89 only)
ECO339Y		ECOC51H
ECO340Y		ECOC45H
ECO342Y	ECOC83Y	1200
ECO348H	ECOC48H	ECOD01H in 84/85 only
	ECOCABIL	ECODOTH
ECO423Y		ECODOTA
(formerly ECO323Y)		ECOB82Y
ECO452Y		LCOBO21
English		ENGA01Y
ENG102Y		HUMA01Y
ENG104Y		
ENG202Y		ENGA02Y
ENG210Y	ENGB14Y	
ENG213H	ENGB34H	
ENG214H		ENGD75H
		Check with supervisor
ENG215H	ENGB25H	<u> </u>
ENG216Y		ENGC02Y
ENG217H		ENGC53H
ENG218H		ENGC54H
ENG220Y	ENGB10Y	
ENG222Y	ENGB11Y	
ENG224H		ENGC55H
ENG227Y	ENGB15Y	
ENG240Y	ENGBOLY	
ENG243Y		ENGC32Y
ENG247Y		ENGA08Y
ENG250Y	ENGB08Y	1
ENG252Y	ENGBO7Y	
	ENGBO71 ENGB20H. ENGB21H	
ENG255Y	ENGBZUH, ENGBZIH	ENGC59Y
ENG270Y		
ENG275Y		HUMB62Y (LITB42Y)
ENG278H		HUMB62Y (LITB42Y)
ENG300Y	ENGC30Y	
ENG302Y		ENGC32Y
ENG304Y		ENGC32Y
ENG306Y		ENGC35H, C36H, C37H
ENG308Y	ENGC42Y	
ENG309Y	ENGC43Y	
ENG322Y	ENGC38Y	
ENG324Y	ENGC46Y	.
ENG328Y	ENGC52Y	
ENG332Y	ENGC33Y	
ENG338Y	ENGC50Y	
ENG348Y	ENGC51Y	
ENG354Y		ENGC07H
		ENGC12Y
ENG358Y		ENGC12Y
ENG359Y	rucceov	ENGCIZI
ENG366Y	ENGC59Y	ENCROSA (LEECOV)
ENG369Y		ENGB60Y (LITB60Y) Check with supervisor

ST. GEORGE COURSE	FULLY EQUIVALENT SCARBOROUGH COURSE	PARTIALLY EQUIVALEN SCARBOROUGH COURSE
ENG391Y		LITD66Y, HUMD91H, HUMD92H Check with supervisor
ENG400Y (formerly ENG300Y)	ENGD01Y	ď.
	FNCDOON	· · · · · · · · · · · · · · · · · · ·
ENG401Y	ENGD02Y	+
ENG490Y	ENGD98Y	+
Fine Art History		TABA1811
FAH101Y		FARA10H
FAH102Y	<u> </u>	FARALIH
FAH200Y		FARA12H
FAH210Y		FARA13H
FAH211H	FARB41H	
FAH212H	FARB54H	
FAH215H	FARBO4H	
FAH268H		FARC07H
FAH273H	FARB19H	
FAH281H		FARB48H
FAH286H		FARB60Y
FAH308Y		FARB29Y, FARC11H
FAH310Y		FARB60Y
FAH314H	FARB37H	
FAH315H	FARC13H	
FAH321Y		FARB10H
(formerly FAH321H)		
FAH324H		FARC10H
FAH447H		FARC15H
*FAH480Y/481H	*FARD02H, FARD03Y	
*FAH482Y/483H	*FARD04H, FARD05Y	
*FAH484Y/485H	*FARD06H, FARD07Y	
*FAH486Y/487H	*FARD06H, FARD07Y	
*FAH488Y/489H	*FARDO8H, FARDO9Y	
* Supervised course - depends on topic		
Fine Art Studio		
FAS110Y	FARA90Y	FARA70H/A71H
	FARB75Y	TAKA/OIDA/III
FAS230Y	FARB751 FARB70H + B74H	FARB74H or B70H
FAS238Y	FARC76Y or C77Y	FARB/4R OF B/OR
FAS331Y	FARC82H/C83H/C84H*	
FAS338Y 	FARC86H/C87H/C88H*	
*FAS430Y/*431H	FARD21Y/D24H* FARD25H/D90H/D91H*	
*FAS434Y/*435H	FARD22Y/D24H* FARD25H/D90H/D91H*	
FAS436Y/437H	FARD24H/D25H* FARD90H/D91H*	
*FAS438Y/*439H	FARD24H/D25H* FARD90H/D91H*	
*Depends on assignments		
French	FREACCY	
FREIOIY	FREA06Y	-
FRE121Y	FREA16Y	

