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Convocation and
Student Records

1991-92

SCARBOROUGH COLLEGE
UNIVERSITY OF TORONTO

CALENDAR

1991-1992
Scarborough Calendar

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

1991/92

1265 Military Trail, Scarborough, Ontario, Canada, M1C 1A4. (416) 287-7550

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IMPORTANT NOTICES

The College reserves the right to change the content of, or to withdraw any course or programme of study. In such cases every effort will be made to provide equivalent alternative instruction, but this cannot be guaranteed.

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.

The University reserves the right to alter the fees and other charges described in the *Calendar*.

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.

It is the responsibility of students to see that their academic programmes meet the College's regulations in all respects.

ACADEMIC OFFENCES ARE A SERIOUS MATTER. See page 220.

The College has a fire safety plan. Copies are available from Physical Plant Services (S303).

The College has a No-Smoking Policy.

This is Scarborough College

Scarborough College, a constituent college of the University of Toronto, was established in 1964 to provide for the rapid growth in demand for undergraduate education foreseen for the later 1960's. Since that time it has grown from a modest beginning of ten evening courses in a local high school to a thriving campus where 220 faculty teach more than 700 courses to 5200 students.

The first 191 full-time Scarborough students enrolled in 1965. Classes began on the University's St. George campus that fall and moved to the new Scarborough campus when the first building, made up of the Science and Humanities wings, opened in January, 1966. The building, designed by Toronto architect John Andrews, won immediate international attention for its striking architecture.

1973 saw the opening of both the R-wing which provided much needed additional classroom and office space, as well as a gymnasium and other sports facilities and the Student Village, a complex of townhouse residences with room for 260 students. In 1985 the original Student Village was expanded and in 1990 the West Village which includes some wheelchair-accessible houses opened. A total of 536 students can now be accommodated in residence on the Scarborough Campus.

In 1982, the Vincent W. Bladen Library, named in memory of a former member of the Economics faculty of Scarborough College, was added to the R-wing. The library has more than 200,000 books, as well as thousands of maps and periodicals and a media centre with recordings and fine art slides. The Soil Erosion Research Laboratory opened in 1989 and the N'Sheemaehn child care centre in 1990.

Originally an integrated part of the University's Faculty of Arts and Science, in 1972 Scarborough College became a separate arts and science division of the University of Toronto which allowed it more independence in curriculum development. It was the first college in the University to adopt a credit system allowing both full and part-time students to complete their degrees at a rate of their own choosing. The College offers the only formal co-operative programmes in the University. The programme in Administration was offered for the first time in 1975. Since then co-operative programmes have been added in Arts Administration, in Computer Science and Physical Science and in International Development Studies. The Physical Sciences Specialist programmes have been redesigned and, in cooperation with the Faculty of Education will include an Early Teacher Project component. Successful completion of the Early Teacher Project, together with the required academic standing will guarantee admission, on application to the Faculty of Education, for at least thirty students a year. Other special programmes include Neurosciences, Terrain and Environmental Earth Sciences, the Humanities and Women's Studies.

From the beginning faculty research and the training of graduate students have flourished at the College with Scarborough faculty also making an important contribution to the School of Graduate Studies through courses taught both here and on the St. George campus. The well-appointed research laboratories, the high level of technical services, the relatively small size of the College and the diversity of the 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 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 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 has attracted such notable names as Nobel Prize winner and former Prime Minister Lester Pearson, architect Raymond Moriyama, philosopher and theologian Hans Kung, scientist and television personality David Suzuki, union leader Bob White and Assembly of First Nations chief George Erasmus.

"N'Sheemaehn": The Scarborough Campus Child Care Centre

The name of the University of Toronto's newest child care centre, pronounced N-she-meh, comes from a native folktale in which the song of the chickadee (n'sheemaehn) reminds us to take good care of our little ones.

The centre, licensed for 46 children of students, staff, faculty and neighbourhood families, operates Monday to Friday 7:30 a.m. to 6:00 p.m. It is housed in a brand new building, officially opened October 10, 1990, and has already attracted praise both for its thoughtful design and fine programming and staff.

"N'sheemaehn" is a non-profit centre, managed by a parent/university board of directors. The board has developed a philosophy for the centre which emphasizes the provision of a warm, secure and loving environment for the children which will foster the development of each child's self-esteem, independence and self-control, while encouraging cooperation, consideration and empathy for others.

The centre has arranged for a purchase-of-service agreement with the municipal government to assist low-income families with the fees. As there is a very long wait for these subsidies, interested families are strongly advised to apply well in advance of the time child care will be needed.

For more information about the child care centre or to arrange for a visit, please contact the Director, Ms. Kathleen McElroy at (416) 287-7624.

Academic Calendar/Summer Session 1991

March 15	Last day for new students to apply for admission to the University for the Summer Session for courses beginning in May (Y, A, F and H courses).
April 15	Registration begins
May 3	Last day to register for Y, A, F and H courses.
May 13	Classes for Y, A, F and H courses begin.
May 15	Last day for new students to apply for admission to the University 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 commencement of classes.
May 17	Last day to add Y, A, F or H courses.
May 20	Victoria Day. University closed.
June 7	Last day to withdraw without academic penalty from A or F courses.
June 21	Last day of classes in A and F courses on the St. George and Erindale Campuses. Last day for submission of term assignments in St. George and Erindale Campus courses. H and Y courses continue to meet.
June 24-June 28	Final examinations in A and F courses on the St. George and Erindale campuses.
June 28	Last day of classes in A and F courses at Scarborough College. 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 28	Last day to register for B and S courses.
July 1	University closed for Canada Day holiday.
July 2-July 5	Reading Week for H and Y courses.
July 2	Classes for B and S courses begin.
July 5	Last day to add B or S courses.
July 19	Last day to withdraw without academic penalty from Y or H courses.
July 26	Last day to withdraw without academic penalty from B or S courses.
August 5	Civic holiday. University closed.
August 9	Last day of classes for Y, B, H and S courses on the St. George and Erindale campuses.
August 12-August 16	Final examinations in Y, B, H and S courses on the St. George and Erindale campuses.
August 16	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 Convocation.

Academic Calendar/Winter Session 1991/92

1991

March 18	Early registration begins for returning students.
April 5	Last day for returning students to register early.
June 1	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 17	Course changes for students who registered early and course selection for other students begin.
August 9	Last day to select courses during the summer.
September 2	Labour Day. University closed.
September 11	Classes for Y, A, F and H courses begin.
September 20	Last day to add Y, A, F or H courses.
October 14	Thanksgiving Day. University closed.
November 1	Last day to withdraw without academic penalty from F or A courses.
November 15	Christmas Examination Schedule published.
December 10	Last day of classes in the first term. Last day for submission of term assignments in F and A courses.
December 11-December 20	Term test and final examination period.

1992

January 6	Classes for B and S courses begin.
January 17	Last day to add B or S courses.
February 14	Last day to withdraw without academic penalty from Y or H courses.
February 15	Last day to request conferment of degree at the June Convocation.
February 17-February 21	Reading Week - no classes held.
February 28	Last day to withdraw without academic penalty from B or S courses.
March 15	Annual Examination Schedule published.
April 10	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 17	Good Friday. University closed.
April 20-May 8	Final examination period.
June 1	University Spring Convocations are likely to begin.

Officers of the University of Toronto 1991/92

Chancellor

The Honourable J.B. Aird, O.C., Q.C., B.A., LL.D., D.Litt.S. (until 30 June 1991)

President

J.R.S. Prichard, M.B.A., LL.B., LL.M.

Chairman, Governing Council

R.J. McGavin, B.P.E., M.Sc., Ph.D.

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. (until 30 June 1991)

Secretary of the Governing Council

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

Officers of Scarborough College 1991/92

Principal and Dean

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

Vice-Principal and Associate Dean

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

Chair, Division of Humanities

J. Warden, M.A.

Chair, Division of Life Sciences

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

Chair, Division of Management and Economics

S. Borins, B.A., M.P.P., 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 Co-operative Programmes

H. Wittmann, M.A., Ph.D.

Director of Administration,

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

Faculty of Scarborough College

Division of Humanities

Classics

J. Warden, M.A. (Cantab.), *Professor and Chair*
A. Boddington, B.A. (Oxon.), *Associate Professor*
J.H. Corbett, M.A., Ph.D. (Toronto), *Associate Professor*
M.E. Irwin, M.A., Ph.D. (Toronto), *Associate Professor*
I.R. McDonald, B.A. (Alberta) Ph.D. (N. Carolina), *Associate Professor*
W. Helleman, M.A. (Toronto), Ph.D. (Free University, Amsterdam), *Assistant Professor*

Cognitive Science

R.I. Binnick, M.A., Ph.D. (Chicago), *Professor*
J.M. Kennedy, B.Sc., M.Sc. (Belf.), PH.D. (Cornell), *Professor*
C.M. MacLeod, B.A. (McGill), Ph.D. (Washington), *Professor*
M.C. Smith, B.A. (Toronto), Ph.D. (MIT), *Professor*
A. Kukla, A.B., M.A., Ph.D. (UCLA), *Associate Professor*
W.E. Seager, M.A. (Alberta), Ph.D. (Toronto), *Associate Professor*
M.A. Schmuckler, B.A. (Suny-Binghampton), Ph.D. (Cornell), *Assistant Professor*
S. Sedivy, B.A. (Toronto), Ph.D. (Pittsburgh), *Assistant Professor*
R. Smyth, B.A. (Carleton), M.Sc., Ph.D. (Alberta), *Assistant Professor*

Drama

M.Q. Schonberg, M.A., Ph.D. (Toronto), *Associate Professor*
K. Theil, M.A., Ph.D. (Yale), *Associate Professor*
P. Sperdakos, M.A., Ph.D. (Toronto), *Assistant Professor*

English

J.M.R. Margeson, M.A., Ph.D. (Toronto) *Professor Emeritus*
R.M. Brown, M.A., Ph.D. (New York), *Professor*
W.J. Howard, M.A., S.T.B. (Toronto), Ph.D. (Leeds), *Professor*
M.C. Cuddy-Keane, M.A., Ph.D. (Toronto) *Associate Professor*
J. Kay, M.A. (Glasgow), M.A., Ph.D. (Pennsylvania), *Associate Professor*
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M.S. Tait, M.A., Ph.D. (Toronto), *Associate Professor*
K. Theil, M.A., Ph.D. (Yale), *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*
J. Matus, M.A. (Columbia), Ph.D. (Toronto), *Assistant Professor*

Fine Art

M. Gervers, M.A. (Poitiers), Ph.D. (Toronto), *Professor*
G. Scavizzi, M.A., Ph.D. (Turin), *Professor*
M.C. Shaw, M.A., Ph.D. (Bryn Mawr), *Associate Professor*
R. Siebelhoff, M.A., Ph.D. (Toronto), *Associate Professor*
L. Carney, M.A. (Columbia), *Assistant Professor*
L. Varga-Gervers, M.A., Ph.D. (Budapest), *Assistant Professor*
D. Holman, B.F.A. (Kansas City Art Inst.), *Senior Tutor*
J. Hoogstraten, B.F.A. (Manitoba), *Senior Tutor*
A. Brannen, M.A. (New Mexico), B.F.A. (York, Canada), *Senior Tutor*

French

G.F.R. Trembley, L.ès L. (Montpellier), Ph.D. (Yale), *Professor Emeritus*
C. Bertrand-Jennings, L.ès L. (Paris), Ph.D. (Wayne State), *Professor*
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W.J. Bancroft, M.A. (Manitoba), Ph.D. (Harvard), *Associate Professor*
J.A. Curtis, M.A., M.Phil. (Toronto), *Associate Professor*
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U. Lesser-Sherman, M.A., Ph.D. (Pennsylvania), *Senior Tutor and Co-ordinator of C.U.S.L.*

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Music

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

W. Bowen, B.A., B.A.Mus. (Carleton), M.A., Ph.D. (Toronto), *Assistant Professor*

Philosophy

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Spanish

P.R. León, M.A., Ph.D. (Cornell), *Professor*

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K. Godde, B.A. (McGill), M.A. (N.Y.), Ph.D. (Toronto), *Senior Tutor*

Women's Studies

C. Bertrand-Jennings, L.ès L. (Paris), Ph.D. (Wayne State), [illegible] (French)

[illegible] Thompson, M.A., Ph.D. (Toronto), *Professor* (Philosophy)

[illegible] Abray, M.A. (McMaster), M.Phil., Ph.D. (Yale), *Associate* [illegible] (History)

[illegible] M.A. (Calgary), Ph.D. (UBC), *Associate Professor* [illegible]

[illegible] Keane, M.A., Ph.D. (Toronto), *Associate* [illegible]

[illegible] Ph.D. (Toronto), *Associate Professor*

[illegible] Ph.D. (Michigan), *Associate*

M. Latta, M.A., Ph.D. (Toronto), *Associate Professor* (Anthropology)

K. England, B.A., P.G.C.E. (Leicester), M.A., Ph.D. (Ohio), *Assistant Professor*

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

F. Iacovetta, M.A., Ph.D. (York, Canada), *Assistant Professor*

L. Lange, B.A., M.A. (Manitoba), Ph.D. (Toronto), *Assistant Professor*

J. Matus, M.A. (Columbia), Ph.D. (Toronto), *Assistant Professor*

A. Tuzlak, B.A., M.A. (Windsor), Ph.D. (York, Canada), *Assistant Professor*

A. Brannen, M.A. (New Mexico), B.F.A. (York, Canada), *Senior Tutor*

J. Hoogstraten, B.F.A. (Manitoba), *Senior Tutor*

Division of Life Sciences

Biology

F.A. Urquhart, B.A., M.A., Ph.D. (Toronto), *Professor Emeritus*

R. Boonstra, B.Sc. (Calgary), Ph.D. (B.C.), *Professor*

I.R. Brown, B.Sc. (Carleton), Ph.D. (Texas), *Professor*

C.K. Govind, B.Sc. (Rhodes), M.Sc. (Natal), Ph.D. (Manitoba), *Professor*

J. W. Gurd, B.A. (Mnt.All.), Ph.D. (McGill), *Professor*

C. Nalewajko, B.Sc., Ph.D., D.Sc., (Univ. College London), *Professor*

J.C. Ritchie, B.Sc. (Aberdeen), Ph.D. (Sheffield), D.Sc. (Aberdeen), F.R.S.C., *Professor*

J.C. Silver, B.Sc., Ph.D. (CUNY), *Professor*

A.H. Weatherley, B.Sc. (Sydney), M.Sc. (Tas), Ph.D. (Glas), *Professor*

D.D. Williams, B.Sc. (Univ. Coll. N. Wales), Dip.Ed. (Liverpool), M.Sc., Ph.D. (Waterloo), D.Sc. (Wales), *Professor*

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

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I.M. Campbell, B.Sc. (Alberta), M.A., Ph.D. (Toronto), *Associate Professor*

R.E. Dengler, B.Sc., Ph.D., (UCD), *Associate Professor*

M.F. Filosa, B.S. (St. Peter's), M.S. (Fordham), Ph.D. (Princeton), *Associate Professor*

G.F. Israelstam, B.Sc. (Witwaterrand), Ph.D. (Univ. College London), *Associate Professor*

J. M. Eadie, B.Sc.(Western), M.Sc. (Queen's), Ph.D. (B.C.), *Assistant Professor*

C. A. Hasenkampf, B.S. (Loyola), M.Sc., Ph.D. (Florida State), *Assistant Professor*

K. M. Martin, B.Sc. (U. of P.E.I., Charlottetown), M.Sc. (Alberta), Ph.D. (Queen's), *Assistant Professor*, NSERC University Research Fellow

C. D. Riggs, B.Sc. (North Carolina), Ph.D. (Florida State), *Assistant Professor*

N. E. Williams, B.Sc. (Guelph), M.Sc. (Waterloo), Ph.D. (Toronto) *Assistant Professor*

C. Pickett, B.Sc., M.A. (Toronto), *Senior Tutor*

Psychology

G.B. Biederman, B.Sc. (CUNY), Ph.D. (NYU), *Professor*

K.K. Dion, B.A. (Wellesley), Ph.D. (Minn.), *Professor*

J.E. Foley, B.A., Ph.D. (Syd.), *Professor*

B. Forrin, B.A. (Toronto), M.A., Ph.D. (Michigan), *Professor*

J.M. Kennedy, B.Sc., M.Sc. (Belf.), Ph.D. (Cornell), *Professor*

C.M. MacLeod, B.A. (McGill), Ph.D. (Washington), *Professor*

N.W. Milgram, B.A. (U.Cal.), M.A., Ph.D. (McGill), *Professor*

T.L. Petit, B.S., M.A. (Louisiana), Ph.D. (Florida), *Professor*

M.C. Smith, B.A. (Toronto), Ph.D. (MIT), *Professor*

J. Bassili, B.A. (McGill), Ph.D. (Cornell), *Associate Professor*

G.C. Cupchik, B.A. (Mich.), M.A., Ph.D. (Wisc.), *Associate Professor*

G.O. Ivy, B.A. (Drew), Ph.D. (Irvine), *Associate Professor*

F. Klajner, B.Sc. (McGill),, M.A. (Toronto), Ph.D. (Toronto), M.D. (Toronto), *Associate Professor*

A. Kukla, A.B., M.A., Ph.D. (UCLA), *Associate Professor*

M.A. Schmuckler, B.A. (Suny-Binghampton), Ph.D. (Cornell), *Assistant Professor*

D. A. Bors, B.A. (Florida), M.A. (Regina), Ph.D. (Toronto) *Senior Tutor*

G.A.J. Heighington, B.A. (Toronto), B. of Ed., *Senior Tutor*

Division of Management and Economics

Economics

L. Tarshis, B.A., M.A., Ph.D. (Cambridge), *Professor Emeritus*

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), *Professor*

S. Horton, B.A., M.A. (Cambridge), Ph.D. (Harvard), *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. Baker, B.Comm. (Toronto), M.A. (York, Canada), Ph.D. (Michigan), *Assistant Professor*

K. McKenzie, B.Comm. (Saskatchewan), M.A. (Calgary), Ph.D. (Queen's), *Assistant Professor*

J. Tenjo, B.A. (Un. Nacional de Columbia), M.A. (Brown), M.A., Ph.D. (Toronto), *Assistant Professor*

D. Trefler, B.A. (Toronto), M.A. (Cambridge), Ph.D. (Un. of California, L.A.), *Assistant Professor*

Management

O. Berman, B.A., S.M. (Tel Aviv University), Ph.D. (M.I.T.), *Professor*

S. Borins, B.A. (Harvard), M.P.P. (Kennedy School of Gov't.), Ph.D (Harvard), *Professor*

G. T. Gilbert, B.Comm (Toronto), FCA, *Professor*

G. Hunt, B.Sc. (Trent), M.Ed (Toronto), Ph.D (Bath), *Assistant Professor*

M. Quaid, B.A. (McGill), M.Sc.(London School of Economics), Ph.D. (Oxford), *Assistant Professor*

A. Stawinoga, B.A. (Toronto), M.B.A. (York, Canada), C.M.A., *Assistant Professor*

T. Litovitz, B. Comm. (Toronto), C.A., M.B.A. (York, Canada), *Senior Tutor*

Division of Physical Sciences

Astronomy

C. Dyer, B.Sc., M.Sc., Ph.D., *Professor*

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*

Chemistry

A.J. Kresge, B.A. (Cornell), Ph.D. (Illinois), F.R.S.C., *Professor*

R.A. McClelland, B.Sc., Ph.D., *Professor*

R. Morris, B.Sc. (Waterloo), Ph.D. (U.B.C.), *Professor*

T.T. Tidwell, B.S. (Georgia Inst. Tech.), Ph.D. (Harvard), *Professor*

A. Walker, B.Sc., Ph.D. (Nottingham), *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*

K. Henderson, B.Sc., M.Eng., *Senior Tutor*

J. Potter, B.Sc. (Birmingham), M.Sc. (Windsor), *Senior Tutor*

A. Verner, M.Sc., M.Eng., *Senior Tutor*

N.E. Mitchell, B.Sc. (Guelph), *Tutor*

W. Restivo, B.Sc., *Senior Tutor*

L. Teo B.Sc., B.Ed., (Singapore), *Senior Tutor*

Computer Science

C. Dyer, B.Sc., M.Sc., Ph.D., *Professor*

W.H. Enright, B.Sc. (British Columbia), M.Sc., Ph.D., *Professor*

A. Mendelzon, B.S., M.S.E., M.A., Ph.D., (Princeton), *Professor*

J. von zur Gathen, Ph.D. (Zurich), *Associate Professor*

V. Hadzilacos, B.A. (Princeton), Ph.D. (Harvard), *Associate Professor*

G. Hirst, B.A., B.Sc., M.Sc. (Anu, U.B.C.), Ph.D. (Brown U.), *Associate Professor*

G.J. Cupit, B.Sc. (U.B.C.), *Senior Tutor*

M. Horrigan, B.Sc., M.A., M.Sc., *Senior Tutor*

P. Lumby, B.Sc. (McGill), M.Sc. (London) *Tutor*

N. Cheng, B.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*

R.T. Pybus, B.Sc. (Brock), *Special Lecturer*

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*

P. Selick, B.Sc., M.Sc., Ph.D. (Princeton), *Professor*

R.W. Sharpe, M.Sc., Ph.D. (Yale), *Professor*

J.B. Wilker, B.Sc., M.A. (British Columbia), Ph.D., *Professor*
R.O. Buchweitz, Ph.D. (Hanover), *Associate Professor*
J. Scherk, D.Phil., (Oxford), *Associate Professor*
L. Haddad, L.Sc.(Libanaise), M.Sc., Ph.D. (Montreal), *Assistant Professor*
J.C. Harris, M.S., Ph.D. (Chicago), *Assistant Professor*
S. Chawla, B.A. (Delhi), M.Sc. (McMaster), *Senior Tutor*
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*
S. C. Tryphonas, M.Sc., *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.J. 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., *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), *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), *Associate Professor*
G.S. Gillison, B.A. (McGill), Ph.D. (CUNY), *Assistant Professor*

Geography
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. (Toronto), *Professor*
E. Relph, B.A., M. Phil. (London), Ph.D. (Toronto), *Professor*
M.F. Bunce, B.A., Ph.D. (Sheffield), *Associate Professor*
A.G. Price, B.Sc. (Wales), M.Sc., Ph.D. (McGill), *Associate Professor*
K. England, B.A. (Leicester), M.A., Ph.D. (Ohio State), *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 Professor*
D.B. Cook, M.A., Ph.D. (Toronto), *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), *Associate Professor*
D. Welch, B.A. (Toronto), A.M., Ph.D. (Harvard), *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), M.A., Ph.D. (University of Alberta) *Associate 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.
L. Le, B.A., M.L.S.
M. Miller, B.A. Hon., M.L.S.
M. Wiederkehr, Dip. Trad., M.L.S.
P.H. Yamamoto, B.A., M.S.C. in L.S.

Programmes of Study and Course Descriptions

The following Programmes are offered at Scarborough College.
All programmes in Computer Science, Economics, Management, Neurosciences, Political Science, 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.
Astronomy, Physics & Mathematics - B.Sc.
Biological Sciences - B.Sc.
Chemistry - B.Sc.
Chemistry & Biochemistry - B.Sc.
Cell and Molecular Biology - B.Sc.
Cognitive Science - B.Sc.
Computer Science - B.Sc.
Computer Science & Mathematics - B.Sc.
Computer Science & Statistics - 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.
Environmental Chemistry - B.Sc.
Fine Art History - B.A.
Fine Art Studio - B.A.
French - B.A.
Geography - B.A./B.Sc.
History* - B.A.
Linguistics - B.A.
Management - B.A.
Management & Economic Theory - B.A.
Management & Economics - B.A.
Mathematics - B.Sc.
Mathematics & Statistics - B.Sc.
Modern Languages - B.A.
Neurosciences - B.Sc.
Philosophy* - B.A.
Physical Sciences - B.Sc.
Political Science - B.A.
Psychology* - B.A./B.Sc.
Sociology* - B.A.
Terrain and Environmental Earth Sciences - B.Sc.

Major Programmes - Type of Degree
Anthropology* - B.A./B.Sc.
Astronomy & Physics - B.Sc.
Biochemistry - B.Sc.
Biological Sciences - B.Sc.
Chemistry - B.Sc.
Classical Studies - B.A.
Cognitive 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.
International Development Studies - B.A./B.Sc.
Italian Language - B.A.
Linguistics - B.A.
Mathematical Sciences - B.Sc.
Music History & Literature - B.A.
Philosophy* - B.A.
Political Science* - B.A.
Psychology* - B.A./B.Sc.
Sociology* - B.A.
Spanish Language - B.A.
Women's Studies - B.A.

College Programmes - Type of Degree
Humanities - B.A.

Co-operative Programmes - Type of Degree
Administration - B.A.
Arts Administration - B.A.
International Development Studies - B.A./B.Sc.
Computer Science & Physical Science - B.Sc.

Co-operative Programmes are work-study Programmes which are designed to integrate related, practical experience with regular university studies. All Co-operative 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.

* These are Programmes which the College makes available to students who are able to study only in the evening.

Anthropology

Assistant Chair: L. Sawchuk (287–7347)
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 non-literate 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 areas. Students interested in inquiring about appropriate course sequences in one of the sub-fields are invited to consult with one of the faculty in the appropriate subfield and with the Supervisor of Studies.

Specialist Programme in Anthropology
Supervisor: R.W. Shirley (287-7346)
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:

1 ANTA01Y Introduction to Anthropology
2 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.
4 One full-course equivalent in a field methods or supervised reading and research course
ANTC03F
ANTC04S
ANTC60S
ANTD12H
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 (287-7346)
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:
1 ANTA01Y Introduction to Anthropology
2 One course from among the following:
ANTB15Y Biological Anthropology
ANTB20Y Social and Cultural 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 Anthropology within the three-year degree programme.

ANTA01Y Introduction to Anthropology
Telephone ID #: 00710163
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, Summer Evening
M. Lambek & TBA

ANTB01Y Ecological Anthropology
Telephone ID #: 00720163
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.
Prerequisite: ANTA01
Session: Winter Day
H. B. Schroeder

ANTB15Y Biological Anthropology
Telephone ID #: 00721563
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 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
TBA

ANTB20Y Social and Cultural Anthropology
Telephone ID #: 00722063
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
R.W. Shirley, TBA

ANTB26Y An Introduction to Prehistoric Archaeology
Telephone ID #: 00722663
A survey of the anthropological sub-discipline 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 Evening
H. B. Schroeder

ANTB38Y Prehistory of North America
Telephone ID #: 00723863
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 prerequisite or corequisite
Session: Winter Day
TBA

ANTB49F Myth and Symbol
Telephone ID #: 00724933
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, 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

ANTB54F Anthropology of Sex
Telephone ID #: 00725433
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
F. D. Burton

ANTB55Y Cultures of the Middle East and Islamic World
Telephone ID #: 00725563
The Islamic world embraces a bewildering diversity of cultures, environments, and even languages. Yet all are united by bonds of a common faith that is itself a social system. This course examines similarities and variations among contemporary and traditional Muslim societies from an anthropological perspective. It includes consideration not only of Middle Eastern and North African populations, but also of Islamic sub-Saharan Africa, Asia, and Indonesia.
Prerequisite: ANTA01 or permission of instructor
Session: Winter Day
J. Boddy

ANTC03F 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

ANTC10S Anthropological Perspectives on Development
Telephone ID #: 00731053
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.
Prerequisite: ANTA01
Session: Winter Day
G. Gillison

ANTC11Y The Anthropology of Women and Gender
Telephone ID #: 00731163
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

ANTC19F Economic Anthropology
Telephone ID #: 00731933
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.
Prerequisite: ANTA01 or WSTA01 (JHSA01) or permission of instructor
Session: Winter Day
R.W. Shirley

ANTC25S Anthropology and Psychology
Telephone ID #: 00732553
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 cross-cultural perspective; psychoanalytic (Freudian) contributions to the understanding of culture (e.g. symbolic projection, unconscious motivation; the cross-cultural 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

ANTC40Y Anthropological Demography
Telephone ID #: 00734063
An examination of the biological, demographic, ecological and social-cultural determinants of human and non-human population structure and the interrelationships between these determinants.

Lecture topics include population and societal strategies of survival and adaptation, population structure of small-scale and urban societies, and paleodemography and paleopathology.
Prerequisite: ANTA01; ANTB15 is recommended
Session: Winter Day
L. Sawchuk

ANTC49S Law and Society
Telephone ID #: 00734953
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.
Prerequisite: ANTA01 or ANTB20 or permission of instructor
Session: Winter Day
R.W. Shirley

ANTC51Y Medical Anthropology
Telephone ID #: 00735163
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.
Prerequisite: ANTA01
Session: Winter Day
M. Lambek, L. Sawchuk

ANTD03Y Analysis of Archaeological Material
Telephone ID #: 00740363
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.
Prerequisite: Any B-level course in Archaeology
Session: Winter Day
TBA

ANTD11Y The Concept of Race in Anthropology
Telephone ID #: 00741163
An insight into and an appreciation of the concept of race.

This concept is central to human biology and raises major issues concerning the processes of diversity, evolutionary history and social relationship. Modern theories are never wholly modern, as they contain the elements and constructs of previous ideas. Often these older ideas are fallacious or unscientific but so much a part of general thought that newer ideas are overwhelmed. The course will concentrate on primary sources from 1700 to the present. Four major periods are delineated; 1700-1860; 1860-1925; 1925-1945; 1945-present. The periods demarcate the modes and moods concerning the concept of race, the antiquity of humankind and explanations for its diversity.
Exclusion: (ANTC43)
Prerequisite: ANTB15 or one C-level course in Anthropology.
Session: Winter Day
F.D. Burton

ANTD12S Research on the Social Behaviour of Non-Human Primates
Telephone ID #: 00741253
The purpose of this course is to study non-human primates in a free-ranging habitat. Because the animals are habituated to humans, observation from dawn to dusk is possible. The field experience includes exploration of the impact of the local people on the environment and conservation of the monkeys. This field course costs between $1,200-$1,500 depending on location. Enrolment is limited to 10.
Prerequisite: ANTC22 and permission of instructor
Session: Winter Day
F.D. Burton

ANTD14Y New Perspective on Human Origins
Telephone ID #: 00741463
Important theories and models of hominisation will be examined.

Consideration will be given to theories that emphasize the structural aspects of man's emergence. Demographic and ecological models will also be reviewed. However, it is expected the investigative emphasis will be placed on bio-behavioural models of hominid evolution. some of the conceptual parameters that may be dealt with are: hominid neural evolution; possible hominid behavioural propensities, such as, aggression, territoriality, and altruism; palaeoecology and the development of diagnostic hominid masticatory and locomotor complexes and; the relative roles of the various evolutionary forces of genetic drift, gene flow, non-random mating and natural selection. The final section of the course will synthesize the above information in an effort to understand hominisation in a broad perspective. The lectures in the introductory weeks will be followed by class discussion and student seminars. Evaluation will be based on a major research project to be presented orally and handed in at the end of term in the form of a written term paper.
Prerequisite: ANTB15 or 1 C-level course in Physical Anthropology
Session: Winter Day
TBA

ANTD16S Biomedical Anthropology
Telephone ID #: 00741653
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 and one C level full-course equivalent in Physical Anthropology
Session: Winter Day
L. Sawchuk

ANTD31S and D32F Advanced Research in Anthropology
Directed critical examination of specific problems in Anthropology, based on library and/or field research. Individual tutorials, as arranged.
Prerequisite: Permission of instructor
Session: Winter Day, Winter Evening, Summer Evening
Members of Faculty

Courses Not Offered in 1991-92

ANTB03F The Americas: An Anthropological Perspective
Corequisite: ANTC37 recommended

ANTB05F African Cultures and Societies I: Survey
Prerequisite: ANTA01 or Permission of Instructor

ANTB07S Comparative Slavery
Prerequisite: ANTA01

ANTB11F Human Behaviour in the Old Stone Age
Prerequisite: ANTA01
(ANTB26 is recommended).

ANTB12S The Rise of Civilization
Prerequisite: ANTA01
(ANTB26 is recommended)

ANTB16Y Cultures of Modern Canada
Prerequisite: ANTA01 or permission of instructor.

ANTB21Y Canadian Native Peoples
Prerequisite: ANTA01 or permission of instructor
Corequisite: ANTB38, ANTC28 recommended

ANTC05Y Anthropological Study of Religion
Prerequisite: ANTA01Y

ANTC06S African Cultures and Societies II: Case Studies
Prerequisite: ANTB05

ANTC16Y Human Origins
Prerequisite: ANTA01 or permission of instructor

ANTC22Y Primate Behaviour
Prerequisite: ANTA01 or ANTB15 or PSYA01 or BIOA03

ANTC32F Political Anthropology
Prerequisite: ANTA01

ANTC35F Quantitative Methods in Anthropology
Prerequisites: ANTA01; ANTB15 and ANTB26 are recommended

ANTC37S Prehistory of Mexico and Mesoamerica
Prerequisite: ANTA01; ANTB03 and ANTB38 is recommended

ANTC41Y Human Adaptability
Prerequisite: ANTA01 or BIOA03; ANTB15 highly recommended

ANTC47Y Human Osteology
Prerequisite: ANTA01 or BIOA03; ANTC16 (ANTB14) and ANTB15 recommended

ANTC50F Death and Burial
Prerequisite: Any B-level course in Anthropology

ANTC56Y The Anthropology of Food
Prerequisite: ANTA01 and one other B or C level course in Anthropology

ANTC58Y Native People of the Canadian Subarctic
Prerequisite: ANTB21Y

ANTC60S Fieldwork in Social and Cultural Anthropology
Prerequisites: Any B-level course in Anthropology or IDS or permission of instructor.

ANTD02S Background to Modern Archaeology: Settlement Patterns
Prerequisite: Any B level full-course equivalent in Archaeology or related disciplines

ANTD15F Frontiers of Anthropology
Exclusion: ANTB49
Prerequisite: permission of instructor

ANTD23F/S Ethnomedicine
Prerequisite: ANTC51 or permission of instructor

ANTD24F Theory and Methodology in Social/Cultural Anthropology
Exclusion: (ANTC16),(ANTC17)
Prerequisite: ANTA01 and ANTB20 or permission of instructor

Arts

Specialist Programme in the Arts
Supervisor: Janis Hoogstraten (287-7177)
The Specialist Programme in the Arts is designed for all those students with an active interest in the Arts. This programme will give the student a broad foundation in the areas of Fine Art, Music, and Drama while at the same time developing expertise in one of the areas. In addition, the more practical aspects of these areas can be studied in the minor component in Arts Administration.

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:

1 The Major Component:
One of the following areas:
Drama
Fine Art History
Fine Art Studio
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 areas, other than the area chosen as the Major Component:

Arts Administration:
AADB01Y (Introduction to Arts Administration)
and 2 full-course equivalents from:
MGTA01Y Financial Accounting
ECOA02Y Introduction to Economics: A Mathematical Approach
or
ECOA03Y Introduction to Economics
ECOB35F/S Public Decision Making*
MGTB27Y Organizational Behaviour*
POLA50Y Introduction to Canadian Politics

Drama:
DRAB01Y, DRAB03Y, DRAB04Y.

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:
FARA90Y and any two full-course equivalents in Fine Art Studio.

Music:
MUSA01Y and any two full-course equivalents in Music.

3 HUMC11H
Plus one and one half full-course equivalents from relevant disciplines. Authorization from the programme supervisor is required.

HUMC11H Arts Seminar
A seminar/performance course combining at least two of: Fine Art Studio, Fine Art History, Drama and Music. Students will bring a proposal for a project to the supervisor early in the fall term and develop their proposals through the term. They will present their seminar/performance in the spring term. The form of presentation will depend upon the development of the proposal and the disciplines involved.
Prerequisites: at least 10 full-course equivalents in the Arts Programme.
Session: Winter Day
Co-ordinator: J. Hoogstraten
Offered 1992/93 and 1993/94

Astronomy

Discipline Representative: C.C. Dyer (287–7206)
Astronomy is at the same time one of the oldest and one of the most dynamic areas of science. It is basically the attempt to understand the environment in which humanity developed, from the solar system in which we find our direct and recent origins, to the largest distance scales typified by quasars and the *big bang*, in which we must search for the very origins of structure ranging from the solar system to the largest structures, such as large clusters of galaxies and *cosmic voids*. The past quarter century has seen startling discoveries, such as the *cosmic microwave background radiation*, that have given us both new understanding of the universe and made us more aware of the problems still facing us in attaining a further understanding. In addition there has recently been a significant trend towards the integration of many of the ideas of modern high energy Physics into Astronomy, with particularly interesting developments concerning ideas about the very first seconds in the evolution of our universe.

The full range of modern astronomical topics is covered in the introductory course ASTA03Y. For students wishing to further their study in Astronomy, there are a number of B and C level courses, which are integral components of a number of the Physical Sciences Specialist Programmes. In addition, the course ASTB03S is intended for students who have taken no previous astronomy, and covers the history of modern Astronomy. It is intended to provide a historical perspective on modern Astronomy, and by example, an introduction to the evolution of a number of modern scientific areas.

Please refer to the Physical Sciences section of the Calendar for the following Programmes.

Specialist Programme in Astronomy, Mathematics and Physics

Major Programme in Astronomy and Physics

ASTRONOMY

ASTA03Y Introduction to Astronomy
Telephone ID #: 01110363
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 both the science and 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.
Session: Winter Day
R. G. Carlberg

ASTB03S Great Moments in Astronomy
Telephone ID #: 01120353
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

ASTB50S Celestial and Classical Mechanics
Telephone ID #: 01125053
This course considers classical mechanics with particular emphasis on its origins and applications in celestial mechanics, particularly the study of the motions of bodies in planetary systems. Topics will include central

force laws, Kepler's Laws, conservation laws, Lagrange's equations, and an introduction to Hamiltonian mechanics.
Prerequisite: ASTA03Y, MATA26Y, PHYA01Y
Corequisite: MATB41F, MATB42S, PHYB21S

ASTC01H Research Topics in Astronomy
Telephone ID #: 01130143
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: ASTA03 or 323; PHYB21S, permission of instructor
Session: Winter Day

ASTC50F Structure and Evolution of Astrophysical Bodies
Telephone ID #: 01135033
The structure and evolution of astrophysical bodies, particularly stars of various types is considered from its basis in various branches of Physics, and from the observational viewpoint. A number of areas of Physics come together to explain the structure and stability of stars, including gravitation, thermodynamics, radiative processes, and nuclear energy generation mechanisms. Of particular interest is the fragile balance among the various forces and processes, and failures in this balance will be shown to lead to various evolutionary tracks, leading from the birth of stars to the various possible endstates for stars, such as neutron stars and black holes. The generation of the atomic elements by the nuclear processes in stars will be considered. There will also be some discussion of cooler objects, such as the planets, where the structure is typically more complicated due to the solid or liquid state of matter in these objects.
Prerequisites: ASTA03Y, ASTB50S, MATA26Y
Corequisites: MATB41F, MATB42S
Not offered 1991/92
Offered 1992/93

ASTC51S Stellar Systems, Galaxies, and Cosmology
Telephone ID #: 01135153
This course will consider the structure and evolution of collections of astrophysical bodies, usually starting at the scale of stars. Topics will include the star clusters found in various regions of most galaxies, and their implications both for the evolution of the stars and for the evolution of the galaxies of which they are a part. The study of galaxies will extend to their morphology, evolution, and place in the evolution of larger systems, such as clusters of galaxies, superclusters, and eventually the universe. The large scale structure of the universe, cosmology, will be considered in the Newtonian gravity approximation, leading to the simple Friedmann models of the universe. Observational approaches to determining limits on the large scale structure of the universe will be considered.
Prerequisites: ASTA03Y, ASTB50S, ASTC50F
Corequisite: PHYC22S
Not offered 1991-92
Offered 1993/94

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: G. F. Israelstam (Office S–526)
This Programme must include BIOA03Y plus 6 full-course equivalents in Biology. Note that at least 1 full-course equivalent must be in animal science and 1 full-course equivalent in plant science. (The following are the plant science courses:
BIOB06Y, BIOB39F, BIOB40S, BIOC07S, BIOC37F, BIOC38S, BIOC46S, BIOC47F, BIOD10S, 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 full-course 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:
BIOB12Y, BIOB14F, BIOB28S**, BIOC03F, BIOC07S, BIOC16S, BIOC18S(BIOB03S), BIOC19F, BIOC33S, BIOC46S, BIOC47F, BIOC50F, BIOC52F, BIOC64F, BIOC65S, BIOD10S, BIOD11F, BIOD13F, BIOD15F, BIOD22S.
Group 4. Genetics and Cell Biology:
BIOB05Y, BIOB23Y, BIOB25F*, BIOC31S*, BIOC37F*, BIOC48F*, BIOC20Y, BIOC51F, BIOD05S, BIOD17F, BIOD19S.

**Note: This course cannot be used to fulfil the half course requirement in Ecology and Environmental Biology.

Specialist Programme in Biological Sciences
Supervisor: G. F. Israelstam (Office S–526)
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.

1 BIOA03Y
2 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:
BIOB12Y, BIOB14F, BIOB28S, BIOC03F, BIOC07S, BIOC16S, BIOC18S(BIOB03S) BIOC19F, BIOC33S, BIOC46S, BIOC47F, BIOC50F, BIOC51F, BIOC52F, BIOC64F, BIOC65S, BIOD10S, BIOD11F, BIOD13F, BIOD15F, BIOD22S.
5 At least one full-course equivalent in Cell and Molecular Biology:
BIOB05Y, BIOB23Y, BIOC20Y, JBCC35Y, JBCC36H, BIOC48F, BIOD05S, BIOD17F, BIOD19S.
6 Five other full-course equivalents in Biology (unspecified). Note that BIOD01Y or BIOD02Y can be used in filling this requirement.
7 Three full-course equivalents in cognate disciplines:
CHMA02Y
PHYA01Y or PHYA02Y
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: J. Youson (Office S-566)
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. However, CHMB05Y Organic Chemistry is strongly recommended in the second year for students who plan to take Biochemistry.

1 BIOA03Y
2 Five full-course equivalents as follows: BIOB02Y; BIOB05Y; BIOC20Y; JBCC35Y; JBCC36H; 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.
3 Three full-course equivalents from the following:
BIOB06Y 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, IMM334Y, 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 ballot.
4 Four full-course equivalents in cognate disciplines:
CHMA02Y
CHMB05Y
PHYA01Y or PHYA02Y
MATA26Y or (MATA27Y) or (MATA55Y)
5 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: J. Eadie (Office S-558)
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 1 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 5.5 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 full-course equivalents from the following groups with at least 0.5 full-course equivalent from each group:
Group 1: BIOC07S, BIOC46S, BIOC47F, BIOD10S, BIOD11F.
Group 2: BIOC16S, BIOC19F, BIOD13F, BIOD15F.
Group 3: BIOB14F, BIOC03F, BIOC18S(BIOB03S), BIOC33S, BIOC50F, BIOC52F, BIOC64F, BIOC65S, BIOD22F.
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, BIOB06Y, BIOB17Y, BIOC31S*, JBCC35Y, JBCC36H, BIOC48F*, BIOD12H, BIOD30S.
5 One full-course equivalent in Genetics and Cell Biology: BIOB05Y, BIOB23Y, BIOB25F*, BIOC20Y, BIOC31S*, BIOC37F*, BIOC48F*, BIOC51F, BIOD05S, BIOD17S, BIOD19S.
6 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 BIOD01Y or BIOD02Y.
8 Three full-course equivalents in cognate disciplines:
CHMA02Y
PHYA01Y or PHYA02Y or GLGA01Y or GGRA05F/S and CSCA04H
MATA26Y or MATA55Y
9 For those interested in pursuing Theoretical Ecology, an additional MAT course should be considered.
10 A computer science course such as CSCA04H or CSCA56F/S is also recommended.

BIOA03Y Introductory Biology
Telephone ID #: 01310363
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, a background in Biology and Chemistry is recommended.
Session: Winter Day
The Faculty

JBHB01Y Introduction to Biological Sciences
Telephone ID #: 10020163
An introduction to the central concepts of Biology and their interrelationships.
The course is designed for students with no formal background in Biology but who have acquired some skill in reflection and in writing. Topics will include the functioning of cells and organisms and the relationships of organisms in space and time. The contemporary understanding of biological structures and functions will be illustrated by reference to common experience; genetic and ecological topics will be related to current ethical and political controversies which require biological input for their solution. Reading and essay writing will be an integral part of the course, supplemented by lectures and discussion periods.
Prerequisite: Either, two full-course equivalents in the Division of Humanities; or, two full-course equivalents in the Division of Social Sciences with permission of instructor.
Exclusion: Not open to students who are taking or have taken BIOA03Y.
Session: Winter Day
G. R. Williams

BIOB02Y Basic Microbiology
Telephone ID #: 01320263
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
J. C. Silver

BIOB05Y Genetics
Telephone ID #: 01320563
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
M. F. Filosa

BIOB06Y Plant Physiology
Telephone ID #: 01320663
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
Telephone ID #: 01321263
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.
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
Telephone ID #: 01321433
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 or permission of instructor
Session: Winter Day
R. Boonstra

BIOB17Y Animal Physiology
Telephone ID #: 01321763
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
C. K. Govind

BIOB23Y Developmental Biology
Telephone ID #: 01322363
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 development.

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
TBA and C. D. Riggs

BIOB25F Vertebrate Histology: Cells and Tissues
Telephone ID #: 01322533
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
Session: Winter Day
J. H. Youson

BIOB26S Vertebrate Histology: Organs
Telephone ID #: 01322653
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
Session: Winter Day
J. H. Youson

BIOB28S Elementary Statistics for Biologists
Telephone ID #: 01322853
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, GGRB31, SOCB06, ECOB11, ECOB12, STAB22
Session: Winter Day
I. M. Campbell

BIOB32F Vertebrate Morphogenesis
Telephone ID #: 01323233
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
Session: Winter Day
A. H. Weatherley

BIOC16S Marine Biology: Habitats and Communities*
Telephone ID #: 01331653
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: 16.
Pre- or co-requisite: BIOC29 or permission of instructor.
Session: Winter Evening
D. D. Williams

*In the 1991-92 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.

BIOC18S Microbes in the Environment
Telephone ID #: 01331853
This microbial ecology course will deal with the relationships of microorganisms: algae, 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: BIOB02
Exclusion: (BIOB03)
Session: Winter Day
C. Nalewajko

BIOC19F Limnology
Telephone ID #: 01331933
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: BIOC18 (BIOB03)
Session: Winter Day
C. Nalewajko

BIOC20Y Cell Biology
Telephone ID #: 01332063
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 cell-cell 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, BIOB26S, BIOC37F, BIOC38S or JBCC35Y. JBCC35Y may be taken concurrently.
Session: Winter Day
R. E. Dengler/C. D. Riggs/J. H. Youson

BIOC29F Invertebrate Zoology
Telephone ID #: 01332933
A general survey of the invertebrate animals (Protozoa-Urochordata), excluding the Arthropods, with emphasis on those groups of numerical, evolutionary and medical importance. Lectures, discussion groups 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 sessions and three hours of laboratory work per week. Field trip.
Prerequisite: BIOA03
Session: Winter Day
D. D. Williams

BIOC30S The Arthropoda
Telephone ID #: 01333053
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 sessions and a three-hour lab per week. Offered in alternate years.
Prerequisite: BIOA03, BIOC29 or permission of instructor
Session: Winter Day
D. D. Williams

BIOC31S Invertebrate Neurobiology
Telephone ID #: 01333153
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
Session: Winter Day
C. K. Govind

BIOC33S General Biology of Vertebrates
Telephone ID #: 01333353
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
Session: Winter Day
A. H. Weatherley

JBCC35Y Introductory Biochemistry
Telephone ID #: 09633563
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
Session: Winter Evening
J. W. Gurd

JBCC36H Laboratory in Biochemistry
Telephone ID #: 09633643
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.

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

BIOC37F Plant Structure and Development: Cells and Tissues
Telephone ID #: 01333733
The structure and development of cells and tissues making up the vascular plant body are examined at the light and electron microscope levels. Embryos and seedlings are used to demonstrate the integration of tissue systems throughout the plant body. A review of cell constituents and cell wall precedes a more detailed consideration of tissue types including parenchyma, collenchyma, sclerenchyma, xylem, phloem and a variety of secretory structures. Some attention is given to the relationship between structure and function as well as to the evolution of more complex cell types such as vessel members and sieve tubes. Microscope work in the laboratories emphasizes the recognition of cells, cell products and tissues dealt with in the lectures and text. Offered in alternate years.
Prerequisite: BIOA03
Session: Winter Day
R. E. Dengler

BIOC38S Plant Structure and Development: Organs
Telephone ID #: 01333853
A course dealing with the morphological, histological and developmental analysis of the major vegetative plant parts (roots, stems, leaves and derived structures) in higher vascular plants. Questions to be addressed include: how do plant parts arise, and how does their pattern of initiation and growth affect overall plant form; what is the range of morphological variation for a given type of plant part (e.g. storage root, proproot, grasping root, aerating root, thorn root, etc.); what special histological and developmental attributes are associated with these morphological variations; how can one relate form and internal structure to function and adaptation to particular environments? The laboratories include examples of subjects covered in the lectures and text. Each student receives adequate training to complete a plant microtechnique project by the end of the course. Offered in alternate years.
Prerequisite: BIOA03; BIOC37 or permission of instructor.
R. E. Dengler

BIOC46S Plant Population Ecology
Telephone ID #: 01334653
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
Session: Winter Day
J. C. Ritchie

BIOC48F Molecular Physiology of the Bacterial Cell
Telephone ID #: 01334833
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 research-oriented 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
Session: Winter Day
J. C. Silver

BIOC50F Ecology of Arid Regions
Telephone ID #: 01335033
This course deals with an examination of the modern ecosystems of arid and sub-arid regions, with particular attention to environmental changes and associated responses in vegetation, fauna, and human subsistence patterns, during recent decades and throughout the latest global climatic cycle. Regional emphasis will be on Africa.

Two hours of lecture per week, plus tutorials.
Prerequisite: BIOA03
Session: Winter Day
J. C. Ritchie

BIOC51F Population Genetics
Telephone ID #: 01335133
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)
I. M. Campbell

BIOC52F Animal Behaviour
Telephone ID #: 01335233
An introduction to the study of animal behaviour. The course will emphasize the evolutionary and ecological basis of animal behaviour. Students will participate in several practical exercises to gain experience in the methods testing 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; parental investment and parental care; reproductive tactics; mating systems and social behaviour. Labs will involve prepared exercises on foraging behaviour, social behaviour, mating behaviour, and anti-predator 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
Telephone ID #: 01336053
An 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; molecular evolution; the ecological basis of evolutionary change and coevolution. 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)
Session: Winter Day
J. M. Eadie

BIOC64F Alpine and Desert Field Ecology
Telephone ID #: 01336433
A field course introducing students to high alpine tundra, subalpine forests, desert and prairie biomes, all environments shaped by wind and aridity.

Intensive field studies of fauna and flora; fire ecology; glacial geomorphology and its influence on biological systems; wildlife conservation and management programmes. Students will be evaluated on a major project due at the end of the Fall term. Offered in alternate years with BIOC03 (Ecology Field Course). Limited enrolment: 15
* In the 1991/92 session, the course will be held during the last two weeks of August principally in the Colorado Rocky Mountains and nearby prairie and desert habitats. Interested students must contact instructors before 1 April and must be prepared to cover the cost of travel and accommodation.
Prerequisite: BIOB12 or permission of instructors
Session: Winter Day
K. Martin and J. Eadie

BIOC65S Conservation Biology
Telephone ID #: 01336553
A study of scientific principles of biological conservation.

Conservation biology is a pure and applied science that addresses the disturbing reduction in biological diversity of the planet. Lecture topics will include ecological principles of biological conservation; the impact of disease, inbreeding, hybridization, and natural catastrophes on small or fragmented populations; problems and progress on restoration and reintroduction of natural populations; captive breeding programmes; waste management; dynamic interactions between global climate change and biological conservation. Two one hour lectures per week and one two-hour tutorial biweekly.
Prerequisite: BIOB12
Session: Winter Day
K. Martin

BJPC70F Theoretical Foundations of Biology I
Telephone ID #: 01437033
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
Session: Winter Day

BJPC71S Theoretical Foundations of Biology II
Telephone ID #: 01437153
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
Session: Winter Day

BIOD01Y 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.
Session: Winter
Members of Faculty

BIOD02Y Directed Research in Biology
Identical to BIOD01Y (BIOC01Y) but not to be taken with the same faculty member.
Prerequisite: Completion of fifteen full-course equivalents, of which at least four must be Biological Science B- or C-level courses. Will require a seminar presented by the student during a Biology Research Day in the Spring.
Session: Winter
Members of Faculty

BIOD11F Quaternary Vegetation and Environments
Telephone ID #: 01341133
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, GLGB02 or (QUAD01)
Session: Winter Day
J. C. Ritchie

BIOD12H Physiology and Biochemistry of Plant Growth and Development
Telephone ID #: 01341243
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 recommended
Session: Winter Day
G. F. Israelstam

BIOD13F Environmental Biology of Fish Populations
Telephone ID #: 01341333
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
Session: Winter Day
A. H. Weatherley

BIOD17F Plant Molecular Biology
Telephone ID #: 01341733
An upper level course which elaborates on current genetic, molecular and biochemical aspects of plant cell metabolism.

Plants utilized a number of biochemical pathways which are not found in animal cells to carry out their normal life-cycles and to respond to changes in their environment. With the advent of plant transformation systems and recombinant DNA techniques these unique developmental changes and responses to environmental stimuli are beginning to be understood at the molecular level. Topics to be covered will include: the genetics of Agrobacterium and plant transformation, generation of somatic hybrids, targeting of proteins to the chloroplast, interactions between nuclear and chloroplast genomes, molecular biology of pollen development and floral evocation, embryogenesis and development of monocot and dicot seeds, cis and transacting factors controlling gene expression during the course of development and in response to environmental cues, plant genetic engineering and agricultural applications.
Prerequisites: BIOB05
Session: Winter Day
C. D. Riggs

BIOD19S Molecular Biology of the Gene
Telephone ID #: 01341953
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
Session: Winter Day
TBA

BIOD22S Global Metabolism
Telephone ID #: 01342253
A study of global biogeochemical cycles, their integration and regulation.