ST. GEORGE COURSE	FULLY EQUIVALENT SCARBOROUGH COURSE	PARTIALLY EQUIVALENT SCARBOROUGH COURSE
FRE220Y	FREB40H + B41H	
FRE224Y	FREB26Y	
FRE240Y	FREA30Y	
(formerly FRE140Y)		
FRE257H	FREBSOH, BS1H	
FRE261Y		FREB10Y
FRE271Y	FREBIOY	TALBAVI.
FRE272Y	FREB25Y	· · · · · ·
FRE273Y	FREB42Y	
FRE277Y	NEU-32	FREB48Y
FRE310Y	†	
FRE311Y		FREB36H, B37H
	FDFC22V	FREB38H
FRE316Y	FREC22Y	
FRE319H		FREC25Y
FRE322Y	FREB24Y	
FRE348Y		FREC25Y, C40Y
FRE356Y		FREB29H
FRE358Y	FREB30H + FREB31H	
FRE362Y		FREC24H+FREC23H
FRE364Y	FREC26Y (FREB34Y)	
FRE375Y	FREC09Y	
FRE376H		FREB48Y
FRE380H)	FRECIOY	
FRE381H)		
FRE410H	FREC39H	
FRE426Y		FREB49Y. B70Y
FRE470Y		FREC18H
(formerly FRE471Y)	<u></u>	
FRE472Y		FREB43H
(formerly FRE472H)		
FRE475Y		FREC18H
FRE491H	FRED02H-FRED07H FRED90Y	
Geography		
GGR100Y		GGRA05H - not interchangeable
GGR101Y		GGRA04H
GGR110Y		GGRA04H - not interchangeable
GGR124Y	GGRB05Y - not interchangeable	
GGR201H		GGRB19Y - not interchangeable
GGR203H		GGRB03Y
GGR205H		GGRC27Y
GGR206H		GGRC28Y
GGR220Y	† · · · · · · · · · · · · · · · · · · ·	JEGB27H
GGR233Y	GGRB01Y	JEGB2/H
	- not interchangeable	
GGR239H	1	GGRC13H
GGR270Y	ļ	GGRB31H
GGR276H		GGRC23H
GGR301H		GGRD03H
GGR306H	1	GGRC37H

ST. GEORGE COURSE	FULLY EQUIVALENT SCARBOROUGH COURSE	PARTIALLY EQUIVALENT SCARBOROUGH COURSE
GGR312H		GGRB03Y
GGR324H		GGRC18H
GGR339H		GGRC13H
GGR357H		GGRC04H
GGR371H	<u> </u>	GGRC24H
GGR491Y	GGRD01Y	GGRC24H
Geology	JOSEPHI	
GLG103H	CLCAONI	
GLG110H	GLGA03H	CICAOIN
	CLCAOLY	GLGA01Y
GLG140H + 141H	GLGA01Y	
GLG219H + 221H	GLGB05H + GLGB06H	
GLG301H	GLGB02H	
GEO(GLG)326H	GLGC06H	
GLG470Y	GLGD03Y	
GLG471H	GLGD02H	
German		
GER 100Y	GERA10Y	GERA09H
GER101H		GERA10Y + A09Y
GER202Y		GERB19Y
(formerly GER110Y)		<u> </u>
GER204Y		HUMB56H
GER206Y	!	GERB20Y, B19Y,
(formerly GER130Y)		CO3H. HUMB56H
GER210Y	GERB20Y	
GER310Y	GERC10Y	
GER311Y	GERC10Y	. <u> </u>
GER323H (formerly GER323Y)		GERC03H
GER410Y	CERDOLY	
GER4101	GERD01Y	CERROLL
(formerly GER411Y)		GERDOIY
GER415H		GERC02H
GER416H		GERC02H
GER422Y		HUMB57H
GER490H	GERD13H/14H/15H/12H	GERD16Y/D10H/D11H
Greek	GERDISH 1410 ISH 1211	SERDIOI/DIOI/DITH
GRK100Y	GRKA01Y	
GRK150Y	GRKAOSY	
GRK151H	GRKA05Y	
GRK210H	GRKBIIH	
GRK215H	GRKB02H	
GRK245Y	GRKB10Y	
GRK250Y	UKKU101	GRKC22Y
GRK350Y	<u> </u>	GRKC24H
GRK355Y		GRKC23H
GRK428Y	GRKC30H-C34H:	GRRC23H
WALLEY I	C35H-C39H, C40Y	
	(depends on topic)	
History		
HIS105Y	HISA01Y	
HIS109Y	HISA01Y	
HIS220Y	HISB06Y	
HIS238H		HISC23Y

ST. GEORGE COURSE	FULLY EQUIVALENT SCARBOROUGH COURSE	PARTIALLY EQUIVALENT SCARBOROUGH COURSE
HIS239H	HISB02Y	
HIS244H		HISC18Y
HIS250Y	HISB07Y	
HIS260Y		HISB04Y
HIS261Y		HISB04Y
HIS262Y	HISB04Y	11130041
HIS263Y	HISB04Y	
HIS271Y	HISB03Y	
HIS282Y	HISC25Y	
HIS302Y	HISC16Y	
HIS303Y	HISC12Y	
(formerly HIS303H)	miscizi	
HIS308Y	HISC10Y	
HIS313Y	HISC47Y	-
HIS314Y	HISC42Y	
HIS317H		+
HIS318Y	HISC87Y	
(formerly HIS318H)	HISD17Y	
HIS349Y	WCC11V	
HIS357Y	HISCLIY	
HIS362Y	HISC12Y	
HIS365Y		HISC42Y
HIS372Y	<u> </u>	HISC43Y
	HISC35Y	
HIS408Y	<u>.</u>	HISC31H
HIS412H	:	HISD17Y
(formerly HIS312H)	 	
HIS431H		HISD78Y
HIS442Y	HISC21Y	<u> </u>
HIS468Y		HISC46Y
HIS469Y		HISB44H, HISD43H
HIS470Y	HISD32Y	
(formerly HIS373Y)		
HIS497Y/498H/499H	HISDO1H, DO2H, DO3Y (depends on topic)	
History and Philosophy of		
Science and Technology		
HPS323H		HUMC11Y
Innis College		
INI112Y	HUMB70Y	
Italian Studies		
ITA100Y	ITAA01Y	<u> </u>
ITA101Y	ITAA02H + A03H	
ITA110Y	ITAA11Y	
ITA120Y		ITAC22H
ITA121Y		ITAC12H
ITA152Y	ITABOLY or BLOY or BLLY	
ITA222Y	ITAC44H + C45H	
ITA224H		ITAC43H
ITA225H	ITAC13H	
ITA226Y	ITAC12H+C27H	ITAC22H
ITA240Y		IHIC71H
ITA245Y		ITAC20H
	ITAB01Y	TIACZUN
		•