The perturbation of these cycles on a short time scale by human activities and on a geological time scale by extra-planetary effects such as changes in solar input or meteoritic impact. Geochemical feed-back mechanisms tending to preserve habitability, the role of biochemical processes in these mechanisms. Habitability as a compromise between evolutionary/physiological adaptation and geochemical constraints. The link between molecular regulation and global homeostasis.
Prerequisites: GLGA01Y, BIOB12Y or BIOB14F, JBCC35Y; or permission of instructor
Session: Winter Day
G. R. Williams

Courses Not Offered 1991-92

BIOB39F Comparative Morphology of Fungi, Algae and Bryophytes
Prerequisite: BIOA03

BIOB40S Comparative Morphology of Vascular Plants
Prerequisite: BIOA03

BIOC03F Ecology Field Course
Prerequisite: BIOB12

BIOC07S Phytogeography of Canada
Prerequisite: BIOA03

BIOC47F Plant Community Ecology
Prerequisite: BIOB12

BIOD05S Advanced Genetics
Prerequisite: BIOB05

BIOD10S Principles and Methods of Pollen Analysis
Prerequisite: One of (QUAA03), GLGA01 or BIOA03; plus one of BIOC46, BIOC47, GLGB02 or (QUAD01).

BIOD15F River Ecology
Prerequisite: BIOB12 or BIOC29 or permission of instructor.

BIOD30S Physiology of Algae
Prerequisite: BIOC18 (BIOB03)

Canadian Studies

The College Programme in Canadian Studies is no longer offered but students currently enrolled in it will be allowed to complete the programme.

Chemistry

Discipline Representative: A. Walker (287–7225)
Coordinator of First Year Studies in Chemistry: A. Verner (287–7224)
Chemistry can be viewed as both a challenging intellectual pursuit and a powerful, practical tool for developing and handling 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 CHMA02Y which must be taken by those who wish to take further chemistry courses or who require chemistry for another science.

Completion of CHMA02Y permits students to take any of the B-level courses in Chemistry. These are divided according to the following subdisciplines: Inorganic Chemistry, Analytical Chemistry, Physical Chemistry and Organic Chemistry. Thereafter, one can proceed to advanced-level courses at the C and D level.

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 St. George Series	*Complete Scarborough Courses*
420	CHMA02Y; CHMB22Y; CHMC22F; CHMC26F
430	CHMA02Y; CHMB11Y; CHMB33Y; CHMC33H; CHMC36S
440 (except 447)	CHMA02Y; CHMB44Y; CHMC44Y

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 PHYA01Y early in their programmes. Thus, the suggested first-year programme in Chemistry includes CHMA02Y, MATA26Y and PHYA01Y.

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.

Please refer to the Physical Sciences section of the Calendar for the following programmes.

Specialist Programme in Chemistry

Specialist Programme in Chemistry and Biochemistry

Specialist Programme in Environmental Chemistry

Major Programme in Chemistry

Major Programme in Biochemistry

Specialist Programme in Chemical Physics
The Specialist Programme in Chemical Physics is no longer offered. Students currently registered will be allowed to complete it.

CHEMISTRY

CHMA02Y General Chemistry
Telephone ID #: 02810263
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 is strongly recommended and is required for some higher level chemistry courses.
Session: Winter Day

CHMB11Y Analytical Chemistry
An introduction of 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.
Exclusion: (CHMB02Y)
Prerequisite: CHMA02Y
Other recommended courses: CHMB33Y
Session: Winter Day
Not offered 1991-92
First offered 1992-93

CHMB22Y Introductory Physical Chemistry
Introduction to physical chemistry, including thermodynamics, elementary statistical mechanics and chemical kinetics. The course starts with the application of the basic laws of thermodynamics to a variety of chemical problems. Topics covered include spontaneous processes, chemical and phase equilibria,

properties of solutions and electrochemistry. Further course topics are: the kinetic theory of gases, statistical mechanics of simple model systems, elementary chemical kinetics and theories of chemical bonding.
Exclusion: (CHMB03Y)
Prerequisites: CHMA02Y, MATA26Y, PHYA01Y
Corequisites: MATB41F and MATB42S are strongly recommended but not required. However note prerequisites for CHMC22F
Session: Winter Day
Not offered 1991-92
First offered 1992-93

CHMB33Y Inorganic Chemistry I
The ideas of structure and bonding of atoms, molecules and ionic lattices introduced in CHMA02Y are further developed and applied to the rich variety of structures of inorganic solids. The same ideas provide a framework to account for the reactions of these substances - namely acid-base and redox reactions. These concepts are used to rationalize the descriptive chemistry of the elements, particularly those of the s- and p- blocks. The structure and properties of the d-metal complexes are introduced as a special case of acid-base interactions.
Two one hour lectures per week.
Exclusions: (CHMB01Y)
Prerequisite: CHMA02Y
Session: Winter Day
Not offered 1991-92
First offered 1992-93

CHMB44Y 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.
Exclusion: (CHMB05Y)
Prerequisite: CHMA02Y
Session: Winter Day
Not offered 1991-92
First offered 1992-93

CHMC22F Advanced Physical Chemistry
This course is a continuation of CHMB22Y. Further topics in physical chemistry are treated, including molecular spectroscopy, topics in statistical mechanics and advanced topics in kinetics. The spectroscopy portion will primarily be concerned with the use and interpretation of various techniques (IR, UV/VIS, NMR, etc.). Both equilibrium and non-equilibrium statistical mechanics will be discussed, through calculation of partition functions for model systems (equilibrium) and treatment of diffusion and other transport properties, as well as the effects of noise (non-equilibrium). The advanced kinetics portion will cover oscillatory reactions, with examples drawn from chemistry, biochemistry and ecology. The approach of this course is more theoretical than that of CHMC25S.
Exclusion: (CHMC02Y)
Prerequisite: CHMB22Y, MATB41F, MATB42S
Session: Winter Day
Not offered 1991-92
First offered 1993-94

CHMC25S Environmental Physical Chemistry
This course treats physical chemical topics of environmental and ecological importance, including colloidal and interfacial chemistry, atmospheric chemistry and large scale physical and chemical transport processes. Collidal chemistry deals with thermodynamic stability and phase equilibria in colloids. Atmospheric chemistry treats the chemical kinetics and photochemistry of the atmosphere, especially as these relate to pollution and ozone depletion mechanisms. Transport properties such as percolation and diffusion are treated in an environmental setting. This course has a more applied approach than that of CHMC22F.
Prerequisite: CHMB22Y
Session: Winter Day
Not offered 1991-92
First offered 1993-94

CHMC26F Experimental Physical Chemistry
This course provides an introduction to modern techniques in physical chemistry, through experimentation and computer simulation. Computer modelling experiments will examine time-dependent phenomena such as complex and oscillatory chemical reactions, noise-driven processes and simple bifurcation theory, as well as simple trajectory studies of reaction kinetics and electronic structure calculations. "Real" experiments on kinetics and thermodynamics will illustrate the topics covered in the lecture courses (CHMB22Y, C22F and C25S), with some emphasis on environmental systems.
Exclusion: (CHMC02Y)
Prerequisite: CHMB22Y
Corequisite: CHMC22F
Session: Winter Day
Not offered 1991-92
First offered 1993-94

CHMC33H Inorganic Chemistry II
The objective is to rationalize the structure, bonding, spectra and reactions of transition metal complexes. The introduction to this subject in CHMB33Y is expanded to include the analysis of the electronic spectra of complexes, reaction mechanisms of d-block complexes, organometallic chemistry, and catalysis.
Two hours of lecture per week.
Exclusion: (CHMC01Y)
Prerequisite: CHMB33Y
Session: Winter Day
Not offered 1991-92
First offered 1993-94

CHMC35H Environmental Inorganic Chemistry
This is a study of the sources, reactions and fates of chemical species in the water, soil and air. Topics include the aqueous chemistry of important elements, redox equilibria, coordination complex formation, the role of essential and trace elements in biological systems, catalysis by microorganisms, water pollution, treatment and analysis, soil chemistry and atmospheric chemistry. Much of the chemistry is rationalized in terms of concepts of structure and bonding introduced in CHMA02Y and CHMB33Y. Chemical transport and other physical aspects are covered in CHMC25S.
Prerequisites: CHMB11Y, CHMB33Y or by permission of instructor.
Session: Winter Day
Not offered 1991-92
First offered 1993-94

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: BIOA03Y; (CHMB05Y)
Prerequisite beginning in 1992-93: BIOA03Y; CHMB44Y
Session: Winter Day

JBCC36H Laboratory in Biochemistry
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: BIOA03Y; (CHMB05Y)
Prerequisite beginning in 1992/93: BIOA03Y; CHMB44Y
Corequisite: JBCC35Y
Session: Winter Day

CHMC36S Inorganic Chemistry Laboratory
Synthetic techniques as applied to inorganic compounds, both main group and transition metal examples, including some organometallic complexes.

This course is meant to complement both CHMB33Y and CHMC33H by illustration of the theoretical concepts presented in those two courses through primarily synthetic experiments. Characterization of the products obtained will be done by both classical and instrumental methods, primarily infrared spectroscopy.
The laboratory meets one day each week in the spring term for 6 hours.
Exclusion: (CHMC01Y)
Prerequisite: CHMB33Y
Corequisite: CHMC33H
Session: Lab: Spring Term T10-5
Not offered 1991-92
First offered 1993-94

CHMC44Y 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.
Exclusion: (CHMC03Y)
Prerequisite: CHMB44Y
Session: Winter Day
Not offered 1991-92
First offered 1993-94

CHMD33H 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.
Exclusion: (CHMD48S)
Prerequisite: CHMC33H
Session: Winter Day
Not offered 1991-92
First offered 1995-96

CHMD34H Special Topics in Organometallic Chemistry and Catalysis
A selection of topics in organometallic chemistry and catalysis. Recent developments are emphasized. It is intended to offer this course every two years, alternating with CHMD33H. 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 in organometallic chemistry and catalysis. The emphasis will be on inorganic chemistry, but a good background in organic and physical chemistry is useful. Two lectures per week.
Exclusion: (CHMD52S)
Prerequisite: CHMC33H
Session: Winter Day
Not offered 1991-92
First offered 1994-95

CHMD42H Special Topics in Physical Organic Chemistry
A selection of topics dealing with kinetics, equilibria, and mechanisms of organic reactions, and the structure and properties of organic molecules and reactive intermediates. Recent developments are emphasized. The course is usually offered in alternate years, and the topics covered vary, so students should consult with the faculty in organic chemistry as to the specific topics to be covered in a given year.
Exclusion: (CHMD49S)
Corequisite: CHMC44Y
Session: Winter Day
Not offered 1991-92
First offered 1995-96

CHMD44H Special Topics in Synthetic Organic Chemistry
A selection of topics in synthetic organic chemistry. A survey of modern synthetic methods will be emphasized, and some application to the synthesis of particular systems of interest will be included.

Two lectures per week.
Exclusion: (CHMD51S)
Corequisite: CHMC44Y
Session: Winter Day
Not offered 1991-92
First offered 1994-95

CHMD88Y 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.
Exclusion: (CHMD46Y)
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.
Session: Summer Day, Winter Day
Members of the Chemistry Faculty
Not offered 1991-92
First offered 1994-95

CHMD90Y 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: (CHMD45Y) (CHMD47F/S/H)

CHMD91H
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
Not offered 1991-92
First offered 1994-95

CHMD91H Library Thesis
Similar to CHMD90Y 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: (CHMD47F/S/H) (CHMD45Y)
CHMD90Y
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
Not offered 1991-92
First offered 1994-95

The following courses are being offered for students completing programmes listed in the 1990-91 College Calendar.

CHMB01Y Inorganic Chemistry I
Telephone ID #: 02820163
Not offered after 1991-92

CHMB02Y Analytical Chemistry
Telephone ID #: 02820263
Not offered after 1991-92

CHMB03Y Physical Chemistry I
Telephone ID #: 02820363
Not offered after 1991-92

CHMB05Y Organic Chemistry I
Telephone ID #: 02820563
Not offered after 1991-92

CHMC01Y Inorganic Chemistry II
Telephone ID #: 02830163
Not offered after 1992-93

CHMC02Y Physical Chemistry II
Telephone ID #: 02830263
Not offered after 1992-93

CHMC03Y Organic Chemistry II
Telephone ID #: 02830363
Not offered after 1992-93

CHMD45Y Library Thesis
Telephone ID #: 02844563
Not offered after 1993-94

CHMD46Y Introduction to Research
Telephone ID #: 02844663
Not offered after 1993-94

CHMD47H Library Thesis
Telephone ID #: 02844743
Not offered after 1993-94

CHMD48S Special Topics in Inorganic Chemistry
Telephone ID #: 02844853
Offered in 1991-92 and 1993-94 only

CHMD49S Special Topics in Physical Organic Chemistry
Telephone ID #: 02844953
Offered in 1991-92 and 1993-94 only

CHMD51S Special Topics in Synthetic Organic Chemistry
Telephone ID #: 02845153
Offered in 1992-93 only

CHMD52S Special Topics in Organometallic Chemistry and Catalysis
Telephone ID #: 02845253
Offered in 1992-93 only

Classical Studies

Discipline Representative: J.H. Corbett (287–7131)
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.

Major Programme in Classical Studies
Supervisor: J.H. Corbett (287–7131)
For the Major Programme in Classical Studies students must complete eight full-course equivalents to be selected as follows:

1 CLAA01Y Classical Civilization
2 CLAA02Y Greek and Roman Mythology
3 Two full-course equivalents from:
GRHB01Y, GRHB02Y, GRHB03Y, GRHC24F/S, GRHC25Y, GRHC29Y, CLAB32F/S, CLAB33F/S
4 Two full-course equivalents from:
CLAC03Y, CLAC04Y, LATA01Y, LATB02F, LATB11S LATC30-40, GRKA01Y, GRKB02F, GRKB11S GRKB10Y, GRKC22Y, GRKC23F/S, GRKC24F/S GRKC30-40
5 One full-course equivalent from:
CLAC21Y, CLAC23F/S PHLB40F/S, PHLB42F/S, PHLC40F/S, PHLC42F/S
6 One half course from:
FARA10F/S, FARB04F/S, FARB05F/S
7 One half course from:
CLAC01F/S, CLAC02F/S

Classics

CLAA01Y Classical Civilization
Telephone ID #: 03010163
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.
Session: Winter Day
J.R. Warden
Offered 1992/93 and 1993/94

CLAA02Y Greek and Roman Mythology
Telephone ID #: 03010263
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 art-historical studies and will serve as an introduction to other courses in classics.
Exclusion: (HUMA11)
Session: Winter Day
W. Helleman
Offered 1992/93 and 1993/94

CLAB33F The Age of Homer
Telephone ID #: 03023333
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
Not offered 1992/93
Offered 1993/94

CLAC02S Selected Topics in Classical Civilization
Telephone ID #: 03030253
For 1991/92 the course will study education in the ancient world in the various periods from 5th century B.C. Greece to imperial Rome. Particular emphasis will be placed on the curriculum, types of schools, and educational facilities, with special focus on the goals and ideals of education. Basic text will be H.I. Marrou, *A History of Education in Antiquity*. We shall also study (in translation) a number of passages dealing with education from such authors as Plato, Isocrates, Cicero, and Quintilian.
Prerequisite: One full-course equivalent in CLA or GRH or permission of the Instructor.
Session: Winter Day
W. Helleman
Not offered 1992/93
Offered 1993/94

CLAC03Y Greek and Roman Epic
Telephone ID #: 03030363
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
W. E. McLeod
Not offered 1992/93
Offered 1993/94

CLAC23S Christianity in the Greco-Roman World
Telephone ID #: 03032353
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 permission of instructor
Session: Winter Day
J.H. Corbett
Not offered 1992/93
Offered 1993/94

Greek and Roman History

GRHB01Y Greek History from the Bronze Age to the Death of Alexander
Telephone ID #: 07120163
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.

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
Not offered 1992/93
Offered 1993/94

GRHB02Y Greek and Roman History from the Death of Alexander to the Gracchi
Telephone ID #: 07120263
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 one-hour 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.
Session: Winter Evening
J.H. Corbett
Not offered 1992/93
Offered 1993/94

GRHC29Y The Romanization of Western Europe 200 B.C. - A.D. 400
Telephone ID #: 07132963
A study of life and culture in the Roman provinces of Britain, Gaul, and Spain.

This course moves beyond the generalities of a survey course to ask more penetrating questions about the nature and effect of Rome's power and influence as it spread through the western part of her Empire. Source material will be studied in some detail, including literary sources, inscriptions (all read in translation), and archaeological material, such as military installations, towns, temples and tombs.
Prerequisite: GRHB03 or any related GRH, or CLA course.
Session: Winter Day
A. Boddington
Not offered 1992/93 or 1993/94

Greek

GRKA01Y Introductory Greek
Telephone ID #: 07210163
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
W. Helleman
Not offered 1992/93
Offered 1993/94

GRKB02F Introduction to Greek Authors
Telephone ID #: 07220233
A rapid reading of simple Greek texts combined with a consolidation of grammar.

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
TBA
Offered 1992/93
Not offered 1993/94

GRKB10Y Intermediate Modern Greek
Telephone ID #: 07221063
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 unless the student is a native speaker of the language
Session: Winter Day
G. Kirikopoulos
Offered 1992/93 and 1993/94

GRKB11S Plato: Apology
Telephone ID #: 07221153
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)
Session: Winter Day
A. Boddington
Offered 1992/93
Not offered 1993/94

GRKC22Y Images of Modern Greece: 1936 to the Present
Telephone ID #: 07232263
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 Hadjidakis, 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
Not offered 1992/93
Offered 1993/94

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: J.H. Corbett
Offered 1992/93 and 1993/94

Latin

LATB02F Introduction to Latin Authors
Telephone ID #: 19820233
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 OAC or 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 literature.
Exclusion: LATA10
Prerequisite: LATA01 or OAC Latin or Grade 13 Latin
Session: Winter Day
J.H. Corbett
Not offered 1992/93
Offered 1993/94

LATB11S Catullus
Telephone ID #: 19821153
A selection of the works of Catullus.

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 influences which affect Catullus, and his contribution to Latin poetry will be considered. The text used will be the edition of Kenneth Quinn (Macmillan, 1970). Exclusion: (LATB01)
Prerequisite: LATB02 (LATA10)
Session: Winter Day
TBA
Not offered 1992/93
Offered 1993/94

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: J.H. Corbett
Offered 1992/93 and 1993/94

Courses Not Offered in 1991-92

CLAB10S	Greek and Latin for Scientists Exclusions: CLAB11 Offered 1992/93 Not offered 1993/94
CLAB11F/S	The Classical Element in English Exclusion: CLAB10 Not offered 1992/93 Offered 1993/94
CLAB32S	The Age of Nero Exclusion: (HUMB24) Offered 1992/93 Not offered 1993/94
CLAC01F	Selected Topics in Classical Literature Prerequisite: One full-course equivalent in CLA or another literature. Offered 1992/93 Not offered 1993/94

CLAC04Y Greek and Roman Tragedy
Prerequisite: CLAA01 or one full-course equivalent in English or another literature.
Exclusion: DRAB14, (CLAB02)
Offered 1992/93
Not offered 1993/94

CLAC21Y Greek and Roman Religion
Exclusion: (CLAB21)
Prerequisite: CLAA01 or CLAA02 (HUMA11)
Offered 1992/93
Not offered 1993/94

GRHB03Y Roman History from the Gracchi to Nero
Offered 1992/93
Not offered 1993/94

GRHC24F/S Ancient Historiography
Prerequisite: CLAA01 or one GRH or HIS course.
Offered 1992/93
Not offered 1993/94

GRHC25Y Political and Social Life in Classical Athens (500-300 B.C.)
Prerequisite: GRHB01 or any related GRH course.
Offered 1992/93
Not offered 1993/94

GRKC23F Modern Greek Cinema and Theatre
Prerequisite: GRKB10Y or CLAA01Y or any related course in Greek or Cinema or Drama.
Offered 1992/93
Not offered 1993/94

GRKC24S Classical Themes in Modern Greek Literature
Prerequisite: GRKB10Y or CLAA01Y or any related course in GRK, CLA, or GRH
Offered 1992/93
Not offered 1993/94

LATA01Y Introductory Latin
Exclusion: OAC Latin or Grade 13 Latin, except by permission of the Division.
Offered 1992/93
Not offered 1993/94

Cognitive Science

Supervisor: R. I. Binnick (287–7169)
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 thirteen courses; the Major Programme requires eight courses.

Specialist Programme in Cognitive Science
Supervisor: R. I. Binnick (287–7169)
* Students should check prerequisites/corequisites/exclusions for these courses.

Required Courses
Seven full-course equivalents:

PSYA01Y Introduction to Psychology
LINA01Y General Linguistics
PHLA01Y Fundamental Questions of Philosophy
CSCA56F/S Computer Programming
or
CSCA58F/S* Introduction to Computing
COGB01Y* Elements of Cognitive Science
PSYB07F/S Data Analysis in Psychology
PSYB57F/S* Memory and Cognition
JLPB55F/S* Psycholinguistics
PHLB20F/S Belief, Knowledge and Truth
PHLB81F/S Theories of Mind

Optional Courses
Psychology
Two full-course equivalents chosen from the following, to include either PSYB50F/S or PSYB51F/S or both:

PSYB10F/S* Introduction to Social Psychology
PSYB20F/S* Introduction to Developmental Psychology
PSYB50F/S* Sensation and Perception
PSYB51F/S* Perception and Cognition
PSYB65F/S* Human Brain and Behaviour
PSYC08F/S* Experimental Design in Psychology
PSYC34F/S* Psychometric Methods Laboratory
PSYC54F/S* Cognition and Representation
PSYC85F/S* History of Psychology
PSYD50F/S* Current Topics in Memory and Cognition
PSYD53F/S* Psychology and the Law

Linguistics
Two full-course equivalents chosen from the following:

LINB01F/S* Practical Language Analysis
LINB09F/S* Phonetics: The Study of Speech Sounds
LINC02F/S* Phonology
LINC11Y* Syntax
LINC12F/S* Semantics: The Study of Meaning
LINC14F/S* Pragmatics: The Study of Language Use
LINC25F/S* Second Language Learning
LINC26F/S* Second Language Teaching
JLPC24F/S* Developmental Psycholinguistics
JLPD55F/S* Disorders of Speech and Language

Philosophy and Theoretical Psychology
One full-course equivalent chosen from the following:

PHLB15F/S Philosophy of Education
PHLB50F/S Symbolic Logic I
PHLB70F/S* Philosophy of Science
PHLB80F/S Philosophy of Language
PHLC50F/S Symbolic Logic II
PSYC82F/S* Theoretical Psychology
PSYD80F/S* Current Topics in Theoretical Psychology

Cognate Courses
One full-course equivalent chosen from the following:

CSCA66F/S* Programming Applications
CSCA68F/S* Computer Applications
CSCB38F/S* Discrete Mathematics for Computer Science
CSCB58F/S* Computer Organization
One half course in Anthropology at the B-level or higher

Major Programme in Cognitive Science
Supervisor: R. I. Binnick (287–7169)
* Students should check prerequisites/corequisites/exclusions for these courses.

Required Courses
Four full-course equivalents

PSYA01Y Introduction to Psychology
LINA01Y General Linguistics
COGB01Y* Elements of Cognitive Science
PSYB57F/S* Memory and Cognition
JLPB55F/S* Psycholinguistics

Optional Courses
Psychology
One and one half full-course equivalents chosen from the following, to include either PSYB50F/S or PSYB51F/S or both:

PSYB10F/S* Introduction to Social Psychology
PSYB20F/S* Introduction to Developmental Psychology
PSYB50F/S* Sensation and Perception
PSYB51F/S* Perception and Cognition
PSYC08F/S* Experimental Design in Psychology
PSYC34F/S* Psychometric Methods Laboratory
PSYC54F/S* Cognition and Representation
PSYC85F/S* History of Psychology
PSYD50F/S* Current Topics in Memory and Cognition

Linguistics
One and one half full-course equivalents chosen from the following:

LINB01F/S* Practical Language Analysis
LINB09F/S* Phonetics: The Study of Speech Sounds

LINC02F/S*	Phonology
LINC11Y*	Syntax
LINC12F/S*	Semantics: The Study of Meaning
LINC14F/S*	Pragmatics: The Study of Language Use
LINC25F/S*	Second Language Learning
LINC26F/S*	Second Language Learning
JLPC24F/S*	Developmental Psycholinguistics
JLPD55F/S*	Disorders of Speech and Language

Cognate Courses
One full-course equivalent chosen from the following:

PHLB15F/S	Philosophy of Education
PHLB20F/S	Belief, Knowledge and Truth
PHLB50F/S	Symbolic Logic I
PHLB70F/S*	Philosophy of Science
PHLB81F/S	Theories of Mind
PHLC50F/S*	Symbolic Logic II
PSYC82F/S*	Theoretical Psychology
PSYD80F/S*	Current Topics in Theoretical Psychology
CSCA04F/S	How Computers Are Used
CSCA56F/S	Computer Programming
CSCA58F/S*	Introduction to Computing

COGB01Y Elements of Cognitive Science
Telephone ID #: 33420163
A general introduction to the problems and methods of Cognitive Science.

The focus will be on such topics as the nature of mind; processes of perception, cognition, and learning; information storage and retrieval in the mind; mental representations; the relationship of thought and language; and the artificial modeling of mental processes.
Prerequisites: PSYA01, LINA01
Session: Winter Day
Offered every year

Computer Science

Discipline Representative: J. von zur Gathen (287–7260)
Computer science is the study of the use of computers to process information. The form of this information may vary widely, from the business person'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 position.

Students interested in computer studies should also refer to Specialist and Major Programmes in Cognitive Science.

Please refer to the Physical Sciences section of the Calendar for the following Programmes.

Specialist Programme in Computer Science

Specialist Programme in Computer Science for Data Management

Specialist Programme in Computer Science and Mathematics

Specialist Programme in Computer Science and Statistics

Specialist Programme in Co-op Computer Science and Physical Sciences

Specialist Programme in Physical Sciences

Major Programme in Mathematical Science (Computer Science)

Major Programme in Computer Science
The Major Programme in Computer Science is no longer offered. Students registered in it will be allowed to complete it.

COMPUTER SCIENCE

CSCA04S How Computers Are Used
Telephone ID #: 03710453
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
Telephone ID # for CSCA56F: 03715633
Telephone ID # for CSCA56S: 03715653
Introduction to programming in a high-level language. Fundamental constructs: if statements, loops. Operations on strings and numbers. Data and program structuring using arrays and subprograms. Applications, including sorting. Further topics chosen from recursion, record structures, other languages.

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

CSCA57S Introduction to Scientific Computing
Telephone ID #: 03715753
An introduction to the use of computers in the physical sciences. Choice and design of algorithms and their implementation in a high level computer language, such as *C* or *FORTRAN*, for the solution of problems arising in the physical sciences. Topics will include elementary numerical analysis, such as numerical integration, mathematical modelling of physical systems, data fitting and interpolation. The use of data-base systems for information storage and query and the use of graphical display devices and software for visualization of physical systems will be considered. The use of computer algebra systems in the physical sciences will also be considered.
(Intended primarily for physical sciences students who do not plan to pursue any of the Programmes in Computer Science or Cognitive Science.)
Exclusions: CSCA56F, CSCA58F, CSCA66S,
Corequisite: MATA26Y, PHYA01Y

CSCA58F Introduction to Computing
Telephone ID #: 03715833
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
Telephone ID #: 03716653
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
Telephone ID #: 03716853
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

CSCB09S Software Tools in Unix and C
Telephone ID #: 03720953
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 File Structures and Data Management
Telephone ID #: 03722853
An introduction to techniques for storing, accessing, and managing long-term data in computer systems. Hardware and software aspects of data processing: processors, storage devices, communications, file I/O control. Techniques for organizing and managing files: serial files, direct files, indexed files, multikey files, integrated files, file systems. Introduction to data base management systems with emphasis on relational data base systems.

The COBOL language will be discussed during tutorials. Enrolment limit: 100
Prerequisite: CSCA68
Session: Winter Day

CSCB38F Discrete Mathematics for Computer Science
Telephone ID #: 03723833
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
Telephone ID #: 03725833
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
Telephone ID #: 03732453
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 recommended: CSCB58)
Session: Winter Day

JMCC31F Combinatorics
Telephone ID #: 14533133
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, Polya 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
TBA

CSCC50F Numerical Algebra and Optimization
Telephone ID #: 03735033
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

CSCC51S Numerical Approximation, Integration and Ordinary Differential Equations
Telephone ID #: 03735153
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

CSCC64S Effective and Efficient Computing
Telephone ID #: 03736453
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 reduction.
Prerequisite: CSCB38H
Session: Winter Day

CSCC78F Information Structures
Telephone ID #: 03737833
An advanced study of major classes of information structures with an emphasis on the design, analysis, and implementation of nonnumerical 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.
Exclusion: CSCC34 before 1982/83
Prerequisite: CSCB28 and CSCB38 or (CSCB68)
Session: Winter Day

CSCC85S Microprocessor Systems
Telephone ID #: 03738553
Hardware and software aspects of microcomputers and microprocessors. Instruction 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

CSCD94H Computer Science Project
Telephone ID #: 03749443
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
Telephone ID #: 03749543
Same description as CSCD94H. Normally a student may not take two project half-courses 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 1991-92

JMCC32F Graph Theory and Algorithms for its Applications
Prerequisite: MATB31 (or MATB44 or CSCB38) and at least one other B-level course in Mathematics or Computer Science.

CSCC54F Computer-Based Simulation Models
Prerequisite: CSCA68, STAB47S

Co-operative Programme in Administration

Director: H. Wittmann (287-7107)
Co-ordinator: Beverley Abramson (287-7112)
Supervisor of Studies: R. S. Blair (287–7304)

The Co-operative Programme in Administration is a work-study programme which combines academic studies in Management, Economics, Political Science, History, the behavioural and social sciences and statistics with work experience in public and private enterprises. The programme alternates study terms with work terms and typically requires almost five years to complete. Administration students learn through both studies and practical experience about:

- decision-making in both business and government
- the management of policies and programmes dealing with complex economic, political, social and business problems
- financial and management accounting
- the allocation of resources
- policy and economic analysis

Students prepare for careers in business, government, regulatory agencies, crown corporations or for further studies in the social sciences (MA), business (MBA), public administration (MPA), accounting (C.A.) and law (LLB).

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 Co-operative Programmes as well.**

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. **The deadline for the first round of applications is April 30, 1991.**

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 four-month terms of study, four work terms and two "off" terms over a five year period. In addition to the twenty full course credits needed for graduating, extra credits will be awarded for the work terms. 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 co- operative students from this and other universities. During work terms students gain experience in a wide range of departments within government, business enterprises or public agencies. Depending on their needs and abilities students work in areas such as accounting, administration, auditing, communications, economic development, finance, human resources/personnel, information systems, marketing, policy and strategic planning.

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. Appropriate co-op work terms with designated C.A. firms will be recognized by the Institute of Chartered Accountants of Ontario as part of their internship requirement.

Evaluation of Work Term

Performance on each work term is evaluated by both the employer and Co-ordinator. Students must submit for evaluation a report for each work term which integrates knowledge gained during the work term 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:

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 COMPLETED PROGRAMME AND DEGREE REQUIREMENTS FOR GRADUATION.

Eligibility for work terms

To compete for a work term a student must be in good standing in the Programme and must have completed

- for the first work term: seven full-course equivalents, including one of ECOA02 or ECOA03, one of HISB02 or HISB03 or HISB04, HUMA01 or a language beyond the OAC or GRADE 13 level*, MGTA01, MGTB27, POLA50.

* Students who study a language in their first year may postpone taking MGTB27, but must complete MGTB27 before their third work term.

- for the second work term: nine full-course equivalents including the above courses and MGTB01, ECOB03 or ECOB04. At least one of POLB51, POLB53, POLB61, POLB62, POLC55, POLC64, POLD50 or POLD62
- for the third work term: eleven full-course equivalents including the above courses, a statistics half-course from section A, II, below.
- 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, and Management. The choice should be made on the basis of the student's career goals and personal interests and skills.
- advanced courses in Computer Science, Economics, Management, Mathematics, Psychology, and Sociology have prerequisites so students must plan their studies with care.
- EACH STUDENT'S CURRICULUM REQUIRES THE ANNUAL APPROVAL OF THE SUPERVISOR OF STUDIES.

If courses are not available, students should check with the Supervisor of Studies for alternatives.

The first two years in the Programme should consist of:

First Year: (Winter Session) ECOA02 or ECOA03, one of HISB02 or HISB03 or HISB04, HUMA01 or a language, MGTA01, MGTB27, POLA50,

Second Year: (Summer and Winter Sessions) ECOB03 or ECOB04, MGTB01, at least two elective full-course equivalents, and a work term. Students interested in the Management or Economic Policy advanced options, or in careers in Management or Economics, may select MATA28 or MATA26 (Calculus) as early in their studies as possible, although it is not a required course for the co-op curriculum or for the Management or Economic Policy options.

Students who take Calculus in their first year may postpone taking MGTB27Y, but must complete it before they are eligible for a third work term. A Statistics course, ECOC32F/S, ECOB35F/S or ECOB68F/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 (10.5 full-course equivalents)

I. SOCIAL SCIENCE FOUNDATIONS REQUIRED (6.0 full course equivalents)

Economics Courses

ECOA02Y or ECOA03Y	Introduction to Economics
ECOB03Y or ECOB04Y	Price Theory

Management Courses

MGTA01Y	Financial Accounting
MGTB01Y	Management Accounting
MGTB27Y	Organizational Behaviour

Political Science Courses

POLA50Y	Introduction to Canadian Politics

II. BASIC SKILLS REQUIRED (1.5 full course equivalents)

a) Computer Science

CSCA56F/S	Computer Programming
CSCA58F/S	Introduction to Computing
CSCA04F/S	How Computers Are Used

b) Statistics

ECOB11F/S	Quantitative Methods in Economics I or equivalent

c) one of:

ECOB35F/S	Public Decision Making
ECOB68F/S	Comparative Economic Systems
ECOC32F/S	Economics of the Public Sector

III. BEHAVIOURAL FOUNDATIONS REQUIRED (1.0 full course equivalent)

to be selected from courses within the Humanities, Life & Social Science Divisions. The intention of this requirement is to provide students with an understanding of human behaviour, attitudes and social issues within the context of the work environment.
Example:

MGTC22F/S	Personnel Administration
MGTC25F/S	Organizational Design
MGTC26F/S	Comparative Organizational Behaviour
PHLB01F/S	Ethics I
PHLB05F/S	Social Issues
PHLB22F/S	Business Ethics
PSYA01Y	Introduction to Psychology
PSYB10F/S	Introduction to Social Psychology
SOCB33Y	Sociology of Work & Industry

IV. HISTORICAL & CULTURAL FOUNDATIONS REQUIRED (2.0 full course equivalents)

to be selected from the Humanities Division must include one of:

HISA01Y	The European World: An Introduction to History
HISB02Y	Britain from the 18th Century to the Present
HISB03Y	History of the United States
HISB04Y	Introduction to Canadian History
HUMA01Y	Prologue
HUMA02Y	Composition: An Introduction to Expository Writing
Language	Any language course beyond the Grade 13 or OAC level

V. OTHER BASIC SKILLS *RECOMMENDED;*

Calculus	MATA28Y or MATA26Y

B. ADVANCED OPTIONS (4.0 full course equivalents)

to be selected from one of the following areas:

I. ECONOMIC POLICY

Required: a) ECOB07Y or ECOB08Y
b) ECOB12F/S
c) 1.5 full course equivalents in Economics (may include 0.5 full course equivalent in Joint Management & Economics courses)

II. POLICY ANALYSIS

Required: a) 3.0 full course equivalents in Political Science selected from: Canadian Government, Public Policy/Public Administration, or Comparative Politics (Industrial Countries)

b) 1.0 full course equivalent in Economics (may include 0.5 full course equivalent in joint Management & Economics courses)

III. MANAGEMENT

Required: a) 2.5 full course equivalents in Management or Joint Management & Economics courses

b) 0.5 full course equivalent ECOB12F/S

c) 0.5 full course equivalent in Political Science POLB61F/S or 0.5 full course equivalent in Economics, or Computer Science or Joint Management & Economics courses

d) 0.5 full course equivalent in an Economics or Management course

C. ELECTIVES

5.5 full course equivalents

ADMC01-C05H Administration Co-Op Work Term
Work terms are an integral part of the Co-op Curriculum. Practical work experience in an appropriate, related field is alternated with study terms to enhance academic studies and develop professional and personal skills. Work term reports are required at the completion of each work term. Continuation in the co-op programme is based on a student's ability to meet both the academic and work term requirements. To be eligible for work terms, students must be in good standing in the Programme and must have completed a required number of courses. (For details: see page 48). Course credit of 0.5 full course equivalent is granted for each four month work period. Work term credits are in addition to the 20 full course degree requirements and are graded on a Credit, No Credit system. There are no additional course fees for work terms.

Co-operative Programme in Arts Administration

Director: H. Wittmann (287–7107)
Co-ordinator: Jan Nolan (287–7114)
Supervisor of Studies: J. Mayo (287-7191)
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 four 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 Management, Economics, Political Science and other administrative skills with a major 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 the arts, 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.

c Some facility in Mathematics is highly desirable due to the nature of the Management and Economics courses required in the programme.

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. **The deadline for the first round of Arts Administration applications is April 30, 1991.**

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. In addition to the twenty full course credits needed for graduating, extra credits will be awarded for the work terms. 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. The places of work will vary widely according to availability and to a student's needs and abilities but generally students will serve in the administration or management of galleries, museums, concert halls, theatres, government, private or voluntary cultural agencies or offices at the municipal, provincial or federal levels, performing groups, arts service organizations, university cultural projects, and public relations offices of corporations which support the arts. Work terms begin in September, January and May.

Performance on work terms will be evaluated by both employer and Co-ordinator. 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
- participate in special events and seminars arranged by Co-ordinator

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 COMPLETED 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 including:

- two full-course equivalents from the artistic field
- MGTA01Y (Financial Accounting)
- ECOA03Y (Introduction to Economics)
- HUMA02Y (Composition: An Introduction to Expository Writing)

and

- AADB01Y (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 AADD10Y (Senior Seminar in Arts Administration) after the completion of their first work term.

All students must complete the Administrative field (nine full-course equivalents, Section A, below), an artistic field (six full-course equivalents) in one of Drama, Fine Art History, Fine Art Studio, or Music (Section B, below), and an elective field (five full-course equivalents). They must select their artistic field upon registering in the Programme.

The first year of study should consist of five courses including AADB01Y, one full-course equivalent from the major field, MGTA01Y or ECOA03Y, HUMA02Y, plus one additional full course equivalent based on eligibility for work placement requirements given above.

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 of Studies. In addition, all students are advised to discuss their artistic field course selections with the Supervisor of Studies in the chosen subject.

The course requirements are as follows:

Twenty full-course equivalents which must be selected as follows: nine full-course equivalents from Section A, six full-course equivalents from Section B, five additional full-course equivalents.

A Administrative Field of Study

a) Required:

7.5 full-course equivalents:

AADB01Y	Introduction to Arts Administration
AADD10Y	Senior Seminar in Arts Administration
ECOA03Y	Introduction to Economics
ECOB35F/S	Public Decision Making
HUMA02Y	Composition: An Introduction to Expository Writing
MGTA01Y	Financial Accounting
MGTB27Y	Organizational Behaviour
POLA50Y	Introduction to Canadian Politics

b) 1.5 full-course equivalents from any of:

CSCA04F/S	How Computers are Used
CSCA56F/S	Computer Programming
ECOB03Y	Price Theory
ECOB07Y	Macroeconomic Theory and Policy
MGTB01Y	Management Accounting
MGTC02Y	Corporation Finance
MGTC04F	Principles of Marketing
MGTC05S	Introduction to Marketing Management
MGTC07F/S	Market Research
MGTC10F	Management Control Systems
MGTC22F/S	Personnel Administration
MGTC30Y	The Legal Environment of Business
MGTC54Y	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 Artistic Field of Study

Six full-course equivalents from one of the following fields:

I Drama

Required:

DRAB01Y	An Introduction to the Practical Elements of Theatre
DRAB03Y	The History of Theatre I
DRAB04Y	The History of Theatre II
DRAB06Y	Canadian Drama

or

ENGB11Y	Varieties of Drama

and

One full-course equivalent from the courses listed under the Major Programme in Drama, Group A (page 64)

and

one full-course equivalent from the courses listed under the Major Programme in Drama, Group B (page 64)

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 page 84 for Fine Art History courses.

III Fine Art Studio

Required:

FARA90Y	Foundation Studies in Studio*
FARA91F/S	But Why Is It Art?
FARB70F/S	Drawing I
FARB72F/S	Contemporary Issues in Printmaking
FARB74F/S	Drawing II
FARB75Y	Painting I

and

2.0 additional full-course equivalents in Fine Art Studio of which one must be at C-level. (see page 88)

* Students must meet the prerequisite for FARA90Y; an OAC in visual art or permission of instructor following a positive evaluation of a portfolio.

IV Music

Required:

MUSA01Y	Introduction to Music
MUSB07F/S	Materials of Music I
MUSC21F/S	Materials of Music II

and

4 additional full-course equivalents from Music (see page 138).

C Elective Field of Study

A further 5.0 full course equivalents chosen in conjunction with the Programme Supervisor. The purpose of the elective field is to allow students some flexibility in shaping a degree programme to their interests and future needs. In making their choices students should remember that a working knowledge of a second language, especially French, may be particularly valuable. Students can choose one of the following options:

1. Courses chosen from a number of different subject areas with the aim of providing breadth to the student's programme.
2. A coherent selection of courses in one subject area. Students choosing this option may want to concentrate in a second artistic area, or in some aspect of the administrative field, or in a language. It should be noted that it is possible to complete a major in their artistic field within the requirements of their specialist degree in Arts Administration. Students contemplating this option should consult the calendar under the particular subject heading to see which additional courses may be required.
3. Further concentration in the chosen artistic field (B), or in the administrative field. This option is particularly valuable for students wishing to complete the specialist requirements in their artistic field, or

for students contemplating graduate study in the arts or in Business Administration. Students considering careers in a museum or graduate work in Museum Studies should use this option to take an approved programme of courses in anthropology and other related disciplines.

Students selecting either 2) or 3) will need to consult also with the programme supervisor in the chosen subject. The Programme Supervisor of Arts Administration can supply details of suggested elective packages. Consultation with the supervisor is essential for all students.

AADB01Y Introduction to Arts Administration and Policy
Telephone ID #: 00120163
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.
Exclusion: (HUMB90)
Session: Winter Day
P. Schafer

AADC01 and AADC02 Arts Administration Co-Op Work Terms
The Arts Administration Work Terms form an integral part of the Co-op curriculum. They are designed to provide a student with practical experience in an appropriate setting, thereby enhancing the student's academic studies and developing professional and personal skills. To be eligible for a work term, a student must be in good standing in the Programme and have completed certain required courses (see page 52) and pre-placement seminars. The work term report prepared by the student is a vital component of each placement experience. Course credit of 0.5 full course equivalent is earned for each four month work period. Work term credits are in addition to the 20 full course degree requirements and are graded on a Credit, No Credit system. There are no additional course fees for work terms.

AADD10Y Senior Seminar in Arts Administration
Telephone ID #: 00141063
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: (HUMD10)
Session: Winter Day
P. Schafer

Co-operative Programme in Computer Science and Physical Science

Director: H. Wittmann (287-7107)
Co-ordinator: G. Cupit (287-7253)
Supervisor of Studies: C. Dyer (287–7206)

The Co-operative Programme in Computer Science and Physical Science is a work-study programme which combines academic studies in computer science, and other disciplines in the physical sciences 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 Physical Science.

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 Physical Science. **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. **The deadline for the first round of applications is April 30, 1991.**
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 Physical Science
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 Co-ordinator. Students must also submit for evaluation a report for each work term.

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 at least 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 two courses of study offered within this co-operative programme. These will be outlined below as Option A and Option B. 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 SUPERVISOR OF STUDIES.

Option A -	Computer Science and Physical Science - 16 required courses
First Year:	CSCA58F, CSCA68S MATA04Y, MATA26Y (MATA55Y) PHYA01Y
*Second Year	CSCB38F, CSCB58F, CSCB28S MATB41F and MATB42S or MATB05Y PHYB21S, PHYB22S, PHYB23H
*Third Year	CSCB09S, CSCC24S, CSCC50F, CSCC78F, CSCC85S, PHLB70F, PSCC01H
*Fourth Year	CSCC51F, CSCC64S PHYC21F, PHYC22S, PSCD01F, PSCD02S, one full course equivalent chosen from other C-level Physical Science Division courses.

*Students currently registered in years 2, 3, or 4 of the programme should consult last year's calendar and the Programme Supervisor.

Option B -	Computer Science and Statistics - 15.5 required courses
Year One:	CSCA58F, CSCA68S, MATA04Y, MATA26Y, PHYA01Y
Year Two:	CSCB28S, CSCB38F, CSCB58F, MATB41F, MATB42S, MATB43S, STAB22F, STAB47S
Year Three:	CSCC24S, CSCC64S, CSCC78, (STAC67F and STAC42S) or (STAC62F and STAC52S), plus 1 full course equivalent from: C level statistics courses, CSCC54F, and 300 and 400 level statistics courses on the St. George Campus
Year Four:	CSCC50F, CSCC51S, PSCD01F, PSCD02S, (STAC67F and STAC42S) or (STAC62F and STAC52S), plus 1 full course equivalent from: C level statistics courses, CSCC54F, and 300 and 400 level statistics courses on the St. George Campus.

NOTE: IT IS THE STUDENTS' INDIVIDUAL RESPONSIBILITY TO ENSURE THAT THEY HAVE CORRECTLY COMPLETED 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.

Normally, students return to their studies after each work term (and must be registered in courses after the completion of their last work term).

CSPC01-C03H Computer Science & Physical Science Co-op Work Term
Work terms are an integral part of the co-op curriculum. Practical work experience in an appropriate, related field is alternated with study terms to enhance academic studies and develop professional and personal skills. Work term reports are required at the completion of each work term. Continuation in a Co-op Programme is based on a student's ability to meet both the academic and work term requirements. To be eligible for work terms, students must be in good standing in the Programme and must have completed 10 courses. Course credit of 0.5 full course equivalent is granted for each four month work period. Work term credits are in addition to the 20 full course degree requirements and are graded on a Credit, No Credit system. There are no additional course fees for work terms.

Co-operative Programme in International Development Studies

Director: H. Wittmann (287–7107)
Co-ordinator: J. Maxwell (287–7113)
Supervisor of Studies: P. León (287–7173)

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 or Third World development agency, 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, language skills, experience or interest 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 required. Admissions decisions are normally made from late May until early July. **The deadline for the first round of International Development Studies applications is April 30, 1991.**
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. Students may serve with the administration or management of research or development programmes of Canadian or local development agencies, universities, schools and organizations in a developing country.

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 Supervisor of Studies, 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 Co-ordinator and the Supervisor of Studies. **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 Co-ordinator.**

Eligibility for Work Placements
To compete for work placements a student must

- have completed at least fifteen full-course 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 full course equivalent.

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; and IDSB02Y: International Development Studies: Physical and Ecological Resource Management. 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 SUPERVISOR OF STUDIES 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 full-course equivalents from the following:
(PLEASE NOTE THE COURSES ON ST. GEORGE CAMPUS ARE IDENTIFIED WITH*. ALSO NOTE THAT STUDENTS MUST COMPLY WITH REGULATIONS REGARDING REGISTERING IN COURSES ON OTHER CAMPUSES.)

I. *Required:*

ANTC10F/S	Anthropological Perspectives on Development
BIOB14F/S	Environmental Biology
ECOA02Y	Introduction to Economics: A Mathematical Approach
	or
ECOA03Y	Introduction to Economics
FOR495F	Forestry in Development

plus one half full-course equivalent in a cognate discipline to be chosen in consultation with the Supervisor of Studies.

GGRB09F/S	Hydrology, Land Use and Water Quality
or	
*GGR206H	Introduction to Hydrology
GGRC27Y	Soil Management and Conservation
IDSB01Y	International Development Studies: Political Economy
IDSB02Y	International Development Studies: Physical and Ecological Resource Management
POLB80Y	International Relations

II. *One full-course equivalent from:*

ECOC66F/S	Economic Development
ECOC67F/S	Development Policy
POLB91Y	Politics of the Third World

III. *One-half course from:*

ANTC35F/S	Quantitative Methods in Anthropology
ECOB11F/S	Quantitative Methods in Economics
GGRB31F/S	Data Analysis in Geography
SOCB06F/S	Social Statistics

B *Advanced Options:* at least three full-course equivalents chosen from either I or II, below

I. *Political Economy*
Three full-course equivalents from

ANTB20Y	Social and Cultural Anthropology
ANTC11Y	The Anthropology of Women
ANTC19F/S	Economic Anthropology
ANTC51Y	Medical Anthropology
ANTC55Y	Women in Development
ANTC56Y	The Anthropology of Food
ANTC60F/S	Fieldwork in Social and Cultural Anthropology
ECOB03Y	Price Theory
ECOB07Y	Macroeconomic Theory and Policy
*ECO230Y	International Economic Institutions
ECOC66F/S	Economic Development
ECOC67F/S	Development Policy* *if not taken as part of core requirements above
GGRC20F/S	Issues in Rural Development
GGRC29Y	Problems in Modern Agricultural Land Use
POLB91Y	Politics of the Third World* *if not chosen as part of core requirements
POLD93F/S	Selected Topics on Developing Areas
POLD94F/S	Selected Topics on Developing Areas
*POL445Y	Canada and the Third World
SOCC17F/S	Social Change in the Third World

II. *Ecological Resource Management*
At least three full-course equivalents chosen from

ANTB01Y	Ecological Anthropology
ANTC51Y	Medical Anthropology
BIOB12Y	Fundamentals of Ecology (Note: BIOA03Y Introductory Biology is a prerequisite - students in this stream are strongly advised to take BIOA03Y)
BIOC50F/S	Ecology of Arid Regions
*BOT206Y	Applied Botany
*FOR455H	Advanced Forest Ecology
*FOR456H	Forest Soils II
GGRB03Y	Climatology
GGRB19Y	General Geomorphology
GGRC28Y	The Hydrology of Surface and Subsurface Waters
*GGR207H	Airphoto Interpretation
*GGR305H	Biogeography
*GGR310H	Problems in Biogeography
*GGR355H	Environmental Change
*GGR393H	Methods of Environmental Impact Assessment

*GGR416H	Field Studies in Environmental Assessment
*GGR461H	Remote Sensing of Environment

C *Regional and Language Options:* At least two full-course equivalents chosen from courses dealing with a designated development region. One of these full-course equivalents should be in a language appropriate for work in developing countries. Students with a functional knowledge of an appropriate language may substitute non-language regional courses. Selection of a region and courses is subject to approval by the Supervisor of Studies. Some approved courses for two regions are listed below. STUDENTS INTERESTED IN OTHER REGIONS AND LANGUAGES SHOULD CONSULT THE SUPERVISOR OF STUDIES FOR A LIST OF COURSES AVAILABLE.

I *Latin America*

a. at least one full-course equivalent from

ANTB03F/S	The Americas: an Anthropological Perspective
ANTB07F/S	Comparative Slavery
*ANT443Y	Social Anthropology of Latin America and the Caribbean
ENGB20F/S	Contemporary Literature in English: Africa and the West Indies
*GGR244H	Historical Geography of Latin America
*GGR249H	Contemporary Latin America
*HIS291Y	Latin America: the Colonial Period
*HIS292Y	Latin America: The 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 Latin America
*POL442Y	Topics in Latin American Politics I and II
*PRT280H	Aspects of Brazilian Culture
*SOC323Y	Social Change in Latin America

and

b. at least one full-course equivalent from

SPAA01Y	Introductory Spanish
SPAA02H	Language Practice I
SPAB01Y	Intermediate Spanish
SPAB02H	Language Practice II
*PRT100Y	Introductory Portuguese
*PRT222Y	Language Practice

II. *Africa*

a. at least one full-course equivalent from

ANTB05F/S	African Cultures and Societies I: Survey
ANTB55Y	Cultures of the Middle East and the Islamic World
ANTC06F/S	African Cultures and Societies II: Case Studies
*ANT345Y	Social Anthropology of 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 Independent Africa
*POL430Y	Topics in African Politics

and

b. at least one full-course equivalent from

FREA10Y	Language Practice I
FREA16A	Introductory French II
FREA17F/S	Intermediate Conversation I
FREB10Y	Language Practice II
FREB17F/S	Intermediate Conversation II
*NEW280Y	Introductory Swahili
*NEW380Y	Intermediate Swahili

Efforts will be made to accommodate students who have other regional and/or linguistic interests. See Supervisor of Studies.

D *Required:*

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:

MGTA01Y	Financial Accounting
ECOC61F/S	International Economics: Finance
ECOC62F/S	International Economics: Trade Theory
*ECO328Y	International Economics
*FOR466Y	Wildlife Ecology and Management
*GGR334H	Water Resource Management
*GGR356H	Energy-Environment Interaction

*GGR461H Remote Sensing of Environment
*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 Supervisor of Studies and the agreement of the host university, be taken for programme credit.

IDSB01Y International Development Studies: Political Economy
Telephone ID #: 08120163
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 socio-economic 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
Telephone ID #: 08120263
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

IDSB03F/S Project Management
A study of the phases of the project management cycle with emphasis on situational analysis and identification of needs, project implementation, project monitoring and evaluation.

Project management will be considered in the context of the mission and programme activities of international development agencies. Students will be familiarized with basic organizational development theory and the various approaches of Canadian Non Governmental Organizations (NGOs) engaged in the delivery of development assistance. The integration of gender and development and environmental issues into the project process will be discussed. CIDA's policies and practices governing project administration as well as its project management model will also be examined. Students will carry out field visits to local development NGOs to analyze the project approach used by the agency. Practising professionals will also be invited to talk about development issues and project management.
Prerequisite: IDSB01Y & IDSB02Y and permission of the instructor.
Session: Fall or Winter Day

IDSC01-C03H International Development Studies Co-Op Work Placement Term
The IDS work placement is an integral part of the Co-op curriculum and is designed to provide students with practical hands-on experience of the development process in a Third World field setting. Students are placed as apprentice interns with Canadian or local development agencies or universities in a developing country for a 10-12 month period. Students are required to submit progress reports every 2 months and begin work on a major research project based on their work placement experience. To be eligible for placement, students must have completed 15 full course equivalents including 12 IDS (10 core plus language and regional option) credits and maintain 2.5 G.P.A. The IDS work placement normally begins after the third year of study and requires a minimum of 2 years of residence in the programme. Course credit of 0.5 full course equivalent is granted for each four month work period. Work term credits are in addition to the 20 full course degree requirement and are graded on a Credit, No Credit system. There are no additional course fees for work terms.