ST. GEORGE COURSE	FULLY EQUIVALENT SCARBOROUGH COURSE	PARTIALLY EQUIVALENT SCARBOROUGH COURSE
ITA251Y	ITABLIY	
ITA252Y	ITABOLY or BLOY or BLLY	
ITA271Y		ITACOSH.ITABO6H
ITA321Y	ITAC31Y	
ITA324Y	ITAC33H + C36H	
ITA326H		JLIC32H
ITA328Y		ITAC35H
ITA329Y		ITAC41H
ITA350Y	ITAC01Y	
ITA351Y	ITAC01Y	
ITA352Y	ITAC01Y	
ITA371Y		ITAC05H.ITAB06H
ITA420Y	ITAC34H + C40H	·
ITA425H		ITAC23H
ITA427H		ILIC32H
ITA432Y		ITAC27H
ITA450Y		ITAC04H
Joint Courses		
IAL252Y	LINB14H+C15H	
ILP315H	ILPC24H	
ILP374H	ILPB55H	
IPE400Y		POLC92H
Latin		
LAT100Y	LATAOLY	
LAT200Y	121111911	LATAOLY and LATBO2H
LAT215H	LATB11H	LATAVIII MU LATAVZII
LAT216H	- LOVING	LATB02H
LAT428Y	LATC30H/C34H; C35H/C39H/C40Y/D01H/D0: (depends on topic)	
Linguistics		
LINIBOY	LINA01Y	
LIN228H	LINBO9H	
LIN229H	LINB02H	
LIN231H	LINB16H	
LIN348H	LINC06H	
LIN495Y/496H	LIND05Y LIND01H/D02H/D03H/D04H	
LIN497Y/498Y	LIND05Y LIND01H/D02H/D03H/D04H	
Mathematics		
MAT105Y		MATA22Y
MAT130Y		MATA22/A26/A27/A55Y
MAT133Y	MATA27Y	MATA22/A26/A55Y
MAT135Y	MATA26Y	MATA22/A27/A55Y
MAT139Y	MATA26Y	MATA22/A27/A55Y
MAT140Y	MATA40H+A45H/A04Y	
MAT149Y		MATA22/A26/A27/A55Y
MAT150Y	MATA55Y	MATA22Y/A26Y/A27Y
MAT225Y	MATA40H+A45H/A04Y	
MAT229H	Inchasemase and asset	MATA40H+A45H/A04Y
MAT230Y	MATB41H + B42H	MATA-VIII A-13/11/AU-1
MAT234Y	MATB41H + B42H	MATB50H/B55H/B05Y
MA1234 I	I MA1041H + 042H	MAIDOUN/DOON/BUOI

	FULLY EQUIVALENT	PARTIALLY EQUIVALENT
ST. GEORGE COURSE	SCARBOROUGH COURSE	SCARBOROUGH COURSE
MAT235Y	MATB41H + B42H	MATB50H/B55H/B05Y
MAT239Y	MATBSOH/SSH/BOSY	MATB41H/B42H
MAT240H	18A1B30H/25H/B031	MATB44H
MAT244H	 	MATC51H/C56H
MAT245H		MATB25Y
MAT249H		
(formerly		MATC51H
part of APM251Y)		
MAT250Y	MATB50H+B55H/B05Y	MATB41/B42H
MAT300Y	MATB44H + C49H	MAID41/D4211
MAT315H	MATB70H	
MAT313H MAT319H	MATBOOL	MATCCOLLICETU
MAT319H MAT324H		MATC60H/C65H
MAT325Y	MATROEV	MATB25Y
MAT330Y	MATB25Y	V. T. C. C. V. C.
(formerly MAT369H.469H)		MATC60H/C65H
	MATCCOU	
MAT334H	MATC60H	1117777
MAT338H	 	MATC53Y
MAT340Y		MATC44H/C49H
MAT344H		JMCC31H
MAT350Y	MATC53Y	
MAT363H	MATC54H	
MAT435Y		MATC51H/C56H
Microbiology		
MPL200Y	BIOB02Y	
Molecular Genetics and Molecular Biology		
MGB460H	BIOD17H	
Music		
MUS100Y		MUSA10H.A20H
MUS201H	MUSBOIH	MUSATORIAZOR
MUS202H		<u> </u>
1-1-1	MUSCITH	
MUS302H	MUSC05H	
MUS304H	MUSCO7H	
MUS400H	MUSCO6H	<u> </u>
MUS410H	MUSB04H	
TMU140Y		MUSB17H/MUSB24H
HMU121H)		MUSBO2H, MUSBO5H
HMU122H)		MUSBO6H, MUSBO1H
HMU221H)		MUSB04H, MUSB03H
HMU222H)		
New College	IIIIMBZOV	
NEW112Y	HUMB70Y	
NEW201Y		ENGB34H
NEW207Y		HUMB27S, B39F
NEW217Y	·	ENGC02Y
NEW260Y	 	JHSA01Y. HUMB64Y
NEW322Y	ENGB20H	
NEW366Y		HUMB60F
Philosophy		
PHL100Y	PHLAOLY	
PHL/PHI101Y	PHLAO1Y	
PHL102Y	PHLAOIY	

ST. GEORGE COURSE	FULLY EQUIVALENT SCARBOROUGH COURSE	PARTIALLY EQUIVALENT SCARBOROUGH COURSE
PHI103Y	PHLA01Y	
PHI105Y	PHLA01Y	
PHL/PHI200Y		PHLB40H, PHLB42H, PHLC40H, PHLC42H
PHI205Y	PHLB44H + C44H	
PHL/PHI210Y	PHLB46H + C46H	
PHL215H	PHLB48H	
PHL216H	PHLB12H	
PHL220H	PHLB30H	
PHL/PHI230H	PHLB20H	
PHL/PHI231H	PHLB60H	
PHL235H	PHLB61H	
PHI236Y		PHLB61H
PHL240Y		PHLB81H
PHL242H		PHLB81H
PHL/PHI245H	PHLB50H (formerly IMPB50H)	
PHL246H	PHLC61H	PHLC52H
PHL/PHI247H	PHLB53H	
PHL250H	PHLB80H	
PHL/PHI255H		PHLB14H, B70H
PHL265H	PHLB10H	111111111111111111111111111111111111111
PHL267H	THE TOIL	PHI C85H
PHL/PHI270Y		PHLB11H
PHL272H	PHLB15H	THE STATE OF THE S
PHL275H	PHLBO1H	
PHL/PHI276Y	PHLB01H + PHLC02H	
PHL278H	THEODIN THE COZII	PHLB06H
PHL/PHI281H		PHLB87H
PHL/PHI282H		PHLC05H
PHL/PHI285H	PHLB03H	THECOSI
PHL/PHI286H	THEBOSH	PHLB03H
PHL288H	PHLB04H	FHLSOSIT
PHL/PHI301Y	PHLB40H + C40H	
PHL/PHI302Y	PHLB42H + C42H	
PHL310H	FHLB42H + C42H	PHLB46H
PHL311H		PHLC46H
PHL315H	PHLB15H	PHLB48H
PHL318H	FREBISH	PHLB12H
PHL/PHI321H		PHLB30H
PHL325H	·	PHLC48H
(formerly PHL225H)		
PHL/PHI326H	· · · · · ·	PHLC48H
PHL327H		PHLC48H
PHL/PHI335H	PHLC61H Depends on topic. Check with programme supervisor.	
PHL344H	PHLC54H	
PHL345H	PHLC50H	PHLC48H
PHL347H	PHLC61H	PHLC52H
PHL355H	PHLB70H	
РНІ362Н		PHLB16H
PHL370H	PHLC11H	

ST. GEORGE COURSE	FULLY EQUIVALENT SCARBOROUGH COURSE	PARTIALLY EQUIVALENT SCARBOROUGH COURSE
PHL375H	PHLC01H	
PHI381H		PHLB05H
PHL385H		PHLC76H
PHL438H		PHLC61H
PHL455H*		PHLC71H
PHL470H+		PHLC11H
PHL475H*		PHLC05H
PHL485H*	*PHLC75H - C94H (depends on topics offered from term to term).	
PHL/PHI498H*/499H*	*PHLD95H - D99Y (depends on topics offered from term to term),	
Physics		
PHY110Y		PHYA03Y
PHY130Y	PHYA03Y	
PHY138Y		PHYA03Y
PHY150Y		РНУА03У
PHY224H		PHYB08H
PHY225H	PHYB08H	
PHY230Y		РНҮВО1Н
PHY238Y		РНҮВО1Н
PHY250Y		PHYB01H
PHY252H	PHYB19H	
PHY256H	PHYB17H	
PHY325Y		PHYC05H
PHY326H	PHYC05H	
РНҮ330Н		PHYC07H
(formerly PHY330Y)		
PHY331H		РНҮВОЗН
PHY352H		РНҮС09Н
PHY354H		PHYC08H
PHY452H		ASTC10Y
(formerly_PHY426H)	<u> </u>	
PHY455H		PHYC04F
(formerly part of PHY455Y)		
PHY462Y		ASTC10Y
(formerly PHY452Y)		
Political Science	DOLDEON	
POL 100Y	POLBSOY	
POL200Y	POLBZOY	
POL201Y	POLB91Y	
POL203Y	POLB87Y	
POL204Y	POLBS6Y	
POL205Y	(POLBGOY)	
POL207Y	POLB61H + POLB62H (POLB60Y before 1986)	_
POL208Y	POLB80Y	
POL210Y	POLC52Y (1985/6 onward)	POLB52H (before 1985)
POL212Y	<u> </u>	POLD71Y
POL300Y	POLC87Y	1