IDSD01Y 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

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.
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

Major Programme in International Development Studies
Supervisor: S. Horton
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 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 more intensive Co-operative Programme in International Development Studies.

Students must complete:
IDSB01Y Political Economy of International Development
IDSB02Y Development Studies: Physical and Ecological Resource Management

They must also complete at least *three* full-course equivalents from the following:
(Courses marked with an asterisk have prerequisites.)
*ANTC10F/S Complex Societies: Anthropological 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.)
*ANTB01Y Ecological Anthropology
ANTB03F/S The Americas: an Anthropological Perspective
*ANTB05F African Cultures and Societies I: Survey
*ANTB07F/S Comparative Slavery
*ANTB20Y Social and Cultural Anthropology
*ANTB55Y Cultures of the Middle East and the Islamic World
*ANTC06S African Cultures and Societies II: Case Studies
*ANTC11Y The Anthropology of Women
*ANTC19F Economic Anthropology
*ANTC35F Quantitative Methods in Anthropology
*ANTC51Y Medical Anthropology
*ANTC55Y Women in Development
*ANTC56Y The Anthropology of Food
*ANTC60F/S Fieldwork in Social and Cultural Anthropology
*BIOB12Y Fundamentals of Ecology

*BIOC50F	Ecology of Arid Regions
ECOA02Y (ECOA01Y)	Introduction to Economics: A Mathematical Approach or
ECOA03Y (ECOA01Y)	Introduction to Economics
ECOB03Y	Price Theory or
ECOB04Y (ECOB03Y)	Price Theory: A Mathematical Approach
ECOB07Y	Macroeconomic Theory and Policy or
ECOB08Y (ECOB07Y)	Macroeconomic Theory and Policy: A Mathematical Approach
*ECOB11F/S	Quantitative Methods in Economics
*GGRB03Y	Climatology
GGRB19Y	General Geomorphology
*GGRB31S	Data Analysis in Geography: An Introduction
*GGRC20F/S	Issues in Rural Development
*GGRC28Y	The Hydrology of Surface and Subsurface Waters
*GGRC29S	Problems in Modern Agricultural Land Use
POLC95Y	Politics and Society in Tropical Africa
POLC98Y	Politics and Society in Latin America
POLD93F	Selected Topics on Developing Areas
POLD94S	Selected Topic on Developing Areas

Notes:
The Major Programme in International Development Studies requires a minimum of *eight* full-course equivalents from the courses listed above, together with appropriate prerequisites.
These normally involve A-level prerequisites in each discipline selected. It is possible to complete the Programme within three years, as shown in Example 1 below.
Example 1 (three-year degree)
First Year:
IDSB01Y, IDSB02Y, ECOA02Y or ECOA03Y (ECOA01Y), GGRA05F/S, SOCA01Y
Second Year:
ECOB03Y or ECOB04Y, GGRC27Y, SOCC35Y, POLB80Y, POLB91Y
Third Year:
ECOC66F, ECOC67S, SOCC17F, POLC95Y, POLD93F, POLD94S
However, students are strongly advised to register in a four-year degree which requires a Major (or Specialist) in a discipline as well as a Major in the College Programme in Development Studies. In Example 2 a Major in Political Science would be obtained along with a Major in Development Studies.
Example 2 (four-year degree)
First Year:
ECOA02Y or ECOA03Y (ECOA01Y), POLA50Y (POLA01Y), SOCA01Y, ANTA01Y, GGRA05F/S
Second Year:
ECOB03Y or ECOB04Y, POLA50Y (POLB50Y), SOCC35Y, POLB91Y, IDSB02Y
Third Year:
ECOC66F, ECOC67S, SOCC17F, POLB80Y
Fourth Year:
POLB70Y, ANTC10F, POLC87Y, POLD93F, POLD94S, GGRB31S, IDSB01Y

Drama

Discipline Representative:
M.Q. Schonberg (287–7175)
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.

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, students become acquainted with all aspects of theatre production in studio situations, both as actors and technicians. Students study both 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 20
Specialist in Co-operative Programme in Arts Administration: Page 51

Specialist Programme in Drama
Supervisor: M.Q. Schonberg
A student is required to complete thirteen full-course equivalents, eleven in the area of Dramatic Literature and Theatre, and two in related disciplines, as follows:

1 DRAB01Y An Introduction to the Practical Elements of Theatre
2 DRAB03Y The History of Theatre I
3 DRAB04Y The History of Theatre II
4 ENGB11Y Varieties of Drama
5 ENGC50Y Modern Drama
6 Three full-course equivalents chosen from the following:
CLAC04Y Greek and Roman Tragedy
DRAB05Y The Art and Nature of Comedy
DRAB06Y Theatre in Canada
DRAB12B Medieval and Early Tudor Drama: The Texts and Their Production
ENGB10Y Shakespeare
ENGB26F/S Canadian Drama
ENGC33Y* English Drama to 1642
ENGC55F/S* Drama Since 1960
ENGD10 - ENGD58F/S Studies in Major Writers **
ENGD70 - ENGD89F/S Selected Topics **
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
FREB41F/S* French Classicism: The Theatre
HUMB48Y Dramatic Literature and Political Revolution

* Students should check these courses for prerequisites.
**Course content varies from year to year. Students should check the listings in the *Calendar* to determine what precise courses may be pertinent to Drama in a given year.

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
DRAC02Y The Directors' Theatre
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 Directing
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 single academic year.

8 Two full-course equivalents chosen from the following:
ANTA01Y Introduction to Anthropology
ANTC05Y* Anthropological Study of Religion
CLAC03Y Greek and Roman Epic
ENGA01Y English Literature: Practical Criticism and Interpretation
ENGA08Y Twentieth-Century Literature
HISA01Y The European World: An Introduction to History
HUMA01Y Prologue
CLAA02Y Greek and Roman Mythology
HUMB70Y Introduction to the Cinema
LINA01Y General Linguistics
LINA04F/S Introduction to Language
MUSA01Y Introduction to Music
PHLB03F/S Philosophy and Art
PSYA01Y Introduction to Psychology
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 Practical Elements of Theatre
DRAB03Y History of Theatre I
DRAB04Y History of Theatre II
ENGB11Y 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. No more than one full-

course equivalent from DRAD20Y-DRAD28S) may be taken.

Group A

DRAC01Y	Intermediate Workshop in Theatre Performance
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 Directing
DRAD20Y*/DRAD21Y*/DRAD22Y* DRAD23Y*/DRAD24Y*/DRAD25H* DRAD26S*/DRAD27F/S* DRAD28F/S*	Supervised Reading Courses

Group B

CLAC04Y	Greek and Roman Tragedy
DRAB05Y	The Art and Nature of Comedy
DRAB06Y	Theatre in Canada
DRAB12B	Medieval and Early Tudor Drama: the Texts and their Production
DRAC02Y	The Directors' Theatre
ENGB10Y	Shakespeare
ENGB26F/S	Canadian Drama
ENGC33Y*	English Drama to 1642
ENGC35F/S*	Drama Since 1960
ENGC50Y*	Modern Drama
ENGD10 - ENGD58F/S+	Studies in Major Writers
ENGD70 - ENGD89F/S+	Selected Topics
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
FREB41F/S*	French Classicism: The Theatre
HUMB70Y	Introduction to Cinema
HUMB48Y	Dramatic Literature and Political Revolution

* Students should check these courses for prerequisites.
** Prerequisite: ten full-course equivalents
\+ Course content varies from year to year. Students should check the listings in the *Calendar* to determine what precise courses may be pertinent to Drama in a given year.

DRAB01Y An Introduction to the Practical Elements of Theatre
Telephone ID #: 04020163
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
P. Sperdakos

DRAB03Y The History of Theatre I
Telephone ID #: 04020363
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
M.Q. Schonberg

DRAC01Y Intermediate Workshop in Theatre Performance
Telephone ID #: 04030163
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
Session: Winter Day
M.Q. Schonberg

DRAC02Y The Directors' Theatre
Telephone ID #: 04030263
A study of the theoretical statements and practical work of directors from 1860-1960.

The course will explore the work of famous theatrical companies and directors of the nineteenth and twentieth centuries, including such personalities as the Duke of Saxe-Meiningen, Andre Antoine, Constantin Stanislavsky, Gordon Craig, David Belasco, Jacques Copeau, Max Reinhardt, Bertolt Brecht, Jean-Louis Barrault, Peter Brook and Jerzy Grotowski.

Classes will include lectures as well as seminars, and extensive use of visual materials. Students will prepare individual projects related to the work of specific directors and theatres. The bibliography includes Cole and Krich, ed. *Directors or Directing*. Jerzy Grotowski, *Towards a Poor Theatre*, Brook, *The Empty Space*, Gorelik, *New Theatres for Old*.
Corequisite: DRAB03
Exclusion: (DRAB02)
Session: Winter Day
P. Sperdakos

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 DRAB03 and DRAB04. 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

DRAD20-24Y
DRAD25-28H Supervised Reading
An advanced reading course for drama students.

Students wishing to take this course should consult with M.Q. Schonberg, the Programme Supervisor, who will arrange in cooperation 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

FOR COURSES IN ARTS ADMINISTRATION PREVIOUSLY LISTED WITH A HUMANITIES COURSE DESIGNATION, SEE CO-OPERATIVE PROGRAMME IN ARTS ADMINISTRATION (page 51).

Courses Not Offered in 1991-92

DRAB04Y	The History of Theatre II
DRAB05Y	The Art and Nature of Comedy
DRAB06Y	Theatre in Canada
DRAB12B	Medieval and Early Renaissance Theatre
DRAD01Y	Advanced Workshop: Performance and Directing

Economics

Assistant Chair: M. Krashinsky
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 courses (ECOA02Y or ECOA03Y); the initial B-level courses - Price Theory (ECOB03Y or ECOB04Y) and Macroeconomic Theory and Policy (ECOB07Y or ECOB08Y); 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 (ECOB68S). 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 Algebra).

In the first year, specialist students in Economics, Economics and Mathematics, and Economics and Quantitative Methods should generally take ECOA02Y (the mathematical version of the introductory course), although students who choose ECOA03Y (the non-mathematical version) will be able to enter those specialist programs if they have completed calculus. We encourage these specialists to take MATA26Y (calculus) and further math courses, although Specialist in Economics can enter the program with MATA28Y. Specialist in Management and Economics will generally take ECOA02Y and MATA28Y (although MATA26Y and MATB41F can replace MATA28Y). Specialist in Economics and History and in Economics and Political Science do not require calculus, so that students may take ECOA03Y in their first years of those specialities.

In the second year, specialist students in Economics, Economics and Mathematics, and Economics and Quantitative Methods will take ECOB04Y and ECOB08Y, mathematical versions of ECOB03Y and ECOB07Y respectively, and will generally take ECOB11F/B12S (we encourage students planning graduate work in Economics to replace ECOB11F with STAB22 and STAB47).

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 introductory economics ECOA02Y or ECOA03Y and calculus MATA28Y or MATA26Y. 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 full-course equivalents in Economics. The following specific courses must be included as part of the ten course minimum:
ECOA02Y or ECOA03Y
MATA28Y or MATB41F or (MATA27Y)
ECOB04Y
ECOB08Y
ECOB11F/S or STAB22F and STAB47F/S
ECOB12S
ECOC25F or ECOC26S or ECOD05S or ECOD07S
ECOC11Y
ECOC66F or ECOB68S or ECOB81Y or ECOB82Y or ECOC83Y
ECOC13F and ECOC14S
ECOD50H
At least one full-course or two half-courses from the following introductory Humanities courses: CLAA01Y, CLAA02Y, CLAB11F/S, CLAB32F/S, CLAB33F/S, DRAB03Y, DRAB04Y, DRAB06Y, ENGA08Y, ENGB07Y, ENGB08Y, ENGB10Y, ENGB11Y, ENGB14Y, ENGB15Y, ENGB20F, ENGB21S, ENGB25F/S, ENGB34F/S, FREB25Y, FREB26Y, FREB29F, FREB36F, FREB37S, FREB49Y, GRHB01Y, GRHB02Y, GRHB03Y, HISA01Y, HISB02Y, HISB03Y, HISB04Y, HISB06Y, HISB07Y, HUMA01Y, HUMB02Y, ITAC22F, ITAC23S, ITAC31Y, ITAC45F/S, JBHB01Y, MUSA01Y, MUSB14F/S, PHLA01Y, PHLB01F, PHLB03F, PHLB04S, PHLB05F

Students may petition the Supervisor for permission to substitute other courses for some of those listed above.

Specialist Programme in Management and Economics
Supervisor: G. Hunt
Registration in this Programme is limited. Selection will be based on all grades including the following prerequisite courses: MGTA01, ECOA02 or ECOA03, and MATA26 or MATA28. Students who have completed more than ten credits will not normally be considered for admission to the Specialist Programme.
Please refer to Management.

Specialist Programme in Management and Economic Theory
Registration in this Programme is limited. Selection will be based on all grades including the following prerequisite courses: MGTA01, ECOA02 (though ECOA03 will be accepted in special cases), and MATA26 or MATA28. Students who have completed more than ten credits will not normally be considered for admission to this Programme.
Please refer to Management.

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 ECOA02Y or ECOA03Y). 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:
ECOA03Y or ECOA02Y
ECOB03Y or ECOB04Y
ECOB07Y or ECOB08Y
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 economics.
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: HISC11Y - 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 CONSULTATION 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 ECOA02Y and MATA26Y). 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:
ECOA02Y
MATA26Y or (MATA27Y) or (MATA55Y)
MATA04Y
CSCA56F/S or CSCA58F
ECOB04Y
ECOB08Y
ECOB13F
(MATB41F and MATB42S and MATB43S) or MATB05Y
MATB31F (MATB44) and MATB32S (MATB49)
STAB22F and STAB47S
ECOC13F and ECOC14S
MATC51F
MATC53Y
MGTC72F
MGTC73S
ECOD50H
A further one full-course equivalent in ECO or MGT.
One course from among the Humanities options listed for the Specialist Programme. 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 ECOA03Y or ECOA02Y). Students wishing to register in the Programme at a later date may be admitted 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:
ECOA03Y or ECOA02Y
ECOB03Y or ECOB04Y
ECOB07Y or ECOB08Y
ECOC31S, ECOC32F
ECOC25F or ECOC26S or ECOD05S or ECOD07S
ECOB35S or ECOC66F
ECOB11F/S or (STAB22F and STAB47S)
ECOB12S
Required courses in Political Science:
POLA50Y
POLB70Y or POLC74Y
Four 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 other disciplines:
MATA26Y or MATA28Y (MATA27Y), CSCA56F, MGTA01Y
*The maximum number of Economics and Political Science full-course equivalents that can be counted for the four-year degree is sixteen.

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 ECOA02Y or ECOA03Y and MATA26Y). Students wishing to enter the Programme at a later date may be admitted at the discretion of the supervisor.

This Programme is designed for students considering the possibility of graduate 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:
ECOA02Y
CSCA58F
CSCA68S
MATA26Y or (MATA27Y) or (MATA55Y)
ECOB04Y
ECOB08Y
ECOB13S
MATA04Y
STAB22F and STAB47S
MATB05Y or both MATB41F and MATB42S
CSCB28S or CSCB68F
ECOC11Y
ECOC13F
ECOC14S
MGTC72F
One half-course from: CSCC34F, CSCC51S, CSCC78F, MATB43S, MATC53Y, STAC42F, STAC52F
ECOD50H
One course from among the Humanities options for the Specialist Programme.

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 ECOA03Y or ECOA02Y). 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 full-course equivalents in Economics, and one in Humanities. The Economics courses must include:
ECOA03Y or ECOA02Y
ECOB03Y or ECOB04Y
ECOB07Y or ECOB08Y
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 Management, 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.

ECOA02Y Introduction to Economics: A Mathematical Approach
Telephone ID #: 04310263
A study of economic theory and its application to contemporary Canadian economic problems. Problems discussed include: unemployment, inflation, pollution, poverty, monopoly. A mathematical approach to economic analysis is used in this course and it is oriented principally towards students who plan to enter the various specialist programmes in Management and in Economics.
Exclusion: (ECOA01Y) ECOA03Y
Prerequisite: OAC Calculus and one of OAC Algebra and Geometry or OAC Finite Mathematics.
Corequisite: MATA28Y or MATA26Y
Session: Winter Day

ECOA03Y Introduction to Economics
Telephone ID #: 04310363
A study of economic theory and its application to contemporary Canadian economic problems. Problems discussed will include: unemployment, inflation, pollution, poverty, monopoly.
Exclusion: (ECOA01Y) ECOA02Y
Session: Summer Evening, Winter Day, Winter Evening

IDSB01Y Political Economy of International Development
Telephone ID #: 08120163
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

ECOB03Y Price Theory
Telephone ID #: 04320363
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.
Exclusion: ECOB04
Prerequisite: ECOA01
Session: Summer Evening, Winter Day, Winter Evening

ECOB04Y Price Theory: A Mathematical Approach
Telephone ID #: 04320463
Intermediate level development of the principles of microeconomic theory. This course will cover the same topics as EOCB03Y, but will employ techniques involving calculus so as to make the theory clearer to students.
Exclusion: ECOB03
Prerequisite: ECOA02Y; students who completed ECOA03Y may enrol in ECOB04Y if they simultaneously enrol in MATA28Y.
Session: Winter Day

ECOB07Y Macroeconomic Theory and Policy
Telephone ID #: 04320763
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.
Exclusion: ECOB08
Prerequisite: ECOA02Y or ECOA03Y
Session: Winter Day, Winter Evening

ECOB08Y Macroeconomic Theory and Policy: A Mathematical Approach
Telephone ID #: 04320863
Intermediate level development of the principles of macroeconomic theory and policy. This course will cover the same topics as ECOB07Y, but will employ techniques involving calculus so as to make the theory clearer to students.
Exclusion: ECOB07
Prerequisite: ECOA02Y; students who completed ECOA03Y may enrol in ECOB08Y if they simultaneously enrol in MATA28Y
Session: Winter Day

ECOB11F/S Quantitative Methods in Economics: I
Telephone ID # for ECOB11F: 04321133
Telephone ID # for ECOB11S: 04321153
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 section.
Exclusions: ANTC35(ANTB43); GGRB31; PSYB07; SOCB06; STAB22
Note: (STAB22 *and* STAB47) are counted as equivalent to ECOB11.
Prerequisite: ECOA02 or ECOA03 (ECOA01)
Session: Summer Evening, Winter Day (F), Winter Evening (S)

ECOB12S Quantitative Methods in Economics: II
Telephone ID #: 04321253
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: Registration in one of the programmes in Economics and/or Commerce, or Administration; also ECOB11, or STAB22 and STAB47.
Session: Summer Evening, Winter Day, Winter Evening

ECOB35S Public Decision Making
Telephone ID #: 04323553
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: ECOA02 or ECOA03 (ECOA01)
Session: Winter Day
M. Krashinsky

ECOB82Y European Economic History
Telephone ID #: 04328263
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: ECOA02 or ECOA03 (ECOA01)
Session: Winter Day

MGTC02Y Corporation Finance
Telephone ID #: 33530263
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: MGTB01; ECOB03 or ECOB04; ECOB11. ECOB12 is strongly recommended
Session: Winter Day, Winter Evening

ECOC11Y Econometrics
Telephone ID #: 04331163
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 or ECOB04, ECOB07 or ECOB08, ECOB12, MATA04Y or MATB41 or permission of instructor
Session: Winter Day

ECOC13F Advanced Microeconomic Theory
Telephone ID #: 04331333
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 uncertainty.
Prerequisites: ECOB03 or ECOB04; ECOB11; MATA28 or MATA26 (MATA27) or (MATA55)
Session: Winter Day

ECOC14S Advanced Macroeconomic Theory
Telephone ID #: 04331453
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 or ECOB04; ECOB07 or ECOB08; ECOB11; MATA28 or MATA26 (MATA27) or (MATA55)
Session: Winter Day

ECOC25F History of Economics I: Adam Smith to Karl Marx
Telephone ID #: 04332533
A study of the literature of classical Political Economy, especially the work of Adam Smith, Malthus, Ricardo, J.S. Mill, and Marx.
Prerequisite: ECOB03 or ECOB04 or ECOB07 or ECOB08
Corequisite: ECOB03 or ECOB04 or ECOB07 or ECOB08 (whichever is not used to satisfy the prerequisite).
Session: Winter Day

ECOC26S History of Economics II: Origins of Modern Economic Theory
Telephone ID #: 04332653
A study of classical literature of Political Economy between 1870 and the 1930's, especially the work of Jevons, Walras, Marshall, Wicksell and the early Keynes.
Prerequisite: ECOB03 or ECOB04 or ECOB07 or ECOB08
Corequisite: ECOB03 or ECOB04 or ECOB07 or ECOB08 (whichever is not used to satisfy the prerequisite).
Session: Winter Evening

ECOC31S Economics of the Public Sector: Taxation
Telephone ID #: 04333153
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. Limited enrolment: 60.
Prerequisite: ECOB03 or ECOB04
Session: Winter Day
K. McKenzie

ECOC32F Economics of the Public Sector: Expenditures
Telephone ID #: 04333233
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. Limited enrolment: 60.
Prerequisite: ECOB03 or ECOB04
Session: Winter Day
M. Krashinsky

ECOC37S Law and Economics
Telephone ID #: 04333753
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.
Prerequisite: ECOB03 or ECOB04 (ECOB03 or ECOB04 will be accepted as a corequisite when ECOC37 is taught in the second term of the winter session)
Session: Winter Day
M. Krashinsky

ECOC41F/S Industrial Organization
Telephone ID # for ECOC41F: 04334133
Telephone ID # for ECOB41S: 04334153
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.
Prerequisite: ECOB03 or ECOB04
Session: Winter Evening

ECOC45F Poverty and Income Distribution
Telephone ID #: 04334533
A study of alternative theories of income distribution with application to poverty and income distribution in Canada. Includes an analysis of the impact of alternative income maintenance schemes such as welfare, negative income taxes, wage subsidies, unemployment insurance, minimum wages, human resource development and public expenditures, taxes and subsidies, as well as the impact of aggregate demand policies on the distribution of income. Limited enrolment: 60.
Prerequisite: ECOB03 or ECOB04
Session: Winter Day

ECOC51S Labour Economics
Telephone ID #: 04335153
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. Limited enrolment: 60.
Prerequisite: ECOB03 or ECOB04
Session: Winter Day
M. Baker

MGTC54Y Industrial Relations
Telephone ID #: 33535463
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 a collective bargaining simulation exercise. Limited enrolment: 80.
Exclusion: (JCEC54)
Prerequisite: Completion of at least ten full-course equivalents including ECOA01 or ECOA02.
Session: Winter Evening

ECOC61S International Economics: Finance
Telephone ID #: 04336153
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. Limited enrolment: 60.
Prerequisite: ECOB07 or ECOB08
Session: Winter Day

ECOC62F International Economics: Trade Theory
Telephone ID #: 04336233
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. Limited enrolment: 60.
Prerequisite: ECOB03 or ECOB04
Session: Winter Day

ECOC66F Economic Development
Telephone ID #: 04336633
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.
Prerequisite: ECOB03 or ECOB04
Session: Winter Day
TBA

ECOC67S Development Policy
Telephone ID #: 04336753
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. Limited enrolment: 60.
Prerequisite: ECOC66
Session: Winter Day
A. Berry

MGTC72F Analysis for Decision Making I
Telephone ID #: 33537233
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: (JCEC72)
Prerequisite: CSCA56 or CSCA58, MATA26 or (MATA27) or MATA28 or MATA04 or (MATA55), ECOB03 or ECOB04
Corequisite: ECOB11 or STAB47
Session: Winter Day

MGTC73S Analysis for Decision Making II
Telephone ID #: 33537353
A continuation of MGTC72(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, nonlinear programming, allocation of risk-bearing. Limited enrolment: 80.
Exclusion: (JCEC73)
Prerequisite: MGTC72(JCEC72)
Session: Winter Day

ECOD05F The Economics of J.M. Keynes
Telephone ID #: 04340533
A study of his major works and consideration of their implications. Modern criticisms and interpretations will be discussed.
Prerequisite: ECOB03 or ECOB04, ECOB07 or ECOB08; ECOC25 or ECOC26S
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.
Prerequisite: Permission of instructor
Session: Summer Day, Summer Evening, Winter Day, Winter Evening

ECOD50H Workshop in Economic Research
Telephone ID #: 04345043
This course discusses with students the techniques used by economists to define research problems and to do research. In the first term, various members of the staff will discuss their approaches to research. At the end of the term, students will choose a research problem and a faculty member with whom to work. During the second term, students will research and write papers on their topic and present their ongoing work to other members of the class.
Prerequisite: ECOB04 and ECOB08 (or ECOB03 and ECOB07 and first year calculus); ECOB12. This course should be taken among the last 5 courses of a twenty course degree.
Session: Winter Day
Members of Faculty

MGTD70S Advanced Corporate Finance
Telephone ID #: 33547053
This course focuses on major issues in corporate financial management with reference to company valuation for financial decisions and capital structure issues. Limited enrolment: 60.
Exclusion: (JCED70) COM431; COM438
Prerequisite: MGTC02 (JCEC02)
Session: Winter Day

MGTD75F/S Investments
Telephone ID #: 33547553
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: (JCED75)
Prerequisite: MGTC02 (JCEC02)
Session: Winter Day

Courses Not Offered in 1991-92

ECOB13S	Application of Mathematics to Economics Prerequisite: ECOA02; (MATA27) or (MATA55) or MATB41 or MATB05Y
JEGB27F	Location and Spatial Development Prerequisite: ECOA03
ECOB68S	Comparative Economic Systems Prerequisite: ECOA03 Corequisite: ECOB03
ECOB81Y	North American Economic History Prerequisite: ECOA03
ECOC48S	Monetary Economics Exclusion: ECO348H Prerequisite: ECOB07
ECOC83Y	Economic History 1914-1971 Exclusion: (ECOB83) Prerequisite: ECOA03 and 3 B-level courses in Economics or History
ECOD01F	Topics in Advanced Economic Theory Exclusion: (ECOC15 and ECOC16) Prerequisite: ECOC13 and ECOC14 and permission of instructor
ECOD02S	Topics in Advanced Economic Theory Exclusion: (ECOC15 and ECOC16) Prerequisite: ECOC13 or ECOC14 and permission of instructor.
ECOD07S	The Economics of Karl Marx Exclusion: (ECOC07) Prerequisites: ECOB03; ECOB07, ECOC25 or ECOC26

English

Discipline Representative: W.J. Howard (287–7156)
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 B-level, 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: W.J. Howard (287–7156)
Ten full-course equivalents in English and two in other disciplines in the Division of Humanities are required. They should be selected as follows.

1 ENGA01Y English Literature: Practical Criticism and Interpretation
2 ENGA02Y English Literature: Historical Survey
3 ENGC59Y English Literary Criticism
4 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)
5 Two full-course equivalents in English at the D-level
6 Two full-course equivalents in other Humanities disciplines.
The following are particularly recommended:

CLAA02Y	Greek and Roman Mythology
CLAB11F/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 B-level history course)
HUMA01Y	Prologue
LINA01Y	General Linguistics
PHLB03F/S	Philosophy and Art
PHLB04F/S	Philosophy of Literature
WSTA01	Introduction to Women's Studies

Alternatively, students are encouraged to follow a sequence of language courses in fulfilment of this requirement.

Major Programme in English
Supervisor: W.J. Howard (287–7156)
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
ENGB10Y	Shakespeare
ENGC30Y	Chaucer
ENGC32Y	Prose and Poetry of the English Renaissance, 1500-1660
ENGC33Y	English Drama to 1642
ENGC35F/S	Dryden and the Restoration
ENGC36F/S	English Literature of the Early 18th Century
ENGC37F/S	English Literature of the Late 18th Century
ENGC38Y	Fiction before 1832

LIST B:
Post-1800 courses:

ENGA08Y	Twentieth-Century Literature
ENGB07Y	Canadian Literature in English: an Introduction
ENGB08Y	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
ENGB26F/S	Canadian Drama
ENGB34F/S	The Short Story
ENGC02Y	Canadian Fiction in English
ENGC12Y	Major American Authors
ENGC42Y	The Romantics
ENGC43Y	Victorian Poetry
ENGC46Y	Fiction 1832-1900
ENGC50Y	Modern Drama
ENGC51Y	Twentieth-Century Poetry
ENGC52Y	Fiction 1900-1960
ENGC53F/S	British Fiction Since 1960
ENGC54F/S	American Fiction Since 1960
ENGC55F/S	Drama Since 1960

ENGA01Y English Literature: Practical Criticism and Interpretation
Telephone ID #: 05510163
An introduction to methods of literary criticism through a detailed study of texts representative of various literary genres, and through practice in analytical writing.

Why do we study literature rather than just read it? What is involved in analysing 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 analysis of specific literary texts, chosen from a variety of historical periods. Written assignments will focus on stimulating students to think critically, to formulate their ideas coherently, and to express themselves clearly and persuasively. A list of texts will be available in H525-A.

Teaching will involve a mixture of lecture and discussion. All sections will require the writing of essays and a final examination.

Note: This course is intended as an introduction to the University study of English for students planning to major or specialize in English.
Session: Winter Day, Winter Evening
Course Co-ordinator: *J.L. Matus*
Offered 1992/93 and 1993/94

ENGA02Y English Literature: Historical Survey
Telephone ID #: 05510263
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 brief selections from approximately fifty writers. The primary text is *The Norton Anthology of English Literature* (Fifth Edition), Vols. 1 and 2; further texts will be announced.

Note: This is exclusively a lecture and examination course. Students are advised to combine this course with English A01Y in order to include group discussion, detailed textual study, and practice in essay writing in their study of English.
Session: Winter Day
E. P. Vicari, J. Kay
Offered 1992/93 and 1993/94

ENGA08Y Twentieth-Century Literature
Telephone ID #: 05510863
An introduction to important literary and cultural developments in the twentieth century through a study of selected works of literature written in English.

This course will include the study of short stories and novels by such writers as Conrad, Lawrence, Forster, Hemingway, and Fitzgerald; plays by Ibsen, Shaw, Eliot, Miller, Pinter, and others; and a selection of poetry. Essays based on the reading will provide practice in writing at the University level, and enable students to develop their critical skills.

Note: This course is intended as an alternative to ENGA01Y for students who do not expect to take a Specialist or Major Programme in English.
Session: Winter Day
M. S. Tait
Offered 1992/93 and 1993/94

ENGB07Y Canadian Literature in English: An Introduction
Telephone ID #: 05520763
A study of a wide range of Canadian literature, including works by fiction writers, poets, playwrights, and critics, such as 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.
Session: Winter Day
R. Brown
Not Offered 1992/93 or 1993/94

ENGB10Y Shakespeare
Telephone ID #: 05521063
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
Offered 1992/93 and 1993/94

ENGB11Y Varieties of Drama
Telephone ID #: 05521163
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, Sophocles, *Oedipus the King;* Aristophanes, *Lysistrata;* Shakespeare, *King Lear, As You Like It;* Wilde, *The Importance of Being Earnest;* Beckett, *Krapp's Last Tape;* Miller, *Death of a Salesman;* Williams, *A Streetcar Named Desire;* Pinter, *The Homecoming;* Churchill, *Cloud Nine;* 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
K. Theil
Offered 1992/93 and 1993/94

ENGB15Y English Poetry
Telephone ID #: 05521563
A comparative study of forms, modes, themes, and styles of poetry from a number of historical periods.

The poems selected for study will reflect the variety of forms in the English poetic tradition, and will include medieval ballads, Renaissance sonnets, eighteenth-century couplets, romantic odes and modern free verse. Poets studied will include Shakespeare, Donne, Pope, Wordsworth, Eliot, Yeats and Frost. The text will be *The Norton Anthology of Poetry* (Third Edition).
Session: Winter Day
M.S. Tait
Not offered 1992/93
Offered 1993/94

ENGB20F Contemporary Literature in English: Africa and the West Indies
Telephone ID #: 05522033
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, Soyinka, Harris, Naipaul, and others.
Session: Winter Day
W.J. Howard
Not offered 1992/93 or 1993/94

ENGB21S Contemporary Literature in English: Australia and India
Telephone ID #: 05522153
A study of twentieth-century Australian and 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. Rao, Jhabvala, Narayan, Malgonkar, Keneally, Stow, White.
Session: Winter Day
W.J. Howard
Not offered 1992/93 or 1993/94

ENGB25S The Canadian Short Story
Telephone ID #: 05522553
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: Summer Evening
TBA

ENGB26F Canadian Drama
Telephone ID #: 05522633
A study of twentieth century Canadian drama in English, with special emphasis on the period from 1960 to the present.

After a brief survey of earlier developments in Canadian drama of this century, this course will focus on the recent explosion of dramatic activity in Canada. A wide range of plays will be read, including plays by John Herbert, George Ryga, James Reaney, Sharon Pollock, Carol Bolt, David Fennario, David French, David Freeman, Tomson Highway.
Session: Winter Day
K. Theil
Not offered 1992/93 or 1993/94

ENGB50Y Women and Literary Study
Telephone ID #: 05525063
A discussion of the work of women writers, and the history of women as students, teachers and writers of literature.

Through a variety of texts (fiction, poetry, drama, criticism) we will explore issues such as "women's writing," and women's relationship to language and a literary tradition that has historically been male dominated. Selections from: Aphra Behn, Mary Shelley, Kate Chopin, George Eliot, Zora Neale Hurston, Virginia Woolf, Anais Nin, Jane Rule, Angela Carter, Sylvia Plath, Lorna Crozier and Caryl Churchill.
Session: Winter Day
J.L. Matus
Offered Summer 1992/93
Not Offered 1993/94

ENGC12Y Major American Authors
Telephone ID #: 05531263
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, James, Eliot, Frost, Hemingway, Stevens, Faulkner.

Further information will be available in Room H525A.
Prerequisite: One full-course equivalent in English
Exclusion: (ENGB24)
Session: Winter Day
TBA
Not offered 1992/93
Offered Winter Evening 1993/94

ENGC32Y Prose and Poetry of the English Renaissance, 1500-1660
Telephone ID #: 05533263
The non-dramatic literature of the English Renaissance from the rise of English humanism to the Interregnum.

A study of English Renaissance literature beginning with sixteenth-century humanism in continental writers and More, responses to the courtly love tradition in the poetry of Wyatt, Surrey, Sidney, and Shakespeare, and Spenser's development of the epic. The second half of the course concerns the later Renaissance and the works of Donne, Milton, Jonson, and their contemporaries.
Prerequisite: ENGA01
Corequisite: ENGA02
or Prerequisite: ENGB15
Exclusion: (ENGB09)
Session: Winter Day
E. P. Vicari
Not offered 1992/93
Offered 1993/94

ENGC38Y Fiction before 1832
Telephone ID #: 05533863
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
J. Kay
Not offered 1992/93 or 1993/94

ENGC42Y The Romantics
Telephone ID #: 05534263
A study of the verse and non-fiction prose of the turbulent period of 1789-1832.

The core of the course is the lyric, narrative, and dramatic poetry of Blake, Wordsworth, Coleridge, Byron, Shelley, and Keats. Selections from the prose writings of these and other authors are included to shed light on the great poems and to provide a broader understanding of the period as a whole.
Prerequisites: ENGA01, ENGA02; or ENGB15
Exclusion: (ENGB05)
Session: Winter Day
J. Kay
Not offered 1992/93
Offered 1993/94

ENGC52Y Fiction 1900-1960
Telephone ID #: 05535263
A study of approximately twelve works of fiction - - novels, novellas, and short stories.

The selection of texts studied here, some of monumental achievement, is drawn from one of the richest periods of creativity in the field of fiction written in English. The challenging innovations of the modernists and the continuance of the realist tradition provide a variety of approaches and styles. Texts to be studied will indluce: first term, Bennett *Old Wives' Tale,* Woolf *To the Lighthouse,* Joyce *Ulysses,* Forster *A Passage to India,* Lawrence *Sons and Lovers;* second term, Faulkner *Light in August,* Ellison *Invisible Man,* Rhys *Wide Sargasso Sea,* Lowry *Under the Volcano.* Students are urged to read these works in advance.
Prerequisites: ENGA01, ENGA02; or ENGA08; or ENGB14
Exclusion: (ENGB33)
Session: Winter Day
A. Thomas
Not offered in 1992/93
Offered in 1993/94

ENGC53F British Fiction since 1960
Telephone ID #: 05535333
Representative works by major British fiction writers of the past quarter century.

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: Summer Evening
TBA

ENGC54S American Fiction Since 1960
Telephone ID #: 05535453
A study of the range and variety of recent fiction writing in the United States.

Approximately eight novels or short story collections by writers such as Barth, Barthelme, Beattie, Bellow, Cheever, Coover, Didion, Dubus, Elkin, Gass, Gardner, Hawkes, Mailer, Nabokov, Oates, Percy, Pynchon, Updike, Roth, Theroux, Welty, Woiwode.
Prerequisites: ENGA01, ENGA02; or ENGA08; or ENGB14
Exclusion: (ENGB36)
Session: Summer Evening
TBA
Not offered 1992/93

ENGC55S Drama Since 1960
Telephone ID #: 05535553
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, Barker, Bond, Churchill, Pinter, Rabe, 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 ENGB26F; or ENGC50 (ENGB31); or one DRA course
Exclusion: (ENGB40)
Session: Winter Day
K. Theil
Not offered 1992/93 or 1993/94

ENGC59Y English Literary Criticism
Telephone ID #: 05535963
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 Evening
J.L. Matus
Offered 1992/93 and 1993/94

ENGD15F Early Shakespeare
Telephone ID #: 05541533
An examination of five or six Shakespeare plays from the period 1590-96.

These plays are considered in the light of their theatrical and dramatic antecedents, as well as in terms of the Shakespearean drama they precede.
Limited enrolment: 20
Prerequisite: ENGA01, ENGA02, and three further full-course equivalents in English; or ENGB10; or ENGC33 (ENGB12)
Exclusion: (ENGC61)
Session: Winter Day
A.J.G. Patenall

ENGD16S Problems in Later Shakespeare
Telephone ID #: 05541653
Textual and editorial, as well as aesthetic and dramatic problems in the later works of Shakespeare.

Primary texts are *Pericles, Cymbeline, A Winter's Tale* and *The Tempest*. The new Arden edition of each is preferred. Each student will develop a topic during the term which will be reported on in seminar, before being presented as a written paper at the end of the term.
Limited enrolment: 20
Prerequisites: ENGA01, ENGA02, and three further full-course equivalents in English; or ENGB10; or ENGC33 (ENGB12)
Exclusion: (ENGC60)
Session: Winter Day
A.J.G. Patenall

ENGD39F George Bernard Shaw
Telephone ID #: 05543933
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*. Plays to be read include *Widower's Houses, Arms and the Man, Candida, Heartbreak House, Man and Superman.*
Limited Enrolment: 20
Prerequisites: ENGA01, ENGA02, and two further full-course equivalents in English; or ENGC50(ENGB31Y).
Exclusion: (ENGC95)
Session: Winter Day
A. Thomas

ENGD41F T.S. Eliot
Telephone ID #: 05544133
A study of selected poetry, drama, and criticism by T.S. Eliot.

In addition to the close study of individual works, this course attempts to define Eliot's place in the evolution of twentieth-century literature.
Limited enrolment: 20
Prerequisites: ENGA01, ENGA02, and three further full-course equivalents in English; or ENGC51(ENGB32)
Exclusion: (ENGC96)
Session: Winter Day
M.S. Tait

ENGD43S D.H. Lawrence
Telephone ID #: 05544353
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 two further full-course equivalents in English; or ENGC52(ENGB33)
Exclusion: (ENGC90)
Session: Winter Day
M.S. Tait

ENGD80F Studies in American Literature
Telephone ID #: 05548033
The South has traditionally been conceived of as a separate and distinctive culture in the U.S. This course will explore the bases and validity of the Southern myth from a broad historical, sociological and geographical perspective while focusing on the poetry, prose and drama of writers in the Southern States. Among the authors and topics to be considered in the present year are: The nineteenth century folklorists and "Reconstruction" novelists; Ellen Glasgow; The "Agrarians"; the "Fugitive" group; Flannery O'Connor; Eudora Welty; Thomas Wolfe; William Styron; William Faulkner; Tenessee Williams, Walker Percy. A complete reading list will be available in May in the Humanities office.
Exclusion: (ENGC24)
Session: Winter Day, Summer Evening
J. Kay

ENGD81S The Arthurian Legend in English Literature
Telephone ID #: 05548153
The theme of King Arthur and the knights of the Round Table traced through several centuries in works of various genres.

The legendary stuff of Arthur still has power to captivate writers and readers, and is the subject of books, poems, films, and plays in our own time. This course begins by looking at present-day recreations in such works as *Camelot* and T.H. White's *The Once and Future King*. From there it turns back to earlier handlings of the myths, beginning with medieval Celtic, English, and French treatments of "the Matter of Britain," and moving down to the Renaissance and Modern period. It attempts to relate these to historical facts and cultural ideals. The relevance and meaning of these legends for people of different periods will be a subject of inquiry.
Prerequisites: ENGA01, ENGA02, and three other full-course equivalents in English
Session: Winter Day
E.P. Vicari

ENGD84S Political Drama in the Age of Thatcher
Telephone ID #: 05548453
Change in the political climate in Britain over the past decade has placed a generation of playwrights in equivocal or adversarial positions and challenged assumptions about the nature and effectiveness of political drama. This course examines a range of current plays varying in political attitude and employing a variety of dramatic forms from Brechtian agit-prop to surrealism. Eight plays will be studied, drawn from the work, among others, of Barker, Bond, Churchill, Hare, and Stoppard.
Limited enrolment: 20
Prerequisites: ENGA01, ENGA02, and two further full-course equivalents in English; or ENGC50 (ENGB31)
Exclusion: ENGC94
Winter Day
A. Thomas

Two or three more D-level courses are to be announced.

ENGD98Y Senior Essay
Telephone ID #: 05549863
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 W.J. Howard. By November 15th a more specific statement of the project is to be sent to Prof. Howard, including the exact title of the proposed study and a short description of its subject and method. After the 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)
Session: Winter Day

Courses Not Offered in 1991-92

ENGB01Y Old English Language and Literature
Exclusion: ENG240
Not offered in 1992/93
Offered in 1993/94

ENGB08Y American Literature: An Introduction
Exclusion: ENG250
Offered in 1992/93
Not offered in 1993/94

ENGB14Y Varieties of Fiction
Exclusion: ENG210
Offered in 1992/93 and 1993/94

ENGB34F/S The Short Story
Exclusion: ENG213; NEW201
Offered in 1992/93 and 1993/94

ENGB60Y Creative Writing I
Exclusion: ENG369; (LITB60)
Offered in 1992/93
Not offered in 1993/94

ENGC02Y Canadian Fiction in English
Prerequisites: one full-course equivalent in English
Exclusion: ENG216; NEW217; (ENGB27)
Offered in 1992/93 and 1993/94

ENGC30Y Chaucer
Prerequisite: ENGA01
Corequisite: ENGA02
Exclusion: ENG300; (ENGB02)
Offered in 1992/93 and 1993/94

ENGC33Y English Drama to 1642
Prerequisites: ENGA01, ENGA02; or ENGB11
Exclusion: ENG332; (ENGB12)
Offered in 1992/93 and 1993/94

ENGC35F/S Dryden and the Restoration
Prerequisites: ENGA01, ENGA02; or ENGB15
Exclusion: ENG306; (ENGB71F/S)
Not offered in 1992/93 or 1993/94
Offered in 1993/94

ENGC36F/S English Literature of the Early Eighteenth Century
Prerequisites: ENGA01, ENGA02; or ENGB15
Exclusion: ENG306; (ENGB72F/S)
Not offered in 1992/93
Offered 1993/94

ENGC37F/S English Literature of the Late Eighteenth Century
Prerequisites: ENGA01, ENGA02; or ENGB15
Exclusion: ENG306; (ENGB73F/S)
Not offered in 1992/93 or 1993/94

ENGC43Y Victorian Poetry
Prerequisites: ENGA01, ENGA02; or ENGB15
Exclusion: ENG309, (ENGB06)
Not offered in 1992/93

ENGC46Y Fiction 1832-1900
Prerequisites: ENGA01, ENGA02; or ENGB14; or (HISC21)
Exclusion: ENG324; (ENGB16)
Offered in 1992/93 and 1993/94

ENGC50Y Modern Drama
Prerequisites: ENGA01, ENGA02; or ENGA08; or ENGB11
Exclusion: ENG338; (ENGB31)
Offered in 1992/93
Not offered in 1993/94

ENGC51Y Modern Poetry
Prerequisites: ENGA01, ENGA02, or ENGA08; or ENGB15
Exclusion: ENG348; (ENGB32)
Offered in 1992/93
Not Offered in 1993/94

ENGC64F
ENGC65S
ENGC66Y Independent Studies: Creative Writing
Prerequisites: ENGB60. (LITB60) and permission of instructor
Exclusions: for ENGC64 (LITD64); for ENGC65 (LITD65); for ENGC66 (LITD66)

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 two 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: L. Carney (287-7164)
Fine Art Studio: J. Hoogstraten (287–7177)
Fine Art is the field which deals with objects of all sorts that have cultural and aesthetic importance. Because the range of these works is virtually without boundaries, widely divergent approaches come into play in studying them. Increasingly, however, these approaches emphasize the ways that works of art reflect major social and ideological conditions in their cultures.

At Scarborough College, Fine Art includes both Art History and Studio, two separate but interrelated fields.

Fine Art History

Because art is perceived through the eyes and other senses as well as through the intellect, art history courses commonly present their subjects via slides, films, videos, and direct viewing of art works in galleries and museums and in the cities. Although the course structure reflects a traditional division into time periods, instructors often use new methodologies to explain the work within these periods.

Art history courses at the A-level and B-level are normally open to all students. In addition to the practice in critical thinking and writing provided by all humanities courses, these courses offer basic information about art and architecture in all phases of Western culture, and a chance to improve one's perceptual awareness. Prerequisite for all C-level courses in Art History: one full-course equivalent at the B-level or permission of the instructor.

Students who decide to concentrate on art history have two programme options. The Major Programme, which is a component of the College's Co-op Programme in Arts Administration, is a good choice for prospective teachers as well as administrators. The Specialist Programme prepares students for graduate school and academic and museum careers, and also for professions in galleries and other public and commercial institutions. Students following these programmes should take the half-courses FARA10, FARA11, FARA12 and FARA13 as early as possible in their university careers, and should consult the Supervisor of Studies when arranging their course sequences.

The Department of Fine Art Undergraduate Handbook summarizes course offerings and resources for Fine Art students on all three University campuses. Woodsworth College also publishes a pamphlet describing Fine Art courses it offers in a summer programme in Siena, Italy.

Fine Art students may wish to refer to the following:
Specialist Programme in the Arts: Page 20
Co-operative Programme in Arts Administration: Page 51

Specialist Programme in Fine Art History
Supervisor: L. Carney (TBA)
Students must complete twelve full-course equivalents as follows:

1 FARA10F; FARA11S; FARA12F; FARA13S
2 Four B-level course equivalents in art history, with at least one half-course each in the areas of classical, medieval, renaissance, baroque and modern art.

Students may also meet one-fourth of this requirement by substituting one full-course equivalent from the following list:

FARA90Y	Foundation Studies in Studio
ANTB38Y	Prehistory of North America North of Mexico*
ANTB49F	Myth and Symbol*
FARB92Y	Sculpture Concepts*
GGRB13Y	Modern Urban Landscapes
HUMB70Y	Introduction to Cinema
PHLB03F/S	Philosophy and Art
PSYB50F/S	Sensation and Perception*
PSYB51F/S	Perception and Cognition*
ANTC50F/S	Death and Burial*
ANTD03Y	Analysis of Archaeological Material*

*Check calendar entries for prerequisites

3 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 with the approval of the Programme Supervisor.

Major Programme in Fine Art History
Supervisor: L. Carney (287-7164)
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).

FARA11F Medieval Art
Telephone ID #: 06211133
A survey of European architecture, sculpture, painting, illumination, and minor arts, from the late Roman Empire to the end of the Middle Ages.

The course examines the origins of European artistic traditions in the early Christian, Mediterranean world; how these traditions were influenced by classical, Byzantine, Moslem and pagan forms; how they developed an entirely new form of artistic expression in the High Middle Ages; and how they led on to the Renaissance. 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.
Session: Winter Day
M. Gervers
Offered 1992/93 and 1993/94

FARA12F Renaissance and Baroque Art
Telephone ID #: 06211233
A survey of architecture, painting and sculpture from 1400 to 1750.

The course will present important monuments, primarily from Italy and the Netherlands, including works by such artists as Jan van Eyck, Leonardo da Vinci, Michelangelo, Rembrandt, and Bernini. Text: Frederick Hartt, *Art: A History of Painting, Sculpture, Architecture,* Vol. II, 1989 edition.
Session: Winter Day
G. Scavizzi
Offered 1992/93 and 1993/94

FARA13S Art after 1750
Telephone ID #: 06211353
A study of European and North American painting, sculpture and architecture from the period of the American and French Revolutions until the present.

By a careful analysis of key works of art, the course will present a view of artistic conditions in major centres throughout the Western world. Text: Frederick Hartt, *Art: A History of Painting, Sculpture, Architecture,* Vol. II, 1989 edition.
Session: Winter Day
L. Carney
Offered 1992/93 aqnd 1993/94

FARB04F Archaic Greek Sculpture (650-480 B.C.)
Telephone ID #: 06220433
The beginnings of Western sculpture.

During this period of experimentation, early sculptors worked out problems of the naturalistic rendition of the human figure, both singly and in scenes of action, drawing mainly from mythology. This early form of realism and concern for correct proportions and anatomy was tempered by a love for decorative pattern. This resulted in a vigorous, innovative, and attractive style. Its studied simplicity and a certain abstraction give this work an affinity with modern art.
Session: Winter Day
M. Shaw
Not offered 1992/93
Offered 1993/94

FARB05S Classical Greek Sculpture (480-300 B.C.)
Telephone ID #: 06220553
The high point in Greek sculpture.

Frequent archaeological discoveries keep this a living and growing field. New sculptures (like the stunning bronze warriors recently found off the coast of Italy) are examined alongside older and better known classical pieces (such as the famous sculptures of the Parthenon), to illustrate the sophisticated ways in which Greek sculptors dealt with concerns of realistic human representation. Scenes derived form myth and legend in these works became vehicles for religious and political expression. The Greek obsession with the human being and the belief in reason, which replaced superstition and formed the basis of Western humanism, are vividly reflected here.
Prerequisite: FARB04 is highly recommended
Session: Winter Day
M. Shaw
Not offered 1992/93
Offered 1993/94

FARB10S Carolingian and Romanesque Art and Architecture
Telephone ID #: 06221053
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 Architecture.*
Prerequisite: FARA11S highly recommended
Session: Winter Day
M. Gervers
Not offered 1992/93
Offered 1993/94

FARB19F Michelangelo
Telephone ID #: 06221933
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 Evening
G. Scavizzi
Not offered 1992/93
Offered 1993/94

FARB46F Post Impressionism
Telephone ID #: 06224633
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. It connects the importance these artists placed on individual perception with the ideas and social currents they experienced.
Session: Winter Evening
L. Carney
Not offered 1992/93
Offered 1993/94

FARB60Y The Arts in Canada: 1670-1960
Telephone ID #: 06226063
A survey of painting and sculpture in French and English Canada.

The course examines the art of French and English Canada from their origins until the "internationalization" of the mid-twentieth century. It also includes some aspects of native art.
Session: Winter Day
L. Carney
Not offered 1992/93
Offered 1993/94

FARB66Y Women and Visual Art
Telephone ID #: 06226663
The influence of feminism on making and understanding art in the last 150 years.

Using informal lectures, the course discusses women artists and their relationship to "mainstream" art. It also studies the impact of feminist theories on art movements and the changes they have engendered.
Prerequisite: WSTA01Y, FARA13F/S, FARA91F/S or permission of instructor
Session: Winter Day
L. Carney, J. Hoogstraten
Not offered 1992/93
Offered 1993/94

FARC17F Leonardo da Vinci
Telephone ID #: 06231733
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
Not offered 1992/93
Offered 1993/94

FARC18S Seminar in Twentieth-Century Art
Telephone ID #: 06231853
Special topics in twentieth-century painting and sculpture.

The subject will change from time to time. After introductory sessions outlining the subject and ways of getting information about it, each seminar member will research a topic and present it.
Session: Winter Day
L. Carney
Offered 1992/93
Not offered 1993/94

FARD02F/S
FARD03Y Supervised Reading in Classical Art
FARD04F/S
FARD05Y Supervised Reading in Medieval Art
FARD06F/S
FARD07Y Supervised Reading in Renaissance and Baroque Art
FARD08F/S
FARD09Y Supervised Reading in Modern Art
Prerequisite: At least one C-level full-course 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

For courses in Arts Administration previously listed with a Humanities course designation, see Co-operative Programme in Arts Administration (page 51).

Courses Not Offered in 1991/92

Fine Art History

FARA10F/S	Ancient Art and Architecture (ca. 900 B.C. - 300 A.D.) Offered 1992/93 and 1993/94
FARB15F	Renaissance in Italy Offered 1992/93 Not offered 1993/94
FARB16Y	The Arts in Northern Europe 1400-1500 Offered 1992/93 Not offered 1993/94
FARB27F	Baroque Painting in Southern Europe 1600-1650 Offered 1992/93 Not offered 1993/94
FARB29Y	Baroque Painting in the Netherlands Not offered 1992/93 Offered 1993/94
FARB37F/S	Rococo to Romanticism Not offered 1992/93 Offered 1993/94
FARB43F/S	Impressionism Not offered 1992/93 Offered 1993/94
FARB49Y	Twentieth-Century Art Offered 1992/93 Not offered 1993/94
FARB55Y	American Painting 1880-1980 Offered 1992/93 Not offered 1993/94
FARB62F/S	Recent Canadian Art Offered 1992/93 and 1993/94
FARC05F/S	Wall Painting in Ancient Egypt and the Bronze Age Aegean (3200-1200 B.C.) Offered 1992/93 Not offered 1993/94
FARC06F/S	Gothic Architecture Offered 1992/93 and 1993/94
FARC11F/S	Frans Hals, Rembrandt, and Vermeer Offered 1992/93 Not offered 1993/94
FARC13F/S	Nineteenth Century Realism Offered 1992/93 Not offered 1993/94
FARC14F/S	Art Around 1900 Not offered 1992/93 Offered 1993/94

Fine Art Studio

The Fine Art Studio curriculum is built around the idea that art is a means of expressing and understanding the human condition. It does not offer courses in commercial or advertising art.

Our courses offer the student a practical "hands-on" experience in art-making. The studio experience is intended to expand the student's perception not only of what art is, but of why and how it is made. Through the actual process of art-making, the student will develop the ability to understand and experience the challenges of contemporary art. Critical skills will expand along with practical skills.

Our A-level studio course is Foundation Studies in Studio and it covers, through practice and discussion, basic media and concepts. The corequisite is FARA91F/S But Why is it Art?. They must be taken before advancing to our B-level courses which will introduce the student to other media, processes, and a deeper investigation of the ideas behind art. C-level and D-level courses allow supervised and independent work in any area the student wishes to investigate.

The Major and Specialist Programmes require an Art History course, FARA13. In addition, we strongly urge our students to take other Art History courses dealing with modern and contemporary art.

The Major Programme in Studio will give the student a full and broad exposure to both the various processes of art-making and to recent developments in art criticism. The programme provides some preparation for teaching at the high school or elementary level.

The Specialist Programme is designed for students who are considering art as a profession and/or who may want to continue to the graduate level. It also prepares students for work in the areas of art gallery administration, curating, arts councils, and art college teaching.

Students will be expected to purchase the materials necessary for each course. An estimate of the costs is available from the Programme Supervisor.

Specialist Programme in Fine Art Studio
Supervisor: J. Hoogstraten (287-7177)
Students must complete fourteen and one half full-course equivalents: ten and one half full course equivalents in studio; two full-course equivalents in art history which must include FARA13; and two additional full-course equivalents in cognate disciplines. The list of

recommended courses is available from the Programme Supervisor.
The courses in studio must include:
1 FARA90Y; FARA91F/S
2 FARB70F/S; FARB72F/S; FARB75Y; FARB82F/S; FARB84Y
3 Three and one-half full-course equivalents from the remaining B-level, and/or C-level chosen in consultation with the supervisor.
4 Two D-level full-course equivalents.

Major Programme in Fine Art Studio
Supervisor: J. Hoogstraten (287-7177)
Students must complete seven full-course equivalents as follows:
1 FARA90Y; FARA91F/S
2 FARA13S
3 FARB70F/S*
4 FARB72F/S*
5 FARB74F/S*
6 FARB75Y*
7 Two and one-half additional full-course equivalents, one of which must be at the D-level*.
* Students should check these courses for prerequisites.

A recommended approach to our programmes would be:
MAJOR PROGRAMME
First Year:
FARA90Y Foundation Studies in Studio
FARA91F/S But Why is it Art?
FARA13S
Second Year:
FARB70F Drawing I
FARB72F Contemporary Issues in Printmaking
FARB75Y Painting I
FARB82F Introduction to Lithography
FARB74S Drawing II
Third Year:
FARC82F/FARC83F
FARD24S/FARD25S

SPECIALIST PROGRAMME
First Year:
FARA90Y Foundation Studies in Studio
FARA91F/S But Why is it Art?
FARA13S
Second Year:
FARB70F Drawing I
FARB72F Contemporary Issues in Printmaking
FARB75Y Painting I
FARB82F Introduction to Lithography
FARB83S Intermediate Lithography
FARB74S Drawing II
Third Year:
FARC82F/FARC83S
FARB73Y* or FARB92Y* or another FCE at the B-level or C-level.
FARB84Y*
Fourth Year:
Two full-course equivalents at the D-level
FARD24S/FARD25S
*These courses should be checked for availability due to cycling.

FARA90Y Foundation Studies in Studio
Telephone ID #: 06219063
An introduction to the various processes of art-making: drawing, painting, sculpture, printmaking, installation work, performance, and/or video.

This course is intended to prepare the student for further study in Studio. A basic foundation of visual understanding will be built through the personal exploration of a number of processes, concepts, and media.

Students will discover, through assigned work and discussions, the many ways contemporary art is made. They will be required to explore a number of these processes through assignments and will also be expected to give an oral presentation on a contemporary artist.

Limited enrolment: 20 per section
Corequisite: FARA91
NOTE: Beginning in 1991/92, the prerequisite for FARA90 will be an OAC in Visual Art or permission of instructor following a positive evaluation of a portfolio.
Session: Winter Day
Staff
Offered 1992/93 and 1993/94

FARA91F But Why is it Art?
Telephone ID #: 06219133
An introduction to the basic ideas behind recent art, how they developed, and why they change.

"I don't know anything about art but I know what I like." Why do we feel uncomfortable when confronted with contemporary art? What are we supposed to be thinking and why? This course aims to develop a broad basic knowledge of the critical positions which led to major changes in recent art.
Session: Winter Day
J. Hoogstraten
Offered 1992/93 and 1993/94

FARB66Y Women and Visual Art
Telephone ID #: 06226663
The influence of feminism on making and understanding art in the last 150 years.

Using informal lectures, the course discusses women artists and their relationship to "mainstream" art. It also studies the impact of feminist theories on art movements and the changes they have engendered.
Session: Winter Day
L. Carney, J. Hoogstraten
Not offered 1992/93
Offered 1993/94

FARB70F Drawing I
Telephone ID #: 06227033
An investigation of the various approaches to drawing, including working from the figure and working with ideas.

Through the use of the model and assignments, this course is designed to develop the student's ability to investigate the potentials inherent in drawing.

The student must complete a number of finished drawings, working both from the model and from assigned problems. Drawings from the model, assigned drawings, and a completed sketchbook will make up the final portfolio for grading. All assigned work will be discussed in class by the instructor and other class members.
Limited enrolment: 20
Prerequisite: FARA90Y
Session: Winter Day
D. Holman
Offered 1992/93 and 1993/94

FARB72F/S Contemporary Issues in Printmaking
Telephone ID # for FARB72F: 06227233
Telephone ID # for FARB72S: 06227253
An exploration of traditional and more experimental processes of printmaking.

Students will investigate the broad possibilities inherent in printmaking through assigned work which will be discussed in class and individually with the instructor. They will also be required to give an oral presentation on a contemporary artist.
Limited enrolment: 15
Prerequisite: FARA90
Session: Winter Day
D. Holman
Offered 1992/93 and 1993/94

FARB74S Drawing II
Telephone ID #: 06227453
A continuation of FARB70 with an increased emphasis on the student's ability to expand her/his personal understanding of the meaning of drawing.

Through the use of the model and assigned projects, the student will be required to explore a number of visual possibilities dealing with both objects and ideas.

This course requires the student to work from the figure as well as work from concepts assigned to the class. These completed drawings will be discussed in class and will, with a complete sketchbook, make up the final portfolio for grading.
Limited enrolment: 20
Prerequisite: FARB70
Session: Winter Day
D. Holman
Offered 1992/93 and 1993/94

FARB75Y Painting I
Telephone ID #: 06227563
An investigation of the possibilities of painting with an emphasis on the rich potential for expression of both personal and cultural imagery.

This course is designed to expose the student to current concepts in painting, primarily the shift from Modernism to Post-modernism and its consequences. These changes will be investigated through an exploration of both media and imagery.

Work in the first term will be based on assignments. Work in the second term will consist of images and concepts developed by the individual student. Discussions of work will be held regularly on both an individual and group level. Students will be required to give an oral presentation on a contemporary artist and write two papers on contemporary art.
Limited enrolment: 20
Prerequisite: FARA90
Session: Winter Day
J. Hoogstraten
Offered 1992/93 and 1993/94

FARB82F Introduction to Lithography
Telephone ID #: 06228233
An introduction to black and white stone lithography including a detailed investigation of materials and techniques.

The course will include demonstrations and lectures covering the technical aspects of the medium. Students will be required to pass a test on procedures and explore the medium by drawing, processing and printing several of their own lithographs. Discussions of work will be held regularly on both an individual and group level.
Limited enrolment: 10
Prerequisite: FARA90 or permission of instructor.
Session: Winter Day
D. Holman
Offered 1992/93 and 1993/94

FARB83S Intermediate Lithography
Telephone ID #: 06228353
A continuation of FARB82, with emphasis on multi-colour printing.

The course explores the technical aspects of working with coloured inks. Students will be expected to work out visual ideas by drawing, processing, and printing a number of their own lithographs. Individual and group critiques will be held to discuss assigned work.
Limited enrolment: 10
Prerequisite: FARB82 and permission of instructor
Session: Winter Day
D. Holman
Offered 1992/93 and 1993/94

FARB84Y Introduction to Intaglio Printing
Telephone ID #: 06228463
An exploration of printmaking with a focus on etching.

This course will involve the student in the various methods of printmaking associated with etching, including engraving and drypoint. Both lectures and demonstrations will introduce the student to the basic concepts and processes associated with intaglio printing. Students will draw and process zinc plates and produce several editions in black and white. Group and individual critiques will be held to discuss these prints. They will also be required to view and assess historical and contemporary prints.
Limited enrolment: 15
Prerequisite: FARB72 or permission of instructor
Session: Winter Day
A. Brannen
Not offered 1992/93

FARB92Y Sculpture Concepts
Telephone ID #: 06229263
The changes in sculpture in the 20th century, with an emphasis on contemporary art.

This course familiarizes the student with recent concepts in sculpture, primarily the shift from Modernism to Post-modernism, and the reasons for this shift. Current ways of exploring space, time, motion, and sound will be discussed.

The course will have a lecture-discussion format with each student leading a discussion. Students will also be responsible for a number of working drawings dealing with assigned problems. Texts include Rosalind E. Krauss' *Passages in Modern Sculpture*, and Gregory Battcock's *Minimal Art: A Critical Anthology*.
Limited enrolment: 15
Prerequisite: FARA90 or permission of instructor
Session: Winter Day
J. Hoogstraten
Not offered 1992/93

FARC85A Intermediate Intaglio Printing
Telephone ID #: 06238513
A continuation of FARB84Y, focussing on colour and multi-plate printing.

The course will examine the technical aspects of working with coloured inks, and will require students to produce several editions in colour. Individual and group critiques will be held to discuss assigned work. Students will also be required to view and discuss by past and contemporary artists and to visit exhibitions and print shops.
Limited enrolment: 15
Prerequisite: FARB84Y or permission of instructor
Session: Summer Evening
A. Brannen
Not offered 1992/93

FARC82F/S
FARC83F/S
FARC86F/S
FARC87F/S
FARC88F/S
Supervised Studies in Studio
An opportunity for the student to create a number of personal statements working in an area of her/his own choice.

These courses may be taken in any area including printmaking, drawing, painting, sculpture, photography or mixed media if the student, through the portfolio and proposal, can show the ability to proceed to the intermediate level. Students will provide their chosen instructor with a written proposal within the first week of classes. This will state the intended area of investigation, the amount of work necessary to fulfill it, and a justification of the students' position. They will also meet at appointed times to discuss work-in-progress. Content, method and evaluation will be planned in co-operation with the instructor.
Limited enrolment: 3
Prerequisite: FARB74, FARB75, FARB83, FARB84 or FARB92 and permission of instructor based on the written proposal and portfolio.
Session: Winter Day
J. Hoogstraten, D. Holman
Offered 1992/93 and 1993/94

FARD21Y Advanced Studio: Individual Study in Painting
Telephone ID #: 06242163
A further opportunity for individual exploration in painting.

This course is designed for mature students who, through their portfolio and proposal, have shown their ability to work without intensive guidance. Students will provide their chosen instructor with a written proposal within the first week of classes. This will state the intended area of investigation, the amount of work necessary to fulfill it, and a justification of the students' position. They will also meet at appointed times to discuss work-in-progress. Content, method and evaluation will be planned in co-operation with the instructor.
Limited enrolment: 5
Prerequisite: at least one half course in painting at the C-level
Session: Winter Day
J. Hoogstraten
Offered 1992/93 and 1993/94

FARD22Y Advanced Studio: Individual Study in Printmaking
Telephone ID #: 06242263
A further opportunity for individual exploration in printmaking.

This course is designed for mature students who, through their portfolio and proposal, have shown their ability to work without intensive guidance. Students will provide their chosen instructor with a written proposal within the first week of classes. This will state the intended area of investigation, the amount of work necessary to fulfill it, and a justification of the students' position. They will also meet at appointed times to discuss work-in-progress. Content, method and evaluation will be planned in co-operation with the instructor.
Limited enrolment: 3
Prerequisite: at least one half course in printmaking at the C-level
Session: Winter Day
D. Holman
Offered 1992/93 and 1993/94

FARD24F/S
FARD25F/S (FARC25H)
FARD90F/S
FARD91F/S
Independent Studies in Studio: Advanced Level
A further opportunity for individual exploration in printmaking, painting, drawing, sculpture, or multi-media.

This course is designed for mature students who, through their portfolio and proposal, have shown their ability to work without intensive guidance. Students will provide their chosen instructor with a written proposal within the first week of classes. This will state the intended area of investigation, the amount of work necessary to fulfill it, and a justification of the students' position. They will also meet at appointed times to discuss work-in-progress. Content, method, and evaluation will be planned in co-operation with the instructor.
Limited enrolment: 3
Prerequisite: at least one half course in the area of intended study at the C-level
J. Hoogstraten, D. Holman
Offered 1992/93 and 1993/94

Courses Not Offered in 1991/92

Fine Art Studio

FARB73Y	Photographic Issues in the Visual Arts Not offered 1991/92 Offered 1992/93
FARC76Y	Painting II Offered 1992/93 Not offered 1993/94

French

Discipline Representative: L. E. Doucette (287–7138)
Supervisor of Studies: J. Curtis (287–7137)
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 the faculty member responsible for FREB10 or FREC10 concerning the appropriate *language practice* course for their purposes. Students without OAC French or equivalent are urged to obtain credit for FREA16 on a "study elsewhere" basis, for example, by attending a summer immersion programme. Further information is available from our Supervisor of Study Elsewhere, Professor L. Mignault (until 30 June 1991),

Professor W. J. Bancroft (from 1 July, 1991).

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*
Courses in literature, both of France and French Canada, cover a range of periods and genres. Some literary study is a requirement in each of the Programmes offered by the Discipline.

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. LINA01, 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, and C33. 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.

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.

Normally, a student may not take an A-level French course at the same time as or after a B-level French course.

Other courses and suggestions likely to interest students of French may be found under Language Studies.

Specialist Programme in French
Supervisor: J. Curtis (287–7137)
Students should complete twelve full-course equivalents, including ten French courses as specified below (items 1-4) and two others (see item 5) as follows:
1 the sequence FREA10Y, FREB10Y, FREC10Y, (except where substitution of other French courses is permitted for students with special proficiency in the French language)
2 one of the following courses: FREB25Y, FREB42Y, FREB48Y, FREC09Y
3 four 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
4 two further full-course equivalents in French (see exclusions listed below)
5 two full-course equivalents outside French but from related areas of study, to be agreed upon in consultation with the Supervisor.
6 Of the courses chosen in French (items 1-4), four full-course equivalents must be at C- or D-level (or from the 300 and 400 series courses on the St. George campus). Both FREC10Y and supervised reading may count toward this requirement.
7 Normally no more than one full-course equivalent in the area of supervised reading may be credited for requirements for the Specialist Programme.

It is recommended that students intending to specialize in French take FREA50 or FREB50 early in their programme of studies.
The following may **not** count toward a Specialist Programme:
1 any A-level French course, with the exception of FREA10, and FREA50
2 FREB17, FREB18, FREB90, FREC11, FREC18.

Major Programme in French Language and Literature
Supervisor: J. Curtis (287–7137)
Students should complete seven full-course equivalents, including:
1 FREA10Y, FREB10Y, (except where substitution of other French courses is permitted for students with special proficiency in the French language).
2 one of the following courses: FREB08F/S, FREB25Y, FREB42Y, FREB48Y, FREC09Y, FREC10Y.
3 four further full-course equivalents in French, of which three must be in the areas of French and French-Canadian literature.
4 Students may include in their Major Programme a maximum of one supervised reading course.

It is recommended that students intending to pursue a Major in French Language and Literature take FREA50 or FREB50 early in their programme of studies.
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 FREA50
2 FREB18, FREB90, 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).

Major Programme in French Language
Supervisor: TBA
Students should complete seven full-course equivalents, including:
1 FREA10Y, FREB10Y, FREC10Y (except where substitution of other French courses is permitted for students with special proficiency in the French language)
2 two full-course equivalents from the following: FREB08F/S, FREB18Y, FREB25Y, FREB42Y, FREB43F/S/Y, FREB48Y, FREC09Y, FREC18F/S.
3 two other full-course equivalents in French, one of which must be in the area of French or French-Canadian literature, and one in French or French-Canadian civilization.
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 FREA50; FREB90.
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.

FREA10Y Language Practice I
Telephone ID #: 06611063
Reinforcement and development of the language skills--understanding, reading, writing, and speaking--necessary for higher-level courses.

The course consists of a grammar review with written and oral exercises, reading and discussion of a variety of texts representing different francophone cultures including Quebec, and whatever exercises class and instructor may choose to devise. The class meets three times a week and, in addition, will do a fourth hour of speaking and listening in the Language Lab. This course is a prerequisite for *all* B-level courses in the French discipline at Scarborough College except FREB90.

For students planning to specialize in French, FREA50Y is recommended as a companion course.
Exclusion: (FREB06), native or near-native proficiency in French
Prerequisite: OAC French or Grade 13 French or FREA16 or equivalent.
Session: Winter Day, Winter Evening
F. Mugnier-Manfredi and Staff
Offered 1992/93 and 1993/94

FREA50Y Introduction to Francophone Literature
Telephone ID #: 06615063
A study of representative works from major periods and areas of the literature of the francophone world.

FREA50Y will introduce students to the thoughtful reading of literary texts in French. Students will be encouraged to acquire the basic vocabulary necessary to analyse literature and to develop their essay-writing skills in French. This course is recommended both for students intending to major or specialize in French as a useful background for more advanced studies and for those students interested in enhancing or retaining their reading, writing, and speaking skills in French.

The class will meet for three hours each week for lectures and discussions conducted in French.
Prerequisite: OAC French or Grade 13 French or FREA16 or equivalent
Session: Winter Day
L. E. Doucette
Offered 1992/93 and 1993/94

FREB08F/S Practical Translation
Telephone ID # for FREB08F: 06620833
Telephone ID # for FREB08S: 06620853
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 F. Mugnier-Manfredi
Offered 1992/93 and 1993/94

FREB10Y Language Practice II
Telephone ID #: 06621063
A continuation of FREA10.

This course is concerned with the development of fluency, accuracy of expression, and style, through the study of grammar, composition, oral practice, readings, and language laboratory work.
Enrolment in each section is limited to 25.
Exclusion: (FREB16), native proficiency in French.
Prerequisite: FREA10 (FREB06) or equivalent
Session: Winter Day
C. Evans and Staff
Offered 1992/93 and 1993/94

FREB17F Intermediate Conversation II
Telephone ID #: 06621733
Intensive practice in the spoken language through controlled situational oral work and discussion groups. Attention will be given to the comprehension of such major regional variants as that found in the Province of Quebec.

As many opportunities as possible will be provided to practise the language and develop a mastery of relevant vocabulary so that students may acquire a reasonable degree of confidence when speaking about everyday life and contemporary topics.
Limited enrolment: 25
Prerequisite: FREA10 (FREB06) or equivalent
Session: Winter Day
L. Mignault
May be offered 1992/93 and 1993/94

FREB18Y Commercial French
Telephone ID #: 06621863
The French language in a commercial or economic context.

This course is of interest to students in French, to Business, Accounting, Computer Science, 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 primarily in the Canadian francophone business community, the programme will consist of theoretical and practical sessions. Class meetings will be devoted, among other things, 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
W.J. Bancroft
Offered 1992/93 and 1993/94

FREB20Y History of French Civilization
Telephone ID #: 06622063
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 J. Thoraval, *Les Grandes Etapes de la civilisation.*
Prerequisite: FREA10 (FREB06)
Session: Winter Day
F. Mugnier-Manfredi
Not offered 1992/93
Offered 1993/94

FREB24Y French Thought and Literature in the Age of Enlightenment
Telephone ID #: 06622463
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: FREA10 (FREB06)
Pre- or Corequisite: FREA50 or FREB50 (A30/A02) or permission of instructor.
Session: Winter Day
J. Curtis
Not offered 1992/93

FREB25Y Introduction to French Linguistics
Telephone ID #: 06622563
A study of the linguistic structure of French and of linguistic theories from the beginning of the twentieth century as applied to modern French.

Topics such as the following will be covered: sound patterns and word formation in French; social and regional variations.

Students are expected to make short class presentations and write one major paper.
Prerequisite: FREA10 (FREB06) or equivalent.
Session: Winter Day
C. Evans
Not offered 1992/93
Offered 1993/94

FREB26Y The Romantic Current in French Literature
Telephone ID #: 06622663
Analysis of Romanticism in nineteenth-century 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. Where appropriate, attention will be paid to modern versions of French romantic works, such as the recent musical production of *Les Miserables.*
Prerequisite: FREA10 (FREB06)
Pre- or Corequisite: FREA50 or FREB50 (A30/A02) or permission of instructor.
Session: Winter Day
W. J. Bancroft
Not offered 1992/93

FREB36F French-Canadian Novel to 1945
Telephone ID #: 06623633
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: FREA10 (FREB06)
Pre- or Corequisite: FREA50 or FREB50 (A30/A02) or permission of instructor.
Session: Winter Evening
L.E. Doucette
Not offered 1992/93

FREB48Y Theoretical and Practical Phonetics
Telephone ID #: 06624863
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 fran,cais standard.*
Limited enrolment per section: 20
Prerequisite: FREA10 (FREB06) or equivalent.
Session: Winter Evening
C. Evans
Offered 1992/93 and 1993/94

FREB50F Approaches to the French Literary Text
Telephone ID #: 06625033
Concepts and techniques of literary criticism.

Students analyse selected works from the fields of fiction, drama, and poetry. Emphasis is on genres rather than on literary movements or periods.
Lectures and seminars are conducted in French.
Prerequisite: FREA10 or equivalent
Exclusion: FREA30 (FREA02)
Session: Winter Day
F. Mugnier-Manfredi
May be offered 1992/93 and 1993/94

FREB90S Understanding Quebec and French Canada
Telephone ID #: 06629053
An attempt to explain contemporary French Canadian issues to English-speaking Canada.

Attention will focus on social, cultural and political questions in post-1960 French Canada, but we will also examine the impact of historical factors on today's issues. Materials for the course consist of documents (in print and on film) and samples of literature, art, and popular culture (songs, music, cinema). The course is offered in English and requires no prior knowledge of French.

May not be counted towards a Major or Specialist degree in French.
Exclusion: FREB22, FREB23
Session: Winter Day
L. Mignault

FREC10Y Language Practice III
Telephone ID #: 06631063
A continuation of FREB10 (FREB16).

Emphasis in this course will be put equally on the oral and written components of French through the study of grammar; the reading and analysis of texts in modern prose; the writing of essays in French; translation and stylistic exercises; discussions and debates.
Enrolment in each section is limited to 25.
Exclusion: (FREC06)
Prerequisite: FREB10 (FREB16)
Session: Winter Day
L. Mignault and Staff
Offered 1992/93 and 1993/94

FREC11S Teaching French as a Second Language
Telephone ID #: 06631153
A study of current theories of language teaching and learning and their application to the teaching of French as a second language.

Topics include communicative competence, traditional and innovative methods and approaches, and the development of teaching materials.

Theoretical and practical sessions are conducted in French.
Students are strongly recommended to take LINC26F before FREC11S.
Limited enrolment: 25
Pre- or Corequisite: FREC10
Session: Winter Day
W. J. Bancroft
Not offered 1992/93
Offered 1993/94

FREC18S Translation for Business and Professional Needs
Telephone ID #: 06631853
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 examination.
Prerequisite: FREB10 or FREB18 or equivalent
Session: Winter Day
S. Mittler
Not offered 1992/93
Offered 1993/94

FREC34S Cross-currents in Contemporary French Fiction
Telephone ID #: 06633453
An examination of the varied thematic and technical perspectives open to contemporary novelists.

French writers of the late twentieth century, heir to key innovations in their treatment of reality, literary symbolism and the importance of history, cannot be assigned a group label but rather express and develop these inherited trends in both form and content, sometimes in novel ways. We will look at farce and high fantasy in R. Queneau, *Les Fleurs bleues*, individual and national conscience in M. Del Castillo, *La Nuit du Décret*, an entire culture on trial in P. Modiano, *Les boulevards de ceinture*, power and human relationships in D. Van Cauwelert, *Poisson d'amour*, and the character of our own times in F. Tristan, *Les Egarés*.

Lectures and discussion.
Prerequisite: One B-level course in the group FREB10 (FREB16) - FREB81, excluding FREB17, FREB18, FREB90.
Pre- or Corequisite: FREA50 or FREB50 (A30/A02) or permission of instructor.
Session: Winter Day
S. Mittler
Not offered 1992/93

FREC39S French-Canadian Poetry
Telephone ID #: 06633953
The development of Canadian poetry in French from the middle of the nineteenth century to the present, with emphasis on the contemporary period.

After the initial few lectures in which a general introduction to prosody and to the origins of French-Canadian poetry is provided, this course is heavily weighted towards the twentieth century. Much emphasis will be given to modern poets such as Saint-Denys Garneau, Anne Hébert, and Alain Grandbois.
Prerequisite: One B-level course in the group FREB10 (FREB16)-FREB81, excluding FREB17, FREB18, FREB90.
Pre- or Corequisite: FREA50 or FREB50 (A30/A02) or permission of instructor.
Session: Winter Evening
L.E. Doucette
Not offered 1992/93

FRED02F
FRED03S
FRED04F
FRED05S
FRED07S
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 a clear relation to the student's previous work, and should differ significantly in content and/or concentration from topics offered in regular courses. In applying to a faculty supervisor, students should be prepared to present a brief written statement of the topic they wish to explore. Final approval of the project rests with the French Discipline.

Interested students should contact the Discipline Representative or Supervisor of Studies for guidance.
Exclusions: (FREC02, FREC03, FREC04, FREC05, FREC07, FREC90)
Prerequisite: One B-level course in the group FREB10 (FREB16)-FREB81, excluding FREB17, FREB18, FREB90.
Session: Winter Day
Offered 1992/93 and 1993/94

Courses Not Offered in 1991-92

FREB21F/S France Today
Prerequisite: FREA10 (FREB06) or equivalent.

FREB22F/S The Society and Culture of French Canada I
Exclusion: FREB90F/S
Prerequisite: FREA10Y (B06) or equivalent competence.
Offered 1992/93

FREB23F/S The Society and Culture of French Canada II
FREB22F is strongly recommended as preparation for this course.
Exclusion: FREB90F/S
Prerequisite: FREA10 (B06) or equivalent competence.
Offered 1992/93

FREB29F/S French Drama of the Eighteenth Century
Note: FREB24 provides an excellent background to this course, but it is **not** essential to have completed it prior to taking FREB29.
Prerequisite: FREA10 (FREB06) or equivalent.
Pre- or Corequisite: FREA50 or FREB50 (A30/A02) or permission of instructor.

FREB30F/S French Theatre of the Early Modern Period
Prerequisite: FREA10 (FREB06) or equivalent
Pre- or Corequisite: FREA50 or FREB50 (A30/A02) or permission of instructor.

FREB31F/S Contemporary French Theatre
Prerequisite: FREA10 (FREB06) or equivalent.
Pre- or Corequisite: FREA50 or FREB50 (A30/A02) or permission of instructor.

FREB37F/S French-Canadian Novel since 1945
Prerequisite: FREA10 (FREB06)
Pre- or Corequisite: FREA50 or FREB50 (A30/A02) or permission of instructor.

FREB38F/S The Theatre of French Canada
Prerequisite: FREA10 (FREB06) or equivalent.
Pre- or Corequisite: FREA50 or FREB50 (A30/A02) or permission of instructor.

FREB40F/S French Classicism: Poetry and Prose
FREB41 is the recommended companion course.
Prerequisite: FREA10 (FREB06) or equivalent.
Pre- or Corequisite: FREA50 or FREB50 (A30/A02) or permission of instructor.

FREB41F/S French Classicism: The Theatre
FREB40 is the recommended companion course.
Prerequisite: FREA10 (FREB06) or equivalent.
Pre- or Corequisite: FREA50 or FREB50 (A30/A02) or permission of instructor.

FREB42Y General History of the French Language
Prerequisite: FREA10 (FREB06)

FREB43Y The French Language in Canada
Prerequisite: FREA10 (FREB06) or equivalent.
Not offered 1992/93
Offered 1993/94

FREB49Y The Twentieth Century: The Search for Identity
Prerequisite: FREA10 (FREB06)
Pre- or Corequisite: FREA50 or FREB50 (A30/A02) or permission of instructor.

FREB70Y The Twentieth Century: In Search of the Novel
Prerequisite: FREA10 (FREB06) or equivalent.
Pre- or Corequisite: FREA50 or FREB50 (A30/A02) or permission of instructor.

FREB80F/S Representation of Women in French Literature
Prerequisite: FREA10 (FREB06) or equivalent.
Pre- or Corequisite: FREA50 or FREB50 (A30/A02) or permission of instructor.

FREB81F/S *Women's Consciousness in* French Literature
Prerequisite: FREA10 (FREB06)
Pre- or Corequisite: FREA50 or FREB50 (A30/A02) or permission of instructor.

FREC09Y Comparative Stylistics
Prerequisite: FREB10 (FREB16) and FREB08
Offered 1992/93

FREC22Y Introduction to Medieval French Language and Literature
Prerequisite: One B-level course in the group FREB10 (FREB16)-FREB81, excluding FREB17, FREB18, FREB90.
Pre- or Corequisite: FREA50 or FREB50 (A30/A02) or permission of instructor.

FREC23F/S The French Novel in the Seventeenth Century
Prerequisite: One B-level course in the group FREB10 (FREB16)-B81, excluding FREB17, FREB18, FREB90.
Pre- or Corequisite: FREA50 or FREB50 (A30/A02) or permission of instructor.
N.B. FREB40 and/or FREB41 are recommended as background courses.
Not offered 1992/93

FREC24F/S The French Novel in the Eighteenth Century
Exclusion: (FREB32); (FREB33)
Prerequisite: One B-level course in the group FREB10 (FREB16)-B81, excluding FREB17, FREB18, FREB90.
Pre- or Corequisite: FREA50 or FREB50 (A30/A02) or permission of instructor.

FREC25Y Literature of the Renaissance
Prerequisite: One B-level course in the group FREB10 (FREB16)-FREB81, excluding FREB17, FREB18, FREB90.
Pre- or Corequisite: FREA50 or FREB50 (A30/A02) or permission of instructor.

FREC26Y Prose Fiction From 1800 to 1900: From Romanticism to Naturalism
Exclusions: (FREB34)
Prerequisite: One B-level course in the group FREB10 (FREB16)-B81, excluding FREB17, FREB18, FREB90.
Pre- or Corequisite: FREA50 or FREB50 (A30/A02) or permission of instructor.

FREC33F/S French Civilization: Continuity and Change
Prerequisite: One B-level course in the group FREB10 (FREB16) - 81, excluding FREB17, FREB18, FREB90; or permission of instructor.

FREC40Y Modern French Poetry from Baudelaire to Valéry
Prerequisite: One B-level course in the group FREB10 (FREB16)-FREB81, excluding FREB17, FREB18, FREB90.
Pre- or Corequisite: FREA50 or FREB50 (A30/A02) or permission of instructor.

Geography

Assistant Chair: E. C. Relph

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. degree are GGRB03, GGRB09, (GGRB15)*, GGRB19, (GGRB24), (GGRB29), GGRB31, (GGRC05), GGRC23, GGRC24, (GGRC25), GGRC26, GGRC27, GGRC28, GGRC30, (GGRC32), (GGRC35), (GGRC36), (GGRC37), GGRD03, GGRD04, GGRD05, GGRD06. In addition (GGRC01) and GGRD01 may be used to fulfill the B.Sc. requirements by students researching in appropriate scientific areas of geography, subject to the approval of the Programme Supervisor.

*Courses shown in parentheses are courses which are no longer offered but which may still be counted for the purposes of this rule.

Specialist Programme in Geography
Supervisor: A. Price
The requirements for this Programme are twelve full-course equivalents, which must include:

1. GGRA04F/S and GGRA05F/S
2. GGRB31F/S, or STAB22F/S or Equivalent*
3. GGRD01Y
4. At least three full-course equivalents in Geography at the C-level or D-level, other than GGRD01Y.
5. Two full-course equivalents in disciplines other than Geography to be agreed on in consultation with the Supervisor.

***NOTE** GGRB31F/S will not be offered in 1991-92, nor in 1992-93. There are several equivalent courses which will be accepted as satisfying this programme requirement, including STAB22F/S and the courses listed in the Calendar as Exclusions to that.

Major Programme in Geography
Supervisor: A. Price
The requirements for this Programme are seven full-course equivalents in Geography, which must include:

1. GGRA04F/S and GGRA05F/S
2. At least two full-course equivalents in Geography at the C-level or D-level

GGRA04F Concepts and Methods of Human Geography
Telephone ID #: 06910433
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

GGRA05S Introduction to Physical Geography
Telephone ID #: 06910553
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

GGRB01Y Resource Management
Telephone ID #: 06920163
The basis for understanding resource development policies and environmental management strategies. Problems of resource use and environmental management are examined generally in their global context, and specifically with reference to Canadian circumstances and policies. Issues discussed will include population growth and quality, world food problems, global energy, water resource management in Canada, and conservation strategies.
Prerequisite: GGRA04 or GGRA05.
Session: Summer Evening
R. Morino

IDSB02Y International Development Studies: Physical and Ecological Resource Management
Telephone ID #: 08120263
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/TBA

GGRB03Y Climatology
Telephone ID #: 06920363
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 instructor
Session: Winter Day
TBA

GGRB05Y Urban Geography
Telephone ID #: 06920563
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
K. England

GGRB09F Hydrology, Land Use and Water Quality
Telephone ID #: 06920933
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
Telephone ID #: 06921363
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 Evening
E.C. Relph

GGRB17Y Rural Geography
Telephone ID #: 06921763
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 with some of the recent literature on the subject, and to introduce them to the methodological and conceptual approaches to studying rural areas.
Prerequisite: GGRA04 or an A-level course in the Social Sciences or the Humanities
Session: Winter Day
M. Bunce

GGRB19Y General Geomorphology
Telephone ID #: 06921963
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

GGRC06F Women and the City
Telephone ID #: 06930633
This course will look at 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 social environment, the use of public space, city-suburban differences, child-care and paid employment. The problems of creating an environment that provides equal opportunities for women and men will be examined.
Prerequisite: GGRB05 or WSTA01 (JHSA01)
Session: Winter Day
K. England

GGRC07S Countryside Conservation
Telephone ID #: 06930753
The problems and policies of countryside conservation in Western Europe and North America. Particular attention will be paid to the origin of conservational and preservational attitudes to the natural and human landscapes of rural areas, and to their impact on rural planning. Topics will include urban containment, agricultural land preservation, land protection, conservation of natural environments and rural heritage, and the management of countryside recreation. Field work and case studies will be an integral part of the course.
Prerequisite: GGRB17, or GGRB05 or GGRB13
Session: Winter Day
M. F. Bunce

GGRC13S Urban Political Geography
Telephone ID #: 06931353
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.
K. England

GGRC18S Urban Transportation Policy Analysis
Telephone ID #: 06931853
This course examines current problems in urban transportation planning using policy analysis. Topics include setting of community goals, economic and social cost-benefit analysis, evaluation of redistributive impacts, impacts of transport projects on land values, mass transit subsidies, and regulation/deregulation. Course examines insights gained from contemporary empirical research. Three hours of lectures per week.
Prerequisite: GGRB31 or equivalent and GGRB05 or JEGB27
Session: Winter Day
TBA

GGRC26Y Coastal Geomorphology
Telephone ID #: 06932663
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.
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
Telephone ID #: 06932763
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.
Prerequisite: GGRA05 or GLGA01 or IDSB02
Session: Winter Day
R. Bryan/D. Oostwoud

GGRC28Y The Hydrology of Surface and Subsurface Waters
Telephone ID #: 06932863
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

GGRC29F Problems in Modern Agricultural Land Use
Telephone ID #: 06932933
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 consultation.
Prerequisite: One of GGRB17, GGRB01, IDSB01, IDSB02
Session: Winter Day
M. F. Bunce

GGRC30S Boundary Layer Climates
Telephone ID #: 06933053
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 modelling these exchanges for a variety of atmospheric conditions and surface types. The course will emphasize mathematical and numerical (e.g. computer) modelling. Specific topics include: atmospheric radiation, heat transfer within the ground and water bodies, and major approaches (e.g. eddy correlation, flux-gradient, aerodynamic) for estimating turbulent transfer fluxes. Two hour lectures per week plus an additional lab. hour as needed.
Prerequisite: GGRB03
Session: Winter Day
TBA

GGRC31S Development and Planning of Metropolitan Regions
Telephone ID #: 06933153
An advanced analysis of the recent growth of metropolitan regions, its causes, efficient urban scale, social goals and planning, public policy issues, as well as the tools, roles and impacts of public planning policies. Course examines insights gained from contemporary empirical research. Three hours of lectures per week.
Prerequisite: GGRB31 (or equivalent) and one of GGRB05 or JEGB27
Session: Winter Day
TBA

GGRC34F Landscape Interpretation
Telephone ID #: 06933433
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
TBA

GGRD01Y Supervised Research
Telephone ID #: 06940163
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 full-course equivalents in Geography and one full-course equivalent from GGRB30, GGRB31, GGRC23, GGRC24
Session: Winter Day
Staff

GGRD03S Theoretical Geomorphology
Telephone ID #: 06940353
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
Prerequisite: GGRB19 and one of GGRC26, GGRC27 or GGRC28; a background in science will be useful.
Session: Winter Day
B. Greenwood

GGRD06F Climatic Change
Telephone ID #: 06940633
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.
Prerequisites: GGRB03 and GGRC30
Session: Winter Day
TBA

Courses Not Offered in 1991-92

JEGB27F	Location and Spatial Development Prerequisite: ECOA02 or ECOA03
GGRB31S	Data Analysis in Geography: An Introduction Prerequisite: GGRA04 or GGRA05
GGRC04S	Urban Residential Geography Prerequisite: GGRB05
GGRC20F	Issues in Rural Development Prerequisite: One of GGRB01, GGRB17, GGRB28S, IDSB01, IDSB02
GGRC23F	Computer Modelling in Physical Geography Prerequisites: GGRB31 or equivalent and any two of GGRB03, GGRB19, GGRB09

GGRC24F Advanced Quantitative Methods in Geography
Prerequisite: GGRB31 or equivalent

GGRD02F Environmental Philosophies
Prerequisite: Any 10 full-course equivalents including at least one of GGRB01, GGRB17, IDSB01, IDSB02

GGRD04S Sedimentary Models
Prerequisite: GGRB19 and one of GGRC26, GGRC27, GGRC28; a background in science will be useful.

GGRD05S Hillslope Geomorphology
Prerequisite: GGRB19 and one of GGRC26 or GGRC28

Geology

Discipline Representative:
K. Howard (287-7233)

GEOLOGY - "the scientific study of the earth, its origin, structure, composition and history, and the nature of the processes which have given rise to its present state"

Geology also provides the key to understanding and resolving many of the environmental issues that plague our planet. Problems such as diminishing and polluted water supplies, acid rain, lake and coastal erosion, disposal of household, industrial and radio-active wastes can often be attributed to an insufficient understanding of near-surface geology and geological processes.

This growing concern with our environment has long been recognized at the University of Toronto and has led to the development of a specialist programme in geology on the Scarborough Campus called Terrain and Environmental Earth Sciences (TEES). The TEES programme provides students with a good background in all the fundamental aspects of geology through the study of earth materials at or near the surface, and the processes--chemical, sedimentary, hydrogeological--that shape and determine the environment as we see it today. While the emphasis is on geology, the programme is multidisciplinary in nature and is strongly supported by the physical and biological sciences.

Please refer to the Physical Sciences section of the Calendar for the following programme.

Specialist Programme in Terrain and Environmental Earth Sciences (TEES)

GEOLOGY

GLGA01Y Planet Earth: an Introduction to Geology
Telephone ID #: 07010163
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
TBA

GLGA03S Geological Hazards
Telephone ID #: 07010353
This course will focus on the geological background and possible solutions to major hazards affecting the 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 non-specialist 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
Telephone ID #: 07020253
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
Telephone ID #: 07020353
The stratigraphy, sedimentology, and structure of Palaeozoic rocks of the Appalachian Mountains and adjacent craton will be examined during this two-week 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
Telephone ID #: 07020533
Crystallography, physical properties, origin and occurrence of minerals; and the descriptive mineralogy of approximately eighty common and useful minerals.
Prerequisites: GLGA01Y, CHMA02Y
Session: Winter Day
D. Gorman

GLGB06S Optical Mineralogy
Telephone ID #: 07020653
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
Session: Winter Day
J. Gittins

GLGC06F Glacial and Periglacial Geology
Telephone ID #: 07030633
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
Exclusion: (GLGC06S)
Session: Winter Day
N. Eyles

GLGC08S Subsurface Exploration Techniques: Drilling
Telephone ID #: 07030853
This course is designed to expose students to drilling techniques necessary for geotechnical, hydrogeological and mineral exploration investigations. The course is organized as field demonstrations combined with classroom instruction and laboratory practicals in waterwell, blasthole, geotechnical, exploration and rotary drilling. Applications, limitations, costs, advantages and disadvantages will be stressed. Particular emphasis will be placed on new developments in drilling equipment, overburden drilling and *in situ* testing in Quaternary sediments, design and installation of hydrogeological monitoring and production wells.
Prerequisites: GLGC06F, GLGC10F or with permission of instructor.
Session: Winter Day
R. Pybus

GLGC10F Exploration Techniques in Hydrogeology
Telephone ID #: 07031033
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
K.W.F. Howard

GLGD01S Contaminant Hydrogeology
Telephone ID #: 07040153
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 transport.
Session: Winter Day
Prerequisites: GLGC10F and CHMA02Y, or MATB41F and CHMB22Y or CHMB11Y
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.
Session: Winter Day
Staff

GLGD05F Field Camp II: The Western Prairies and the Rocky Mountains
Telephone ID #: 07040533
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, GLG332F
Session: Winter Day
N. Eyles and K.W.F. Howard

German

Discipline Representative: H. Ohlendorf
The German Programme is designed to introduce students to the language and culture of the German-speaking countries. A variety of modern integrated teaching materials is used to maximize students' exposure to the four language skills (listening, speaking, reading and writing).

Students interested in language studies are encouraged to combine the German Major Programme with another language major for a Specialist degree in Modern Languages.

The German Major Programme is also recognized as an excellent complement to studies in Fine Art, History, Humanities, Linguistics, Literature, Philosophy, Commerce, and Social Sciences.

The internationally recognized *Certificate for German as a Second Language* may be obtained by students chiefly interested in language competence, who have completed the following courses: GERA10Y, GERA19H, GERB20Y, GERB19Y, GERC10Y, or their equivalent. This course of study may be of interest to students in the Social Sciences who are attracted to international relations.

A Workstudent Programme in the Federal Republic of Germany is available to qualified students. The Federal Republic of Germany guarantees a job for the months of June and July and allows for independent travel in August.

The German government, through the Goethe Institute, also makes available various scholarships for intensive language studies to qualified Scarborough students.

Major Programme in German Language
Supervisor: H. Ohlendorf
The Programme consists of the following courses:

GERA10Y	Introductory German
and	
GERA09H	Language Practice I
GERB20Y	Intermediate German
and	
GERB19Y	Language Practice II
GERC01F/S	The Last Hundred Years
GERC02F/S	History of the German Language
GERC03F/S	Language in a Literary Context
GERC10Y	Advanced Conversation and Composition
LINA01Y	General Linguistics (a more theory-oriented course)

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 reading.

See also the following courses in translation:

HUMB01Y	Introduction to Literature
JDHB16Y	Dramatic Literature and Political Revolution
GERB21F/S	Twentieth Century Prose
HUMB43F/S	Science, Power and Hell: The Story of Dr. Faustus

GERA10Y Introductory German
Telephone ID #: 06811063
The fundamentals of the German Language.

Grammar, syntax, and vocabulary are introduced to provide a basic knowledge of the language. There are three hours per week of intensive language work. Students are also encouraged to make use of available computer learning programmes and language tapes.
Corequisite: GERA09H
Session: Winter Day
Staff

GERA09S Language Practice I
Telephone ID #: 06810953
A practical complement to GERA10Y.

This course is designed to reinforce and supplement through oral practice the grammar work done in GERA10Y, as well as to expand the students' skills to communicate in German. This course commences in spring 1992. There are 3 hours of conversational language practice per week, supplemented by work with language tapes.
Corequisite: GERA10Y
Session: Winter Day
Staff

GERB20Y Intermediate German
Telephone ID #: 06822063
Intensive language work involving a review of grammatical principles in the context of readings, oral exercises and written composition.

Mimeographed material on current events may 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
Telephone ID #: 06821963
A practical complement to GERB20Y.

This course is designed to increase the students' vocabulary and fluency in German through supervised discussion, essay writing, and reading.
Prerequisite: OAC German or Grade 13 German or GERA09 and GERA10
Corequisite: GERB20
Session: Winter Day
H. Wittmann

GERC10Y Advanced Composition and Conversation
Telephone ID #: 06831063
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.
H. Ohlendorf

GERD10, 11, 12F
GERD13, 14, 15S
GERD16Y
Supervised Reading
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 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 1991-92

GERC01F	The Last Hundred Years Exclusion: (GERB24F/S)
GERC02S	History of the German Language Exclusion: (GERB33S) Prerequisite: OAC German or Grade 13 German or GERA09 and GERA10
GERC03F	Language in a Literary Context Prerequisite: GERB19 and GERB20
GERD01Y	Advanced Language Practice Exclusion: (GERC50Y) Prerequisite: GERC10Y

Greek

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
GRKB10Y	Intermediate Modern Greek
GRKB11S	Plato: Apology
GRKC22Y	Images of Modern Greece: 1936 to the Present
GRKC30-34F GRKC35-39S GRKC40Y	Supervised Reading

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
GRHC29Y	The Romanization of Western Europe 200 B.C. - A.D. 400

For further information see under *Classical Studies*.

History

Discipline Representative: E.W. Dowler (287-7145)
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. History can also be usefully combined with language study.

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 upper-level courses students investigate more specific areas, periods, or problems. D-series 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.

Students are advised to consult the prerequisites for C- and D-level courses when planning their individual programmes.

Specialist Programme in History
Supervisor: W.M. Dick (287-7144)

1 Number of Courses
Students must complete ten full-course equivalents in History (HIS or GRH). These ten must include HISA01Y and five upper-level full-course equivalents (C/D-level courses on the Scarborough Campus, 300/400-level courses on the St. George Campus). At least one of the five must be a D/400-level course. In addition, students must complete two full-course equivalents in disciplines other than History. Students are encouraged to follow a sequence of language courses in fulfilment of this requirement.

2 Pre-1815 Courses
Of the ten at least two full-course equivalents must deal with the period prior to 1815 (All GRH courses and as indicated in the HIS course descriptions).

3 Areas of Study
Students are also required to take courses in at least three different areas as indicated in the course descriptions.

Among the five upper-level full-course equivalents at least two courses must be within one area (one and one-half full-course equivalents may meet this requirement).

Major Programme in History
Supervisor: W.M. Dick (287-7144)

1 Number of Courses
Students must complete seven full-course equivalents in History (HIS or GRH). These seven must include HISA01Y and three upper-level courses (C/D-level courses on the Scarborough Campus, 300/400-level courses on the St. George Campus.

2 Pre-1815 Course
Of the seven at least one full-course equivalent must deal with the period prior to 1815 (All GRH courses and as indicated in the HIS course descriptions).

3 Areas of Study
Students are also required to take courses in at least two different areas as indicated in the course descriptions.

Courses in History

HISA01Y The European World: An Introduction to History
Telephone ID #: 07510163
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 student is essential.
0.5 Pre-1815 credit
European Area
Session: Winter Day
J. Pearl, M. Eksteins
Offered 1992/93 and 1993/94

HISB02Y *Britain from the Eighteenth Century to the Present*
Telephone ID #: 07520263
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 abandoned their imperial role and concentrated on the establishment of a welfare state. Two lectures and one tutorial per week.
British Area
Session: Winter Day
F. Iacovetta
Offered 1992/93 and 1993/94

HISB03Y History of the United States
Telephone ID #: 07520363
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.
American Area
Session: Winter Day
A. N. Sheps, W. M. Dick
Offered 1992/93 and 1993/94

HISB04Y Introduction to Canadian History
Telephone ID #: 07520463
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.
Canadian Area
Session: Winter Day
F. Iacovetta
Offered 1992/93 and 1993/94

HISB06Y Europe in the Middle Ages
Telephone ID #: 07520663
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.
Pre-1815 credit
Medieval Area
Session: Summer Evening, Winter Day
M. Gervers
Offered 1992/93 and 1993/94

HISB07Y Russia from the Thirteenth Century to the Present
Telephone ID #: 07520763
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.
0.5 Pre-1815 credit
Russian Area
Session: Winter Day
E. W. Dowler
Offered 1992/93
Not offered 1993/94

HISC16Y Modern France 1750 to the Present
Telephone ID #: 07531663
An exploration of the transition from agricultural monarchy to industrial republic.

Topics will include the revolutionary tradition, the persistence of social conflict, the French sense of world mission, cultural history, the present stalemate between Left and Right, parallels and contrasts to the Canadian experiences of nationalism, regionalism, and modernization. Two lecture hours plus tutorial per week.
Exclusion: (HISB16)
Prerequisite: HISA01 or permission of instructor.
Session: Winter Day
J. Pearl
Not offered 1992/93
Offered 1993/94

HISC18Y Europe in the Enlightenment, 1700-1789
Telephone ID #: 07531863
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 so-called enlightened despots to apply Enlightenment ideas to the life of their states will be examined.

Lectures and tutorials.
Exclusion: (HISB18)
Prerequisite: HISA01
Pre-1815 credit
European Area
Session: Winter Day
E. W. Dowler
Offered 1992/93
Not offered 1993/94

HISC31F Slavery in the American South
Telephone ID #: 07533133
An examination of Southern society and slavery from the colonial period to the Civil War.

Topics will include the origins and growth of slavery and the plantation, the economics of slavery, race relations, daily life under slavery and Southern political and social structure and ideas.
Exclusion: (HISB31)
Prerequisite: HISB03
American Area
Session: Winter Day
A. Sheps
Not offered 1992/93
Offered 1993/94

HISC35Y Twentieth-Century America
Telephone ID #: 07533563
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
American Area
Session: Winter Evening
W. M. Dick
Offered 1992/93 and 1993/94

HISC45F Immigrants and Race Relations in Canadian History
Telephone ID #: 07534533
The history of immigrants, immigration policy, and race relations in Canada from the European-Native contact period to the post-World War II era.

Organized partly chronologically and partly by theme, the lectures and reading material will introduce students both to the perspectives and methodologies of the field and to the diversity of the ethnic/racial experience in Canada. Immigrants' lives as pioneer farmers, male sojourners, industrial workers, domestics, entrepreneurs, radicals, and as members of families are considered. The course highlights the experience of such groups as Canada's first peoples, the famine Irish, West Coast Asians, continental Europeans, and American and West Indian Blacks.
Prerequisite: HISB04
Session: Winter Day
F. Iacovetta
Not offered 1992/93
Offered 1993/94

HISC78F Social History of Imperial Russia, 1700-1900
Telephone ID #: 07537833
The development of Russian society from the revolutionary reforms of Peter the Great to the counter-revolutionary reforms of Alexander III.

The evolution of social classes, the nature of Russian peasant society, women in society, urbanization, and proletarianization will be among topics discussed in this course.
Prerequisite: HISB07
Russian Area
Session: Winter Evening
W. Dowler
Not offered 1992/93 and 1993/94

HISC84F Popular Culture in Early Modern Europe
Telephone ID #: 07538433
An investigation of mentalities and society in Europe from the fifteenth to the eighteenth century.

This course will explore many areas of popular society, examining how people lived, and especially what they believed in. We will look at popular religion, folklore, and witchcraft, in order to observe the interaction of the world views of different social strata.

Two hours of lecture and one tutorial per week.
Exclusions: (HISB14), (HISC14)
Prerequisite: HISA01
0.5 Pre-1815 credit
European Area
Session: Winter Day
J. L. Pearl
Offered 1992/93 and 1993/94

HISC87Y Germany in the Nineteenth and Twentieth Centuries
Telephone ID #: 07538763
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
European Area
Session: Summer Evening, Winter Day
M. Eksteins
Offered 1992/93 and 1993/94

HISD01F
HISD02S
HISD03Y 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 full-course 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

HISD11S Crime and Punishment in Early Modern Europe 1500-1800
Telephone ID #: 07541153
A seminar investigating concepts of law, court systems, and penalties in Early Modern Europe.

The course will examine how legal systems reflected their societies. Lay courts and ecclesiastical courts (inquisitions) will be studied. The use of torture, corporal, and capital punishment will be examined in the context of societies and their values. Limited enrolment: 20.
Prerequisite: HISA01 and one B or C level course in history.
0.5 Pre-1815 credit
British/European Areas
Session: Winter Day
J. L. Pearl
Offered 1992/93 and 1993/94

HISD15Y Social History
Telephone ID #: 07541563
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.
American/British/European Areas
Session: Winter Day
W. M. Dick
Offered 1992/93 and 1993/94

HISD17Y European Society and Culture in the Twentieth Century
Telephone ID #: 07541763
An investigation of the impact of war, technology, economic crisis, and totalitarianism on the social condition and mind of European man.

Two-hour seminar. Limited enrolment: 15. Exclusion: (HISC17)
Prerequisite: HISA01 and one B- or C-level course in History
European Area
Session: Winter Day
M. Eksteins
Offered 1992/93 and 1993/94

HISD32Y Colonial and Revolutionary America and the British Empire, 1607-1787
Telephone ID #: 07543263
An examination of the origins of American society and institutions in the seventeenth century and their development in the eighteenth century, the origins, course and effect of the American Revolution and the Constitution and their relation to Western political thought, and the impact of the Revolution on British North America and Britain.