ST. GEORGE COURSE	FULLY EQUIVALENT SCARBOROUGH COURSE	PARTIALLY EQUIVALENT SCARBOROUGH COURSE
POL301Y	POLC95Y	
(formerly POL206Y)		
POL306Y	POLC83Y	
POL312Y		POLC84H
POL316Y		POLC54H
POL318Y	POLC75Y	
	(POLB65Y before 1986)	
POL320Y	POLC74Y	
POL322Y		POLB60Y
POL326Y	POLC82Y	
POL333Y	POLC55Y	*****
(formerly POL333H)	1.02007	
POL336Y	POLBSIH	
(formerly POL331H+332H)		I
POL400Y		POLC70Y
POL407Y		POLD71Y
POL446Y		POLC70Y, PHLC84H
POL495Y		POLD98H
POL496H	POLD99H	
Psychology		
	PSYA01Y	
PSY100Y	FSIAUL	PSYA01Y
PSY200H	DCVDOZII	FSIAULI
PSY201H	PSYBO7H	
PSY202H	PSYC08H	
PSY210Y	PSYB20H + C21H	
PSY220H	PSYB10H	
PSY230H	РЅҮВЗОН	
PSY240H	PSYB32H	
PSY260Y	<u>, </u>	PSYC42H (old PSYB41H)
PSY270Y		PSYB57H
PSY280Y	PSYB50H + B51H	
PSY290Y*	PSYB60H + C61H	
* Students with prior credit		+
for PSY290Y (or PSYB60)		
cannot take PSYB65H		<u> </u>
PSY300H	PSYD85H	
PSY301H		PSYD80H
PSY303H/304H	PSYC90H, PSYC93H	
PSY305H		PSYC34H
PSY306H	PSYC58H	
PSY311H	PSYD22H	
PSY320H	PSYC12H	
PSY323H	PSYD18H	
PSY325H		PSYD53H
(formerly PSY421H)		
PSY329Y		PSYC11H
PSY330H	PSYC34H	
PSY341H	PSYD32H	
PSY359H	PSYC42H	
	PSYD41H	
PSY360H	1.3104111	PSYC42H
PSY369Y	DCVDE 711	F31C42R
PSY372H	PSYB57H	PCVDCOIL
PSY390H		PSYD60H

Equivalent Course Lis	Eau	ival	ent	Course	List
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ST. GEORGE COURSE	FULLY EQUIVALENT SCARBOROUGH COURSE	PARTIALLY EQUIVALENT SCARBOROUGH COURSE
PSY400Y	PSYD98Y	
PSY410H	PSYD22H	
PSY420H	PSYD15H or D16H	
PSY430H	PSYD30H	
PSY440H	PSYD32H	
PSY460H	PSYD40H, D41H	
PSY461H (formerly PSY361H)	PSYB45H	

Apart from PSY100Y and 200H, all other Psychology courses downtown are considered to be B-levels or C-levels except for:

(a) all 400-level courses are D-level equivalents;

(b) only the following 300-level courses are D-level equivalents:

1. PSY300H - History

2. PSY301H - Theory
3. PSY360H - Issues in Learning

4. PSY390H - Advanced Topics/Physiological

5. PSY391H - Psychophysiology

If the student wishes to discuss an exception to the above, this must be done with the Supervisor of Studies prior to taking the course in question.

The following courses at Scarborough have no equivalent downtown:

1. PSYB65H Biological Foundations of Behaviour

(But note that this may not be taken after PSYB60 or PSY290 downtown.)