A two-hour weekly seminar, based on suggested readings and class discussion.
Exclusion: HISD34F/S
Prerequisite: Any *one* of HISB02, HISB03, HISB04 or HISC18(HISB18)
Pre-1815 credit
American/British Areas
Session: Winter Day
A. N. Sheps
Offered 1992/93 and 1993/94

HISD62Y The Crusades
Telephone ID #: 07546263
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
Pre-1815 credit
Medieval Area
Session: Winter Evening
M. Gervers
Offered 1992/93 and 1993/94

Courses in Classical Studies (See Classical Studies for full course descriptions):

GRHB01Y Greek History from the Bronze Age to the Death of Alexander
Telephone ID #: 07120163
Pre-1815 credit
Ancient Greek and Roman
Session: Winter Day
A. Boddington
Offered 1992/93
Not offered 1993/94

GRHB02Y Greek and Roman History from the Death of Alexander to the Gracchi
Telephone ID #: 07120263
Pre-1815 credit
Ancient Greek and Roman
Session: Winter Day
J. Corbett
Not offered 1992/93
Offered 1993/94

GRHC29Y The Romanization of Western Europe
Telephone ID #: 07132963
Pre-1815 credit
Ancient Greek and Roman
A. Boddington
Not offered 1992/93 and 1993/94

Courses Not Offered in 1991-92

HISA02S The Twentieth Century World
Offered 1992/93
Not offered 1993/94

HISC10Y The Sexes since 1350
Exclusion: (HISB10)
Prerequisite: One of HISA01, HISB02, HISB03, HISB04, WSTA01 (JHSA01)
0.5 Pre-1815 credit
British/Canadian/European Areas
Offered 1992/93 and 1993/94

HISC11Y France from Reformation to Revolution, 1500-1789
Exclusion: (HISB11)
Prerequisite: HISA01
Pre-1815 credit
European Area
Offered 1992/93
Not offered 1993/94

HISC23Y Tudor and Stuart England
Exclusion: (HISB23)
Prerequisite: Any B-level full-course equivalent
Pre-1815 credit
British Area
Offered 1992/93
Not offered 1993/94

HISC46Y Atlantic Canada
Exclusion: (HISB46)
Prerequisite: HISB04
0.5 Pre-1815 credit
Canadian Area
Offered 1992/93 and 1993/94

HISC47Y The Canadian Left, 1867 to the Present
Exclusion: (HISB47)
Prerequisite: HISB04
Canadian Area
Not offered 1992/93
Offered 1993/94

HISC49S Canada Between the World Wars
Prerequisite: HISB04
Canadian Area
Offered 1992/93
Not offered 1993/94

HISC79F/S Social History of Revolutionary Russia
Prerequisite: HISB07
Russian Area
Not offered 1992/93 and 1993/94

HISC83Y Europe in the Reformation Era
Exclusion: (HISB13)
Prerequisite: HISA01
Pre-1815 credit
European Area
Offered 1992/93
Not offered 1993/94

HISC86F/S Revolutionary France
Prerequisite: HISA01
0.5 Pre-1815 credit
European Area
Not offered 1992/93 and 1993/94

HISD10F/S History of Feminism since the Eighteenth Century
Prerequisite: HISC10Y
British/European Areas
Not offered 1992/93
Offered 1993/94

HISD34F/S Revolutionary America, 1760-1790
Exclusion: (HISC34) HISD32Y
Prerequisite: Any one of HISB02 or HISB03 or HISB04
0.5 Pre-1815 credit
American Area
Not offered 1992/93 and 1993/94

HISD78Y The Russian Intelligentsia
Exclusion: (HISC78)
Prerequisite: HISB07 or RUSA01
Russian Area
Offered 1992/93
Not offered 1993/94

The History of Ideas

The Major Programme in The History of Ideas is no longer offered, but students currently enrolled in it will be allowed to complete the programme.

Humanities

Discipline Representative: C.V. Ponomareff (287–7166)

> "The study of culture is largely the study of continuities, and it is this sense of continuity rather than of uncritical acceptance we hope to impart to our students. We want them to acquire a habit of mind that looks for these continuities not only within the confines of their special field, but in all the manifestations of culture that surround them."
>
> E.H. Gombrich

> "Civilization means something more than energy and will and creative power... How can I define it? Well, very shortly, a sense of permanence."
>
> Kenneth Clark

As one of the College's four academic Divisions, Humanities comprises twelve distinct disciplines, such as Classical Studies, English, History, and the Modern Languages. Each of them offers a range of courses in its own area and its own programme(s) of study. These are listed under the pertinent headings in the Calendar.

In addition, the Division offers, under the rubric HUM, a number of courses which fall outside the purview of the traditional disciplines. These are concerned mainly with culture, civilization, and literature; and all have readings and instruction in English. These courses help establish an intellectual context in which staff and students can explore new approaches to learning and benefit from a more comparative and interdisciplinary approach to knowledge.

Within this context the Division offers a more general programme than is found in many of the traditional disciplines: The College Programme in Humanities. The requirements for this Programme are set out below, followed by a list of the HUM courses offered this year, several of which may form part of this Programme.

A number of individual disciplines also offer courses (in English) in the literature or culture of particular countries. These are relevant to the College Programme in the Humanities but are open equally to all interested students. They are listed after the HUM courses.

College Programme in the Humanities
Supervisor: W.C. Graham (287–7149)
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:

1 HUMA01Y
2 PHLA01Y
3 HISA01Y
4 One full-course equivalent in the arts: DRA, FAR, MUS
5 One full-course equivalent in language, literature, or linguistics: CLA, DRA, ENG, FRE, GER, HUM, ITA, LIN, 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 fulfill 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: ANTA01Y, ASTA03Y, JBHB01Y, POLB70Y, POLC74Y, SOCB03Y. Other courses offered by the Divisions of Life Sciences, Physical Sciences, and Social Sciences may be chosen to fulfill this requirement upon approval by the Supervisor.
7 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.

Specialist Programme in the Humanities
The Specialist Programme in the Humanities is no longer offered, but students currently enrolled in it will be allowed to complete the programme.

HUMA01Y Prologue*
Telephone ID #: 07810163
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,
Offered 1992/93 and 1993/94

HUMA02Y Composition: An Introduction to Expository Writing
Telephone ID #: 07810263
A university-level course for students who wish to improve their writing.

This is not a remedial course, nor a course in creative writing. It presumes a mastery of basic writing skills. It teaches the organization of arguments, effective sentence structure, and control of tone and diction, through the study of good prose and regular writing assignments. Lectures, discussions of prose specimens, and "workshop" sessions may be supplemented by one-on-one tutorial sessions and by computer-assisted instruction.

A diagnostic test at the beginning of classes will govern admission. Because much of the instruction is of an individual nature, section enrolment is strictly limited and not all students can be accommodated.
Session: Winter Day, Winter Evening, Summer Evening
TBA
Offered 1992/93 and 1993/94

HUMB04F Celtic Christianity 400-1500 A.D.
Telephone ID #: 07820433
A study of the Celtic Church in the Middle 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
C. Evans
Not offered 1992/93 or 1993/94

HUMB05S The Irish
Telephone ID #: 07820553
Aspects of Irish history, literature, and culture.

Irish history and characteristic features of Irish culture - ancient myths, art, and folklore - are presented with slide illustrations in a two-hour weekly lecture. A third hour is devoted to discussion of selected readings related to the lectures. These include early sagas, medieval poems, folkloric writings, and works by W. B. Yeats, James Joyce, and J. M. Synge. Our aim is to connect modern Irish culture with its ancient past and to try to put present political conflicts in their historical context.
Session: Winter Day
C. Evans
Not offered 1992/93 or 1993/94

HUMB06S Russian Short Fiction of the 19th and 20th Centuries
Telephone ID #: 07820653
The many guises of marginal man in the stories of Pushkin, Gogol, Turgenev, Dostoevsky, Chekhov, Gorky, Zamiatin, Solzhenitsyn, and others.
Exclusion: (LITB17)
Prerequisites: HUMB02Y (LITA01) or ENGA01 or FREA30 (FREB02) or one course in literature.
Exclusion: (HUMB11)
Session: Winter Day
C. Ponomareff
Offered 1992/93 and 1993/94

HUMB07F Russian Culture
Telephone ID #: 07820733
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
Not offered 1992/93
Offered 1993/94

JBHB01Y Introduction to Biological Sciences
Telephone ID #: 10020163
An introduction to the central concepts of Biology and their interrelationships.

The course is designed for students with no formal background in Biology but who have acquired some skill in reflection and in writing. Topics will include the functioning of cells and organisms and the relationships of organisms in space and time. The contemporary understanding of biological structures and functions will be illustrated by reference to common experience; genetic and ecological topics will be related to current ethical and political controversies which require biological input for their solution. Reading and essay writing will be an integral part of the course, supplemented by lectures and discussion periods.
Exclusion: BIOA03
Prerequisite: Either, two full-course equivalents in the Division of Humanities; or, two full-course equivalents in the Division of Social Sciences with permission of instructor.
Session: Winter Day
G.R. Williams
Offered 1992/93
Not offered 1993/94

HUMB19F Beyond Consciousness
Telephone ID #: 07821933
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 1990-91, 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, *Yoga: 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
Offered 1992/93 and 1993/94

HUMB43F Science, Power, and Hell: The Story of Dr. Faustus
Telephone ID #: 07824333
A literary examination of the myth of Dr. Faustus, scientist, philosopher, physician, and black magician, which originated in 1587 and has paralleled the development of modern science.

We will examine the popular *History of Dr. Johann Faustus* (1587), Christopher Marlowe's play *The Tragical History of Dr. Faustus* (1588), the puppet plays, J.W. Goethe's play *Faust* (1806-1832), and other works. The focus will be on the literary transmutation of the legend of Faust, and on such questions as the relation of faith to knowledge, knowledge to power, power to love. Throughout, close attention will be paid to the changing socio-political and intellectual circumstances, within which the various writers composed their versions of the story.
Exclusion: (LITB50S)
Prerequisite: LITA01 or ENGA01 or FREA30(FREB02Y) or one full course in literature
Session: Winter Day
H. Ohlendorf

HUMB45S The Spanish Civil War: Fact to Fiction
Telephone ID #: 07824553
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: Ayala, 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
Offered 1993/94
Not offered 1992/93

HUMB46S The Individual and the Totalitarian State
Telephone ID #: 07824653
An exploration of a crucial experience in our century as reflected in modern fiction.

The course will explore what is at stake in this confrontation, with special emphasis on the philosophy behind totalitarianism, its scope and variety of forms. The novels to be studied will be taken from Russian, German, French, English, and American fiction, and will be read in English.
Session: Winter Day
C. V. Ponomareff
Offered 1993/94
Not offered 1992/93

HUMB70Y Introduction to Cinema
Telephone ID #: 07827063
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.Q. Schonberg
Offered 1993/94
Not offered 1992/93

HUMC10S Humanities Seminar
Telephone ID #: 07831053
A special full-course equivalent seminar course, taken normally after the completion of ten full-course equivalents. Each member of the seminar undertakes an individual project and gives a report on it.

Topics for the seminars should be chosen in consultation with the Co-ordinator. 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
Offered 1992/93 and 1993/94

HUMC11H Arts Seminar
Telephone ID #: 07831143
A seminar/performance course combining at least two of: Fine Art Studio, Fine Art History, Drama and Music. Students will bring a proposal for a project to the supervisor early in the fall term and develop their proposals through the term. They will present their seminar/performance in the spring term. The form of presentation will depend upon the development of the proposal and the disciplines involved.
Prerequisites: at least 10 full-course equivalents in the Arts Programme.
Session: Winter Day
Co-ordinator: J. Hoogstraten
Offered 1992/93 and 1993/94

HUMC14Y Topics in Latin American Culture and Literature
Telephone ID #: 07831463
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
Offered 1993/94
Not offered 1992/93

HUMC53S Beyond Nihilism: Visions of Renewal
Telephone ID #: 07835353
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: HUMB02Y (LITA01) or ENGA01 or FREB02 or one full-course equivalent in literature.
Session: Winter Day
C. Ponomareff
Offered 1993/94
Not offered 1992/93

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 other courses.

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 Humanities.
Session: Winter Day
Offered 1992/93 and 1993/94

HUMD95-D99Y Individual Study Year
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
Staff
Offered 1992/93 and 1993/94

AADB01Y Introduction to Arts Administration and Policy
Telephone ID #: 00120163
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.
Exclusion: (HUMB90Y)
Session: Winter Day
P. Schafer
Offered 1992/93 and 1993/94

AADD10Y Senior Seminar in Arts Administration
Telephone ID #: 00141063
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)(HUMD30Y)
Session: Winter Day
P. Schafer
Offered 1992/93 and 1993/94

CLAA02Y Greek and Roman Mythology
Telephone ID #: 03010263
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 art-historical studies and will serve as an introduction to other courses in classics.
Exclusion: (HUMA11)
Session: Winter Day, Winter Evening
TBA
Offered 1992/93
Not offered 1993/94

Courses Not Offered in 1991-92

HUMB02Y Introduction to Literature
Exclusion: LITA01
Offered 1992/93 and 1993/94

HUMB03Y Celtic Mythology and Mediaeval Celtic Civilization
Not offered 1992/93
Offered 1993/94

HUMB27S Science Fiction
Offered 1992/93
Not offered 1993/94

HUMB39F Fantasy in Narnia and Middle Earth
Offered 1992/93
Not offered 1993/94

HUMB42Y The Modernist Adventure
Exclusions: (RUSB24),(SPAB33),(LITB22)
Prerequisite: One course in literature.
Offered 1992/93
Not offered 1993/94

HUMB44F Disaster and the Literary Imagination
Prerequisite: One course in literature
Exclusion: (LITB40)
Offered 1992/93
Not offered 1993/94

HUMB48Y Dramatic Literature and Political Revolution
Exclusion: (JDHB16)(JHGB50)(LITB15)
Prerequisites: One full-course equivalent in literature.
Offered 1992/93
Not offered 1993/94

HUMB58Y The Nineteenth Century Russian Novel, 1830-1880
Exclusion: (RUSB11), (LITB07Y)
Prerequisite: One course in literature.
Offered 1992/93
Not offered 1993/94

JHIC71S Italian Cinema
Exclusion: (JHIB71)
Prerequisite: For those taking the course as part of a Programme in Italian, ITAB01 or ITAB11; for others, none.

SPAB14F The Civilization of Spain I
Exclusion: (HUMB15)(HUMB09)(HUMC09)
Offered 1992/93
Not offered 1993/94

SPAB15S The Civilization of Spain II
Exclusion: (HUMB15)(HUMB10)(HUMC13)
Offered 1992/93
Not offered 1993/94

Italian

Discipline Representative:
A. Franceschetti: (287–7167)
Scarborough College offers a 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 ITAB01; students from ITAA11 may take ITAB11. One of the two courses (ITAB01 and ITAB11) is pre- or corequisite to all other ITA courses taught in Italian. 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, and Humanities.

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 language while taking or after completing any B-level course in Italian language.

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 (287-7180)
Seven full-course equivalents, as follows:
Option A (for students who have no prior knowledge of Italian or its dialects):

1	ITAA01Y	Introductory Italian
	and	
	ITAA02H	Language Practice
2	ITAA03S	Conversation II
	or	
	ITAB03F	Intermediate Conversation I
3	ITAB01Y	Intermediate Italian I
4	ITAC01Y	Language Practice
5	ITAC22F/S	Introduction to Modern and Contemporary Literature
6	One and one-half full-course equivalents from among the following: ITAB06S, ITAC04H, ITAC05F/S, ITAC20F/S, ITAC23F/S, JHIC71F/S	
7	LINA01Y	General Linguistics

Option B (for students with some prior knowledge of Italian or one of its dialects):

1	ITAA11Y	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, ITAB06S, ITAC04H, ITAC05F/S, ITAC20F/S, ITAC23F/S, JHIC71F/S	
7	LINA01Y	General Linguistics

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 their Programme as soon as possible with the Supervisor.

Major Programme in Italian Language and Literature
The Major Programme in Italian Language and Literature is no longer offered, but students currently enrolled in it will be allowed to complete the programme.

ITAA01Y Introductory Italian
Telephone ID #: 08610163
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
Telephone ID #: 08610243
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. Class-time 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
Telephone ID #: 08610353
Practical application of the language structures introduced in ITAA01 and ITAA11.

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.
Corequisite: ITAA01 or ITAA11
Session: Winter Day
S. Mittler

ITAA11Y Elementary Italian
Telephone ID #: 08611163
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 ITAA03 concurrently with it.
Session: Winter Day
J. Campana

ITAB01Y Intermediate Italian I
Telephone ID #: 08620163
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
D. McAuliffe

ITAB03F Intermediate Conversation I
Telephone ID #: 08620333
An advanced course in conversation for those students with sufficient knowledge of Italian.

This course offers the opportunity to improve oral and aural skills in Italian. Attention will be given to idioms and special constructions in readings or in discussions focusing on Italian culture and civilization. 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
S. Mittler

ITAB11Y Intermediate Italian II
Telephone ID #: 08621163
A continuation of ITAA11Y.

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

ITAB31Y Dante's Divine Comedy
Telephone ID #: 08623163
A study of the *Divine Comedy* within the literary and cultural context of the Middle Ages.

The course introduces students to Dante's *Divine Comedy* with specific reference to the problems, mentality, and cultural patterns of man in the Middle Ages. The lectures will examine Dante's masterpiece against the background of medieval literature, focusing on a selection of *canti* and their significance in terms of the life and culture of times.

Lectures and readings will be in English. Students planning to count this course towards a Programme in Italian should consult the instructor.
Exclusion: ITAC31Y
Session: Winter Day
A. Franceschetti

ITAC01Y Language Practice
Telephone ID #: 08630163
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
J. Campana

ITAC04F Advanced Composition
Telephone ID #: 08630433
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

ITAC08F Comparative Translation of Italian and French
Telephone ID #: 08630833
Practice in translation from English to Italian and French.

A variety of texts (from fields such as business, science, and literature) in a variety of styles (journalistic, academic, colloquial etc.) will be translated synchronously into Italian and French; translation strategies will be examined comparatively.
Prerequisites: ITAB01 or ITAB11 plus FREB10 or FREB08; or permission of instructor.
Session: Winter Day
S. Mittler

ITAC22F Introduction to Modern and Contemporary Literature
Telephone ID #: 08632233
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

JHIC71S Italian Cinema
Telephone ID #: 13637153
A survey of the development of Italian cinema from World War II to the present.

Films by Rossellini, Antonioni, Fellini, Pasolini, and other post-war Italian directors will be shown during the course, which will meet four hours per week. Besides participating in the discussions, students will be required to write a brief review on each film, and one end-of-term essay for which a cinematic project (a short film plus a scenario) may be substituted. *This course is open both to students with no previous knowledge of Italian language and culture and to specialists in Italian.* Specialists in Italian will be expected to do their written work in Italian.
Exclusion: (JHIB71)
Prerequisite: For those taking the course as part of a Programme in Italian, ITAB01 or ITAB11; for others, none.
Session: Winter Day
J. Campana

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 1991-92

ITAB06S	Intermediate Conversation II Corequisite: ITAB01 or ITAB11
ITAC05S	Practical Translation Exclusion: (ITAB05) Corequisite: ITAB01 or ITAB11
ITAC20F	Modern Italy Exclusion: (HUMB18), (ITAB20) Prerequisite: ITAB01 or ITAB11
ITAC23S	Survey of Italian Literature from the Middle Ages to the Renaissance Exclusion: (ITAB23) Prerequisite: ITAB01 or ITAB11
ITAC31Y	Dante and Medieval Culture Exclusion: ITAB31 Prerequisite: ITAB01 or ITAB11; a course in Italian Literature such as ITAC22 and ITAC23, is recommended 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 recommended but not required.

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
JBHB01Y Introduction to Biological Sciences

Biology and Philosophy
BJPC70 Theoretical Foundations of Biology I
BJPC71 Theoretical Foundations of Biology II

Drama and Humanities
JDHB16Y Dramatic Literature & Political Revolution

Geography and Economics
JEGB27F Location and Spatial Development

Humanities and Fine Art
JHFC40Y Vienna and the Origins of Contemporary Culture

Humanities and Italian
JHIC71S Italian Cinema

Linguistics and Psychology
JLPB55H Psycholinguistics
JLPC24S Developmental Psycholinguistics
JLPD55S Disorders of Speech and Language

Mathematics and Computer Science
JMCC31H Combinatorics
JMCC32H Graph Theory and Algorithms for its Applications

Spanish and Drama
JSDD16Y Golden Age Spanish Drama

Language and Literature

The Specialist Programme in Language and Literature is no longer offered but students currently enrolled in it will be allowed to complete the programme.

Language Studies

Centre for University Studies in Language
Co-ordinator: TBA
The Centre exists to ensure coherent and integrated language programmes based on new and traditional 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 should consult 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 in the Federal Repubic of Germany.

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.
2 LINA01Y General Linguistics, except where already included in the Major Programme.
3 LATA01Y or OAC French or Grade 13 French.
4 One full-course equivalent from the following, the choice to be approved by the Supervisor, for every combination other than French/Spanish:
HISA01Y European World
HUMA01Y Prologue

Major Programme in French Language
Seven full-course equivalents, including:
1 FREA10Y, FREB10Y, FREC10Y
2 two full-course equivalents from the following: FREB08F/S, FREB18Y, FREB25Y, FREB42Y, FREB43Y, FREB48Y, FREC09Y, FREC16Y, FREC18F/S.
3 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, FREA50 and FREB90F/S.
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
GERC01F/S The Last Hundred Years
GERC02F/S History of the German Language
GERC03F/S Language in a Literary Context
GERC10Y Advanced Conversation and Composition
LINA01Y General Linguistics

Major Programme in Italian Language
Seven full-course equivalents, as follows:
Option A (for students who have no prior knowledge of Italian or its dialects):
1 ITAA01Y Introductory Italian
and
ITAA02H Language Practice
2 ITAA03S Conversation II
or
ITAB03F Intermediate Conversation I
3 ITAB01Y Intermediate Italian I
4 ITAC01Y Language Practice
5 ITAC22F/S Introduction to Modern and Contemporary Literature
6 One and one-half full-course equivalents from among the following: ITAB06S, ITAC04H, ITAC05F/S, ITAC20F/S, ITAC23F/S, JHIC71F/S
7 LINA01Y General Linguistics

Option B (for students with some prior knowledge of Italian or one of its dialects):
1 ITAA11Y 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, ITAB06S, ITAC04H, ITAC05F/S, ITAC20F/S, ITAC23F/S, JHIC71F/S
7 LINA01Y General Linguistics

Major Programme in Spanish Language
Seven full-course equivalents as follows:
SPAA01Y Introductory Spanish
SPAA02H Introductory Spanish Language Practice
SPAB01Y Intermediate Spanish
SPAB02H Intermediate Spanish Language Practice
SPAB04F Phonetics
SPAB12S History of the Spanish Language I
SPAC01Y Advanced Spanish
SPAB14F The Civilization of Spain I
SPAB15S The Civilization of Spain II
or
HUMC14Y Topics in Latin American Culture and Literature
SPAC21F Stylistics and Translation
SPAC22F History of the Spanish Language II

(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.)

Language requirements for any of the above Programmes will be waived by the Supervisor for students judged to have advanced knowledge of the language.

Equivalent courses will be substituted in consultation with the Supervisor.

Students might also refer to the following Programmes:

Classical Studies
Linguistics

The following **courses** are offered in Languages. (For full course descriptions, pre- and corequisites, course cycling, etc., see under French, Classics, German, Italian, Russian, Spanish. Courses in brackets are not offered in 1991-92.)

FREA10Y Language Practice I
(FREA16Y Introductory French II)
FREB08F/S Practical Translation
FREB10Y Language Practice II
FREB17F/S Intermediate Conversation II
FREB18Y Commercial French
FREB25Y Introduction to French Linguistics
(FREB42Y General History of the French Language)
(FREB43Y The French Language in Canada)
(FREC09Y Comparative Stylistics)
FREC10Y Language Practice III
FREC11F/S Teaching French as a Second Language
FREC18F/S Translation for Business and Professional Needs
(FRED16B Advanced French)

GERA10Y Introductory German
GERA09H Language Practice I
GERB20Y Intermediate German
GERB19Y Language Practice II
(GERC02F/S History of the German Language)
(GERC03F/S Language in a Literary Context)
GERC10Y Advanced Composition and Conversation
(GERD01Y Advanced Language Practice)

GRKA01Y Introductory Greek
GRKB02F Introduction to Greek Authors
GRKB10Y Intermediate Modern Greek

ITAA01Y Introductory Italian
ITAA02H Introductory Italian Language Practice
ITAA03S Conversation II
ITAA11Y Elementary Italian
ITAB01Y Intermediate Italian I

ITAB03F	Intermediate Conversation I
(ITAB06S	Intermediate Conversation II)
ITAB11Y	Intermediate Italian II
ITAC01Y	Language Practice
ITAC04F	Advanced Composition
(ITAC05F/S	Practical Translation)
(LATA01Y	Introductory Latin)
LATB02F	Introduction to Latin Authors
RUS	Introductory and Intermediate Language courses are not currently offered. Students with an advanced knowledge of the language may take: RUSC02H-C05H Supervised Reading
SPAA01Y	Introductory Spanish
SPAA02H	Introductory Spanish Language Practice
SPAB01Y	Intermediate Spanish
SPAB02H	Intermediate Spanish Language Practice
(SPAB04F	Phonetics)
(SPAB12S	History of the Spanish Language I)
SPAC01Y	Advanced Spanish
SPAC21F	Stylistics and Translation
SPAC22F	History of the Spanish Language II

See also courses in LINGUISTICS

Latin

Courses are offered in introductory Latin (LATA01, LATB02) and Latin literature (LATB11), LATC30, etc.).

LATB02F	Introduction to Latin Authors
LATB11S	Catullus
LATC30F-34F LATC35S-39S LATC40Y	Supervised Reading

For further information see under *Classical Studies*

Linguistics

Discipline Representative: J.D. Woods (287–7172)

Linguistics deals with all possible aspects of language. It has its own theory about the basic structure of language in such core areas as phonetics (what human sounds are possible speech sounds; how are they made and perceived?); phonology (how do languages choose sounds from the inventory of possible speech sounds to make the sound system of any given language?); morphology (how do sounds combine to form words?); syntax (how do we build sentences?); and semantics (the study of meaning in all its possible forms). Linguistics studies how language changes over time and what forces cause such change.

Linguists have interests in common with psychologists (psycho-linguistics--what's the relationship between language and mind? How does a child learn its language, or a second or subsequent language? What can language tell us about how the mind works? What's wrong when language goes wrong?); sociologists (sociolinguistics -- what's the relationship between language and society? How does your use of language tell people about your social roles and relations?); anthropologists (ethnolinguistics -- what's the relationship between language and culture? What does your use of language tell others about your cultural values?); computer scientists (much of computer language "syntax" is based on that of human language); and students/teachers of languages (a teacher, in particular, has to be keenly aware of the structure of the language she/he is teaching). Ultimately, a strong awareness of language is important, even in seemingly unrelated areas, such as law, where a knowledge of syntax and semantics is of primary importance.

Specialist Programme in Linguistics

Supervisor: J.D. Woods (287–7172)

The Specialist Programme in Linguistics: Thirteen full-course equivalents, as follows:

1 LINA01Y General Linguistics
or
LINA05Y Practical Language Study
2 LINB01Y Practical Language Analysis
and
LINB09F Phonetics
3 LINC02S Phonology
and
LINC11Y Syntax

4 Three further C- or D-level full-course equivalents in LIN or JLP, or in a related discipline, as approved by the Supervisor of Studies.
5 Two further full-course equivalents in LIN or JLP.
6 One full-course equivalent from among the following courses:

ENGB01Y	Old English Language and Literature
FREB25Y*	Introduction to French Linguistics
FREB42Y*	General History of the French Language
FREB43Y	The French Language in Canada
FREB48Y*	Theoretical and Practical Phonetics
GERC02F/S*	History 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.

7 Two full-course equivalents in a language which is not the student's native language.
8 One full-course equivalent in a third language or equivalent demonstrated ability.

Please note: Neither LINA04S nor LINB05Y can be counted toward the Specialist Programme in Linguistics.

Major Programme In Linguistics

Supervisor: J.D. Woods (287–7172)

The Major Programme in Linguistics: Seven full-course equivalents, as follows:

1 LINA01Y General Linguistics
or
LINA05Y Practical Language Study
2 LINB01Y Practical Language Analysis
and
LINB09F Phonetics
3 LINC02S Phonology
and
LINC11Y Syntax
4 a. Three further full-course equivalents in LIN or JLP, of which at least one must be at the C- or D-level.
or
b. Two further full-course equivalents in LIN or JLP *and* one C-level full-course equivalent in a language. (Only 4a is permitted when this programme is taken as part of the Modern Languages Specialist Programme.)

Please note: Neither LINA04S or LINB05Y can be counted toward the Major Programme in Linguistics.

LINA01Y General Linguistics: the Theory of Language

Telephone ID #: 20010163

An introduction to the various methods and theories of language analysis, and to the relationships between language and mind, language and culture, and language and society.

Topics such as the following will be covered: 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.J. Binnick, R. Smyth
Offered every year

LINB01Y Practical Language Analysis

Telephone ID #: 20020163

Analysis of sound, word and sentence structure in a broad variety of languages of the world. Starting with the techniques of linguistic analysis studied in LINA01 or LINA05, students will analyze phonological, morphological, and syntactic data from a representative variety of language types. Problem sets will be distributed in class. Lectures will focus on how to organize data for analysis, how to draw upon general principles of language structure to identify possible solutions, and how to decide which of several competing solutions is best. Implications for different schools of linguistic theory will also be discussed.

Prerequisite: LINA01 (LINA05)
Exclusion: LINB02, LINB16
J. D. Woods
Offered every year

LINB03S Sociolinguistics: the Study of Language and Society

Telephone ID #: 20020353

The effect of social factors on the form and use of language and the impact which linguistic variation can have on society.

Topics will include: speech varieties within a language, e.g. regional and social dialects, speech styles and registers; the role of speech varieties as symbols of group affiliation; multilingualism within a community or nation; the diverse social factors resulting in the spread or death of languages, and the creation of new languages such as pidgins and creoles; and the ways in which the social

situation can affect speakers' use of language and choice of linguistic forms.
Prerequisite: LINA01 (LINA05), or LINA04 with permission of instructor.
Exclusions: (LINB14, LINC15, LINB07)
Session: Winter Day
D. M. James
Not offered 1992/93
Offered 1993/94

LINB09F Phonetics: the Study of Speech Sounds
Telephone ID #: 20020933
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 transcription. We will discuss material from the prescribed readings and problems which are to be solved.
Students are strongly urged to take LINB09F before LINC02S.
Prerequisite: LINA01 (LINA05)
Session: Winter Day
J.D. Woods
Offered every year

JLPB55S Psycholinguistics
Telephone ID #: 14225553
Experimental evidence for theories of how humans produce and understand language, and of how language is represented in the mind.

Topics will include the perception and categorization of speech sounds; retrieval of words from memory during speech and listening; use of grammatical knowledge in planning and understanding sentences; production and comprehension of longer stretches of discourse; and the role of memory systems in language processing.
Prerequisite: One full-course equivalent in LIN *and* PSYA01
Session: Winter Day
R. Smyth
Offered every year

LINC02S Phonology: Sound Systems of Language
Telephone ID #: 20030253
Theoretical issues of phonology.

We will attempt to cover both Generative theory and several aspects of Non-linear theory (Underspecification, as well as the theories of Lexical, Metrical, and Autosegmental phonology).

This course will assume familiarity with phonological problem-solving methods; we will read, discuss, and evaluate basic works from the recent theories outlined above.
Students are strongly urged to take LINB09F before LINC02S.
Prerequisite: LINB01Y
Session: Winter Day
J.D. Woods
Offered every year

LINC06S Language Change
Telephone ID #: 20030653
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 (LINA05)
Session: Winter Day
R.I. Binnick
Not offered in 1992/93 or 1993/94

LINC11Y Syntax: the Study of Sentence Structure
Telephone ID #: 20031163
The principles underlying the formation of sentences.

Students will analyze linguistic data so as to determine the principles and constraints which govern sentence formation and the expression of meaning via sentence structure. Particular attention will be paid to those features of syntax which appear to be universal in languages; a focus of concern will be the ways in which these may be best accounted for in a general theory of syntax. Current theoretical approaches will be studied in detail.
Prerequisite: LINB01
Exclusion: (LINB11)
Session: Winter Day
D.M. James
Offered every year

LINC28F Language and the Sexes
Telephone ID #: 20032833
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 speakers.

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, PSY, or WST.
Exclusion:(LINB28)
Session: Winter Day
D.M. James
Not offered 1992/93
Offered 1993/94

JLPD55F Disorders of Speech and Language
Telephone ID #: 14245533
Pathologies of language acquisition and comprehension/production.

Topics include the anatomy and physiology of the speech and hearing mechanism, voice disorders (hoarseness, harshness, dysphonia, alaryngeal speech), functional articulation disorders, cleft palate, aphasia, apraxia, dysarthria, language delay, language/learning disabilities, mental retardation, hearing and auditory processing disorders, and the identification of pathologies in speakers of other dialects or languages than that of the clinician.
Exclusion: (LINB29, JLPC55)
Prerequisites: One full-course equivalent in LIN and PSYA01, and one C-level full-course equivalent in LIN, PSY, or JLP.
Session: Winter Day
R. Smyth
Not offered 1992/93
Offered 1993/94

LIND01F/S
LIND02F/S
LIND03F/S
LIND04F/S
LIND05Y 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 full-course equivalent in Linguistics; permission of instructor.
Session: Winter Day
Staff
Offered every year

Courses Not Offered in 1991-92

LINA04S Introduction to Language
Exclusion: LINA04 may not be taken by students who have credit for LINA01 or LINA05. LINA01 and LINA04 may not be taken in the same session.
Not offered 1992/93 or 1993/94

LINB27F Animal Communication and the Nature of Language
Prerequisite: One course in LIN, or PSY, or SOC, or ANT, or BIO
Not offered 1992/93 or 1993/94

LINC12F Semantics: The Study of Meaning
Corequisite: LINB01Y
Not offered 1992/93 or 1993/94

LINC14S Pragmatics: The Study of Language Use
Prerequisite: LINC12
Not offered 1992/93 or 1993/94

JLPC24S Developmental Psycholinguistics
Exclusions: (LINB15), (JLPB24)
Prerequisite: One full-course equivalent in LIN and PSYA01, and one B-level full-course equivalent in either LIN, PSY, or JLP.

LINC25F Second Language Learning
Prerequisite: One full-course equivalent in LIN and PSYA01, and one B-level full-course equivalent in either LIN, PSY, or JLP.

LINC26F Second Language Teaching
Not offered 1992/93 or 1993/94

LIND21Y Investigation of a Language
Exclusion: (LINC2l)
Prerequisite or Corequisite: LINB01, LINB02
Offered 1992/93
Not offered 1993/94

Literature

Discipline Representative: H. Wittmann (287–7107)
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:

1. **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.
4. **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 (287–7107)
This Programme is no longer being offered; however, students currently enrolled will be allowed to complete it.

HUMB02Y 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

For courses previously listed under LIT, see **Humanities**.

Management

Assistant Chairman: Professor Sandford Borins
Management courses are designed for those students who intend to specialize in the area and for those students who intend to combine a Management concentration with studies in other areas. Courses in Management should help students to develop the analytical skills needed to diagnose and solve problems in business and government.

Students may take Management 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 Management 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 most Management 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 Management 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.

Management Programmes
There are three Specialist Programmes as well as a Major Programme in Management. Registration in all four programmes is limited. Each year a total of 160 students are admitted to the Specialist and Major Programmes. 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) MGTA01 and ECOA02 or ECOA03, plus MATA28 or MATA26 if applying to either of the Specialist Programmes). Students should be aware that calculus is required in all three specialist programmes. The normal course to meet this requirement is MATA28. Students may also meet this requirement by taking both MATA26 (or MAT133 at St. George) and MATB41.

Students applying for admission on completion of their first year of studies will be evaluated based on all their grades, including the prerequisites for admission to the Programme. Student applying with more than five credits will also be evaluated on all their grades. Students who have completed more than ten credits will not normally be considered for admission to either the Specialist or Major programmes.

The three 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 Management allows a student the opportunity to pursue some degree of specialization in a specific area of management. The Specialist Programme in Management and Economics combines management courses with a solid grounding in economics. The Specialist Programme in Management and Economic Theory prepares students for graduate work in economics while providing a firm grounding in management.

The Major Programme in Management 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 Management
Supervisor G. Hunt

Registration in this Programme is limited. Selection will be based on all grades including the following prerequisite courses: MGTA01, ECOA02 or ECOA03, and MATA26 or MATA28. Students who have completed more than ten credits will not normally be considered for admission to the Specialist Programme.

The Programme requires the completion of the following minimum requirements as part of a twenty-course degree:

1. Eight full-course equivalents in Management including MGTA01, MGTB01, MGTB27, MGTC02, MGTC72, MGTC73. See Note A.
2. ECOA02 or ECOA03, ECOB03 or ECOB04, ECOB07 or ECOB08, ECOB11 or STAB22 and STAB47, and ECOB12.
3. MATA28 or MATA26 and MATB41.
4. CSCA56 and CSCA66 or CSCA58 and CSCA68.
5. Four *additional* full-course equivalents from courses other than MGT, ECO and JEG to include at least one full-course equivalent from among the following courses: CLAA01Y, CLAA02Y, CLAB11F/S, CLAB30F/S, CLAB31F/S, CLAB32F/S, CLAB33F/S, DRAB03Y, DRAB04Y, DRAB06Y, 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, 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, JBHB01Y, LITA01Y, MUSA01Y, MUSB14F/S, PHLA01Y, PHLB01F, PHLB03F, PHLB04S, PHLB05F, PHLB22S

Note A: The following courses may be counted as either Management or Economics courses: MGTC02, MGTC54, MGTC72, MGTC73, MGTD70, MGTD75. If they are used to meet the Economics requirements, other MGT

courses must be substituted in meeting the Management requirements.

Note: For programme purposes, POLB61, and POLB62 can be counted as either Management or non-Management courses. It is not necessary to obtain formal approval to apply these courses for credit toward the Management Programmes.

Recommendations for Area Concentration
Students who wish to pursue some degree of concentration in a specific area of Management studies should consider the following lists of recommended courses:
Accounting: MGTC01, MGTC10, MGTC15, MGTC30, MGTD50, MGTD55, MGTD60.
Marketing: MGTC04, MGTC05, MGTD07, MGTD08 ECOC41.
A course in research methods (SOCB01 or PSYB01).
Other related courses: ANTB16, ANTC10, ANTC19, ANTC32, PSYB10, PSYB50, PSYC11, PSYC12, PSYD15, PSYD16, SOCB23, SOCC34.
Finance: MGTD70, MGTD75, MGTC01.
Other related courses: ECOC11, ECOC13, ECOC14, ECOC31, ECOC32, ECOC61.
Organizational Behaviour: MGTC10, MGTC22, MGTC25, MGTC26, MGTC35, MGTC54.
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, SOCB33, SOCC07, SOCC22, SOCC35.
Public Mangement: MGTC35, MGTC42, MGTC54.
Other related courses: ECOB35, ECOC31, ECOC32, ECOC37, ECOC41, POLA50, POLB53, POLB61, POLB62, POLC54, SOCB04.

Specialist Programme in Mangement and Economics
Supervisor: G. Hunt
Registration in this Programme is limited. Selection will be based on all grades including the following prerequisite courses: MGTA01, ECOA02 or ECOA03, and MATA26 or MATA28. Students who have completed more than ten credits will not normally be considered for admission to the Specialist Programme.
The Programme requires completion of the following minimum requirements as part of a twenty-course degree:
1. Six full-course equivalents in Management including MGTA01, MGTB02, MGTB27, MGTC02, MGTC72, MGTC73. See Note A under Specialist Programme in Management.
2. Five full-course equivalents in Economics including: ECOA02 or ECOA03, ECOB03 or ECOB04, ECOB07 or ECOB08, ECOB11 or STAB22 and STAB47, and ECOB12.
3. MATA28 or MATA26 and MATB41.
4. CSCA56 and CSCA66 or CSCA58 and CSCA68.
5. Four *additional* full-course equivalents from courses other than MGT, ECO and JEG to include at least one full-course equivalent from among the Humanities options listed under the Specialist Programme in Management.

Major Programme In Management
Supervisor: G. Hunt
Registration in this Programme is limited. Selection will be based on all grades including the following prerequisite courses: MGTA01, and ECOA02 or ECOA03. Students who have completed more than ten credits will not normally be considered for admission to the Major Programme.
The Programme requires completion of the following as part of a fifteen or twenty-course degree:
1. Six full-course equivalents in MGT courses including MGTA01, MGTB01, and MGTB27. See Note A under Specialist Programme in Management.
2. Two full-course equivalents in Economics including ECOA02 or ECOA03.
3. Five additional full-course equivalents, one of which must be at the B, C, or D level, from courses other than MGT, ECO, or JEG, to include at least one full-course equivalent from among the Humanities options listed in the Specialist Programme.

Specialist Programme In Management and Economic Theory
Registration in this Programme is limited. Selection will be based on all grades including the following prerequisite courses: MGTA01, ECOA02 (though ECOA03 will be accepted in special cases), and MATA28 or MATA26. Students who have completed more than ten credits will not normally be considered for admission to this Programme.
This Programme requires completion of the following minimum requirements as part of the twenty-course degree:
1. Six full-course equivalents in Management, including MGTA01, MGTB01, MGTB27, MGTB02, MGTC72, MGTC73.
2. Seven and a half full-course equivalents in Economics, including ECOA02 or ECOA03, ECOB04, ECOB08, ECOB11 or STAB22 and STAB47, ECOB12, ECOC11, ECOC13, ECOC14, ECOD50.
3. MATA28 or MATA26 and MATB41; if the second combination is chosen, MATB41 may be included as one of the 7.5 required Economics courses;
4. Four additional full-course equivalents from courses other than MGT, ECO, and JEG to include at least one full-course equivalent from among the Humanities options listed under the Specialist Programme in Management.

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 (287–7550).

MGTA01Y Financial Accounting
Telephone ID #: 33510163
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.
Exclusion: (COMA01)
Session: Winter Day, Winter Evening, Summer Evening

MGTA02Y Introduction to Management
Telephone ID #: 33510263
Introduction to the process of management (planning, organizing, controlling, and directing), the functional components of profit and nonprofit organizations (accounting, finance, marketing, personnel, etc.), and the organization's role within a broader context: including ethical and societal considerations.
Extensive use will be made of case work and student presentations.
Exclusions: Any MGT (COM, JCE, JCS) credit other than MGTA01 (COMA01)
Prerequisites: None
Session: Winter Day

MGTB01Y Management Accounting
Telephone ID #: 33520163
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.
Enrolment is limited to students registered in programmes requiring this course.
Exclusion: (COMB01)
Prerequisites: MGTA01 (COMA01) and ECOA02 or ECOA03 (ECOA01)
Session: Winter Day, Winter Evening, Summer Evening

MGTB27Y Organizational Behaviour
Telephone ID #: 33522763
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.
Enrolment is limited to students registered in programmes requiring this course.
Exclusions: (JCSB27)
Session: Winter Day, Winter Evening, Summer Evening

MGTC01Y Intermediate Financial Accounting
Telephone ID #: 33530163
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 MGTA01 and, to a lesser extent, MGTB01. 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.
Exclusions: (COMC01)
Prerequisite: MGTB01 (COMB01)
Session: Winter Day, Winter Evening

MGTC02Y Corporation Finance
Telephone ID #: 33530263
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.
Exclusion: (JCEC02)
Prerequisites: MGTB01 (COMB01); ECOB03 or ECOB04; ECOB11. ECOB12 is strongly recommended.
Session: Winter Day, Winter Evening

MGTC04F Principles of Marketing
Telephone ID #: 33530433
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 mix-product, price, promotion and channel policies; marketing planning, evaluation and control. Limited enrolment: 60.
Exclusion: (COMC04)
Prerequisite: MGTB01 (COMB01). ECOB03 is recommended.
Session: Winter Day, Winter Evening, Summer Evening

MGTC05S Introduction To Marketing Management
Telephone ID #: 33530553
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: 60.
Exclusion: (COMC05)
Prerequisite: MGTC04 (COMC04). ECOB11 or equivalent recommended.
Session: Winter Day, Winter Evening, Summer Evening

MGTC10S Management Control Systems
Telephone ID #: 33531053
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.
Exclusion: (COMC10)
Prerequisites: MGTB01 (COMB01), MGTB27 (JCSB27)
Session: Winter Evening

MGTC15Y Income Tax
Telephone ID #: 33531563
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.
Exclusion: (COMC15)
Prerequisite: Completion of at least ten full-course equivalents including MGTA01 (COMA01) and ECOA02 or ECOA03 (ECOA01)
Session: Winter Evening

MGTC22F/S Personnel Administration
Telephone ID # for MGTC22F: 33532233
Telephone ID # for MGTC22S: 33532253
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.
Exclusion: (COMC22)
Prerequisite: MGTB27 (JCSB27)
Session: Winter Day

MGTC25F Organizational Design
Telephone ID #: 33532533
This course considers theoretical and design aspects of modern organizations. Various theoretical perspectives will be explored that are used to explain the formal and informal structure of organizations. The course will consider public and private sector organizations and make extensive use of case study material. Limited enrolment: 60.
Exclusion: (COMC25)
Prerequisite: MGTB27Y (JCSB27Y)
Session: Winter Day

MGTC26S Comparative Organizational Behaviour
Telephone ID #: 33532653
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.
Exclusion: (COMC26)
Prerequisite: MGTB27 (JCSB27)
Session: Winter Day

MGTC30Y The Legal Environment of Business
Telephone ID #: 33533063
An intensive examination of those aspects of the law that most directly affect the operations of a business. Limited enrolment: 60.
Exclusion: (COMC30)
Prerequisite: Completion of at least ten full-course equivalents including MGTA01 (COMA01) and ECOA02 or ECOA03 (ECOA01)
Session: Winter Day, Summer Evening

MGTC35S Management and Organization in Fiction
Telephone ID #: 33533553
Through the analysis of works of fiction dealing with managers in both private and public sector organizations, the course explores the ethical dilemmas, organizational politics and career choices that managers can expect to face. Limited enrolment: 60.
Exclusion: (COMC35)
Prerequisite: MGTB27Y (JCSB27)
Session: Winter Day

MGTC42S Public Management
Telephone ID #: 33534253
The course deals with key public sector management processes (priority-setting, budgeting, human resources, crisis management) making extensive use of cases, case studies, and simulations intended to develop the student's management skills. Limited enrolment: 60.
Exclusion: (COMC42)
Prerequisite: MGTB27 (JCSB27), POLA50 (POLA01 or POLB50) or POLB61
Session: Winter Day

MGTC54Y Industrial Relations
Telephone ID #: 33535463
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 a collective bargaining simulation exercise. Limited enrolment: 80.
Exclusion: (JCEC54)
Prerequisite: Completion of at least ten full-course equivalents including ECOA02 or ECOA03 (ECOA01).
Session: Winter Evening

MGTC72F Analysis for Decision Making I
Telephone ID #: 33537233
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: (JCEC72)
Prerequisites: CSCA56 or CSCA58, MATA04 or MATA26 or MATA28 (MATA55), ECOB03
Corequisite: ECOB11 or GGRB31 or STAB47
Session: Winter Day

MGTC73S Analysis for Decision Making II
Telephone ID #: 33537353
A continuation of MGTC72 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: (JCEC73)
Prerequisite: MGTC72 (JCEC72)
Session: Winter Day

MGTD07S Market Research
Telephone ID #: 33540753
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. Limited enrolment: 40.
Exclusion: (COMD07)
Prerequisites: MGTC05 (COMC05), ECOB11 or equivalent. Computer background recommended.
Session: Winter Day or Evening

MGTD08S Retail Management and Strategy
Telephone ID #: 33540853
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. Limited enrolment: 60.
Exclusion: (COMD08)
Prerequisite: MGTC05 (COMC05)
Session: Winter Evening

MGTD50F Advanced Accounting
Telephone ID #: 33545033
Consideration of accounting practice in the context of accounting theory and concepts for a number of areas including intercorporate investments, and foreign currency translation.
Limited enrolment: 60.
Exclusion: (COMD50)
Prerequisites: MGTC01 (COMC01) and permission of instructor.
Session: Winter Evening

MGTD55F Current Issues in Accounting
Telephone ID #: 33545533
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. Limited enrolment: 60.
Exclusion: (COMD55)
Prerequisite: MGTC01 (COMC01)
Session: Winter Evening

MGTD60S Auditing
Telephone ID #: 33546053
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. Limited enrolment: 60.
Exclusion: (COMD60)
Prerequisite: MGTC01 (COMC01)
Session: Winter Evening

MGTD70S Advanced Corporate Finance
Telephone ID #: 33547053
This course focuses on major issues in corporate financial management with reference to company valuation for financial decisions and capital structure issues. Limited enrolment: 60.
Exclusion: (JCED70)
Prerequisite: MGTC02 (JCEC02)
Session: Winter Day

MGTD75S Investments
Telephone ID #: 33547553
This course studies and reviews major investment problems, in particular investment in stocks and bonds, risk and return characteristics, efficient markets, evaluation, and portfolio management.
Limited enrolment: 60.
Exclusion: (JCED75)
Prerequisite: MGTC02 (JCEC02)
Session: Winter Day

MGTD80F/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: (MGTC80) (COMC80)
Prerequisite: Permission of instructor
Session: Summer Day, Summer Evening, Winter Day, Winter Evening

Courses Not Offered 1991/92

MGTC40F/S Management Issues and Practices in the Developing World
Prerequisite: MGTB01 (COMB01), MGTB27 (JCSB27)

Mathematics

Discipline Representative: P. Selick (287–7270)
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.

Please refer to the Physical Sciences section of the Calendar for the following Programmes.

Specialist Programme in Astronomy, Mathematics and Physics

Specialist Programme in Computer Science and Mathematics

Specialist Programme in Mathematics

Specialist Programme in Mathematics and Statistics

Specialist Programme in Physical Sciences

Major Programme in Mathematical Sciences (Mathematics)

Major Programme in Mathematics
The Major Programme in Mathematics is no longer offered. Students currently registered will be allowed to complete it.

MATHEMATICS

MATA04Y Linear Algebra
Telephone ID #: 20410463
Vector spaces: subspaces, basis, dimension. Systems of linear equations. Linear transformations: kernel, image, rank, matrix representation. Change of basis. Determinants. Eigenvalues and eigenvectors, characteristic polynomial, Cayley-Hamilton theorem, diagonalization. Introduction to inner products, Cauchy-Schwarz inequality, Gram-Schmidt orthogonalization.
Exclusions: (MATA40, MATA45)
Prerequisite: Grade 13 Calculus and one other Grade 13 Mathematics or OAC Calculus and OAC Algebra
Session: Winter Day

MATA26Y Calculus
Telephone ID #: 20412663
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: MATA28 (MATA27, MATA55)
Prerequisite: Grade 13 Calculus or OAC Calculus and one of OAC Algebra and Geometry or OAC Finite Mathematics
Session: Winter Day

MATA28Y Introduction to Optimization
Telephone ID #: 20412863
R^n as a model space in economics, constraints, functions of one and several variables, graphs. Derivatives, partial derivatives, differentials, rules for differentiation in several variables including chain rule, higher derivatives. Exponential and logarithm, geometric series, discrete and continuous interest. One variable optimization: relative and absolute extrema, graph sketching, word problems. Matrix algebra, linear equations. Optimization in several variables. Contour maps. Lagrange multipliers. Linear programming. This course is illustrated throughout by examples drawn from Economics.
Students must have a calculator with memory and the exponential and logarithmic functions.
Exclusions: MATA26 (MATA27, MATA55), MATB41.
Prerequisite: OAC Calculus and one of OAC Algebra and Geometry or OAC Finite Mathematics
Corequisite: ECOA02Y (ECOA01Y)
Session: Winter Day
NOTE: This course is intended for certain students in some Management and/or Economics Programmes. It does not satisfy the requirements for any Programme in the Physical Sciences except the Programme Computer Science for Data Management, and it may not be used as a prerequisite for any further Mathematics course. Students should consult with the Faculty in Management and Economics or with Counselling Services to make sure that MATA28Y is appropriate to their needs.

MATB30S Geometry I
Telephone ID #: 20423053
Euclidean geometry: isometries, symmetry groups. Platonic solids, tesselations, crystallography. Projective geometry: projective spaces, homogeneous coordinates and their transformations, duality, cross-ratio, perspectivities, the fundamental theorem, conics. Models of non-Euclidean geometries. Introduction to finite geometries and coding theory.

This course is intended as an introduction to geometry. It emphasizes the interplay between geometry and algebra. It should be

of interest to students in chemistry, computer science and physics.
Exclusion: (MATB25)
Prerequisites: MATA04 or (MATA45)
Corequisites: MATB31 or (MATB44)
Session: Winter Day

MATB31F Algebra I
Telephone ID #: 20423133
Groups: definition and elementary examples, symmetry groups, matrix groups, permutation groups. Equivalence relations, cosets, conjugacy classes. Theorems of Lagrange, Cayley, Cauchy. Class formula and Sylow theorems. Finite abelian groups: modular arithmetic, Euclidean algorithm, lcm, gcd, classification.
Exclusions: (MATC44, MATB44)
Prerequisites: MATA04 or (MATA45)
Session: Winter Day

MATB32S Algebra II
Telephone ID #: 20423253
Rings: ideals, quotient rings, homomorphisms, domains and their fields of fractions. Euclidean domains and their arithmetic. Polynomial rings, roots of polynomials, extension fields. Structure theorem for modules over a principal ideal domain, with application to finitely generated abelian groups and normal forms of matrices.
Exclusions: (MATB40, MATB49)
Prerequisites: MATB31F or (MATB44)
Session: Winter Day

MATB41F Techniques of the Calculus of Several Variables I
Telephone ID #: 20424133
Vector algebra in R^n, lines and planes in R^3, complex numbers, matrices, determinants and linear equations. Functions of several variables, partial derivatives, gradient, tangent plane, Jacobian matrix and chain rule. Taylor series. Extremal problems. Extremal problems with constraints and Lagrange multipliers. Multiple integrals, spherical and cylindrical coordinates, law of transformation of variables.
Exclusion: (MATB05Y) (MATB50) and MATA28Y
Prerequisite: MATA26Y (MATA27Y)
Session: Winter Day

MATB42S Techniques of the Calculus of Several Variables II
Telephone ID #: 20424253
Fourier series. Vector fields in R^n, Divergence and curl. Curves, parametric representation of curves, path and line integrals. Surfaces, parametric representations of surfaces, surface integrals. Green's, Gauss', and Stokes' theorems. Introduction to differential forms, total derivative.
Exclusion: (MATB05Y)(MATB50, MATB55)
Prerequisite: MATB41
Session: Winter Day

MATB43S Introduction to Analysis
Telephone ID #: 20424353
The least upper bound principle for R, limits in R and R^2, 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 A26 and A04, and who wish to acquire the analytic techniques which are essential for more advanced work. 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

MATB70S Introduction to Number Theory
Telephone ID #: 20427053
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
Telephone ID #: 14533133
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: MATB31 (or MATB44 or CSCB38) and at least one other B-level course in mathematics or computer science.
Session: Winter Day

MATC49F Galois Theory
Telephone ID #: 20434933
Fields of quotients, residue fields, finite fields, algebraic and transcendental field extensions, primitive elements, Galois extensions, review of group theory, the fundamental theorem of Galois theory, calculations and examples, the classical problems of angle trisection and construction of regular polygons.
Prerequisites: MATB32 or (MATB49)
Session: Winter Day

MATC51F Differential Equations I
Telephone ID #: 20435133
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.
Prerequisites: MATA04Y; MATA26Y or (MATA55)
Corequisite: MATB41F (MATB05)
Session: Winter Day

MATC53Y Real Analysis
Telephone ID #: 20435363
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 operators.
Exclusion: (MATC50), (MATC55)
Prerequisites: MATB32 (MATB49) and (MATB05) MATB41F and MATB42S and MATB43 or (MATB55).
Session: Winter Day

MATC54S Differential Geometry I
Telephone ID #: 20435453
Parametric curves in space, Serret Frenet formulae, curves with specified curvature and torsion. Plane curves, isoperimetric inequality, four vertex theorem, curves of constant width. Parametric surfaces in space, Gauss Weingarten formulae, measures of curvature, Theorema Egregium, surfaces with specified first and second fundamental forms. Curves or surfaces, geodisies, parallel transport, Gauss Bonnet theorem. Geometry on surfaces of constant curvature.
Prerequisites: MATA04 or (MATA45) and (MATB05) or MATB42 or (MATB55)
Corequisite: MATC51
Session: Winter Day

MATC56S Differential Equations II
Telephone ID #: 20435653
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 equations.
Prerequisite: MATC51 (or MATB51)
Session: Winter Day

Courses Not Offered in 1991-92

MATB05Y	Analysis
MATC30S	Geometry II
MATC43S	Linear and Multilinear Algebra
MATC60F	Complex Analysis I
MATC65S	Complex Analysis II
JMCC32F	Graph Theory and Algorithms for its Application

Medieval Civilization

The Major and Specialist Programmes in Medieval Civilization are no longer offered but students currently enrolled in them will be allowed to complete these programmes.

Music

Discipline Representative: Wm. R. Bowen (287-7188)
Music courses on the Scarborough Campus are designed both for students who intend to pursue a career in the arts and for students whose interests are more general. 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.

Most of the 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 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 20 and 51.)

Major Programme in Music History
Supervisor: Wm. R. Bowen (287-7188)
Students are required to complete a total of seven full-course equivalents in Music and related areas. The seven courses will be made up as follows:

1 MUSA01Y Introduction to Music
MUSB07F Materials of Music I
MUSC21S Materials of Music II
Students excluded from MUSB07F must take another half-course equivalent in Music in consultation with the Supervisor.

2 Four full-course equivalents chosen from MUS courses. Two full-course equivalents must be selected from MUSB01-B06; either MUSB03 or MUSB04 is required. At least one and one-half courses in this section should be at the C or D level.
In exceptional circumstances, students may substitute one or more courses (HMU or TMU) offered by the Faculty of Music on the St. George Campus; music courses (MUS) offered through the Faculty of Arts and Science do not qualify. Permission of the Supervisor is required.

3 One additional full-course equivalent in Supervised Performance [MUSB20/21/22/23/25/26H]. Students may count a maximum of 1.5 full-course equivalents in performance toward the requirements of the Major Programme.

MUSA01Y Introduction to Music
Telephone ID #: 22610163
A study of the basic materials, principles of design, and cultural significance of representative works of Western music from the Middle Ages to the present day.

Through examples drawn from a variety of periods, students are introduced to ideas of musical style and design. These concepts are of great help in listening to and understanding works by composers as different from each other as Josquin, Bach, Beethoven, Stravinsky and Duke Ellington. 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 musical experience should also find this introduction valuable.

Upper level courses, for which MUSA01Y is the prerequisite, assume that the student has some ability in reading music. Students who wish to continue to such upper level courses but who need additional preparation in rudiments are encouraged to take the optional tutorial given in the second term as a supplement to MUSA01Y.
Exclusion: MUSA10F and MUSA20S or MUSA10F and MUSB30S
Session: Winter Day
Wm. R. Bowen and J. Mayo
Offered 1992/93 and 1993/94

MUSA11F Listening to Music
Telephone ID #: 22611133
An introduction to the language of music for non-musicians.

In the noise-polluted environment in which we live, surrounded by sounds both musical and non-musical, listening to music has become an art that needs to be consciously cultivated. This course is an introduction to the rewarding art of intelligent listening. Through examples from a variety of musical sources, including non-Western and popular music as well as "classical" music, students are introduced to some of the mysteries of musical composition and given a deeper understanding of how music works. Throughout the course the emphasis is on what may be heard in a piece of music and theoretical concepts are kept to a minimum. No previous musical experience is required.
Exclusion: MUSA01 (MUSA10/A20/B30)
Session: Winter Day
J. Mayo
Not offered 1992/93 or 1993/94

MUSA12F/S Music of the World's Peoples
Telephone ID # for MUSA12F: 22611233
Telephone ID # for MUSA12S: 22611253
An introduction to the musical cultures of the world's peoples.

In our multi-cultural society, we are constantly exposed to sounds which do not follow the familiar patterns of musical expression. Accordingly, it is the purpose of this course to help the student to appreciate the music of other cultures and to recognize the variety and richness of musical invention in the world. Course materials will include selected examples from Africa, China, India, Japan, the Middle East and South America. In addition, the student will be introduced to Western Folk music and to the music of the native peoples of North America. Lectures will be devoted to a non-technical discussion of music, musical instruments and the place of music in society. No previous musical experience is required.
Session: Summer Evening
TBA
Not offered 1992/93 or 1993/94

MUSB02F Music of the Classic Period
Telephone ID #: 22620233
A study of music from the late eighteenth and early nineteenth centuries with emphasis on the works of Haydn, Mozart and Beethoven.

An examination of the origins of the Viennese classical style will be followed by a study of representative works by the three major composers of the classic period. The works will be studied in the context of the political, social and artistic changes which took place in Europe at this time.
Prerequisite: MUSA01 (MUSB30S)
Session: Winter Day
J. Mayo
Not offered 1992/93 or 1993/94

MUSB06S Music of the Romantic Period
Telephone ID #: 22620653
A study of the music of the 19th century.

A detailed study of Romantic musical styles as represented by selected works of the major 19th century composers. Included are compositions by Beethoven, Schubert, Mendelssohn, Berlioz, Verdi, Wagner, Brahms, Chopin, Liszt and Wolf. The course will include consideration of the relationship between music and the other arts and an introduction to the sociology of musical romanticism.
Prerequisite: MUSA01 (MUSB30S)
Session: Winter Day
Wm. R. Bowen
Not offered 1992/93 or 1993/94

MUSB07F Materials of Music I
Telephone ID #: 22620733
The basic materials of music from the Middle Ages to the present.

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.
Exclusion: Royal Conservatory Gr III harmony or equivalent; MUSB17
Session: Winter Day
J. Mayo
Offered 1992/93 and 1993/94

MUSC09S Canadian Music
Telephone ID #: 22630953
A survey of music in Canada from the early 17th century to the present day.

The course will follow the various kinds of music in Canada, including folk songs, Ballad operas, and the many varieties of music in the 20th century. Specific compositions will be selected for detailed study and comparison to music in Europe and the United States. Music of the Indians and Inuit will be heard and studied.
Prerequisite: MUSA01 (MUSB30S)
Session: Winter Day
Wm. R. Bowen
Not offered 1992/93 or 1993/94

MUSC12F Bach
Telephone ID #: 22631233
A study of the variety of music written by Johann Sebastian Bach.

This course will examine representative works from all the major genres including organ music, church cantatas, concertos and sonatas, the Passions and the B Minor Mass. The music will be studied in the context of works by Bach's contemporaries and the relationships between music and society will be discussed.
Exclusion: (MUSC07)
Prerequisite: MUSA01 (MUSB30S)
Session: Winter Day
J. Mayo
Not offered 1992/93 or 1993/94

MUSC21S Materials of Music II
Telephone ID #: 22632153
A continuation of MUSB07F
Exclusion: (MUSB24, MUSC04)
Prerequisite: MUSB07 (MUSB17) or Royal Conservatory Gr III harmony or equivalent.
Session: Winter Day
J. Mayo
Offered 1992/93 and 1993/94

Performance Courses

The following performance courses are also available to students on a non-credit 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.

MUSB20H Supervised Performance I - Chorus
Telephone ID #: 22622043
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: Any A-level course in Music or MUSB14F/S
Session: Winter Day
Wm. R. Bowen
Offered 1992/93 and 1993/94

MUSB21H Supervised Performance II - Chorus
Telephone ID #: 22622143
A continuation of MUSB20H.
Exclusion: (MUSB10)
Prerequisite: (MUSB09) or MUSB20
Session: Winter Day
Wm. R. Bowen
Offered 1992/93 and 1993/94

MUSB22H Supervised Performance I - Instrumental
Telephone ID #: 22622243
The practical study of ensemble performance.

Students work in an ensemble 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 for rehearsal with MUSB23H and MUSB26H.
Exclusions: (MUSB09/B10)
Prerequisite or Corequisite: Any A-level course in Music or MUSB14F/S
Session: Winter Day
C. Walter
Offered 1992/93 and 1993/94

MUSB23H Supervised Performance II - Instrumental
Telephone ID #: 22622343
A continuation of MUSB22H.
Exclusion: (MUSB10)
Prerequisite: MUSB22 or (MUSB09)
Session: Winter Day
C. Walter
Offered 1992/93 and 1993/94

MUSB25H Supervised Performance III - Chorus
Telephone ID #: 22622543
A continuation of MUSB21.

Students in this course meet for three hours per week, two hours with students of MUSB20H and MUSB21H and an hour in a seminar. In this seminar the elements of choral directing and conducting are introduced.
Prerequisite: MUSB21
Session: Winter Day
Wm. R. Bowen
Offered 1992/93 and 1993/94

MUSB26H Supervised Performance III - Instrumental
Telephone ID #: 22622643
A continuation of MUSB23H.

Students in this course meet for three hours per week, two hours with students of MUSB22H and MUSB23H and an hour in a seminar. In this seminar the elements of instrumental directing and conducting are introduced.
Prerequisite: MUSB23
Session: Winter Day
C. Walter
Offered 1992/93 and 1993/94

MUSD01F
MUSD02S
MUSD03Y 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. Students meet regularly with the supervisor for consultation and prepare a 5,000-7,500 word paper for a term course or a 10,000-15,000 word paper for a year course. Students who have demonstrated exceptional ability in MUSB07F and MUSC21S 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 C-level; permission of instructor to be obtained by the last date of classes in the previous term.
Session: Winter Day
Co-ordinator: Wm. R. Bowen
Offered 1992/93 and 1993/94

Courses Not Offered in 1991-92

MUSB01F Music of the Twentieth Century
Prerequisite: MUSA01Y (MUSB30S)
Offered 1992/93
Not offered 1993/94

MUSB03S Music in the Middle Ages
Prerequisite: MUSA01Y (MUSB30S)
Offered 1992/93
Not offered 1993/94

MUSB04F Music of the Renaissance
Prerequisite: MUSA01Y (MUSB30S)
Not offered 1992/93
Offered 1993/94

MUSB05S Music of the Baroque Era
Prerequisite: MUSA01Y (MUSB30S)
Not offered 1992/93
Offered 1993/94

MUSB14F/S Jazz
Offered 1992/93
Not offered 1993/94

MUSC01F Choral Music
Prerequisite: MUSA01Y (MUSB30S)
Not offered 1992/93 or 1993/94

MUSC05F/S The Symphony
Prerequisite: MUSA01Y (MUSB30S)
Offered 1992/93
Not Offered 1993/94

MUSC06F/S Music for the Theatre
Prerequisite: MUSA01Y (MUSB30S)
Not offered 1992/93
Offered 1993/94

MUSC11F/S Beethoven
Prerequisite: MUSA01Y (MUSB30S)
Not offered 1992/93
Offered 1993/94

MUSC14S Stravinsky
Prerequisite: MUSA01Y (MUSB30S)
Not offered 1992/93 or 1993/94

Myth and Religion

The College Programme in Myth and Religion is no longer offered, but students currently enrolled in it will be allowed to complete the programme.

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 Major and Specialist Programmes in Neuroscience are administered jointly by Psychology and Biology and primarily includes courses from these disciplines. They have been designed for students who are interested in pursuing graduate or medical training in the Neurosciences. The Specialist Programme has a heavy laboratory component and students are encouraged to become actively involved in ongoing research. The subdisciplines represented at Scarborough Campus include behavioural neuroscience, neuroanatomy, neurophysiology,

neurochemistry and cell biology (applied to nervous system).

Specialist Programme in Neurosciences
Supervisor: G. O. Ivy Office: S-569
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 15 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 9.5 full-course equivalents:
BIOA03Y Introductory Biology
PSYA01Y Introduction to Psychology
CHMA02Y General Chemistry
PSYB07F/S Data Analysis in Psychology
or
BIOB28F/S Elementary Statistics for Biologists
BIOB17Y Animal Physiology
PSYB60F/S Brain Mechanisms and Behaviour: I
PSYB65F/S Human Brain and Behaviour
PSYC61F/S Brain Mechanisms and Behaviour: II
PSYC63Y Physiological Psychology Laboratory
PSYC64F/S Psychobiology of Sensory Systems and Their Development
CHMB05Y Organic Chemistry I
JBCC35Y Introductory Biochemistry

2 One full course equivalent from the following:
MATA26Y Calculus
PHYA01Y Principles of Physics
PHYA02Y Concepts of Physics
CSCA04F/S How Computers are Used
and
CSCA56F/S Computer Programming
or
CSCA04F/S How Computers are Used
and
CSCA58F/S Introduction to Computing

3 At least 1.5 full-course equivalents from the following with no more than 0.5 full-course equivalent from the supervised study courses:
PSYD60F/S Current Topics in Physiological Psychology
PSYD62F/S Neuroplasticity: Mechanisms and Function
PSYD67F/S Psychobiology of Aging
BIOC31F/S Invertebrate Neurobiology
NROC90/
C93F/S/H Supervised Study in Neuroscience
NROD98Y Thesis in Neuroscience

4 At least 1.0 full-course equivalent from the following:
PSYB01F/S Psychological Research Laboratory
PSYC08F/S Experimental Design in Psychology
PSYC42F/S Learning Laboratory
PSYC58F/S Experimental Psychology Microcomputer Laboratory
JBCC36H Laboratory in Biochemistry
BIOB25F/S Vertebrate Histology: Cells and Tissues
BIOD19F/S Molecular Biology of the Gene

5 At least 1.0 full-course equivalent from the following:
BIOB05Y Genetics
BIOB23Y Developmental Biology
BIOB32F/S Vertebrate Morphogenesis
BIOC20Y Cell Biology
BIOC33F/S General Biology of Vertebrates
BIOC52F/S Animal Behaviour
BIOC60F/S Evolutionary Biology
BJPC70F/S Theoretical Foundations of Biology I

6 At least 1.0 full-course equivalent from the following:
PSYB32F/S Abnormal Psychology
PSYB50F/S Sensation and Perception
PSYB51F/S Perception and Cognition
PSYB57F/S Memory and Cognition
PSYC85F/S History of Psychology
PSYD40F/S Current Topics in Animal Learning
PSYD41F/S Research in Operant Conditioning
JLPD55F/S Disorders of Speech and Language

7 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 Neurosciences
Supervisor: G. O. Ivy Office: S-569
The programme requires seven full-course equivalents. Students who might consider completing a four year degree are encouraged to include in the electives below the following courses: CHMB05Y and JBCC35Y so that they would be eligible for the Specialist Programme.

The following outline indicates the required courses and the most advantageous sequencing for the Major Programme in Neurosciences.

1 To be completed in the first year of full-time study (or equivalent):
PSYA01Y Introduction to Psychology
BIOA03Y Introductory Biology
CHMA02Y General Chemistry

2 To be completed by the end of the second year of full-time study (or equivalent):
PSYB07F/S Data Analysis in Psychology
PSYB60F/S Brain Mechanisms and Behaviour I
PSYB65F/S Human Brain and Behaviour
PSYC61F/S Brain Mechanisms and Behaviour II
BIOB17Y Animal Physiology

3 To be completed by the third year of full-time study (or equivalent):
PSYC64F/S Psychobiology of Sensory Systems and Their Development
One of the following courses:
PSYD60F/S Current Topics in Physiological Psychology
PSYD62F/S Neuroplasticity: Mechanisms and Function
PSYD67F/S Psychobiology of Aging
BIOC31F/S Invertebrate Neurobiology

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
Exclusions for NROC93: PSYC93, BIOD01
Session: Summer Day, Summer Evening, Winter Day, Winter Evening
Supervision by a faculty member

NROD98Y Thesis in Neuroscience
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: PSYD98, BIOD02
Session: Winter Day
Coordinator: TBA

Philosophy

Discipline Representative: W.E. Seager (287-7151)
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.

PHLA01Y is recommended as an introduction to the field of philosophy in general. It is required for all Majors and Specialists in Philosophy. B-level courses are more specialized in content, but they are open to anyone interested in the topic of the course. All C-level Philosophy courses carry at least a half course pre-requisite in Philosophy.

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. PHLA01, PHLB01, 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 1991-92 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.

Wednesday 4-6 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 (287–7151)

Students must complete at least fourteen full-course equivalents including:

1 PHLA01Y Fundamental Questions of Philosophy
  PHLB01F/S Ethics
  PHLB20F/S Belief, Knowledge, and Truth
  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 C-level 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. Students are encouraged to follow a sequence of language courses in fulfilment of this requirement

Major Programme in Philosophy

Supervisor: W.E. Seager (287–7151)

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 C-level 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.

Cognate Courses

Philosophy students should seriously consider the advantages of studying a language, especially French, German, Greek, or Latin. A sequence of language courses 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: HUMA01Y, Prologue; HISA01Y, European World; ASTA03Y, Introduction to Astronomy; JBHB01Y, Introduction to the Biological Sciences; such courses provide important intellectual and historical background for the study of Philosophy.

PHLA01Y Fundamental Questions of Philosophy

Telephone ID #: 24510163

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?

Some of the world's major philosophers will be studied with a view to answering these and other basic questions which have confronted us throughout history.

The course will be divided into the following lecture sections: L01, L02, L03, L04. The problems addressed are substantially the same in each section, though the readings and approach may vary from section to section, depending on the instructor.

Note: There will also be a section of PHLA01Y taught in the summer session (evenings): L31.

TBA

PHLB03F Philosophy and Art

Telephone ID #: 24520333

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: Winter Evening

G. Nagel

PHLB05F Social Issues

Telephone ID #: 24520533

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

P. Thompson

PHLB10S Political Philosophy

Telephone ID #: 24521053

A study of the philosophical problems of the state and society.

Topics may include: the individual in society, forms of power and coercion, philosophies of political justification of consent.

Session: Summer Evening

P. Wright

PHLB11F Topics in the Philosophy of Law

Telephone ID #: 24521133

A discussion of right and rights, justice, legality, and related concepts.

Session: Summer Evening

P. Wright

PHLB17F Anarchism

Telephone ID #: 24521733

A study of major anarchists and problems of libertarian thought and practice; the impact of anarchism on social, cultural and political institutions; classical and contemporary anarchists such as Proudhon, Bakunin, Kropotkin and Tolstoy, Goldmann, Chomsky, Bookchin and others.

Session: Winter Evening

W.C. Graham

PHLB20F Belief, Knowledge, and Truth

Telephone ID #: 24522033

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.

Session: Winter Day

S. Sedivy

PHLB46F Philosophy of the Early Modern Age I

Telephone ID #: 24524633

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.

Session: Winter Day

G. Nagel

PHLB48F Philosophy in the Late Modern Age I

Telephone ID #: 24524833

A study of the thought of Hegel, Schopenhauer and Nietzsche, Wittgenstein, and other philosophers whose work is fundamental to the age in which we presently live.

Session: Winter Day

G. Nagel

PHLB50F/S Symbolic Logic I

Telephone ID # for PHLB50F: 24525033

Telephone ID # for PHLB50S: 24525053

An introduction to formal techniques of reasoning, sentential logic, and quantification theory or predicate logic.

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. The text is D. Kalish, R. Montague and G. Mar, *Logic: Techniques of Formal Reasoning*.
Exclusion: JMPB50
Session: Winter Evening (F), Winter Day (S)
W. Seager (Fall)

PHLB80F Philosophy of Language
Telephone ID #: 24528033
An examination of various philosophical issues raised by the phenomena of language. Topics include: how we can understand one another and form concepts; how words manage to refer to things; and the explication of the nature of linguistic meaning.
Session: Winter Day
W. Seager

PHLB81S Theories of Mind
Telephone ID #: 24528153
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 mind.
Session: Winter Day
S. Sedivy

PHLC40S Plato and His Predecessors II
Telephone ID #: 24534053
A continuation of PHLB40.
Prerequisite: At least one half-course in Philosophy.
Session: Winter Day
W. Helleman

PHLC42S Aristotle II
Telephone ID #: 24534253
A continuation of PHLB42H.
Exclusion: (PHLB43)
Prerequisite: At least one half-course in Philosophy
Session: Winter Evening
W. Graham

PHLC54S Metalogic
Telephone ID #: 24535453
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: PHLB50
Session: Winter Day
W. Seager

PHLC75F/S-C94F/S Seminar in Philosophy
A study in depth of a philosopher or philosophers or of a philosophical problem.
Limited enrolment: 15.

PHLC85S Seminar in Philosophy: Feminism
Telephone ID #: 24538553
Selected themes in the philosophical tradition in dialogue with central issues in contemporary feminist theory. These may include: critical discussion of themes from Plato to Freud which have been used to justify the subordination of women; theories of how gendered individuals are created; feminist conceptions of self, autonomy, ethics, or the state.
Prerequisite: Two B-level half-courses in Philosophy.
Session: Winter Day
L. Lange

PHLC88S Seminar in Philosophy: Aesthetics
Telephone ID #: 24538853
An examination of aesthetic issues specific to the various art forms; music, drama, literature, visual and plastic arts, film, and dance. We will conclude with a meta-level examination of the enterprise of theorizing about art in general and of the theoretical enterprise of announcing the death of art in particular.
Prerequisite: Two B-level half-courses in Philosophy
Session: Winter Evening
S. Sedivy

PHLC89S Seminar in Philosophy: Contemporary Analytic Philosophy
Telephone ID #: 24538953
An examination of contemporary developments in theories of mind, meaning, and truth.

Contemporary issues will be set up by tracing their development; after a brief look at classical angloanalytic views, we will consider the diagnostic work of Wittgenstein, Sellars, Goodman, and Ryle in depth. Current theories will be examined in terms of how they follow through and build on the lessons advanced by Wittgenstein et al. Our main concern will be the opposition between internalism/externalism and realism/anti-realism in current understanding of mind and meaning.
Prerequisite: Two B-level half-courses in Philosophy
Session: Winter Day
S. Sedivy

BJPC70F Theoretical Foundations of Biology I
Telephone ID #: 01437033
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

BJPC71S Theoretical Foundations of Biology II
Telephone ID #: 01437153
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

PHLD10Y Senior Thesis
Telephone ID #: 24541063
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 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 200-300-word 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 1991-92

PHLB01F/S	Ethics I
PHLB12F/S	Marx and Marxism
PHLB15F/S	Philosophy of Education
PHLB16F/S	Philosophy of History
PHLB22F/S	Business Ethics
PHLB30F/S	Existentialism
PHLB40F/S	Plato and His Predecessors I
PHLB42F/S	Aristotle I
PHLB44F/S	Philosophers of the Middle Ages I
PHLB53F/S	The Art of Thinking
PHLB60S	Metaphysics
PHLB61F/S	Philosophy of Religion
PHLB70F/S	Philosophy of Science Exclusion: BJPC70F (PHLB71)
PHLC01F/S	Ethics II
PHLC05F/S	Biomedical Ethics *Prerequisite:* PHLB05 or PHLB01
PHLC11F/S	Topics in the Philosophy of Law
PHLC44F/S	Philosophers of the Middle Ages II *Exclusion:* (PHLB45) *Prerequisite:* One full or half-course equivalent in Philosophy
PHLC46F/S	Philosophy of the Early Modern Age II *Exclusion:* (PHLB47) *Prerequisite:* one full or half-course equivalent in Philosophy
PHLC48F/S	Philosophy of the Later Modern Age II
PHLC51F/S	Symbolic Logic II
PHLC52F/S	Modal Logic and Probability
PHLC53F/S	Games and Decision *Prerequisite:* one full-course equivalent, not necessarily in Philosophy
PHLC61F/S	Philosophy of Religion II *Prerequisite:* PHLB61

Physical Sciences Scarborough

Physical Sciences Scarborough is a closely integrated group of specialist programmes emphasizing close coordination among traditional subject areas to educate students with an integrated view of science. Admission to the Physical Sciences Scarborough programme takes place in first year.

The following twelve programmes lie within the Physical Sciences Scarborough group:
Astronomy, Mathematics and Physics
Chemistry
Chemistry and Biochemistry
Computer Science
Computer Science and Mathematics
Computer Science and Statistics
Co-op Computer Science and Physical Science
Environmental Chemistry
Mathematics
Mathematics and Statistics
Physical Sciences
Terrain and Environmental Earth Sciences

Most programmes cover at least two cognate disciplines, and as a result 14 to 17 courses must be specified in a 20 course programme. Introductory courses in Physics and Calculus form a basis for all programmes, and it is intended that all programme students take these courses together. The choice of other introductory courses depends on the individual programme, ranging from the mathematically oriented programmes to the environmental science ones. A special first year programme committee will have overall responsibility for the introductory courses, including coordination and work-load balancing so that students are not overwhelmed by the transition to University. The progress of students across their Physical Sciences courses will be monitored throughout the year, and counselling will be provided as appropriate.

Students from the various programmes in higher years will take common courses with students in the same year, so that the cohort will retain a common identification. This will provide significant benefits for the students, particularly through encouraging communication across the disciplines involved. Common courses in the final year will serve to integrate the knowledge gained.

Early Teacher Project
The *Early Teacher Project* is designed to produce future high school teachers of Science and Mathematics. It has been developed in cooperation with the Faculty of Education, University of Toronto. The Physical Sciences Scarborough programmes are designed to lead to *Honours Specialist* Ontario Teacher Certification in one or more subjects. To participate students must continue to be registered in a Physical Sciences Scarborough Programme and participate in an orientation session in second year. Subsequently these students will work with experienced teachers in classrooms of primary/secondary schools in the third and fourth years. There will also be a workshop/seminar component organized jointly by Scarborough College and the Faculty of Education.

The Early Teacher Project will count for academic credit (though not as part of the 20 course requirement of a degree). Successful completion of the Early Teacher Project, together with a Physical Sciences Scarborough Specialist Programme with at least a B range standing in the fifteen full course equivalents will guarantee admission to the Faculty of Education for at least thirty students each year.

Specialist Programme in Astronomy, Mathematics and Physics
Supervisor TBA

This programme requires 16 full-course equivalents as listed below. The programme provides a good grounding in the main areas of astronomy, mathematics and physics. It is intended for students who may wish to pursue a career in teaching or to acquire a broad understanding in these subjects before undertaking a career in government or industry.

First year:

ASTA03Y	Introduction to Astronomy
CSCA57S	Introduction to Scientific Computing
MATA04Y	Linear Algebra
MATA26Y	Calculus
PHYA01Y	Principles of Physics

Second year:

ASTB50S	Celestial and Classical Mechanics
CSCB58F	Computer Organization
MATB30F	Geometry I
MATB31F	Algebra I
MATB41F	Techniques of the Calculus of Several Variables I
MATB42S	Techniques of the Calculus of Several Variables II
MATB43S	Introduction to Analysis
PHYB21S	Electricity and Magnetism

Third year:

ASTC50F	Structure and Evolution of Astrophysical Bodies
MATC51F	Differential Equations I
MATC56S	Differential Equations II
PHYB22S	Electronics
PHYB23H	Physics Laboratory
PSCC01H	Modern Applications of Classical Science
STAB22F	Statistics
STAB47S	Introduction to Probability Theory and Mathematical Statistics

Fourth year:

ASTC51S	Stellar Systems, Galaxies and Cosmology
CSCC50F	Numerical Algebra and Optimization
CSCC51S	Numerical Approximation
PHYC21F	Classical Physics
PHYC22S	Modern Physics
PSCD01F	Policy Issues
PSCD02S	Current Questions in Mathematics and Science

Specialist Programme in Chemistry
Supervisor: A. Walker (287–7225)
This is the most general of the Specialist Programmes and provides the student with a firm basis in each of the chemistry subdisciplines.

First year:

CHMA02Y	General Chemistry
CSCA57S	Introduction to Scientific Computing
MATA26Y	Calculus
PHYA01Y	Principles of Physics

Second year:

CHMB11Y	Analytical Chemistry I
CHMB22Y	Physical Chemistry I
CHMB33Y	Inorganic Chemistry I
CHMB44Y	Organic Chemistry I
MATB41F	Techniques of the Calculus of Several Variables I
MATB42S	Techniques of the Calculus of Several Variables II

Third year:

CHMC22F	Physical Chemistry II
CHMC26F	Physical Chemistry Lab
CHMC33H	Inorganic Chemistry II

CHMC36S Inorganic Chemistry Lab
CHMC44Y Organic Chemistry II

CHMC25S Physical Environmental Chemistry
or
CHMC35H Inorganic Environmental Chemistry

Fourth year:
2.0 full-course equivalents from:
CHMD33S Inorganic Special Topics
CHMD34S Organometallic Catalysis
CHMD42S Organic - Physical
CHMD44S Organic Special Topics
CHMD88Y Research
CHMD90Y Library Thesis
CHMD91H Library Thesis
CHM400 series

1.0 full-course equivalent from:
CHM319H, CHM325H, CHM336H, CHM346H, CHM347H, CHM400 series

PSCD01F Policy Issues
PSCD02S Current Questions in Mathematics and Science

Specialist Programme in Chemistry and Biochemistry
Supervisor: A. Walker (287–7225)
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.

First year:
BIOA03Y Introductory Biology
CHMA02Y General Chemistry
MATA26Y Calculus
PHYA01Y Principles of Physics

Second year:
CHMB11Y Analytical Chemistry I
CHMB22Y Physical Chemistry I
CHMB33Y Inorganic Chemistry I
CHMB44Y Organic Chemistry I
MATB41F Techniques of the Calculus of Several Variables I
MATB42S Techniques of the Calculus of Several Variables II

Third year:
CHMC22F Physical Chemistry II
CHMC26F Physical Chemistry Lab

or

CHMC33H Inorganic Chemistry II
CHMC36S Inorganic Chemistry Lab

CHMC44Y Organic Chemistry II
JBCC35Y Biochemistry
JBCC36H Biochemistry Lab

Fourth year:
CHM347H Organic Chemistry of Biological Compounds

CHM447H Bio-organic Chemistry
or
BCH424H Bio-organic Mechanisms

1.5 full-course equivalents from:
CHMD33S Inorganic Special Topics
CHMD34S Organometallic Catalysis
CHMD42S Organic - Physical
CHMD44S Organic Special Topics
CHMD88Y Research
CHMD90Y Library Thesis
CHMD91H Library Thesis
CHM400 series
BCH400 series

PSCD01F Policy Issues
PSCD02S Current Questions in Mathematics and Science

Specialist Programme in Environmental Chemistry
Supervisor: A. Walker (287–7225)
This Programme is designed for students interested in problems of our environment and the role that chemistry plays in their causation, detection and solution.

First year:
BIOA03Y Introductory Biology
CHMA02Y General Chemistry
GLGA01Y Planet Earth: An Introduction to Geology
MATA26Y Calculus
PHYA01Y Principles of Physics

Second year:
CHMB11Y Analytical Chemistry I
CHMB22Y Physical Chemistry I
CHMB33Y Inorganic Chemistry I
CHMB44Y Organic Chemistry I
MATB41F Techniques of the Calculus of Several Variables I

MATB42S Techniques of the Calculus of Several Variables II

Third year:
BIOB14F Environmental Biology
CHMC25S Physical Environmental Chemistry
CHMC35S Inorganic Environmental Chemistry

CHMC22F Physical Chemistry II
CHMC26F Physical Chemistry Lab

or

CHMC33H Inorganic Chemistry II
CHMC36S Inorganic Chemistry Lab

or

CHMC44Y Organic Chemistry II

CHM319H Instrumental Analysis

Fourth year:
CHM416H Separation Science
GLGD01S Contaminant Hydrogeology
GLG400H Environmental Geochemical Analysis
PSCD01F Policy Issues
PSCD02S Current Questions in Mathematics and Science

Specialist Programme in Computer Science
Supervisor: G. Cupit (287–7253)
This programme provides a broadly based education in computer science. It prepares a student for a professional position in the computer field, and for graduate study in computer science.

First year:
CSCA58F Introduction to Computing
CSCA68S Computer Applications
MATA04Y Linear Algebra
MATA26Y Calculus
PHYA01Y Principles of Physics

Second year:
CSCB28S File Structures and Data Management
CSCB38F Discrete Mathematics
CSCB58F Computer Organization
MATB41F Techniques of the Calculus of Several Variables I
MATB42S Techniques of the Calculus of Several Variables II
MATB43S Introduction to Analysis

Third year:
CSCC24S Principles of Programming Languages
CSCC64S Effective and Efficient Computing
CSCC78F Information Structures
STAB22F Statistics
STAB47S Introduction to Probability Theory and Mathematical Statistics

one of:
MATB31F, MATC51F, MATC60F

Fourth year:
CSCB09S Software Tools
CSCC50F Numerical Algebra and Optimization
CSCC51S Numerical Approximation, Integration and Ordinary Differential Equations
CSCC85S Microprocessors

one of:
CSCC54F, 340, 372, 418, 428, 434, 444, 454, 458, 468, 484, 485, 488

one of:
CSC438, 448 465, 478, JMCC31F, C32F

PSCD01F Policy Issues
PSCD02S Current Questions in Mathematics and Science

Specialist Programme in Computer Science for Data Management
Supervisor: G. Cupit (287–7253)
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, MGTA01Y, ECOA01Y

Second year:
CSCB28S, CSCB38F, CSCB58F, ECOB03Y or ECOB07Y, both MATB41F and MATB42S or MATB05Y

Third year:
CSCC24S, CSCC78F, MGTB01Y, 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.

The following courses are offered only on the St. George Campus. Consult the Department of Computer Science Undergraduate Student Handbook for more details.

CSC300	Computers and society
CSC318	Computer graphics and applications
CSC336	Numerical methods
CSC340	Information systems analysis and design
CSC372	Microprocessor software
CSC418	Interactive computer graphics
CSC428	Human-computer interaction
CSC434	Data management systems
CSC438	Computability and logic
CSC444	Economics of computers
CSC446	Computational methods for partial differential equations
CSC448	Formal languages and automata
CSC454	The business of software
CSC458	Architecture of distributed computer systems
CSC465	Programming methodology
CSC468	Operating systems
CSC478	Computer algebra
CSC484	Applied artificial intelligence
CSC485	Introduction to computational linguistics
CSC488	Language processors

Specialist Programme in Computer Science and Mathematics
Supervisor: G. Cupit (287–7253)
This Programme provides a broadly based education in computer science and mathematics. It prepares a student for a professional position in the computer field and it is appropriate for students who may wish to pursue a career in teaching or in government and industry. It can also lead to graduate study.

First year:

CSCA58F	Introduction to Computing
CSCA68S	Computer Applications
MATA04Y	Linear Algebra
MATA26Y	Calculus
PHYA01Y	Principles of Physics

Second year:

CSCB38F	Discrete Mathematics
CSCB58F	Computer Organization
MATB30F	Geometry I
MATB31F	Algebra I
MATB32S	Algebra II
MATB41F	Techniques of the Calculus of Several Variables I
MATB42S	Techniques of the Calculus of Several Variables II
MATB43S	Introduction to Analysis

Third year:

CSCC24S	Principles of Programming Languages
CSCC64S	Effective and Efficient Computing
CSCC78F	Information Structures
MATC49F	Galois Theory
MATC51F	Differential Equations I
MATC56S	Differential Equations II
STAB22F	Statistics
STAB47S	Introduction to Probability Theory and Mathematical Statistics

Fourth year:
MATC53Y or MATC60F
and
CSCC50F or CSCC51S
MATC65S, CSCC50F or CSCC51S
One other 0.5 course in Computer Science

one of:
JMCC31F, C32F, MATB70S, C30S

PSCD01F	Policy Issues
PSCD02S	Current Questions in Mathematics and Science

Specialist Programme in Computer Science and Statistics
Supervisor: M. Evans (287–7274)
The Specialist Programme in Computer Science and Statistics provides a student with the computational and statistical background required in many applications of these fields. The Programme prepares students for employment opportunities in business, government and education and for further graduate study.

First year:

CSCA58F	Introduction to Computing
CSCA68S	Computer Applications
MATA04Y	Linear Algebra
MATA26Y	Calculus
PHYA01Y	Principles of Physics

Second year:

CSCB28S	File Structures and Data Management
CSCB38F	Discrete Mathematics
CSCB58F	Computer Organization
MATB41F	Techniques of the Calculus of Several Variables I
MATB42S	Techniques of the Calculus of Several Variables II
MATB43S	Introduction to Analysis
STAB22F	Statistics
STAB47S	Introduction to Probability Theory and Mathematical Statistics

Third year:

CSCC24S	Principles of Programming Languages
CSCC64S	Effective and Efficient Computing
CSCC78F	Information Structures

STAC42S, STAC67F
or
STAC52S, STAC62F

1 full-course equivalent to be taken from C level STA courses at Scarborough, CSCC54F, and 300 and 400 level STA courses on the St. George campus.

Fourth year:

CSCC50F	Numerical Algebra and Optimization
CSCC51S	Numerical Approximation, Integration and Ordinary Differential Equations

STAC52S, STAC62F
or
STAC52S, STAC67F

PSCD01F	Policy Issues
PSCD02S	Current Questions in Mathematics and Science

1 full-course equivalent to be taken from C level STA courses at Scarborough, CSCC54F, and 300 and 400 level STA courses on the St. George campus.

Specialist Programme in Co-op Computer Science and Physical Sciences
Supervisor: TBA
The Co-operative Programme in Computer Science and Physical Sciences is a work-study programme which combines academic studies in Computer Science and Related Physical Sciences with work placements in public and private enterprises. The Programme alternates study during the regular academic term (September to May) with work term (May to August).

The Programme offers two options, the first with an emphasis on Computer Science and related Physical Sciences, while the second option emphasizes Computer Science and its relation to Statistics. Both options prepare the student for permanent employment with government and business enterprises concerned with research and technology. Obtaining a solid background in cognate disciplines, combined with work term experience, widens the scope of career opportunities.

Graduates receive a four-year B.Sc. with Specialist certification in Computer Science and Physical Sciences or Computer Science and Statistics.

Option 1:
First year:

CSCA58F	Introduction to Computing
CSCA68S	Computer Applications
MATA04Y	Linear Algebra
MATA26Y	Calculus
PHYA01Y	Principles of Physics

Second year:

CSCB28S	File Structure and Data Management
CSCB38F	Discrete Mathematics
CSCB58F	Computer Organization
MATB41F	Techniques of the Calculus of Several Variables I
MATB42S	Techniques of the Calculus of Several Variables II
PHYB21S	Electricity and Magnetism
PHYB22S	Electronics
PHYB23H	Physics Laboratory

Third year:

CSCB09S	Software Tools
CSCC24S	Principles of Programming Languages
CSCC50F	Numerical Algebra and Optimization
CSCC78F	Information Structures
CSCC85S	Microprocessors
MATC51F	Differential Equations I
PHLB70F	Philosophy of Science
PSCC01H	Modern Application of Classical Science

Fourth year:

CSCC51S	Numerical Approximation, Integration and Ordinary Differential Equations
CSCC64S	Effective and Efficient Computing
PHYC21F	Classical Physics
PHYC22S	Modern Physics

One more full-course equivalent from other C-level Physical Science Division courses

PSCD01F	Policy Issues
PSCD02S	Current Questions in Mathematics and Science

Option 2:
The course requirements are as listed under the Specialist Programme in Computer Science and Statistics.

Specialist Programme in Terrain and Environmental Earth Sciences (TEES)
Supervisor: N. Eyles (287–7231)
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 TEES programme specifies 16.5 of the 20 courses required for a four-year degree, drawing on expertise and facilities both on the Scarborough and St. George Campuses. These courses include two field excursions, each lasting up to two weeks, taken at the end of the second and third years. Field Camp I is held in the Appalachians of Pennsylvania and includes geological mapping along the Lehigh and Delaware Gaps. Field Camp II takes place in the Western Prairies and Rocky Mountains and includes a visit to the Athabasca glacier and the Tyrrell Museum of Palaeontology at Drumheller.

First year:

BIOA03Y	Introductory Biology
CHMA02Y	General Chemistry
GLGA01Y	Planet Earth: An Introduction to Geology
MATA26Y	Calculus
PHYA01Y	Principles of Physics

Second year:

CHMB11Y	Analytical Chemistry I
or	
CHMB22Y	Physical Chemistry I
GLGB02S	Stratigraphy and Sedimentology
GLGB03S	Field Camp I: The Appalachian Mountains
GLGB05F	Introductory Mineralogy
GLGB06S	Optical Mineralogy
GGRB19Y	Geomorphology
MATB41F	Techniques of the Calculus of Several Variables I

Third year:

CHMB44Y	Organic Chemistry I
GLG332F	Structural Geology
GLG318F	Petrology I
GLG319S	Petrology II
GLG400H	Environmental Geochemical Analysis
GGRC28Y	Hydrology

Fourth year:

CHMC25H	Physical Environmental Chemistry
or	
CHMC35H	Inorganic Environmental Chemistry
GLGC06F	Glacial & Periglacial Geology
GLGC10F	Hydrogeology
GLGD01S	Contaminant Hydrogeology
GLGD05F	Field Camp II: Rocky Mountains
PSCD01H	Policy Issues in Mathematics and Science

Specialist Programme in Mathematics
Supervisor: E. Moore (287–7267)
The Specialist Programme in Mathematics is designed to give students a thorough grounding in the main areas of Mathematics, together with an understanding of the close relationship between Mathematics and other Sciences. It is aimed at students who may be interested in teaching, law, government or industry, or who may decide to pursue a career in research.

First year:

CSCA58F	Introduction to Computing
CSCA68S	Computer Applications
MATA04Y	Linear Algebra
MATA26Y	Calculus
PHYA01Y	Principles of Physics

Second year:

MATB30F	Geometry I
MATB31F	Algebra I
MATB32S	Algebra II
MATB41F	Techniques of the Calculus of Several Variables I
MATB42S	Techniques of the Calculus of Several Variables II
MATB43S	Introduction to Analysis
STAB22F	Statistics

one of:
CSCB58F, PHYB21S, STAB47S

Third year:

MATC49F	Galois Theory
MATC51F	Differential Equations I
MATC56S	Differential Equations II

MATC53Y Real Analysis
or
MATC60F, MATC65S

three of:
MATB70S, C30S, C54F, JMCC31F, C32F
Any additional CSC 0.5 course
Any additional STA 0.5 course

Fourth year:
MATC53Y or MATC60F
and
MATC65S

two of:
CSCC50F, CSCC51S, MATB70S, C30S, C54F, JMCC31F, C32F

PSCD01F	Policy Issues
PSCD02S	Current Questions in Mathematics and Science.

Specialist Programme in Mathematics and Statistics
Supervisor: M. Evans (287–7274)
The Specialist Programme in Mathematics and Statistics provides a student with the mathematical and statistical background for a sound understanding of statistical theory and practice. The Programme prepares students for employment opportunities in business, government and education and for graduate study.

First year:

CSCA58F	Introduction to Computing
CSCA68S	Computer Applications
MATA04Y	Linear Algebra
MATA26Y	Calculus
PHYA01Y	Principles of Physics

Second year:

MATB31F	Algebra I
MATB32S	Algebra II
MATB30F	Geometry
MATB41F	Multivariate Calculus I
MATB42S	Multivariate Calculus II
MATB43S	Introduction to Analysis
STAB22F	Statistics
STAB47S	Introduction to Probability Theory and Mathematical Statistics

Third year:

MATC49F	Galois Theory
MATC51F	Differential Equations I
MATC56S	Differential Equations II

STAC52S, STAC62F
or
STAC42S, STAC67F

1 full-course equivalent to be taken from C level STA courses at Scarborough, CSCC54F, 300 and 400 level STA courses on the St. George campus.

Fourth year:

MATC53Y	Real Analysis
or	
MATC60F	Complex Analysis I
MATC65S	Complex Analysis II

1 additional MAT half course

STAC52S, STAC62F
or
STAC42S, STAC67F

PSCD01F	Policy Issues
PSCD02S	Current Questions in Mathematics and Science

1 full-course equivalent to be taken from C level STA courses at Scarborough, CSCC54F, 300 and 400 level STA courses on the St. George campus.

Specialist Programme in Physical Sciences
Supervisor: TBA
This Programme requires 16 full-course equivalents. The programme provides a broad introduction to Astronomy, Chemistry and Physics based upon a firm mathematical foundation. It is intended for students who may wish to pursue a career in teaching or in one or more of the Physical Sciences or to acquire a basic understanding of the Physical Sciences before undertaking a career in government or industry.

First year:
ASTA03Y Introduction to Astronomy
CHMA02Y Chemistry
CSCA57S Introduction to Scientific Computing
MATA26Y Calculus
PHYA01Y Principles of Physics

Second year:
ASTB50S Celestial and Classical Mechanics
CHMB11Y Analytical Chemistry I
CSCB58F Computer Organization
MATB41F Multivariate Calculus I
MATB42S Multivariate Calculus II
PHYB21S Electricity and Magnetism
STAB22F Statistics

Third year:
ASTC50F Structure and Evolution of Astrophysical Bodies
CHMB22Y Physical Chemistry I
PHLB70F Philosophy of Science
PHYB22S Electronics
PHYB23H Physics Laboratory
PSCC01H Modern Applications of Classical Science

Fourth year:
ASTC51S Stellar Systems, Galaxies and Cosmology

CHMB33Y Inorganic Chemistry I
or
CHMB44Y Organic Chemistry I

CSCC50F Numerical Algebra and Optimization
or
CSCC51S Numerical Approximation

PHYC21F Classical Physics
PHYC22S Modern Physics
PSCD01F Policy Issues
PSCD02S Current Questions in Mathematics and Science

Major Programme in Astronomy and Physics
Supervisor TBA
In this Programme, students must complete 8 full-course equivalents in astronomy, mathematics and physics as listed below. After completing the programme, students will have a good education in the basic principles and applications of modern astronomy and physics. It is intended for those who desire a basic understanding of these subjects but who do not plan to pursue graduate studies.

First year:
ASTA03Y Introduction to Astronomy
MATA26Y Calculus
PHYA01Y Principles of Physics

Second year:
ASTB50S Celestial and Classical Mechanics
MATB41F Techniques of the Calculus of Several Variables I
MATB42S Techniques of the Calculus of Several Variables II
PHYB21S Electricity and Magnetism
PHYB23H Physics Laboratory

Third year:
ASTC50F Structure and Evolution of Astrophysical Bodies
ASTC51S Stellar Systems, Galaxies and Cosmology
MATC51F Differential Equations I
PHYC21F Classical Physics
PHYC22S Modern Physics

Major Programme in Chemistry
Supervisor:
K. Henderson (287–7215)/A. Verner (287–7224)
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
PHYA01Y Principles of Physics

Second and Third years: (One of the following *Sets* of options must be taken:

Inorganic/Organic
CHMB11Y Analytical Chemistry I
CHMB33Y Inorganic Chemistry I
CHMB44Y Organic Chemistry I
CHMC33H Inorganic Chemistry II
CHMC36S Inorganic Chemistry Laboratory
CHMC44Y Organic Chemistry II

Physical Organic
CHMB22Y Physical Chemistry I
CHMB44Y Organic Chemistry I
MATB41F Techniques of the Calculus of Several Variables I
MATB42S Techniques of the Calculus of Several Variables II
CHMC22F Physical Chemistry II
CHMC26F Physical Chemistry Laboratory
CHMC44Y Organic Chemistry II

Physical Inorganic
CHMB11Y Analytical Chemistry I
CHMB22Y Physical Chemistry I
CHMB33Y Inorganic Chemistry I
MATB41F Techniques of the Calculus of Several Variables I
MATB42S Techniques of the Calculus of Several Variables II
CHMC22F Physical Chemistry II
CHMC26F Physical Chemistry Laboratory
CHMC33H Inorganic Chemistry II
CHMC36S Inorganic Chemistry Laboratory

Chemistry
CHMB11Y Analytical Chemistry I
CHMB22Y Physical Chemistry I
CHMB33Y Inorganic Chemistry I
CHMB44Y Organic Chemistry I
One full-course equivalent C-level Chemistry Course*** which includes a laboratory.

*** Students should note that if they are going to select CHMC22F, CHMC26F then MATB41F and MATB42S are required as prerequisites.

Major Programme in Biochemistry
Supervisor:
K. Henderson (287–7215)/A. Verner (287–7224)
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:
BIOA03Y Introductory Biology
CHMA02Y General Chemistry

Second and Third years:
CHMB11Y Analytical Chemistry
CHMB44Y Organic Chemistry I
CHMC44Y Organic Chemistry II
JBCC35Y Introductory Biochemistry
JBCC36H Laboratory in Biochemistry

one of:
BIOB02Y Basic Microbiology
BIOB17Y General and Comparative Physiology
CHMB22Y* Physical Chemistry I
CHMB33Y Inorganic Chemistry I
* If CHMB22Y is chosen, MATA26Y and PHYA01Y are prerequisites.
MATA26Y is a strongly recommended course.

Major Programme in Mathematical Sciences
Students must choose one of the following options:

Mathematics:

First year:
MATA26Y Calculus
MATA04Y Linear Algebra
CSCA58F Introduction to Computing
CSCA68S Computer Applications

Second and Third years:
MATB31F Algebra I
MATB41F Techniques of the Calculus of Several Variables I
MATB42S Techniques of the Calculus of Several Variables II
STAB22F Statistics

a) 1.5 full-course equivalents from:
MATB43S, C51F, C53Y, C56S, C60F, C65S

b) 0.5 full-course equivalent from:
MATB30F, B31F, B32S, B70S, C30S, C43S, C49F, C54F, JMCC31F, C32F

c) 1.0 full course equivalent from:
CSCB28S, B38F, B58F, C24S, C50F, C51S, C54F, C64S, C78F, C85S, CSC300, 318, 340, JMCC31F, C32F, any 400 level CSC course on St. George campus.
STAB47S, C42S, C62F, C67F, any 300 and 400 level STA course on St. George campus.

Computer Science:

First year:

CSCA58F	Introduction to Computing
CSCA68F	Computer Applications
MATA04Y	Linear Algebra
MATA26Y	Calculus

Second and Third years:

CSCB28S	File Structures and Data Management
CSCB38F	Discrete Mathematics
CSCB58F	Computer Organization
MATB41F	Techniques of the Calculus of Several Variables I
MATB42S	Techniques of the Calculus of Several Variables II
STAB22F	Statistics

a) 1.0 full-course equivalent from:
CSCC24S, C50F, C51S, C54F, C64S, C78F, C85S, CSC300, 318, 340, JMCC31F, C32F, any 400 level CSC course on St. George campus.

b) 0.5 full-course equivalent from:
MATB43S, C51F, C53Y, C56S, C60F, C65S MATB30F, B31F, B32S, B70S, C30S, C43S, C49F, C54F, JMCC31F, C32F
STAB47S, C42S, C52F, C62F, C67F, any 300 and 400 level STA courses on St. George campus.

c) 0.5 full-course equivalent from:
Course list in a) above PLUS b) above

Statistics

First year:

CSCA58F	Introduction to Computing
CSCA68S	Computer Applications
MATA04Y	Linear Algebra
MATA26Y	Calculus

Second and Third years:

MATB41F	Techniques of the Calculus of Several Variables I
MATB42S	Techniques of the Calculus of Several Variables II
STAB22F	Statistics
STAB47S	Introduction to Probability Theory and Mathematical Statistics

a) 2.0 full-course equivalents from:
STAC42S, STAC52F, C62F, C67F, any 300 and 400 level STA courses on St. George campus.

b) 1.0 full-course equivalent from:
MATB43S, C51F, C53Y, C56S, C60F, C65S MATB30F, B31F, B32S, B70S, C30S, C43S, C49F, C54F, JMCC31F, C32F
STAC42S, C52F, C62F, C67F, any 300 and 400 level STA course on St. George campus.
CSCB28S, B38F, B58F, C24S, C50F, C51S, C54F, C64S, C78F, C85S, CSC300, 318, 340, JMCC31F, C32F, any 400 level CSC course on St. George campus.

PSCC01H Modern Applications of Classical Science
The use of concepts from classical science in modern systems in society will be considered. Particular applications might include energy production and distribution systems, such as hydro-electric grid systems. The constraints on the design, efficiency, etc. of such systems imposed by the laws of classical science, such as thermodynamics, will be considered, and evolutionary possibilities of such systems as technology changes will be considered subject to the same constraints.
Prerequisites: PHYB21S, MATB41F, MATB42S
Corequisite: PHYB22S, PHYB23H

PSCD01F Policy Issues in Mathematics and Science
Consideration of the impact of modern sciences on society, particularly concerned with public policy pertaining to the problems and benefits brought to society with an increasing dependence on science and engineering. Topics will include energy sources and consumption, environmental hazards of resource based and manufacturing industries, acceptable, safe, and peaceful uses of new technologies. Where appropriate, outside guest lecturers will participate in the course.
Prerequisite: Completion of at least one half of the full-course equivalent requirements of the required courses in any one of the Physical Sciences Scarborough Programmes.
Corequisite: Continued participation in one of the Physical Sciences Scarborough Programmes.