2. (PSYC54H) Cognition & Representation

3. PSYD62H Neuroplasticity: Mechanisms and Function

4. PSYD67H Psychobiology of Aging

5. PSYD68H Developmental Psychobiology

6. JLPD55H Disorders of Speech and Language

Religious Studies		
REL101Y	HUMA10Y	<u> </u>
REL205Y	SOCB21Y (SOCC20Y)	
REL213Y	HUMB26Y	
REL220Y	HUMB28Y	
REL226Y		нимв29н
REL228Y		CLAC23H
REL241Y	HUMB20Y	
REL322H		нимв29н
REL338H		HISD14Y
(formerly REL338Y)		
REL490Y	HUMC10H, D91H, D92H, D93Y (depends on topic).	
Slavic Language & Literature		
SLA100Y	RUSA10Y	
SLA202Y		RUSB02Y
SLA220Y	RUSB02Y	
SLA240Y	HUMB58Y (LITB07Y)	
SLA314H		LITB12Y
SLA318H		HUMB11H (LITB17H)
SLA319H		HUMB11H (LITB17H)
SLA340Y		LITB34Y
St. Michael's College		I_
SMC235Y	GERB25Y	GERC01H
SMC240Y		HUMB03Y
SMC311H (formerly part of SMC310Y)		ITAC31Y, (HUMB33Y), LITB31Y

ST. GEORGE COURSE	FULLY EQUIVALENT SCARBOROUGH COURSE	PARTIALLY EQUIVALENT SCARBOROUGH COURSE
SMC312H		ILIC32H, (HUMB33Y).
(formerly part of SMC310Y)	<u> </u>	LITB31Y
SMC339Y	HUMB03Y	
SMC340Y	HUMB03Y	4
SMC350H	HUMB04H	
SMC490Y	(supervised reading	
	medieval studies	
	depends on topic).	
Sociology		
SOC101Y	SOCAOLY	
SOC200Y	SOCB01Y	
SOC201Y		SOCB06H. PSYB07H
SOC202Y	SOCB02Y	
SOC203Y	SOCB03Y	
SOC204Y	SOCB04Y	
SOC205Y	SOCB05Y	
SOC207Y		SOCC07H
SOC210Y	SOCB20Y	
SOC212Y	SOCB18Y	
SOC214Y	(SOCB08H + B09H)	
	or SOCB12Y	
SOC220Y	SOCB13Y	
SOC245Y		SOCC28H
SOC301Y	SOCB10Y	
SOC302Y		(SOCB08H) SOCB12Y
SOC304Y		SOCC16H + SOCC35Y
SOC306Y		SOCC30H, SOCC11H
SOC310Y	SOCC33Y	
SOC311Y	SOCB24H + B25H	
	or SOCB26Y	<u> </u>
SOC312Y	SOCB23Y	I
SOC313Y	SOCC05Y	
SOC317Y	1112	SOCC13H
(formerly SOC316Y)		<u> </u>
SOC320Y		SOCC06F/S/H
SOC323Y		SOCC17H
SOC325Y	1	SOCB17H
SOC365Y		SOCC10H
SOC375Y	ICSB27Y	
SOC390Y/391H/392H	SOCC40H	
SOC440Y		SOCD42H
SOC443Y		SOCD43H
SOC490Y/491H/492H	SOCD41H	
Spanish		
SPA100Y	SPAA01Y	SPAA02H
SPA103Y		SPAAOlY
SPA220Y	SPAB01Y	SPAB02H
SPA223Y	SPAB04H+SPAB12H	Jan 1997
SPA250Y	HUMC09H + HUMC13H	† · · · · · · · · · · · · · · · · · · ·
SPA280Y	HUMC14Y	· · · · · · · · · · · · · · · · · · ·
SPA320Y	SPAC01Y	
3FA34V1	3FACULI	
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ST. GEORGE COURSE	FULLY EQUIVALENT SCARBOROUGH COURSE	PARTIALLY EQUIVALENT SCARBOROUGH COURSE
SPA357H		LITB32S
SPA380H		Check with supervisor
	CD4 CD2H	HUMC141
SPA425H	SPAC22H	
SPA490H	SPAD01-D11 (Equivalents granted depending on topic)	
Statistics		
STA222Y		BIOB28H, ECOB11H, ECOB12H, PSYB07H, PSYC08H, STAB52H, STAB57H,STAB22H
STA242Y	STAB52H + STAB57H	ECOBIIH, PSYB07H, STAB47H
STA262Y	STAB52H + STAB57H	ECOB11H, PSYB07H, STAB47H
STA302H	STAC67H	
STA347H	STAC62H	<u></u>
STA402H	STAC52H	
STA437H	STAC42F	
Victoria College		
VIC112Y	HUMB70Y	
VIC240Y		HUMB33Y
VIC310Y		HUMC19F
Zoology		
Z00202Y	BIOA03Y	
Z00221Y		BIOC20Y
ZOO228Y	BIOB23Y	
ZOO230Y	BIOB17Y	
ZOO250Y		BIOB32H
Z00251Y	BIOB25H+BIOB26H	
Z00321Y		BIOC20Y
Z00323Y	BIOB12Y	
ZOO330Y		BIOB17Y
Z00353Y	BIOC29H+BIOC30H	
ZOO370H	BIOC19H	
ZOO469Y		BIOD15F
ZOO470H		(BIOB15Y)
Z00471Y	(BIOB15Y)	BIOC19H
ZOO498Y	BIODOLY or BIODO2Y	ţ