PSCD02S Current Questions in Mathematics and Science
Topics of current prominence in the physical sciences and mathematics will be discussed, usually by faculty or outside guests who are close to the areas of prominence. Topics will change from year to year as the sciences evolve. An appropriate topic at the present would be, for example, the phenomenon of high-temperature super-conductivity.
Prerequisite: PSCD01F
Corequisite: Continued participation in one of the Physical Sciences Scarborough Programmes.

Physics

Discipline Representative: TBA
Physics is the study of the basic laws which describe how material objects move and influence each other. The 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 Specialist Programme in Astronomy, Physics and Mathematics, the Specialist Programme in Physical Sciences, or the Major Programme in Astronomy and Physics. In addition, there is a Co-operative Programme in Computer Science and Physical Sciences.

NOTE: There are two introductory courses in physics: PHYA01Y and PHYA02Y. PHYA02Y is a university level course for students not intending to pursue further work in physics.

Please refer to the Physical Sciences section of the Calendar for the following Programmes.

Specialist Programme in Astronomy, Mathematics and Physics

Specialist Programme in Physical Sciences

Specialist Programme in Co-op Computer Science and Physical Sciences

Major Programme in Astronomy and Physics

Major Programme in Physics

The Major Programme in Physics is no longer offered. Students currently registered will be allowed to complete it.

PHYSICS

PHYA01Y Principles of Physics
Telephone ID #: 24810163
Classical mechanics: potential energy, conservation laws, rotational dynamics, planetary motion, harmonic vibrations, wave equations; Thermodynamics: temperature, entropy, ideal gases; Special theory of relativity: Lorentz transformation, relativistic mechanics, $E=mc^2$; Electricity and magnetism: Maxwell's equations, electromagnetic waves; Quantum mechanics: Schrodinger's equation in simple systems, lasers, electronic states in metals and semiconductors, the structure of the nucleus.

Two lectures and one tutorial per week, and a three-hour laboratory every second week.
Exclusion: PHYA02; (PHYA03)
Corequisite: MATA26 or (MATA27) or (MATA55)
Session: Winter Day

PHYA02Y Concepts of Physics
Telephone ID #: 24810263
Classical mechanics: potential energy, linear and angular momentum, planetary motion; Thermodynamics: temperature, entropy, ideal gases; Special theory of relativity: length contraction, time dilation, $E=mc^2$; Electricity and magnetism: electric and magnetic fields, laws of Gauss, Ampere, Faraday, and Maxwell, electrognetic waves; Quantum physics: atoms and molecules, solids, structure of nuclei, radioactivity, nuclear fission, the early universe.

Two lectures and one tutuorial per week, and a three-hour laboratory every second week.
Exclusion: PHYA01; (PHYA03)
Prerequisite: OAC Calculus and OAC Algebra or Grade 13 Calculus
Session: Winter Day

PHYB04F Waves and Vibrations
Telephone ID #: 24820433
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: PHYA01 (or PHYA03); MATA26
Session: Winter Day

PHYB17S Quantum Physics A
Telephone ID #: 24821753
An introductory course in quantum physics; simple models of the atom; wave-particle 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
Telephone ID #: 24821953
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

PHYB21S Electricity and Magnetism
Telephone ID #: 24822153
Coulomb's law, electric fields, Gauss' law, electric potential, capacitance, dielectrics, magnetic forces and fields, inductance, magnetization, Faraday's law, displacement current, Maxwell's equations.
Exclusion: PHYB01
Prerequisite: PHYA01; MATB41

PHYB22F Electronics
Telephone ID #: 24822233
Non-linear elements including diodes and transistors, rectifiers, simple filters, amplifiers, pulse circuits, operational amplifiers, logic gates, Boolean algebra, digital electronics. Includes a three-hour laboratory every second week.
Exclusion: PHYB03
Prerequisite: PHYA01 or PHYA02; MATA26
Corequisite: PHYB23

PHYB23H Physics Laboratory
Telephone ID #: 24822343
Experiments in circuit theory, basic electricity and magnetism, solid state physics and atomic and nuclear physics. A six-hour laboratory once every two weeks.
Exclusions: PHYB08, PHYC05
Corequisite: PHYB21

PHYC04F Physics of Solid State Devices
Telephone ID #: 24830433
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

PHYC05H Advanced Physics Laboratory
Telephone ID #: 24830543
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

PHYC08S Thermal Physics B
Telephone ID #: 24830853
A continuation of Thermal Physics A. Conversion of heat to work (refrigerators, heat pumps, Carnot cycles); Gibbs free energy and chemical reactions; phase transitions (vapour pressure equation, mean field theories, ferromagnetism); energy and entropy of mixtures; how to reach low temperatures (cryogenics); kinetic theory of transport processes in gases.
Prerequisite: PHYB19
Session: Winter Day

PHYC21F Classical Physics
Telephone ID #: 24832133
Simple harmonic motion, damping, forced and coupled oscillations; waves, wave groups, group velocity, Fourier analysis; thermal physics, refrigerators, heat pumps, Carnot cycles, energy and entropy.
Exclusions: PHYB04, PHYC08
Prerequisite: PHYB21; MATB42
Not offered 1991/92 or 1992/93
Offered 1993/94

PHYC22S Modern Physics
Telephone ID #: 24832253
Wave-particle duality, Schroedinger equation, atoms and molecules; subatomic physics, particles, nuclei, nuclear power; statistical physics, distributions (MB, FD and BE): semiconductors, metals, superconductivity; lasers.
Exclusions: PHYB17, PHYB19, PHYC04, PHYC07, PHYC09
Prerequisite: PHYC21
Not offered 1991/92 or 1992/93
Offered 1993/94

Courses Not Offered in 1991-92

PHYC07F Quantum Physics B
Prerequisites: PHYB01; PHYB17

PHYC09S Laser Optics
Prerequisite: PHYB01; PHYB04; MATB41
Corequisite: MATC51

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.

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. Students should consult the Supervisor of Studies about procedures.

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 Science
Supervisor: G. Skogstad
Note: Registration in this Programme is 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 POLA50Y. 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 POLA50Y) 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 full-course equivalents in Political Science. The courses must be approved by the Supervisor and must include the following:

1 POLA50 Introduction to Canadian Politics
2 One course in political theory from: POLB70, POLC70, POLC74, POLC75, POLD71, POLD72, POLD73
3 One course from each of any three of
A Canadian Government POLB51, POLC52-C55, POLD51, POLD65
B Public Administration and Public Policy POLB53, POLB61, POLB62, POLC60, POLC61, POLC63, POLC64, POLD50, POLD62.
C International Relations: POLB80, POLC81, POLC82, POLC83, POLC84
D Comparative Politics, Industrial Countries: POLB86, POLB87, POLC68, POLC85, POLC87, POLC89, POLC90
E Comparative Politics, Developing Countries: POLB91, POLC95, POLC96, POLC97, POLC98, POLD93, POLD94

Students in the Specialist Programme may not take more than fourteen full-course 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
Note: Registration in this Programme is limited.

Applications for admission to the Major 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 POLA50Y. 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 POLA50Y) 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 POLA50 Introduction to Canadian Politics
2 One course in political theory from: POLB70, POLC74, POLC75, POLD72, POLD73
3 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
D 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)

POLA50Y Introduction to Canadian Politics
Telephone ID #: 25215063
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.
Exclusion: (POLB50)
Session: Winter Day, Winter Evening, Summer Evening
G. Skogstad, J. Esberey, L. Johnston

IDSB01Y Political Economy of International Development
Telephone ID #: 08120163
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

POLB51S Government and Politics in Ontario
Telephone ID #: 25225153
Political structures and processes in Ontario: Cabinet government; the interaction of Cabinet, Legislature, and public service; political parties and the party system; provincial-municipal relations.
Class size is limited to 80 per section.
Prerequisite: POLA50 (POLB50)
Session: Winter Evening
R. S. Blair

POLB53F Public Policies in Canada
Telephone ID #: 25225333
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.
Prerequisite: POLA50 (POLA01 or POLB50)
Session: Winter Evening
R. Manzer

POLB61F Canadian Public Administration: Institutions and Processes
Telephone ID #: 25226133
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)
Prerequisite: POLA50 (POLB50)
Session: Winter Day
J. Esberey

POLB62S Public Policy-Making
Telephone ID #: 25226253
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.
Prerequisite: POLA50 (POLA01 or POLB50)
Session: Winter Evening
R. Manzer

POLB70Y Political Thought from Plato to Locke
Telephone ID #: 25227063
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 Aquinas will also be studied.
Class size is limited to 80 per section.
Session: Winter Day
TBA

POLB80Y International Relations
Telephone ID #: 25228063
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, Winter Evening
D. Welch, A. Rubinoff

POLB87Y U.S. Government and Politics
Telephone ID #: 25228763
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
A. Rubinoff

POLB91Y Politics of the Third World
Telephone ID #: 25229163
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
Telephone ID #: 25235263
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.
Prerequisite: POLA50 (POLB50)
Session: Winter Day
R. S. Blair

POLC54S Intergovernmental Relations In Canada
Telephone ID #: 25235453
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.
Prerequisite: POLA50 (POLB50)
Session: Winter Day
G. Skogstad

POLC55F Comparative Provincial Government
Telephone ID #: 25235533
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.
Prerequisite: POLA50 (POLB50)
Session: Winter Evening
R. S. Blair

POLC60F Administrative Politics
Telephone ID #: 25236033
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: POLA50 (POLB50) + POLB61 or POLB62
Session: Winter Day
R. Manzer

POLC61S Policy Development and Political Evaluation
Telephone ID #: 25236153
Theories of public decision-making and basic patterns of policy-making institutions and processes. Problems of defining and applying criteria for political evaluation such as efficiency, effectiveness, equity, wants, needs, and rights. Analysis of theory and practice in selected case of Canadian public administration and policy development.
Class size is limited to 60 per section.
Prerequisite: POLB53 or POLB62 or POLB61
Session: Winter Day
R. Manzer

POLC68F Comparative Intergovernmental Relations
Telephone ID #: 25236833
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 growth 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: POLA50 (POLB50) + POLC54 or POLC87Y
Session: Winter Day
J. Esberey

POLC74Y Political Thought of the Eighteenth and Nineteenth Centuries
Telephone ID #: 25237463
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.
Prerequisite: POLB70
Session: Winter Day
D. Cook

POLC84Y Canadian Foreign Policy
Telephone ID #: 25238463
An examination of the most important elements within Canada's foreign policy since 1945 and a consideration of the issues and the influences which have determined that policy.
Class size is limited to 60 per section.
Prerequisite: POLA50 (POLB50) or POLB80Y
Session: Winter Day
D. Welch

POLC87Y Comparative Politics of Industrial Societies
Telephone ID #: 25238763
A comparative analysis of politics in advanced industrial societies including consideration of the following topics: interaction among political and bureaucratic elites, interest group representation, the dynamics of the welfare state, and future conditions of post-industrial societies.
Organization of the course will depend upon enrolment.
Class size is limited to 60 per section.
Exclusion: (POLB85)
Prerequisite: One course in Political Science or Permission of Instructor
Session: Winter Evening
J. Esberey

POLC98Y Politics and Society in Latin America
Telephone ID #: 25239863
This lecture/seminar course will survey the evolution and current traits of political institutions in Latin America 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

IDSD01Y International Development Studies: Advanced Seminar
Telephone ID #: 08140163
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

POLD50F Organized Interests and Public Policy in Canada
Telephone ID #: 25245033
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.
Prerequisite: POLA50 (POLB50)
Session: Winter Day
G. Skogstad

POLD51S Topics in Canadian Government
Telephone ID #: 25245153
An intensive study of selected important topics in the field of Canadian government and politics.
This year, the topics to be explored will include: the politics and management of Canadian economic policy; secrecy; delegated legislation and its consequences; consequences of structural changes in the machinery of central government.
The course will be taught in a weekly two-hour seminar and the students will be expected to undertake regular preparatory reading and to participate actively in class discussion.
Class size is limited to 20 per section.
Prerequisite: POLA50 (POLB50)
Session: Winter Day
TBA

POLD62S Organized Interests and the State
Telephone ID #: 25246253
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.
Prerequisite: POLA50 (POLA01 or POLB50) or POLC87
Session: Winter day
J. Esberey

POLD71Y Canadian Political Ideas
Telephone ID #: 25247163
An examination of the ideas informing Canadian political movements and parties from Confederation to the present.
The seminar will require two class presentations during the year.
Class size is limited to 20 per section.
Prerequisite: One of POLA50 (POLB50), POLB70, POLC74, HISB04
Session: Winter Day
TBA

POLD72F Selected Topics in Political Philosophy
Telephone ID #: 25247233
A detailed examination either of selected themes in political philosophy or the works of a particular philosopher. The topics to be studied will be announced annually in the Spring.
Class size is limited to 20 per section.
Prerequisite: POLB70, POLC74 or permission of instructor.
Session: Winter Day
TBA

POLD73S Selected Topics in Political Philosophy
Telephone ID #: 25247353
A detailed examination either of selected themes in political philosophy or the works of a particular philosopher. The topics to be studied will be announced annually in the Spring.
Class size is limited to 20 per section.
Prerequisite: POLB70, POLC74 or Permission of Instructor
Session: Winter Day
TBA

POLD93F Selected Topics on Developing Areas
Telephone ID #: 25249333
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
Telephone ID #: 25249453
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.
Prerequisite: A social science course on the Third World or development
Session: Winter Day
R. Sandbrook

POLD98F Supervised Reading
Telephone ID #: 25249833
Advanced 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.
Prerequisite: One B-level course in Political Science; Permission of Instructor.
Session: Summer Evening, Winter Day, Winter Evening
Staff

POLD99S Supervised Reading
Telephone ID #: 25249953
Advanced 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 Political Science, wish to pursue further intensive study on a relevant topic of special interest.
Class size is limited to 20 per section.
Prerequisite: One B-level course in Political Science; Permission of Instructor.
Session: Summer Evening, Winter Day, Winter Evening
Staff

Courses Not Offered in 1991-92

POLB86Y	Soviet Government and Politics
POLC63S	Administrative Theories and Policy-Making Limit 60 Prerequisite: POLA50 (POLB50) + POLB61 or POLB62
POLC64S	Comparative Public Administration Limit 60
POLC70Y	Twentieth Century Political Thought Limit 60 Prerequisite: POLB70, POLC74 or POLC75
POLC75Y	Political Analysis Prerequisite: POLA50 (POLB50)
POLC81S	The Psychology of International Relations Limit 60 Prerequisite: (POLB66) or POLB80
POLC82Y	American Foreign Policy Prerequisite: POLB80 or POLB87
POLC95Y	Politics and Society in Tropical Africa Prerequisite: none, but a course in introductory political science would be helpful
POLC97Y	Government and Politics in India
POLD65F	Topics in Political Leadership Prerequisite: POLA50 (POLB50 or POLA01)

Psychology

Associate Chair: TBA
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 subareas 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 or Major 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 (Office S-560)
The programme requires completion of 12.5 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. 10.5 full-course equivalents in Psychology, as follows:
1 PSYA01Y Introduction to Psychology (1 full-course equivalent)
2 Statistical Methods (1 full-course equivalent)
   (a) PSYB07F/S Data Analysis in Psychology
   and
   (b) PSYC08F/S Experimental Design in Psychology
3 Laboratory Methods (1 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 6b or 7.)
4 PSYB02S Scientific Communication in Psychology (.5 full-course equivalent)
5 History and Theoretical Psychology (.5 full-course equivalent)
   (a) PSYC82F/S Theoretical Psychology
   or
   (b) PSYC85F/S History of Psychology
6 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).
7 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 6a, 6b, or 6c.
   NOTE: STUDENTS MUST BALLOT FOR D-LEVEL COURSES; PLEASE READ THE INSTRUCTIONS BELOW.
8 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.

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 (Office S-560)
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)
2 PSYB01F/S Psychological Research Laboratory (.5 full-course equivalent)
3 PSYB07F/S Data Analysis in Psychology (.5 full-course equivalent)
4 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 50-series).
5 Course at the D-level (.5 full-course equivalent)
   Students must choose one half-course (.5 full-course equivalent) from the D-level offerings in Psychology.
   NOTE: STUDENTS MUST BALLOT FOR D-LEVEL COURSES; PLEASE READ THE INSTRUCTIONS BELOW.
6 Additional courses in Psychology (2 full-course equivalents)
   Students must choose 2 further full-course 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 D-level 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 26. 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 early-registration 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 D-levels 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
Telephone ID #: 25710163
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 experience.
Session: Summer Evening, Winter Day, Winter Evening
The Faculty

PSYB01F Psychological Research Laboratory
Telephone ID #: 25720133
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
G. Biederman

PSYB02S Scientific Communication in Psychology
Telephone ID #: 25720253
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 limited to students enrolled in the Psychology Specialist Programme, and is recommended to be taken in the student's second year.
Prerequisites: PSYB01, PSYB07
Session: Winter Day
D. Bors

PSYB07F Data Analysis in Psychology
Telephone ID #: 25720733
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, BIOB28, ECOB11, GGRB31, STAB22, STAB47, SOCB06
Session: Summer Evening, Winter Day
B. Forrin

PSYB10F Introduction to Social Psychology
Telephone ID #: 25721033
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
Telephone ID #: 25722033
Developmental processes during infancy and childhood.

This course presents students with a broad and integrative overview of child development. Major theories and research findings will be discussed in order to understand how the child changes physically, socially, emotionally, and cognitively with age. Topics are organized chronologically beginning with prenatal development and continuing through selected issues in adolescence and life-span development.

Three lecture hours per week.
Prerequisite: PSYA01
Session: Winter Evening
M. Schmuckler

PSYB30S Personality
Telephone ID #: 25723053
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 Abnormal Psychology
Telephone ID #: 25723233
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, medical-psychiatric, psychoanalytic, social-learning, 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
TBA

PSYB45S Behaviour Modification: Origins and Applications
Telephone ID #: 25724553
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. Klajner

PSYB50F Sensation and Perception
Telephone ID #: 25725033
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: Winter Day
J. Kennedy

PSYB51S Perception and Cognition
Telephone ID #: 25725153
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 scene-analysis, 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 Day
J. Kennedy

JLPB55S Psycholinguistics
Telephone ID #: 14225553
Experimental evidence for theories of how humans produce and understand language, and of how language is represented in the mind. Topics will include the perception and categorization of speech sounds, retrieval of words from memory during speech and listening, use of grammatical knowledge in planning and understanding sentences, production and comprehension of longer stretches of discourse, and the role of memory systems in language processing.
Prerequisite: One FCE in LIN and one FCE in PSY
Session: Winter Day
R. Smyth
Offered every year

PSYB57S Memory and Cognition
Telephone ID #: 25725753
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: PSYA01
Corequisite: PSYB07
Session: Summer Evening, Winter Day
TBA

PSYB60F Brain Mechanisms and Behaviour: I
Telephone ID #: 25726033
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: PSYA01; PSYB65 is recommended for students with no Biology background.
Session: Winter Day
T. Petit

PSYB65F Human Brain and Behaviour
Telephone ID #: 25726533
An examination of the neurological basis of human behaviour: an introduction to human neuropsychology.

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 focuses on the following: higher brain function in humans; hemispheric specialization, neuropsychology of speech, disorders of the central nervous system (multiple sclerosis, epilepsy, organic brain damage, strokes, senility, frontal lobe syndrome, neglect, 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
Session: Winter Day
T. Petit

PSYC08S Experimental Design in Psychology
Telephone ID #: 25730853
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 plus one additional B-level half-course in PSY.
Exclusion: STAC52
Session: Winter Day
B. Forrin

PSYC11S Social Psychology Laboratory
Telephone ID #: 25731153
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
Session: Winter Day
J. Bassili

PSYC12S Advanced Social Psychology
Telephone ID #: 25731253
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
Session: Summer Evening, Winter Day
J. Bassili

PSYC21F Advanced Developmental Psychology
Telephone ID #: 25732133
An examination of selected issues pertaining to adult development, particularly during early and middle adulthood.

Examples of topics which may be considered: adaptation to parenthood, work-related functioning, continuity versus change in adulthood.
Teaching method: lectures, discussion.
Prerequisite: PSYB20 plus one additional B-level half-course in PSY
Session: Winter Evening
TBA

PSYC34S Psychometric Methods Laboratory
Telephone ID #: 25733453
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 character.

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)
Session: Winter Day
B. Forrin

PSYC42F Learning Laboratory
Telephone ID #: 25734233
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)
Session: Winter Day
G. Biederman

PSYC45F Applied Psychology of Learning
Telephone ID #: 25734533
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 and PSYC42 also recommended.
Session: Summer Evening
G. B. Biederman

PSYC54S Cognition and Representation
Telephone ID #: 25735453
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, 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 the blind, and child development.

Teaching method includes lectures and student presentations.
Prerequisites: PSYB07, a PSYB20-series or a PSYB50-series half-course in PSY
Session: Winter Evening
J. Kennedy

PSYC58F Experimental Psychology Microcomputer Laboratory
Telephone ID #: 25735833
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 learn 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: any course in Computer Science
Session: Winter Evening
TBA

PSYC61S Brain Mechanisms and Behaviour: II
Telephone ID #: 25736153
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 B-level half-course in PSY; PSYB07 and PSYC08 are recommended.
Session: Winter Day
TBA

PSYC63Y Physiological Psychology Laboratory
Telephone ID #: 25736363
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; PSYB07 and PSYC08 are recommended
Session: Winter Day
G. Ivy and TBA

PSYC82F Theoretical Psychology
Telephone ID #: 25738233
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.
Session: Winter Day
A. Kukla

PSYC85F History of Psychology
Telephone ID #: 25738533
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: 25.
Prerequisite: Two B-level half-courses in PSY
Exclusion: (PSYD85)
Session: Winter Day
G. Cupchik

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
Telephone ID #: 25741533
An intensive examination of selected issues and research problems in social psychology. Limited enrolment: 15.
Prerequisite: PSYC11, PSYC12 or PSYB10 plus one C-level half-course in PSY
Session: Summer Evening
TBA

PSYD16F Critical Analysis in Social Psychology
Telephone ID #: 25741633
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 or PSYC12 or PSYB10 plus one C-level half-course in PSY
Session: Winter Evening
G. Cupchik

PSYD20S Current Topics in Developmental Psychology
Telephone ID #: 25742053
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 or JLPC24 or PSYB20 plus one C-level half-course in PSY
Session: Winter Day
M. Schmuckler

PSYD22S Socialization Processes
Telephone ID #: 25742253
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
Session: Winter Evening
TBA

PSYD33S Current Topics in Abnormal Psychology
Telephone ID #: 25743353
An intensive examination of selected issues and research problems in abnormal psychology. The specific content will vary from year to year. Limited enrolment: 15.
Prerequisite: PSYB32 plus one C-level half course in PSY
Session: Winter Day
TBA

PSYD50S Current Topics in Memory and Cognition
Telephone ID #: 25745053
An intensive examination of selected topics. The specific content will vary from year to year. Limited enrolment: 15
Prerequisite: PSYB57 plus one C-level half course in PSY
Session: Winter Day
M. Smith

PSYD53F Psychology and the Law
Telephone ID #: 25745333
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
Session: Winter Day
M. Smith

JLPD55F Disorders of Speech and Language
Telephone ID #: 14245533
Pathologies of language acquisition and comprehension production. Topics include the anatomy and physiology of the speech and hearing mechanism, voice disorders (hoarseness, harshness, dysphonia, alaryngel speech), functional articulation disorders, cleft palate, aphasia, apraxia, dysarthria, language delay, language learning disabilities, mental retardation, hearing and auditory processing disorders, and the identification of pathologies in speakers of other dialects, or languages than that of the clinician.
Prerequisites: One FCE in LIN and one FCE in PSY, and one C-level FCE in LIN, PSY or JLP.
Session: Winter Day
R. Smyth
Not offered 1992/93
Offered 1993/94

PSYD60F Current Topics in Physiological Psychology
Telephone ID #: 25746033
An intensive examination of selected issues and research problems in comparative and physiological psychology. Limited enrolment: 15.
Prerequisite: PSYC61
Session: Winter Day
TBA

PSYD62F Neuroplasticity: Mechanisms and Function
Telephone ID #: 25746233
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, PSYC61
Session: Winter Day
N. Milgram

PSYD67S Psychobiology of Aging
Telephone ID #: 25746753
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
Session: Winter Day
G. Ivy

PSYD80S Current Topics in Theoretical Psychology
Telephone ID #: 25748053
An intensive examination of selected issues in theoretical psychology. The specific content will vary from year to year.
Limited enrolment: 15
Prerequisite: PSYC82
Session: Winter Day
A. Kukla

PSYD98Y Thesis in Psychology
Telephone ID #: 25749863
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, Psychology Specialist
Exclusion: NROD98
Session: Winter Day
Coordinator: *B. Forrin*

Courses Not Offered in 1991-92

JLPC24S Developmental Psycholinguisitcs
Prerequisites: One F.C.E. in LIN and one F.C.E. in PSY, and one B-level F.C.E. in either LIN, PSY or JLP.
Offered 1992/93
Not Offered 1993/94

PSYC64F/S Psychobiology of Sensory Systems and Their Development
Prerequisite: PSYB60

PSYD18S Psychology of Gender
Prerequisite: PSYB10 plus two C-level half-courses in PSY

PSYD32S Abnormal Child Psychology
Prerequisites: PSYB32; PSYC21 or PSYB20 plus one C-level half-course in PSY

PSYD40S Current Topics in Animal Learning
Prerequisites: PSYB01, PSYC42

PSYD41S Research in Operant Conditioning
Prerequisite: PSYB01, PSYC42

Quaternary Studies

Major Programme in Quaternary Studies

Supervisor: TBA

This programme is no longer offered, but students currently enrolled will be allowed to complete it.

Russian

Discipline Representative:
C.V. Ponomareff (287-7166)
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 RUSC02H-C05Y.

HUMB06F/S Russian Shorter Fiction of the 19th and 20th Centuries
HUMB07F/S Russian Culture
HUMB42Y The Modernist Adventure
HUMB44F/S Disaster and the Literary Imagination
HUMB46F/S The Individual and the Totalitarian State
HUMB58Y The Nineteenth-Century Russian Novel, 1830-1880
HUMC53F/S Beyond Nihilism: Visions of Renewal

RUSC02H
RUSC03H
RUSC04H
RUSC05Y 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.

Major Programme in Society, Values and Medicine

The Major Programme in Society, Values and Medicine is no longer offered. Students currently registered in the Programme will be allowed to complete it.

Sociology

Assistant Chair: J. Tanner
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 advanced courses.

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 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: S. Ungar
The Programme requires completion of ten full-course equivalents as described below. No more than fourteen full-course equivalents in Sociology may be included in a four-year degree.

1 SOCA01Y Introduction to Sociology
2 SOCB01Y Methods in Social Research
SOCB06F/S Social Statistics
3 SOCB03Y History of Social Thought
4 One B-level macrostructure course (see list under Major Programme)
5 One B level microstructure course (see list under Major Programme)
6 SOCC05Y Contemporary Social Theory
7 One and one half full-course equivalents at C-level
8 One full-course equivalent at D-level
9 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 requirement 9.

Major Programme in Sociology
Supervisor: S. Ungar
The Programme requires completion of seven full-course equivalents in Sociology including:

1 SOCA01Y Introduction to Sociology
2 SOCB01Y Methods in Social Research and SOCB03Y History of Social Thought
3 One B-level macrostructure course from the following (full-course equivalents): SOCB04Y, SOCB05Y, SOCB10Y, SOCB13Y, SOCB20Y, SOCB33Y, SOCC33Y, SOCC34Y, SOCC35Y, or JCSB27Y.
4 One B-level microstructure course from the following (full-course equivalents): SOCB02Y, SOCB07Y, SOCB12Y or SOCB18Y.
5 Two full-course equivalent at the C-level in Sociology.

SPECIAL NOTE: Commencing 1990/91 MGTB27Y (JCSB27Y) will no longer be applicable as a prerequisite for Sociology C-level courses.

SOCA01Y Introduction to Sociology
Telephone ID #: 28610163
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, Summer Evening
S. Ungar, J. Lee, TBA

SOCB01Y Methods in Social Research
Telephone ID #: 28620163
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: SOCA01Y
Session: Winter Evening, Winter Day
A. Tuzlak, TBA

SOCB02Y Structure of Interpersonal Relations
Telephone ID #: 28620263
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 "alter-casting" 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 relations.
Prerequisite: SOCA01Y
Session: Winter Day
J. Lee

SOCB03Y History of Social Thought
Telephone ID #: 28620363
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: SOCA01Y
Session: Winter Day, Summer Evening
W. W. Isajiw

SOCB06F Social Statistics
Telephone ID #: 28620633
A consideration of elementary statistics including the summarizing of data, the 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 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 SOCB01.
Exclusion: ANTC35, ECOB11, PSYB07, STAB47
Prerequisite: SOCA01Y
Session: Winter Day
S. Ungar

SOCB07Y Small Groups
Telephone ID #: 28620763
Analyses of small group behaviour with special reference to the dynamics of structure formation, conflict patterns, maintenance patterns, and patterns of change.

The first term will be conducted as an academic self-analytical group; the second term as a seminar. The method in the first term will be participation in group task performance supplemented by regular reading and written reports; and in the second term, class reports, discussions and research reports.
Limited enrolment: 12.
Prerequsite: SOCA01Y
Session: Winter Day
A. Tuzlak

SOCB12Y Sociology of the Family
Telephone ID #: 28621263
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 changing nature.
Exclusion: (SOCB08F and SOCB09S)
Prerequisite: SOCA01Y
Session: Winter Day
TBA

SOCB18Y Sociology of Deviant Behaviour
Telephone ID #: 28621863
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
R. Beals

SOCB20Y Ethnic and Race Relations
Telephone ID #: 28622063
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: SOCA01Y
Session: Winter Evening
TBA

SOCB26Y Sociology of Education: Primary and Secondary Levels
Telephone ID #: 28622663
At the primary and secondary levels, the focus is on peer group, social class and sub-cultural influences on students and teachers, as well as the formal organization of school systems. At university and adult levels, the focus is on the allocation and training of upper-level students and the relationship of higher education to the occupational system. Also considered are problems of education or retraining of older adults.
Exclusion: (SOCB24 and SOCB25)
Prerequisite: SOCA01Y
Session: Winter Day
J.A. Lee (fall), J-L de Lannoy (spring)

SOCB33Y Work and Industry
Telephone ID #: 28623363
An introductory examination of the nature of work and people's occupational roles and behaviour in modern industrial settings.
Students will be exposed to some of the major concepts, theories and empirical research in the sociology of work and industry. Topics will include an overview of the process of capitalist industrialization, changes in the occupational structure of the labour force, orientations to work, sources of job satisfaction and dissatisfaction, women and work, the impact of new technology, unions, employment and unemployment, professionalisation. Two hours of lectures per week.
Exclusions: (SOCC07 and SOCC13)
Prerequisite: SOCA01Y
Session: Winter Day
J. Tanner

SOCC03F Collective Behaviour
Telephone ID #: 28630333
The study of uninstitutionalized group behaviour - crowds, panics, crazes, riots and the genesis of social movements.
Prerequisite: SOCA01Y and two B-level full-course equivalents in Sociology
Session: Summer Evening
J. Hannigan

SOCC04F Social Movements
Telephone ID #: 28630433
The development of an approach to 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 two B-level full-course equivalents in Sociology
Session: Winter Day
J. Hannigan

SOCC05Y Contemporary Social Theory
Telephone ID #: 28630563
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.
Prerequisite: SOCB03Y and one other B-level full-course equivalent in Sociology
Session: Winter Day
R. O'Toole

SOCC10S Sex, Self and Society
Telephone ID #: 28631053
The single most important influence on our behaviour is being male or female. Gender is built into how our institutions are put together, how we are socialized, and how opportunities and access to scarce resources are structured. This course is a sociological examination of gender as category of analysis, research and social experience. It will focus on the social construction of gender, gender ideology, the impact of gender on the individual and the social structure, the maintenance of gender inequality in the labour force, in the family, in education and in social interaction.
Prerequisite: SOCA01 and two B-level full-course equivalents in Sociology
Session: Winter Day
A. Tuzlak

SOCC16S Sociology of Conflict and Co-Operation
Telephone ID #: 28631653
This course will first examine the functions of conflict, especially the use of conflict in the creation of moral dramas (i.e., of good vs. evil, of heroes and of villains). We will examine the conflict between persons and nature; and, in greater detail, the Cold War and the Arms Race. Lectures and films will be used.
Prerequisite: SOCA01Y and two B-level full-course equivalents in Sociology
Session: Winter Day
S. Ungar

SOCC21Y Sociology of Religion
Telephone ID #: 28632163
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.
Exclusion: (SOCB21)
Prerequisite: SOCA01Y and two B-level full-course equivalents in Sociology.
Session: Winter Day
R. O'Toole

SOCC28S Sociology of Aging
Telephone ID #: 28632853
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: SOCA01Y and two B-Level full-course equivalents in Sociology
Session: Summer Evening
R. James

SOCC29F Variant Family Forms
Telephone ID #: 28632933
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) and one other B-level full-course equivalent in Sociology
Session: Winter Day
TBA

SOCC30S Criminal Behaviour
Telephone ID #: 28633053
An advanced study of the causes and consequences of criminal behaviour, with special emphasis on Canada.
Prerequisite: SOCB18 and one other B-level full-course equivalent in Sociology
Session: Winter Day
J. Tanner

SOCC33Y Comparative Social Structure
Telephone ID #: 28633363
An examination of the institutional structure in different societies in order to develop a better understanding of the effects of structural variations on human behaviour.
Prerequisite: SOCA01Y and two B-level full-course equivalents in Sociology
Session: Winter Day
J-L. deLannoy

SOCC35Y Social Change
Telephone ID #: 28633563
The accelerating rate of social change, the uneven rate of change in sectors of our society and between various societies throughout the world, and the consequent social crises, are evident in the daily media. A convincing analysis and explanation of social change is less obvious. This course will examine major themes of change, including industrialization, modernization, urbanization, automation, biogenetics, sexualization and militarization. We will examine competing theoretical models for analysis of social change, and arrange student research for first-hand study of interesting aspects of social change in Canada.
Prerequisite: SOCA01Y and two B-level full-course equivalents in Sociology
Session: Winter Day
J-L de Lannoy

SOCC37S Environment and Society
Telephone ID #: 28633753
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: SOCA01Y and two B-level full-course equivalents in Sociology
Session: Winter Day
J. Hannigan

SOCD40F/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 in Sociology 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.
Prerequisite: Completion of at least fifteen full-course equivalents and permission of instructor.
Session: Summer Evening, Winter Day, Winter Evening
Staff

SOCD42F Advanced Seminar in Sociological Theory
Telephone ID #: 28644233
Special topics in contemporary social theory, designed as a final year course for students taking a Specialist Programme in Sociology.
Prerequisites: SOCB03 and SOCC05
Session: Winter Day
R. O'Toole

SOCD43S Advanced Seminar in Research Methods
Telephone ID #: 28644353
Special topics in methodologies used in contemporary sociological research. Designed as a final year course for students taking a Specialist Programme in Sociology.
Prerequisites: SOCB01 and SOCB06
Session: Winter Day
S. Ungar

Courses Not Offered in 1991/92

SOCB04Y Political Sociology
Prerequisite: SOCA01Y
SOCB05Y Urban Sociology
Prerequisite: SOCA01Y
SOCB10Y Social Class and Social Stratification
Prerequisite: SOCA01Y
SOCB17S Medical Sociology
SOCB32Y Sociology of Science
Exclusion: (SOCC32Y)
SOCC01F Sociology of Revolution
Prerequisite: SOCA01Y and two B-level full-course equivalents in Sociology
SOCC02S Research on Small Groups
Prerequisites: SOCB01 and SOCB07
SOCC06F Applied Sociology
Prerequisite: SOCA01Y and two B-level full-course equivalents in Sociology
SOCC11F/S Sociology of Law and Law Enforcement
Prerequisite: SOCB18Y and one other B-level full-course equivalent in Sociology
SOCC17F Social Change in the Third World
Prerequisite: SOCA01Y and two B-level full-course equivalents in Sociology
SOCC18S Sociology of Art and Culture
Exclusion: (SOCC18Y)
Prerequisite: SOCA01Y and two B-level full-course equivalents in Sociology
SOCC19F/S Sociology of Knowledge
Prerequisite: SOCA01Y and two B-level full-course equivalents in Sociology
SOCC22F/S Qualitative Methods in Social Research
Prerequisite: SOCA01Y and one B-level full-course equivalent in Sociology
SOCC24S Changing Family Life in Canada
Prerequisite: SOCB12 and one B-level full-course equivalent in Sociology
SOCC25Y Comparative Ethnic and Race Relations
Exclusion: (SOCC25)
Prerequisite: SOCB20Y and at least one more B-level full-course equivalent in Sociology
SOCC26F Sociology of Urban Growth
Prerequisite: SOCB05 and one other B-level full-course equivalent in Sociology
SOCC34Y Sociology of Mass Media and Communications
Prerequisite: SOCA01Y and two B-level full-course equivalents in Sociology
SOCC36F/S Sociobiology
Exclusion: (SOCB19Y)
Prerequisite: SOCA01Y and two B-level full-course equivalents in Sociology

Spanish

Discipline Representative: R. Skyrme (287–7147)
Students enrolling in Spanish are offered a wide range of courses in the Spanish language.

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 Modern Languages Specialist Programme may satisfy some of their Programme requirements through the Study Elsewhere Programme operated by the University of Toronto in Granada.

Major Programme in Spanish Language
Supervisor: U. Lesser-Sherman (287–7180)
Seven full-course equivalents are required as follows:

SPAA01Y Introductory Spanish
SPAA02H Introductory Spanish Language Practice
SPAB01Y Intermediate Spanish
SPAB02H Intermediate Spanish Language Practice
SPAB04F Phonetics
SPAB12S History of the Spanish Language I
SPAB14F The Civilization of Spain I
and
SPAB15S The Civilization of Spain II
or
HUMC14Y Topics in Latin American Culture and Literature
SPAC01Y Advanced Spanish
SPAC21F Stylistics and Translation
SPAC22F History of the Spanish Language II

(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.)

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.

SPAA01Y Introductory Spanish
Telephone ID #: 28710163
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 practise grammar and vocabulary skills with the help of specific computer programmes.
Exclusion: OAC Spanish or Grade 13 Spanish
Corequisite: SPAA02
Session: Winter Day
K. Gödde
Offered 1992/93 and 1993/94

SPAA02H Introductory Spanish Language Practice
Telephone ID #: 28710243
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
K. Gödde
Offered 1992/93 and 1993/94

SPAB01Y Intermediate Spanish
Telephone ID #: 28720163
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
K. Gödde
Offered 1992/93 and 1993/94

SPAB02H Intermediate Spanish Language Practice
Telephone ID #: 28720243
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 SPAB01Y. Two hours per week in tutorial format.
Prerequisites: OAC Spanish or Grade 13 Spanish or SPAA01 and SPAA02
Corequisite: SPAB01
Session: Winter Day
P. Leon
Offered 1992/93 and 1993/94

SPAC01Y Advanced Spanish
Telephone ID #: 28730163
Intensive study of grammar and syntax; translation, composition, and oral practice.
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: SPAB01
Session: Winter Day
R. Skyrme
Offered 1992/93 and 1993/94

SPAC21F Stylistics and Translation
Telephone ID #: 28732133
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
Not offered 1992/93
Offered 1993/94

SPAC22F History of the Spanish Language II
Telephone ID #: 28732233
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
Not offered 1992/93
Offered 1993/94

SPAD01-D05F
SPADO6-D10S
SPAD11-15Y Supervised Reading
Specific topics in Peninsular Spanish and Latin American literature, linguistics, and culture.
Students who wish to enter the Spanish Supervised Reading programme should 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 the students.
Exclusions: (SPAC02-C06), (C07-C10), (C11-C15)
Prerequisite: SPAB01
Session: Winter Day
K. Gödde, P. León, R. Skyrme
Offered 1992/93 and 1993/94

See also the following courses offered under Humanities:

HUMB42Y	The Modernist Adventure
HUMB45S	The Spanish Civil War: Fact to Fiction
HUMC14Y	Topics in Latin American Culture and Literature

Courses Not Offered in 1991-92

SPAB04F	Phonetics Corequisite: SPAA01 Offered 1992/93 Not offered 1993/94
SPAB12S	History of the Spanish Language I Prerequisite: SPAB04 Offered 1992/93 Not offered 1993/94
SPAB14F	The Civilization of Spain I Exclusion: HUMB15 (HUMB09)(HUMC09) Offered 1992/93 Not offered 1993/94
SPAB15S	The Civilization of Spain II Exclusion: HUMB15 (HUMB10)(HUMC13) Offered 1992/93 Not offered 1993/94
JSDD16Y	Golden Age Spanish Drama Prerequisite: One B-level course equivalent in Drama and permission of the instructor. Not Offered 1992/93

Statistics

Discipline Representative: M. Evans (287–7274)
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. The C-level courses build upon the introductory material to provide a deeper understanding of statistical methodology and of its practical implementation.

Please refer to the Physical Sciences section of the Calendar for the following Programmes.

Specialist Programme in Computer Science and Statistics

Specialist Programme in Co-op Computer Science and Physical Sciences

Specialist Programme in Mathematics and Statistics

Major Programme in Mathematical Sciences (Statistics)

Major Programme in Statistics
The Major Programme in Statistics is no longer offered. Students currently registered will be allowed to complete it.

STATISTICS

STAB22F Statistics
Telephone ID #: 28922233
This course is an introduction to probability and statistics. The emphasis of the course is on motivation and applications and the treatment is essentially non-mathematical. 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 Probability Theory and Mathematical Statistics
Telephone ID #: 28924753
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: STAB22 or one of its exclusions and MATB41
Session: Winter Day

STAC42S Multivariate Analysis
Telephone ID #: 28934253
The multivariate normal distribution and associated distribution theory. Statistical inference for the multivariate normal, principal components analysis, factor analysis, discriminant analysis, multidimensional scaling.
Prerequisite: STAB47

STAC67F Regression Analysis
Telephone ID #: 28936733
The statistical analysis of linear models. Transformations. The analysis of covariance. Bioassay. Computational procedures.
Prerequisite: STAB47
Session: Winter Day.

Courses Not Offered in 1991-92

STAC52S	Experimental Design Prerequisite: STAB47
STAC62S	Stochastic Processes Prerequisite: STAB47

Women's Studies

Discipline Representative:
D. M. James (287–7170)

Major Programme in Women's Studies
Supervisor: J. Hoogstraten (287–7177)
The Major Programme in Women's Studies provides an interdisciplinary perspective on women's roles, work, and contributions past and present to society. It is designed to acquaint students with the substantial body of scholarship 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 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, a 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:
1 WSTA01Y Introduction to Women's Studies
2 Three full-course equivalents from list A
3 One and one-half full-course equivalents from list B
4 WSTD01H Senior Project in Women's Studies

The Major Programme in Women's Studies with an emphasis in Sciences
Students must select six full-course equivalents as follows:
1 WSTA01Y Introduction to Women's Studies
2 Three full-course equivalents from list B
3 One and one-half full-course equivalents from list A
4 WSTD01H Senior Project in Women's Studies

List A: Humanities

CLAC01F/S	Selected Topics in Classical Literature**
CLAC02F/S	Selected Topics in Classical Civilization**
ENGB50Y	Women and Literary Studies
ENGD10 - ENGD58F/S	Studies in Major Writers**
ENGD70 - ENGD89F/S	Selected Topics**
FARB66Y	Women and Visual Art
FREB80F*	Representations of Women in French Literature
FREB81F/S*	Women's Consciousness in French Literature
HISC10Y*	The Sexes Since 1350
HISD10F/S*	History of Feminism Since the 18th c.
LINC28F/S*	Language and the Sexes
PHLB05F/S	Social Issues
PHLC85S*	Seminar in Philosophy: Feminism
PHLC93F/S*	Feminist Critiques of the Tradition of Social and Political Philosophy

List B: Sciences

ANTC11Y*	Anthropology of Women and Gender
GGRC06F*	Women and the City
PSYD18F/S*	Psychology of Gender
PSYD22F/S*	Socialization Processes
SOCB12Y	Sociology of the Family
SOCC10F/S*	Sex, Self, and Society
SOCC29F/S*	Variant Family Forms

Supervised reading courses focused on women may be included with permission of Supervisor and course instructor.

* Students should check these courses for prerequisites.
**Course content varies from year to year. Students should check the listings in the relevant sections of the Calendar to determine what precise courses may be pertinent to Women's Studies in a given year.

WSTA01Y Introduction to Women's Studies
Telephone ID #: 31710163
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 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.
Exclusion: JHSA01Y
Session: Winter Evening
Co-ordinator: C. Guberman

WSTD01H Senior Project in Women's Studies
Telephone ID #: 31740143
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.
Exclusion: JHSD01H
Session: Winter Day
Staff

Stratford Summer Seminars

Every June and August, in Stratford, Ontario, the Division of Humanities organizes week-long Shakespeare Seminars. In each week these seminars accommodate 75 members, 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 study of Drama and Theatre.

Each week members are provided with tickets to six productions in Stratford, (and to one production at the Blyth Festival), participate in House seminars which provide an academic background to the plays, and attend seminars conducted by the Festival's leading actors, designers, and directors. In 1990 the programme counted among its guests such actors as David William, Patricia Conolly, Nicholas Pennell, and Colm Feore.

The seminar programme maintains a large mailing list by which prospective members are given full details of the events for each summer. Students at Scarborough College are invited to contact either Professor Andrew Patenall or Ms. Joanne Hunter (287–7117), who will be pleased to provide them with further details of the programme. For inclusion on the mailing list students should contact Ms. Hunter (H524), 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 tickets.

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.

Following its successful inception in 1987, the programme also conducts an annual seminar in the United Kingdom. Past seminars have been based in London, with side-

trips to Bristol, Bath, Portsmouth, and Brighton; but in 1991, in mid to late July, a seminar will be held in York, from which visits to theatres and opera houses in Richmond, Scarborough, Harrogate, Leeds, Bradford, Wakefield, and Buxton will be conducted. Registration is limited to forty members and immediate inquiry about joining this seminar is invited.

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

General Admission Requirements to Scarborough College, University of Toronto

Candidates Applying from Ontario Secondary Schools

Admission Requirements for 1991

- Applicants must be eligible to receive the new Ontario Secondary School Diploma (OSSD).
- Applicants must present at least six (6) Ontario Academic Courses (OACs).
- One credit must be OAC English I
- Applicants must present credits to satisfy any pre-requisites of specific courses or specific programmes in which they intend to enrol.
- Applicants whose native langauge is not English and who have not studied in an English language school system for more than two full years will be required to present proof of English facility by achieving appropriate standing on one of the following tests accepted by the University of Toronto:
(Note: an English language school system must be located in a country whose first (native) language is English.)
Test of English as a Foreign Language (TOEFL); Michigan English Language Assessment Battery; British Council English Language Testing Examination; Certificate of Proficiency in English Test (COPE).

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

Prerequisites

Students 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 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
Quebec
- 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.

Note that students will be required to complete at least half of their degree credits and half of their programme requirements as Scarborough College students.

Admission from Colleges of Applied Arts and Technology

1 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.
2 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.
3 Candidates who have completed a three-year CAAT programme are eligible to be considered for admission with up to five transfer credits.

Other Countries

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 pre-university 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 to check if it is appropriate to qualify using this option.

*Pre-university courses are offered by Woodsworth College of the University of Toronto. English and History are available 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 287–7529 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) 287-7529 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. The University of Toronto reserves the right to determine whether or not credentials of degree-granting institutions in Ontario meet the standards for admission to University of Toronto programs.

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.
Applicants interested in applying to limited enrolment programmes (for September entry) should apply well before April 1.

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. Note that some programmes have implicit OAC requirements. For example, the Specialist Programmes in Management and Economics require MATA28Y which in turn requires the OACs in mathematics listed below.

Scarborough Course	Prerequisite(s)	Recommended Course(s)
Chemistry A02Y	Chemistry, Calculus	
Computer Science A56H	One OAC in Mathematics	
Computer Science A57H	Calculus, and one of Algebra & Geometry or Finite Mathematics	
Computer Science A58H	Algebra & Geometry, Calculus	
French A10Y	French	
Geology A01Y		Mathematics and Science courses
Mathematics A04Y	Algebra & Geometry, Calculus	
Mathematics A26Y	Calculus, and one of Algebra & Geometry or Finite Mathematics	
Mathematics A28Y	Calculus, and one of Algebra & Geometry or Finite Mathematics	
Physics A01Y	Calculus, and one of Algebra & Geometry or Finite Mathematics	Physics
Physics A02Y	Calculus, and one of Algebra & Geometry or Finite Mathematics	

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. The official award records are on file in the Office of the Registrar (Room S416). 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.

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 entomologist.

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 February.

Scarborough Alumni 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.

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.

Stanley Kosta Todorow Scholarships
Awarded on the basis of academic excellence to one or more students registered in a Life Sciences or Physical Sciences programme which leads to a Bachelor of Science degree.

Norman F. Brown Memorial Award in Humanities
Awarded to a student enrolled in the second or third year of a programme in the division of Humanities on the basis of excellent academic achievement.

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 University of Toronto Women's Association Lois Dove Memorial Scholarship
Awarded to a student on the basis of excellent academic achievement in the third year of a four year undergraduate degree programme.

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 Tayyeb, 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 a student in good academic standing entering the second, third or fourth year who has made an outstanding contribution to the Academic, Social or Cultural life of Scarborough College. Application required.

Bladen Prize in Economics
Awarded on the basis of an essay submitted by a student specializing in Management 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 entering the third year of a physical sciences programme on the basis of excellent achievement in ASTA03Y and one B or C level course in Astronomy.

John S. Moir Prize in Canadian History
Awarded to the student with the highest standing in HISB04Y Introduction to Canadian History.

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. Application 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 year.

*** The Margaret H. McCoy Johnston Scholarship**
Awarded to the student enrolled in a major or specialist programme(s) in a modern language who, on entering the third or fourth year, has the highest grade point average in courses taken to satisfy the programme(s) (minimum gpa 3.2).

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

Dr. Vivian Paskal Memorial Prize in Psychology
Awarded to a full-time student entering the fourth year of the Specialist Programme in Psychology, on the basis of excellent academic achievement.

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 subject.

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. Application required.

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 A- on 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.

Hewlett-Packard Calculator Award
Awarded to students entering a Specialist Programme in Computer Science who have demonstrated excellence in sciences and computer sciences.

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+).

*** The William D. Peek Award in Biology**
Awarded to a full-time student entering the second year of any programme in the biological sciences on the basis of excellent achievement in BIOA03Y Introductory Biology (minimum 3.3 gpa / B plus). Emphasis will be placed on the laboratory component of the course and overall contribution to the class.

*** Scarborough College Prize in Biology**
Awarded to a full-time student entering the fourth year of a specialist programme in biological sciences on the basis of excellent academic achievement. Emphasis will be placed on achievement in the third year of study.

*** Brian David Radford Memorial Scholarship in Management**
Awarded to one or more students entering the third or fourth year of a Management programme whose academic and athletic achievement, combined, best exhibit dedication to excellence. (Minimum grade point average of 3.3/B+). Application required.

Management Accounting Student of Merit Scholarship
Awarded to the student who has completed the third year of study in the Specialist Programme in Mangement or Management and Economics, and who has completed the following courses with the highest average grade: MGTB01Y, MGTC02Y, MGTC72H/73H.

North Scarborough Rotary Club Scholarships
One scholarship is awarded to a student in a Management 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+). Application required.

Ernst & Young of Scarborough Award in Management
Awarded to an outstanding student entering third or fourth year in a Management Programme, who has achieved a cumulative grade point average of at least 3.3.

The Harvey Babiak Award in Financial Accounting
Awarded to a student completing the third year of the Specialist Programme in Management or Management and Economics with the highest grade (at least A minus) in MGTC01Y.
Donated by Peat Marwick Thorne.

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 achievement.

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.

Canadian Society for Chemistry Silver Medal
Awarded to a student entering the fourth year of a specialist programme in chemistry who has the highest standing in the programme in third year.

Canadian Society for Chemistry, Toronto Section Book Prize
Awarded to the most improved student entering the fourth year of a specialist programme in chemistry.

Division of Physical Sciences Book Award in Chemistry
Awarded to a student entering the third year of a programme in chemistry based on academic achievement in the courses required for the programme (a minimum of three chemistry courses must be completed to be considered).

Rohm & Haas Canada Scholarship in Chemistry
Awarded to an outstanding student entering either (i) the third year of a major programme in chemistry or (ii) the third or fourth year of a specialist programme in chemistry.

Andrew Tsang Memorial Scholarship in Sino-Canadian Studies
Awarded to the undergraduate, whose academic performance and extra-curricular activities in the area of Chinese studies and Sino-Canadian studies best exhibits commitment to Chinese-Canadian cultural and economic ties.

Samuel 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 S416.

Other awards are available.
Students should check the "Undergraduate Awards" binder in Room S416.

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
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 Management programme who has displayed excellent achievement in accounting, with grades not less than A minus in each of MGTB01Y and MGTC01Y.

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).

The Society of Chemical Industry Student of Merit Award
Awarded to a member of the graduating class who has completed a Specialist programme in chemistry and achieved the highest standing in the final year. (Minimum GPA of 3.0/75%; has completed the degree within the normal number of years)

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.

Graduation Prize in Political Science
Awarded to an outstanding member of the graduating class who has completed a programme in political science.

Digital Equipment of Canada Limited Award of Merit
Awarded to the most outstanding student graduating in Computer Science in the University.

John H. Moss Scholarship
Exceptional all-round students graduating in the spring who intend to enter a graduate or second undergraduate degree program should request an application for this prestigious scholarship from the University of Toronto Alumni Association in the fall. The deadline is normally in January.

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.

Edward A. Pickering Placement Bursaries in Arts Administration
Awarded to students enrolled in the Co-operative 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.

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 1991 Summer Session (May to August) and the 1991-92 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 206 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 1990 Summer Session or the 1990-91 Winter Session should pick up registration material from the Registrar's Office beginning on April 15. 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 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 18. Material which is not picked up by April 12 will be mailed 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 a fee will be charged, they will be mailed registration material. New students will receive registration information with their offers of admission.