Telephone Direct frequently called numbers		Physical Sciences Divisio R-Wing Office S-Wing Office Chair's Office	284-3342 284-3227 284-3289
Associate Dean Academic Research/Academic Services	284-3124	Physical Plant Services (Parking enquiries)	284-3203
		Post Office	284-3271
Athletic Association (S.C.A.A.)	284-3395	Principal's Office	284-3111
Bookstore	284-3251	Pub	284-3177
Cafeteria	284-3110	Recreation Centre Counter (reservations, etc.)	284-3392
Campus Police (Including Lost and Found)	284-3398	Office (athletic programme information)	284-3393
Career Counselling & Placement	284-3292	Registrar's Office Records (registration, transcripts, etc.)	284-3127
Cashier's Office	284-3103	Admissions/Scholarships Timetable, examinations	284-3359 284-3300
Community Relations Offic	:e	Registrar	284-3266
(Events enquiries)	284-3243	Residences	
Computer Centre	284-3122	Office Dean of Students in Residence	284-3174
Co-operative Programmes	284-3117	in Residence	284-3210
Counselling Services	284-3292	Social Sciences Division Receptionist	284-3137
Fees Office	978-2142	Chair's Office	284-3149
Health Service	284-3253	Student Awards (OSAP)	978-7950
High School Liaison (Tours) Humanities Division	284-3292	Student Councils Scarborough College Student Council (S.C.S.C.) U of T SAC Desk	284-3135 284-3219
Classics, History, Philosophy Drama, Music	284-3185 284-3163	Writing Laboratory	284-3369
Fine Art, English, Humanities, Linguistics Languages Chair's Office	284-3146 284-3151 284-3304	APUS	978-3993
International Student Centre	978-2564	Scarborough Campus University of Toronto 1265 Military Trail Scarborough, Ontario M1C 1	A4
Library Inquiry, Circulation Desk Reference Desk	284-3246 284-3183	onale me	
Life Sciences Division Biological Sciences,			
Psychology	284-3237		
Chair's Office	284-3291		

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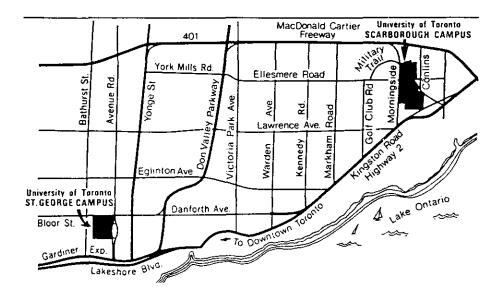
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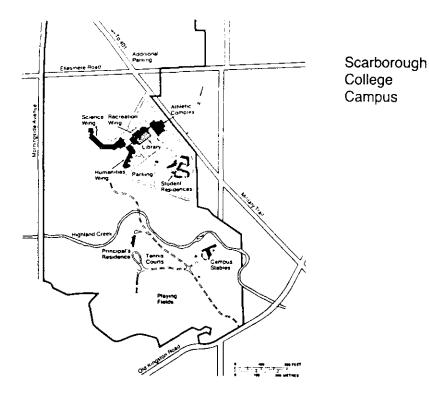
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