Schedule of Fees
The University Fees Department publishes a schedule of fees. The schedule for the 1991 Summer Session will be included in the registration package. The schedule for the 1991-92 Winter Session will be available in June. Further information on fees may be obtained from the Fees Department, University of Toronto, 215 Huron Street, Toronto, Ontario, M5S 1A2; (416) 978–2142.

University of Toronto Student Telephone Service
(872-8638)
Scarborough College students with access to a touchtone telephone may use the Student Telephone Service to:
- add courses
- drop courses
- change sections
- list courses on their record
- beginning with the 1991 Winter Session, request graduation
- avoid lineups

Telephone course identifiers are the numbers which appear next to the course code in the course descriptions in this *Calendar*
Detailed instructions on the Student Telephone Service are available from the Office of the Registrar and will be distributed along with registration material.

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
- fines levied under the Code of Behaviour on non-academic matters

Services to Persons with a Disability
A Co-ordinator is available to provide personal support and liaison with academic and administrative departments on campus and with agencies off-campus, 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.
Students can make appointments through Counselling Services, Room S302, 287-7560 or by contacting the St. George campus office in the Koffler Student Services Centre, 978-8060.

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. ANTA01Y "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:
JLPB55H indicates a course offered jointly by Linguistics and Psychology.
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:

Final Letter	*Credit Value*	*Winter Session*	*Summer Session*
Y	Full Course	Sep.-May	May-August
F	Half Course	Sep.-Dec.	May-June
S	Half Course	Jan.-May	July-August
H	Half Course	Sep.-May	May-August
A	Full Course	Sep.-Dec.	May-June
B	Full Course	Jan.-May	July-August

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.

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 also the Equivalent Course List on page 226.)
2 *Prerequisites*
A student must have passed the prerequisite course before enrolling in the course being described. Instructors are permitted to waive prerequisites 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 are not withdrawn from the course remain in it at their own risk, for lack of the prerequisite is not grounds for special consideration. Students who complete courses for which they have obtained a waiver of specific prerequisites may not subsequently obtain credit for 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 any time during the term. Students who are not withdrawn from the course remain in it at their own risk, for lack of the corequisite is not grounds for special consideration.
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 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 Prerequisites and corequisites for each course, as stated in the course descriptions, must be met, unless waived by the instructor.
2 Students may not register for credit for a course if they have already passed[2] 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 226.)

3 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.
4 Students may not register for credit in a course which is a specific prerequisite[3] for a course they have already passed.
5 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.
6 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.
7 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.
8 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 through the Student Telephone Service or by means of a registration change form, submitted by the appropriate deadline.
9 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 13 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.

Transfer Students

Students will be required to complete at least half of their credits and half of their programme requirements as Scarborough College students.

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 B-level 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 48).
(A list of Specialist Programmes may be found on page 13.)

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 14.)

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 14.)

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 (Academic). 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 A-level 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 must 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 Equivalent Course List should consult with their Programme Supervisor first.
7 Transfer students will be required to complete at least half of their credits and half of their programme requirements as Scarborough College students.

Standing in a course

Grading scheme

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

Grade	Grade Point Value	Percentage Equivalent	Definition
A+	4.3	90-100	
A	4.0	85-89	Excellent
A-	3.7	80-84	
B+	3.3	77-79	
B	3.0	73-76	Good
B-	2.7	70-72	
C+	2.3	67-69	
C	2.0	63-66	Adequate
C-	1.7	60-62	
D+	1.3	57-59	
D	1.0	53-56	Marginal
D-	0.7	50-52	
CR		No value	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 certain 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 201). 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) since beginning their studies at Scarborough College or at the University of Toronto's Faculty of Arts and Science. It is determined at the end of each Summer and each Winter Session:
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 1.60 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 1.60 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 status 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 as it is assessed for any other student returning from suspension.

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 during 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 226 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 status.

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 will be charged for each Letter of Permission.

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 College.

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 cumulative 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 will be charged by 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 degrees nor is programme indicated.)

Academic transcripts

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 and university student number.
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 has a policy on access to student records. The implementation of this policy with respect to Scarborough College students is as follows. (The full text of this policy 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;
- for graduates of the College, the degree and date of its conferral.

In addition the Students' Administrative Council, the Association of Part-time Undergraduate Students and the Newspaper are entitled to publish and distribute within the University community a University-wide directory of students which includes full/part-time status, address and telephone number. Students who do not want this information published should notify in writing the following St. George Campus offices: the Students' Administrative Council, 12 Hart House Circle (978–4911); the Association of Part-time Undergraduate Students, Room 1089, Sidney Smith Hall (978–3993); The Newspaper, Room 245, 1 Spadina Crescent (593–1552).

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 students' addresses and telephone numbers will be released to recognized University campus organizations for their legitimate internal use.
5 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;
3 students' paper files, except for letters of reference which have been provided on the understanding that they shall be maintained 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). A copying fee will be charged.

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 through the Student Telephone Service or 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 course is dropped through the Student Telephone Service or the registration change form is received by the Office of the Registrar.
6 Students who withdraw from courses through the Office of the Registrar 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 specified in the Academic Calendar through the Student Telephone Service or by submitting a withdrawal form to the Office of the Registrar.
2 Students must also complete the following procedures:
- return any borrowed books to the Library, pay any outstanding library fines, and receive clearance from the library;
- 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.

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

The following is the text of the University grading practices policy. Text enclosed in square brackets [ ] has been added to clarify or interpret the policy as it applies to Scarborough College.

Purpose

The purpose of the University Grading Practices Policy is to ensure:
(a) that grading practices throughout the University reflect appropriate academic standards;
(b) that the evaluation of student performance is made in a fair and objective manner against these academic standards;
(c) that grade scales, while remaining suited to the particular circumstances of every division, are compatible with each other;

(d) that 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.

Application of policy

The Policy applies to all individuals and committees taking part in the evaluation of student performance in degree, diploma, and certificate credit courses (hereafter referred to as courses), excluding courses in the School of Graduate Studies.

Amendment to policy

Amendments to the Policy shall be recommended to the Academic Board.

Minor amendments to divisional practices consistent with the University's policy are approved by the divisional council [Scarborough College Council] and reported to the Vice-President and Provost.

Major amendments to divisional practices and policies or amendments requiring an exception to University-wide policy are recommended to the Committee on Academic Policy and Procedures for approval by the Academic Board.

Distribution of policy

A copy of the Grading Practices Policy as well as the description of the grade scale used in a division and the substance of divisional regulations indicated in Part II of this Policy shall be published in the Calendar of the division. Similarly a copy shall be given to all students upon initial registration and to all instructors and others, including teaching assistants, involved in the evaluation of student performance.

The Policy is in three parts: Part I deals with grades, Part II outlines grading procedures to be adhered to in divisional regulations adopted as part of this Policy, and Part III is an administrative appendix available upon request from the Office of the Provost.

PART I: Grades

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.

I.1 A grade assigned in a course is not an assessment of standing within a program of studies. To determine the requirements for credit and standing in a program of studies, the academic regulations of the division in which the program is offered should be consulted.

I.2 Grades for each course shall be assigned with references to the following meanings (which may be expanded in the divisional regulations under Part II):
Excellent,
Good,
Adequate,
Marginal,
Inadequate,
Wholly inadequate.

Grade scales

I.3 Once a judgement on the performance of the student has been made, the following grade scales may be used in accordance with divisional practice:
(a) a compatible letter grade scale;
(b) the numerical scale of marks;
and/or
(c) the scales Honours/Pass/Fail and Credit/No Credit.
[For the scale used at Scarborough College, see page 204.]

Grades vs. scores

I.4 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 divisional review committee described below.

I.5 A table of correspondence and a translation table are defined in the Appendix for each of the letter grade scales referred to in I.3(a) in order to allow the conversion, when necessary, of a grade assigned from one scale to the corresponding grade in another. It should be noted that these tables are not to be used to translate a score to a grade directly.

Grade reporting

I.6 Only one *letter* scale, as referred to in I.3(a) may be used in a division for assigning grades, but the numerical scale and the H/P/FL and CR/NCR scales, as

referred to in I.3(b) and (c) respectively, may also be used. The grades assigned in a course, however, must all be from the same scale.

I.7 Grades in each course shall be assigned according to the practice of the division offering the course.

Grades in each course shall be reported according to the practice of the division administering the program in which the student is registered (the reporting division).

(a) Grades shall be reported as assigned when the division offering the course is also the reporting division, when the offering and reporting divisions use the same grade scale, and when the grades are assigned from the H/P/FL or CR/NCR scales.
(b) In all other cases, grades shall be reported as converted to the scale used by the reporting division, and the conversion shall be made according to the tables of correspondence and translation tables defined in the Appendix.
(c) With the exception of H/P/FL and CR/NCR scales, two different letter grade scales may not be used on the same transcript.
(d) A grade not reported in the form originally assigned by the offering division must on request be made available to the student in that form by the reporting division.

I.8 All non-grade symbols used in reporting course results must correspond to the University-wide standard. A list of the currently approved symbols and their meanings is given in the Appendix A.2.

I.9 The information in grade reports and transcripts must be communicated to the user, whether within or outside the University, in a clear and meaningful way. To that end, transcripts issued by every division of the University must indicate the relationship between the divisional grade scale, the grade meanings, the basic letter grade scale, whether refined or unrefined by plus and minus signs, and the scale of numerical marks as well as the translation table. A list of non-grade symbols and meanings shall also be included in the transcript.

PART II: Grading Procedures

Approval of grades

Grades shall be recommended by the instructor to the chair or division head. The grades shall then be reviewed and approved following the divisional review procedure. Grades shall not be reported or released to students as official until the divisional review procedure has been carried out. The divisional review constitutes final approval of grades except when grades are changed on appeal.

II.1 Divisional Review Committee

In each division, a committee chaired by the divisional head or a designate, and where appropriate, an additional committee structure, with the chairs (or their designates) of departments or other academic units of divisions serving as chairs, shall:

(a) administer the implementation of the University Grading Practices Policy at the divisional level and oversee the general consistency of grading procedures with the division;
(b) formulate, approve, and administer the division's specific regulations concerning the grade scale or scales to be used, the assignment of non-grade symbols for course work, classroom procedures and approved methods of evaluation;
(c) review, adjust and approve course grades recommended by instructors. The grades recommended for any individual student in the professional faculties may be adjusted according to his or her performance in the course or program as determined by the committee. *The divisional committee has the final responsibility for assigning the official course grade.*

II.2 Classroom procedures

To ensure that the method of evaluation in every course reflects appropriate academic standards and fairness to students, divisional regulations governing classroom procedures must be consistent with the practices below.

(a) As early as possible in each course (and no later than the division's last date for course enrolment) the instructor shall make available to the class, and shall file with the division or department, 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.
(b) 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 or the department.
(c) 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. Criteria for exemption may be determined by the division.
- [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.]
(d) In courses that meet regularly as a class there shall be an examination (or examinations) conducted formally under divisional auspices and worth (alone or in the aggregate) at least one-third of the final grade. Criteria for exemption may be determined by the division.
- [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.]

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.

(e) Commentary on assessed term work and time for discussion of it shall be made available to students.
(f) 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.]
(g) Grades shall be recommended by the instructor in reference to the approved grade scales on the basis of each student's overall performance.

In formulating their own regulations divisions may add to items (a) to (g) and may adopt fuller or more specific provisions, for example in place of such terms as "a simple majority" (b), "one-third of the final grade" (d), or in particularizing the evaluation methods referred to in (a) and (b). Divisions may make reasonable exemptions in circumstances such as field or clinical courses where adherence to the above procedures is not possible.

II.3 Procedures in the event of disruptions

Principles

The following principles shall apply in the event of disruption of the academic program:

i) The academic integrity of academic programs must be honoured; and
ii) Students must be treated in a fair manner recognizing their freedom of choice to attend class or not without penalty.

Procedures

(a) The Vice-Principal and Provost, or the Academic Board, shall declare when a disruption of the academic program has occurred. The Provost shall take steps to inform the University community at large of the changes to be implemented, and will report to the Committee on Academic Policy and Programs regarding the implementation of the procedures and changes to the status of the academic programs.
(b) Individual instructors or multi-section co-ordinators responsible for courses that are disrupted shall determine, as the disruption proceeds, whether any changes to classroom procedures are needed to complete the course.
(c) Changes to the classroom procedures should, where possible, first be discussed with students prior to the class in which a vote of the students present on the proposed changes is to be taken. Changes agreed upon by consensus should be forwarded to the department or division with a report on the attendance at the class where the vote was taken.
(d) Where consensus on changes has not been arrived at, or where a vote is not feasible, the instructor, after the class discussion, will provide the division head or chair of the department in multi-departmental faculties, with his or her recommendation, along with the results of any classroom votes. The chair or division head shall then make a decision.
(e) Where classes are not able to convene, the instructor, with the prior approval of the chair in multi-departmental faculties or the division head, shall make changes deemed necessary to the classroom procedures. In the absence of the instructor such changes will be made by the divisional head and require the approval of the Provost. Where courses are to be cancelled, approval of the divisional council is required. If the divisional council cannot meet, approval of the division head, or in the absence of the division head, the approval of the Provost, is required.
(f) Students must be informed of changes to classroom procedures. This may be done by circulating the changes in writing to the class, posting in the departmental and faculty offices, reporting to the divisional council, as well as listing in the campus press. Should classes resume students must be informed, at class, of any changes made during the disruption.
(g) Where changes to the classroom procedures are made, students who do not wish to complete the course under the revised procedures may withdraw without academic penalty. This must be done prior to the last day of classes.
(h) Where students have not attended classes that are meeting, they nonetheless remain responsible for the course work and meeting course requirements. However, where possible, reasonable extension of deadlines for the course requirements, or provision of make-up tests shall be made and reasonable alternative access to material covered should be provided.
(i) A student who feels, owing to his or her special circumstances, that changes to the classroom procedure have unreasonably affected his or her grade may appeal the grade following the procedures as set out in each division.

II.4 Assessment in clinical and field settings

Divisions may make reasonable exemptions to the classroom procedures described above in circumstances such as field or clinical courses where adherence to these procedures is not possible. Nevertheless, it is obligatory that the assessment of the performance of students in clinical or field settings should be fair, humane, valid, reliable and in accordance with the principles enunciated in the University Grading Practices Policy. Accordingly, where a student's performance in a clinical or field setting is to be assessed for credit, the evaluation must encompass as a minimum:

(a) A formal statement describing the evaluation process, including the criteria to be used in assessing the performance of students and the appeal mechanisms available. This statement should be available to all students before or at the beginning of the clinical or field experience;
(b) A mid-way performance evaluation with feedback to the student;
(c) Written documentation of the final assessment.

In addition, for such clinical and field experiences, divisions must ensure that:

(d) Clinical and field assessors are fully informed regarding University, divisional and course policies concerning evaluation procedures, including the specific assessment procedures to be applied in any particular field or clinical setting.

Any exception from the above would require a divisional request with explanation for approval by the Governing Council.

II.5 Grade review and approval process

[The Divisional Review Committee of Scarborough College is the Sub-Committee on Marks Review.]

The following principles and procedures shall govern the grade review and approval process.

(a) The distribution of grades in any course shall not be predetermined by an system of quotas that specifies the number or percentage of grades allowable at any grade level.
(b) However, a division may provide broad limits to instructors setting out a reasonable distribution of grades in the division or department. Such broad limits shall recognize that considerable variance in class grades is not unusual. The division may request an explanation of any grades for a course that exceed the limits and hence appear not to be based on the approved grade scales or otherwise appear anomalous in reference to the Policy. It is understood that this section shall only be used when the class size is thirty students or greater. Each division shall make known in the divisional Calendar the existence of any such limits.
(c) The criterion that the Divisional Review Committee shall employ in its evaluation is whether the instructor has followed the University Grading Practices Policy. The Review Committee shall not normally adjust grades unless the consequences of allowing the grades to stand would be injurious to the standards of the University, or the class in general.
(d) Membership on the Divisional Review Committee may include students but should not include members of the divisional appeals committee(s).
(e) Where grades have been adjusted by a divisional committee, the students as well as the instructor shall be informed. On request, the students or the instructor shall be given the reason for the adjustment of grades, a description of the methodology used to adjust the grades, and a description of the divisional appeal procedure.
(f) Where a departmental review committee changes course grades, the faculty office shall be so informed. Having done so, the faculty office shall relay this information, upon request, to the students or the instructor with a description as to the reason for the change and the methodology used.
(g) Past statistical data, including drop-out rates, mean arithmetic average, etc., should be provided to the Divisional Review Committee as background information where available. The committee will not use this information exclusively to judge whether a specific grades distribution is anomalous. Rather, the information should provide part of the basis for an overall review of grades in a division.
(h) Where class grades have been changed, or when the Divisional Review Committee had reservations about the grades, the issue will be taken up with the instructor by the division or department head, with a view to ensuring that the Grading Practices Policy is followed in future.

Appeals procedure

Every division shall establish divisional appeal procedures. Students may appeal grades according to the procedures established for that purpose in the division. The appeal may be made whether marks have been altered by the review process or not. These procedures shall be outlined in the divisional Calendar, and available upon request at the faculty or registrar's office.

[For procedures for appeals concerning grades and grading practices, see "Procedures for requesting special consideration, petitions, and appeals" (page 217).]

II.6 **Student access to examination papers**

(a) All divisions should provide access to copies of the previous years' final examination papers and other years' papers where feasible. Exemptions may be granted by an appropriate committee of the division or department.
(b) All divisions should provide students with the opportunity within a reasonable time to review their examination paper where feasible. A recovery fee should be set to cover administrative costs including photocopying.
(c) All divisions should provide, in addition to the customary re-reading of papers and the re-checking of marks, the opportunity for students to petition for the re-reading of their examination where feasible. A cost recovery fee should be set and returned where appropriate.

[For further details, please refer to "Procedures for requesting special consideration, petitions, and appeals" (page 217).]

II.7 **Conflict of interest**

Where the instructor or a student has a conflict of interest, or is in a situation where a fair and objective assessment may not be possible, this should be disclosed to the chair or division head who shall take steps to ensure fairness and objectivity.

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 Assistant Registrar (Secretariat and Scheduling) (Room S420A, 287–7540). 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 Assistant Registrar (Secretariat and Scheduling) 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 Office of the Registrar 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 217).

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 section of this Calendar titled Code of Behaviour on Academic Matters.
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 the degree of disability involved;
- 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 are encouraged to seek advice from counsellors in Counselling Services before entering a petition.
5 Students are notified in writing of the Subcommittee'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 Sub-committee 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.
2 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 final grade (A/F course grades are posted in the Meeting Place early in the second term and a complete statement of results is mailed to students at the end of the session) 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:

Summer Sessions:	
A & F courses	- 31 July
B, H, S & Y courses	- 30 September
Winter Sessions:	
A & F courses	- 31 January
B, H, S & Y courses	- 30 June

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 copying 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 recheck 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 copying 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. Claims of prejudice must be supported by a detailed account of incidents and, if possible, confirmation from a third party.
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 Academic Appeals Committee of the Governing Council

Students may appeal a decision of the Sub-committee on Academic Appeals to the Academic Appeals Committee of the Governing Council. 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 Committee. Full information may be obtained from the Secretary to the Appeals Committee, Office of the Governing Council Secretariat, Room 106, Simcoe Hall, St. George Campus, telephone 978-8794.

University Ombudsperson

The Ombudsperson 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 ombudsperson has access to all relevant files and information, and to all appropriate University officials. The ombudsperson 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 Ombudsperson, 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 an appointment at Scarborough Campus with the Sexual Harassment Officer or may go to the downtown office, whichever is more convenient.
For an appointment, 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).

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.

NOTE: The College has a policy on the use of calculators in tests and examinations. Students should consult with instructors about whether the use of calculators is permissible in their course and if so which models are approved. The use of an unauthorized calculator may be treated as an academic offence.

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.

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.

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 (287–7550). Counselling Services does not have regular evening hours but 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 marks in OACs. 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 287–7529.

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 the Office of the Registrar or 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 part-time 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 226 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 denied.

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 co-requisites 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 1991 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.

Management Major Programme

Each of the required courses [MGTA01, MGTB01, ECOA03, MGTB27] is offered in the evening at least once each year. Other MGT and ECO courses are also offered in the evening session.

Economics Major Programme

Each of the five courses specifically required for the Economics Major [ECOA03Y, ECOB03Y, ECOB07Y, ECOB11H, ECOB12H] is offered in the evening at least once each year. ECOA03Y, ECOB03Y, and ECOB11H are offered in both summer and winter evening sessions each year.
ECOB07Y and ECOB12S are offered in each winter evening session, and ECOB07Y in some 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 years.
Post-1800 courses - at least one every year.
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 year.
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: PSYA01Y, PSYB01, 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 year.

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
SOCB01Y	Methods in Social Research

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

SOCB03Y	History of Social Thought
SOCB06H	Social Statistics
SOCB01Y	Methods in Social Research
SOCC05Y	Contemporary Social Theory
SOCD42S	Advanced Seminar in Sociological 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.

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 EQUIVALENT COURSES MUST CONSULT WITH THEIR SUPERVISORS.

ST. GEORGE COURSE YEAR: 1991/92	FULLY EQUIVALENT SCARBOROUGH COURSE If a course appears here: a) Students are normally expected to take the Scarborough course. b) Students may not receive credit for both this course and the St. George course.	PARTIALLY EQUIVALENT SCARBOROUGH COURSE If a course appears here: There is significant overlap in the content of this course and the St. George course. Therefore, students may not receive credit for both this course and the St. George course.
Actuarial Science		
ACT323H		CSCC51H (JMCC51H)
Anthropology		
ANT100Y	ANTA01Y	
ANT203Y	ANTB15Y	
ANT204Y	ANTB20Y	
ANT241Y		ANTB21Y
ANT311Y	ANTC52Y	
ANT316H	ANTC37H	
ANT332Y	ANTC16Y	
ANT334Y	ANTC47Y	
ANT340H	ANTC32H	
ANT441H		ANTC19H
ANT461Y	ANTD24H	
Applied Mathematics		
APM256H		MATC51H/C56H
APM331H		MATC51H/C56H
APM346H		MATC56H
Astronomy		
AST100Y	ASTA03Y	(ASTA02Y)
AST120Y	(ASTA02Y)	ASTA03Y
AST200H		(ASTA02Y), ASTA03Y
AST210H	ASTB03H	
AST225H	ASTB02H	
AST321H		ASTB01Y
AST425H	ASTC01H	
AST1300Y (SGS)	ASTC10Y	
Biochemistry		
BCH320Y	JBCC35Y	
BCH321Y		JBCC35Y
BCH370H	JBCC36H	

ST. GEORGE COURSE	FULLY EQUIVALENT SCARBOROUGH COURSE	PARTIALLY EQUIVALENT SCARBOROUGH COURSE
BCH371H		JBCC36H
Biology		
BIO100Y	BIOA03Y	
BIO150Y	BIOA03Y	
BIO227Y	BIOB05Y	
BIO240Y	BIOB05Y	
BIO233Y	BIOB12Y	
BIO300H	BIOC03H	
BIO301H	BIOC16H	
Botany		
BOT210Y	BIOC37H+BIOC38H	
BOT220Y	BIOB06Y	
BOT222Y	BIOB06Y	
BOT240Y		BIOC20Y
BOT324H	BIOD30H	
BOT325H		BIOB06Y
BOT330H (formerly BOT330Y)	BIOC46H or BIOC47H	
BOT340Y	BIOC37H+BIOC38H	
BOT430Y	BIOD10H+BIOD11H	
BOT460Y	BIOD01Y or D02Y	
Chemistry		
CHM135Y	CHMA02Y	
CHM136Y	CHMA02Y	
CHM150Y		CHMA02Y
CHM219H		CHMB02Y
CHM222Y		CHMB03Y
CHM229H		CHMB03Y
CHM239H		CHMB01Y;CHMC01Y
CHM240Y	CHMB05Y	
CHM249H		CHMB05Y
CHM268H		CHMB02Y; CHMB05Y
CHM269H		CHMB02Y; CHMB05Y
CHM328H		CHMB03Y
CHM329H		CHMC02Y
CHM339H		CHMB01Y;CHMC01Y
CHM349H		CHMC03Y
CHM368H		CHMC01Y; CHMC02Y; CHMC03Y
CHM369H		CHMC01Y; CHMC02Y; CHMC03Y
CHM418Y	CHMD46Y	
CHM428Y	CHMD46Y	
CHM432H) CHM433H) CHM434H) CHM435H)		CHMD48H* or D52H*
CHM439Y	CHMD46Y	
CHM440H) CHM441H) CHM442H) CHM443H)		CHMD49H* or CHMD51H*
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)		
Classics		
CLA100Y		HUMA01Y,CLAC03Y, CLAC04Y
CLA105H		HUMA02Y
CLA130Y		CLAA01Y
CLA200Y		PHLB40H,C40H,B42H,C42H
CLA202H	CLAC01H Topic changes year to year Consult with instructor	
CLA205Y	CLAA02Y	
CLA215H+225H	CLAC03Y	CLAB33F
CLA216H (formerly GRH221H)		GRHC24H
CLA217H (formerly GRH223H)		GRHC24H
CLA225H+215H (formerly GLL227H)	CLAC03Y	
CLA240Y (formerly GRH200Y)	GRHB01Y	
CLA241Y (formerly GRH216Y)	GRHB02Y	
CLA250Y	GRHB03Y	
CLA255Y (formerly GRH209Y)		
CLA270Y (formerly GLL250Y)		GRKC22Y, GRKC24H
CLA300Y (formerly GLL300Y)	CLAC04Y	
CLA303H		CLAC02H, PHLB40H, PHLC40H Topic changes year to year Consult with instructor
CLA340Y (formerly GRH309Y)		GRHC25Y
CLA345Y (formerly GRH312Y)		GRHC25Y
CLA351Y		GRHB03Y, CLAB32H
CLA355H (formerly GRH319H)		HISC61Y
Commerce		
COM120H/121H (formerly COM102H/103H)	MGTA01Y	
COM220Y	MGTB01Y	
COM222H (formerly COM205H) (with COM102H)	MGTA01Y	
COM320Y	MGTC01Y	
COM321H	MGTD60H	
COM330H (formerly COM324H)	MGTD75H	
COM331Y	MGTC02Y	

ST. GEORGE COURSE	FULLY EQUIVALENT SCARBOROUGH COURSE	PARTIALLY EQUIVALENT SCARBOROUGH COURSE
COM337Y	MGTC02Y	
COM352H	MGTC04H	
COM353H	MGTC05H	
COM360Y (formerly COM301Y)	POLB61H+POLB62H or POLB61H+MGTC42H	
COM362H/363H (formerly COM341H/342H)	MGTB27Y	
COM392Y (formerly COM300Y)	MGTC30Y	
COM401H (formerly COM437H)	MGTD80H	
COM420H	MGTD55H	
COM423H+COM429H	MGTC15Y	
COM426H (formerly COM326H)	MGTD50H	
COM428H	MGTC10H	
COM429H		MGTC15Y
COM431H (formerly COM424H)		MGTD70H
COM438H		MGTD70H
COM452H (formerly COM410H)		MGTC05H
COM453H (formerly COM435H)	MGTD07H	
COM460H (formerly COM443H)	MGTC22H	
COM474H		MGTC72H or MGTC73H
Computer Science		
CSC104H	CSCA04H	
CSC108H (formerly CSC201H)	CSCA56H	CSCA58H
CSC118H (formerly CSC202H)	CSCA66H	CSCA68H
CSC148H	CSCA58H	CSCA56H
CSC150H	CSCA58H	CSCA56H
CSC158H	CSCA68H	CSCA66H
CSC160H	CSCA68H	CSCA66H
CSC209H	CSCB09H	
CSC228H	CSCB28H	
CSC238H	CSCB38H	
CSC258H	CSCB58H	
CSC324H	CSCC24H	
CSC336H		CSCC50H
CSC350H (formerly CSC451H)	CSCC50H	
CSC351H	CSCC51H (JMCC51H)	
CSC354H (formerly CSC474H)	CSCC54H	
CSC364H	CSCC64H	
CSC378H	CSCC78H	
ELE385H	CSCC85H	
CSC494H	CSCD94H	
CSC495H	CSCD95H	

ST. GEORGE COURSE	FULLY EQUIVALENT SCARBOROUGH COURSE	PARTIALLY EQUIVALENT SCARBOROUGH COURSE
Drama		
DRM100Y	ENGB11Y	
DRM200Y	DRAB01Y	
DRM230Y		DRAC02Y
DRM260H+262H	DRAB03Y	
DRM264H+266H	DRAB04Y	
DRM268H		DRAB06Y
DRM300Y (formerly DRM250Y)	DRAC01Y	
DRM390Y	DRAD20Y - D24Y (to be considered on a course to course basis)	
DRM400Y (formerly DRM350Y)	DRAD01Y	
Economics		
ECO100Y	ECOA01Y	
ECO101Y		ECOB82Y
ECO200Y	ECOB03Y (B01 + B02H)	
ECO201Y		ECOB82Y
ECO202Y	ECOB07Y (B05 + B06H)	
ECO206Y	ECOB04Y	ECOB03Y (B01H + B02H)
ECO208Y	ECOB08Y	ECOB07Y (B05H + B06H)
ECO220Y	ECOB11H + B12H	GGRB31H, PSYB07H, SOCB06H, STAB47H, ~~SOCB06H~~
ECO221Y		ECOB81Y
ECO222Y		ECOB81Y
ECO227Y		ECOB11H + ECOB12H
ECO236Y	ECOC31H + C32H	
ECO239Y		ECOC51H
ECO244Y		MGTC54H
ECO305Y		ECOB81Y
ECO310Y		ECOC41H or (MGTC40H)
ECO312H		(MGTC40H)
ECO317H		ECOD18H in 1986/7 only
ECO320H	ECOC37H	
ECO322Y	ECOC25H and C26H	
ECO324Y	ECOC66H + ECOC67H	
ECO325H	ECOC14H	
ECO326H	ECOC13H	
ECO327Y	ECOC11Y	(ECOC08H)
ECO328Y	ECOC61H and C62H	
ECO330Y		ECOB68H
ECO331H		MGTC72H
ECO334Y		ECOD14H (88/89 only)
ECO339Y		ECOC51H
ECO340Y		ECOC45H
ECO342Y	ECOC83Y	
ECO348H	ECOC48H	ECOD01H in 84/85 only
ECO423Y (formerly ECO323Y)		ECOD07H
ECO452Y		ECOB82Y

ST. GEORGE COURSE	FULLY EQUIVALENT SCARBOROUGH COURSE	PARTIALLY EQUIVALENT SCARBOROUGH COURSE
English		
ENG102Y		ENGA01Y
ENG104Y		HUMA01Y
ENG202Y		ENGA02Y
ENG210Y	ENGB14Y	
ENG213H	ENGB34H	
ENG214H		ENGD75H Check with supervisor
ENG215H	ENGB25H	
ENG216Y		ENGC02Y
ENG217H		ENGC53H
ENG218H		ENGC54H
ENG220Y	ENGB10Y	
ENG222Y	ENGB11Y	
ENG223H	ENGB26H	
ENG224H		ENGC55H
ENG227Y	ENGB15Y	
ENG240Y	ENGB01Y	
ENG243Y		ENGC32Y
ENG247Y		ENGA08Y
ENG250Y	ENGB08Y	
ENG252Y	ENGB07Y	
ENG253Y	ENGB20H, ENGB21H	
ENG258Y	ENGB50Y	
ENG270Y		ENGC59Y
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)
ENG358Y		ENGC12Y
ENG359Y		ENGC12Y
ENG366Y	ENGC59Y	
ENG369Y		ENGB60Y (LITB60Y) Check with supervisor
ENG391Y		ENGC64H (LITD64H), ENGC65H (LITD65H), ENGC66Y (LITD66Y), (HUMD91H, HUMD92H) Check with supervisor
ENG407H, ENG408H, ENG422H, ENG423H		ENGD10-58H Check with supervisor
ENG480Y-485H		ENGD70-89H
ENG490Y	ENGD98Y	

ST. GEORGE COURSE	FULLY EQUIVALENT SCARBOROUGH COURSE	PARTIALLY EQUIVALENT SCARBOROUGH COURSE
Fine Art History		
FAH101Y		FARA10H
FAH102Y		FARA11H
FAH200Y		FARA12H
FAH210Y		FARA13H
FAH215H	FARB04H	
FAH273H	FARB19H	
FAH286H		FARB60Y
FAH308Y		FARB29Y, FARC11H
FAH310Y		FARB60Y
FAH314H	FARB37H	
FAH315H	FARC13H	
FAH321Y (formerly FAH321H)		FARB10H
FAH324H		FARC10H
*FAH480Y/481H	*FARD02H, FARD03Y	
*FAH482Y/483H	*FARD04H, FARD05Y	
*FAH484Y/485H	*FARD06H, FARD07Y	
*FAH486Y/487H	*FARD06H, FARD07Y	
*FAH488Y/489H	*FARD08H, FARD09Y	
* Supervised course - depends on topic		
Fine Art Studio		
FAS110Y	FARA90Y	FARA70H/A71H
FAS230Y	FARB75Y	
FAS238Y	FARB70H + B74H	FARB74H or B70H
FAS331Y	FARC76Y or C77Y	
FAS338Y	FARC82H/C83H/C84H* 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		
FRE121Y	FREA16Y	
FRE150Y/151Y	FREA50Y	
FRE161Y		FREA10Y
FRE171Y	FREA10Y	
FRE220Y	FREB40H + B41H	
FRE224Y	FREB26Y	
FRE240Y (formerly FRE140Y)	(FREA30Y)	FREB50H
FRE257H		FREB81H
FRE258H	FREB81H	
FRE261Y		FREB10Y
FRE271Y	FREB10Y	
FRE272Y	FREB25Y	
FRE273Y	FREB42Y	

ST. GEORGE COURSE	FULLY EQUIVALENT SCARBOROUGH COURSE	PARTIALLY EQUIVALENT SCARBOROUGH COURSE
FRE277Y		FREB48Y
FRE301F		FREB18Y
FRE310Y		FREB37H
FRE311Y		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) FRE381H)	FREC10Y	
FRE410H	FREC39H	
FRE426Y		FREB49Y, B70Y
FRE470Y (formerly FRE471Y)		FREC18H
FRE472Y (formerly FRE472H)		FREB43Y
FRE491H	FRED02H-FRED07H FRED90Y	
Geography		
GGR100Y		GGRA05H
GGR101Y		GGRA04H
GGR110Y		GGRA04H
GGR124Y	GGRB05Y	
GGR201H		GGRB19Y
GGR203H		GGRB03Y
GGR205H		GGRC27Y
GGR206H		GGRC28Y
GGR220Y		JEGB27H
GGR233Y	GGRB01Y	
GGR239H		GGRC13H
GGR270Y		GGRB31H
GGR276H		GGRC23H
GGR301H		GGRD03H
GGR307H		GGRC27Y
GGR312H		GGRB03Y
GGR324H		GGRC18H
GGR330H		GGRC29H
GGR339H		GGRC13H
GGR371H		GGRC24H
GGR491Y	GGRD01Y	
Geology		
GLG103H	GLGA03H	
GLG110H		GLGA01Y
GLG140H + 141H	GLGA01Y	
GLG219H + 221H	GLGB05H + GLGB06H	
GLG301H	GLGB02H	

ST. GEORGE COURSE	FULLY EQUIVALENT SCARBOROUGH COURSE	PARTIALLY EQUIVALENT SCARBOROUGH COURSE
GEO(GLG)326H	GLGC06H	
GLG470Y	GLGD03Y	
GLG471H	GLGD02H	
German		
GER100Y	GERA10Y	GERA09H
GER101H		GERA10Y + A09Y
GER202Y (formerly GER110Y)		GERB19Y
GER204Y		HUMB56H
GER206Y (formerly GER130Y)		GERB20Y, B19Y, C03H, HUMB56H
GER210Y	GERB20Y	
GER310Y	GERC10Y	
GER311Y	GERC10Y	
GER323H (formerly GER323Y)		GERC03H
GER410Y	GERD01Y	
GER413Y (formerly GER411Y)		GERD01Y
GER415H		GERC02H
GER416H		GERC02H
GER422Y		HUMB57H
GER490H	GERD13H/14H/15H/12H	GERD16Y/D10H/D11H
Greek		
GRK100Y	GRKA01Y	
GRK150Y	GRKA05Y	
GRK151H	GRKA05Y	
GRK210H	GRKB11H	
GRK215H	GRKB02H	
GRK245Y	GRKB10Y	
GRK250Y		GRKC22Y
GRK350Y		GRKC24H
GRK355Y		GRKC23H
GRK428Y	GRKC30H-C34H; C35H-C39H, C40Y (depends on topic)	
History		
HIS105Y	HISA01Y	
HIS109Y	HISA01Y	
HIS220Y	HISB06Y	
HIS238H		HISC23Y
HIS239H	HISB02Y	
HIS244H		HISC18Y
HIS250Y	HISB07Y	
HIS260Y		HISB04Y
HIS261Y		HISB04Y
HIS262Y	HISB04Y	
HIS263Y	HISB04Y	
HIS271Y	HISB03Y	
HIS282Y	HISC25Y	
HIS302Y	HISC16Y	
HIS303Y (formerly HIS303H)	HISC12Y	

ST. GEORGE COURSE	FULLY EQUIVALENT SCARBOROUGH COURSE	PARTIALLY EQUIVALENT SCARBOROUGH COURSE
HIS308Y	HISC10Y	
HIS313Y	HISC47Y	
HIS314Y	HISC42Y	
HIS317H	HISC87Y	
HIS318Y (formerly HIS318H)	HISD17Y	
HIS349Y	HISC11Y	
HIS357Y	HISC12Y	
HIS362Y		HISC42Y
HIS365Y		HISC43Y
HIS372Y	HISC35Y	
HIS408Y		HISC31H
HIS412H (formerly HIS312H)		HISD17Y
HIS431H		HISD78Y
HIS442Y	HISC21Y	
HIS455H	HISC78H/C79H	
HIS467H	HISC45H	
HIS468Y		HISC46Y
HIS469Y		HISB44H, HISD43H
HIS470Y (formerly HIS373Y)	HISD32Y	
HIS497Y/498H/499H	HISD01H, D02H, D03Y (depends on topic)	
Innis College		
INI112Y	HUMB70Y	
Italian Studies		
ITA100Y	ITAA01Y	
ITA101Y	ITAA02H + A03H	
ITA110Y	ITAA11Y	
ITA120Y		ITAC22H
ITA152Y	ITAB01Y or B10Y or B11Y	
ITA222Y	ITAC45H	
ITA226Y		ITAC22H
ITA240Y		JHIC71H
ITA245Y		ITAC20H
ITA250Y	ITAB01Y	
ITA251Y	ITAB11Y	
ITA252Y	ITAB01Y or B10Y or B11Y	
ITA271Y		ITAC05H,ITAB06H
ITA321Y	ITAC31Y	
ITA350Y	ITAC01Y	
ITA351Y	ITAC01Y	
ITA352Y	ITAC01Y	
ITA371Y		ITAC05H,ITAB06H
ITA425H		ITAC23H
ITA450Y		ITAC04H
Joint Courses		
JAL252Y	LINB03H	
JLP315H	JLPC24H	
JLP374H	JLPB55H	
JPE400Y		POLC92H

ST. GEORGE COURSE	FULLY EQUIVALENT SCARBOROUGH COURSE	PARTIALLY EQUIVALENT SCARBOROUGH COURSE
Latin		
LAT100Y	LATA01Y	
LAT200Y		LATA01Y and LATB02H
LAT215H	LATB11H	
LAT216H		LATB02H
LAT428Y	LATC30H/C34H; C35H/C39H/C40Y/D01H/D02H (depends on topic)	
Linguistics		
LIN130Y	LINA01Y	
LIN200Y		LINA04H
LIN228H	LINB09H	
LIN229H	LINB02H	
LIN348H	LINC06H	
LIN421H		LINC02H
LIN431H		LINC11Y
LIN495Y/496H	LIND05Y LIND01H/D02H/D03H/D04H	
LIN497Y/498Y	LIND05Y LIND01H/D02H/D03H/D04H	
Mathematics		
MAT105Y		MATA22Y
MAT130Y		MATA22/A26/A28Y/A55Y
MAT133Y		MATA22/A26/A28Y/A55Y
MAT135Y	MATA26Y	MATA22/A28Y/A55Y
MAT139Y	MATA26Y	MATA22/A28Y/A55Y
MAT147H (replaces 140)	MATA04Y	
MAT149Y		MATA22/A26/A28Y/A55Y
MAT157Y (replaces 150)	MATA55Y	MATA22Y/A26Y/A28Y
MAT225Y	MATA40H+A45H/A04Y	
MAT229H		MATA40H+A45H/A04Y
MAT230Y		MATB41H/B42H
MAT234Y		MATB05Y/B41H/B42H MATB50H/B55H
MAT235Y	MATB41H + B42H	MATB05Y/B50H/B55H
MAT239Y	MATB05Y/50H/55H/	MATB41H/B42H
MAT244H		MATC51H/C56H
MAT245H		MATB30H/MATC30H
MAT246Y		MATB43H
MAT247H (replaces 240)		MATA04Y, MATB31H
MAT257Y (replaces 250)	MATB05Y	MATB41H/MATB42H
MAT267H (formerly 249)		MATC51H
MAT300Y	MATB31H + MATC49H	
MAT315H	MATB70H	
MAT319H		MATC60H/C65H
MAT324H		MATB30H/MATC30H
MAT325Y	MATB30H + MATC30H	

ST. GEORGE COURSE	FULLY EQUIVALENT SCARBOROUGH COURSE	PARTIALLY EQUIVALENT SCARBOROUGH COURSE
MAT330Y (formerly MAT369H,469H)		MATC60H/C65H
MAT334H	MATC60H	
MAT338H		MATC53Y
MAT340Y		MATB32H/C43H/C49H
MAT344H		JMCC31H
MAT350Y	MATC53Y	
MAT363H	MATC54H	
MAT435Y		MATC51H/C56H
NOTE: Except for 435Y - all other 400 level courses have no Scarborough equivalent.		
Microbiology		
MPL200Y	BIOB02Y	
Molecular Genetics and Molecular Biology		
MGB460H	BIOD17H	
Music		
MUS100Y		MUSA10H,A20H
MUS201H	MUSB01H	
MUS202H	MUSC11H	
MUS302H	MUSC05H	
MUS304H	MUSC07H	
MUS400H	MUSC06H	
MUS410H	MUSB04H	
TMU140Y		MUSB17H/MUSB24H
HMU121H) HMU122H) HMU221H) HMU222H)		MUSB02H, MUSB05H MUSB06H, MUSB01H MUSB04H, MUSB03H
New College		
NEW112Y	HUMB70Y	
NEW201Y		ENGB34H
NEW207Y		HUMB27S, B39F
NEW217Y		ENGC02Y
NEW322Y		ENGB20H
Philosophy		
PHL100Y	PHLA01Y	
PHL/PHI101Y	PHLA01Y	
PHL102Y	PHLA01Y	
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

ST. GEORGE COURSE	FULLY EQUIVALENT SCARBOROUGH COURSE	PARTIALLY EQUIVALENT SCARBOROUGH COURSE
PHL242H		PHLB81H
PHL/PHI245H	PHLB50H (formerly JMPB50H)	
PHL246H	PHLC61H	PHLC52H
PHL/PHI247H	PHLB53H	
PHL250H	PHLB80H	
PHL/PHI255H		PHLB14H, B70H
PHL265H	PHLB10H	
PHL267H		PHLC85H
PHL/PHI270Y		PHLB11H
PHL272H	PHLB15H	
PHL275H	PHLB01H	
PHL/PHI276Y	PHLB01H + PHLC02H	
PHL278H		PHLB06H
PHL/PHI281H		PHLB87H
PHL/PHI282H		PHLC05H
PHL/PHI285H	PHLB03H	
PHL/PHI286H		PHLB03H
PHL288H	PHLB04H	
PHL/PHI301Y	PHLB40H + C40H	
PHL/PHI302Y	PHLB42H + C42H	
PHL310H		PHLB46H
PHL311H		PHLC46H
PHL315H	PHLB15H	PHLB48H
PHL318H		PHLB12H
PHL/PHI321H		PHLB30H
PHL325H (formerly PHL225H)		PHLC48H
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	
PHI362H		PHLB16H
PHL370H	PHLC11H	
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).	

ST. GEORGE COURSE	FULLY EQUIVALENT SCARBOROUGH COURSE	PARTIALLY EQUIVALENT SCARBOROUGH COURSE
PHL/PHI498H*/499H*	*PHLD95H - D99Y (depends on topics offered from term to term).	
Physics		
PHY110Y		PHYA01Y,PHYA02Y (A03Y)
PHY130Y		PHYA01Y,PHYA02Y (A03Y)
PHY138Y		PHYA01Y,PHYA02Y (A03Y)
PHY150Y	PHYA01Y	
PHY224H		PHYB08H
PHY225H	PHYB08H	
PHY230Y		PHYB01H
PHY238Y		PHYB01H
PHY250Y		PHYB01H
PHY252H	PHYB19H	
PHY256H	PHYB17H	
PHY325Y		PHYC05H
PHY326H	PHYC05H	
PHY330H (formerly PHY330Y)		PHYC07H
PHY331H		PHYB03H
PHY352H		PHYC09H
PHY354H		PHYC08H
PHY452H (formerly PHY426H)		ASTC10Y
PHY455H (formerly part of PHY455Y)		PHYC04H
PHY462Y (formerly PHY452Y)		ASTC10Y
Political Science		
POL100Y	POLA50Y (POLB50Y)	
POL200Y	POLB70Y	
POL201Y	POLB91Y	
POL203Y	POLB87Y	
POL204Y	POLB86Y	
POL208Y	POLB80Y	
POL210Y	POLC52Y (1985/6 onward)	POLB52H (before 1985)
POL212Y	POLD71Y	
POL300Y	POLC87Y	
POL301Y (formerly POL206Y)	POLC95Y	
POL312Y	POLC84Y	
POL316Y		POLC54H
POL318Y	POLC75Y (POLB65Y before 1986)	
POL320Y	POLC74Y	
POL322Y		POLB60Y
POL326Y	POLC82Y	
POL333Y (formerly POL333H)	POLC55Y	
POL336Y (formerly POL331H+332H)	POLB51H	
POL400Y		POLC70Y

ST. GEORGE COURSE	FULLY EQUIVALENT SCARBOROUGH COURSE	PARTIALLY EQUIVALENT SCARBOROUGH COURSE
POL407Y		POLD71Y
POL446Y		POLC70Y, PHLC84H
POL495Y		POLD98H
POL496H	POLD99H	
Psychology		
PSY100Y	PSYA01Y	
PSY200H		PSYA01Y
PSY201H	PSYB07H	
PSY202H	PSYC08H	
PSY210Y	PSYB20H + C21H	
PSY220H	PSYB10H	
PSY230H	PSYB30H	
PSY240H	PSYB32H	
PSY260Y		PSYC42H (old PSYB41H)
PSY270Y		PSYB57H
PSY280Y	PSYB50H + B51H	
PSY290Y	PSYB60H + C61H	
PSY300H	PSYC85H	
PSY301H		PSYD80H
PSY303H/304H	PSYC90H, PSYC93H	
PSY305H		PSYC34H
PSY306H	PSYC58H	
PSY311H	PSYD22H	
PSY320H	PSYC12H	
PSY323H	PSYD18H	
PSY325H (formerly PSY421H)		PSYD53H
PSY329Y		PSYC11H
PSY330H	PSYC34H	
PSY341H	PSYD32H	
PSY359H	PSYC42H	
PSY360H	PSYD41H	
PSY369Y		PSYC42H
PSY372H	PSYB57H	
PSY390H		PSYD60H
PSY399Y	PSYC63Y	
PSY400Y	PSYD98Y	
PSY410H	PSYD22H, PSYD20H	
PSY420H	PSYD15H or D16H	
PSY430H	PSYD30H	
PSY440H	PSYD32H	
PSY460H	PSYD40H, D41H	
PSY461H (formerly PSY361H)	PSYB45H	

ST. GEORGE COURSE	FULLY EQUIVALENT SCARBOROUGH COURSE	PARTIALLY EQUIVALENT SCARBOROUGH COURSE
PSY470H		PSYD50H
PSY471H		PSYD50H

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. PSYB01H Psychological Research Laboratory
2. PSYB02H Scientific Communication in Psychology
3. PSYB65H Human Brain and Behaviour
4. PSYC45H Applied Psychology of Learning
5. PSYC54H Cognition & Representation
6. PSYD62H Neuroplasticity: Mechanisms and Function
7. PSYD67H Psychobiology of Aging
8. JLPD55H Disorders of Speech and Language

Religious Studies		
REL205Y	SOCB21Y (SOCC20Y)	
REL338H (formerly REL338Y)		HISD14Y
REL490Y	HUMC10H, D91H, D92H, D93Y (depends on topic).	
Slavic Language & Literature		
SLA100Y	RUSA10Y	
SLA202Y		RUSB02Y
SLA220Y	RUSB02Y	
SLA240Y	HUMB58Y (LITB07Y)	
SLA318H		HUMB11H (LITB17H)
SLA319H		HUMB11H (LITB17H)
St. Michael's College		
SMC235Y	GERB25Y	GERC01H
SMC240Y		HUMB03Y
SMC311H (formerly part of SMC310Y)		ITAC31Y, (HUMB33Y), LITB31Y
SMC312H (formerly part of SMC310Y)		JLIC32H, (HUMB33Y), LITB31Y
SMC339Y	HUMB03Y	
SMC340Y	HUMB03Y	
SMC350H	HUMB04H	
SMC490Y	(supervised reading medieval studies depends on topic).	
Sociology		
SOC101Y	SOCA01Y	
SOC200Y	SOCB01Y	
SOC201Y		SOCB06H, PSYB07H
SOC202Y	SOCB02Y	

ST. GEORGE COURSE	FULLY EQUIVALENT SCARBOROUGH COURSE	PARTIALLY EQUIVALENT SCARBOROUGH COURSE
SOC203Y	SOCB03Y	
SOC204Y	SOCB04Y	
SOC205Y	SOCB05Y	
SOC207Y	SOCB33Y	
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	
SOC312Y	SOCB23Y	
SOC313Y	SOCC05Y	
SOC320Y		SOCC06F/S/H
SOC323Y		SOCC17H
SOC325Y		SOCB17H
SOC330Y	SOCC25Y	
SOC365Y		SOCC10H
SOC375Y	MGTB27Y	
SOC390Y/391H/392H	SOCC40H	
SOC440Y		SOCD42H
SOC443Y		SOCD43H
SOC490Y/491H/492H	SOCD41H	
Spanish		
SPA100Y	SPAA01Y	SPAA02H
SPA103Y		SPAA01Y
SPA220Y	SPAB01Y	SPAB02H
SPA223Y	SPAB04H+SPAB12H	
SPA250Y	SPAB14H + SPAB15H	
SPA280Y	HUMC14Y	
SPA320Y	SPAC01Y	
SPA357H		HUMB45H Check with supervisor
SPA380H		HUMC14Y
SPA425H	SPAC22H	
SPA490H	SPAD01-D11 (Equivalents granted depending on topic)	
Statistics		
STA222Y		BIOB28H, ECOB11H, ECOB12H, PSYB07H, PSYC08H, STAB52H, STAB57H,STAB22H
STA242Y	STAB52H + STAB57H	ECOB11H, PSYB07H, STAB47H
STA262Y	STAB52H + STAB57H	ECOB11H, PSYB07H, STAB47H

ST. GEORGE COURSE	FULLY EQUIVALENT SCARBOROUGH COURSE	PARTIALLY EQUIVALENT SCARBOROUGH COURSE
STA302H	STAC67H	
STA347H	STAC62H	
STA402H	STAC52H	
STA437H	STAC42F	
Victoria College		
VIC112Y	HUMB70Y	
Woodsworth College		
WDW203Y		SOCC30H
WDW260Y	JCSB27Y	
Zoology		
ZOO202Y	BIOA03Y	
ZOO221Y		BIOC20Y
ZOO228Y	BIOB23Y	
ZOO230Y	BIOB17Y	
ZOO250Y		BIOB32H
ZOO251Y	BIOB25H+BIOB26H	
ZOO321Y		BIOC20Y
ZOO323Y	BIOB12Y	
ZOO330Y		BIOB17Y
ZOO353Y	BIOC29H+BIOC30H	
ZOO370H	BIOC19H	
ZOO469Y		BIOD15F
ZOO470H		(BIOB15Y)
ZOO471Y	(BIOB15Y)	BIOC19H
ZOO498Y	BIOD01Y or BIOD02Y	

Telephone Directory: frequently called numbers

Athletic Association (S.C.A.A.)	287-7096
Bookstore	287-7035
Cafeteria	287-7057
Campus Police (Including Lost and Found)	287-7398
Career Counselling & Placement	287-7559
Cashier's Office	287-7014
Computer Centre	287-7389 287-7390
Co-operative Programmes	287-7110
Counselling Services	287-7550
Development & Public Relations Office	
Events enquiries	287-7080
Drama	287-7175
Fees Department	978-2142
Health Service	287-7065
High School Liaison (Tours)	287-7556
Humanities Division	
Classics,History,Philosophy	287-7117
Fine Art, English, Humanities, Linguistics	287-7119
Languages	287-7120
Chair's Office	287-7127
International Student Centre	978-2564
Library	
Inquiry, Circulation Desk	287-7482
Reference Desk	287-7480
Life Sciences Division	
Biological Sciences, Psychology	287-7400
Chair's Office	287-7397
Music	287-7191
Physical Sciences Division	
R-Wing Office	287-7200
S-Wing Office	287-7195
Chair's Office	287-7197
Physical Plant Services (Parking enquiries)	287-7575
Principal and Dean	287-7025
Pub	287-7616
Recreation Centre	
Counter (reservations,etc.)	287-7099
Office (athletic programme information)	287-7090
Registrar's Office	
Enquiries	287-7537
Admissions/Scholarships	287-7529
Residences	
Office	287-7366
Dean of Students in Residence	287-7150
Social Sciences Division	
Receptionist	287-7282
Chair's Office	287-7287
Student Awards (OSAP)	978-7950
Student Councils	
Scarborough College Student Council (S.C.S.C.)	287-7047
U of T SAC Desk	287-7615
Vice-Principal and Associate Dean	287-7566 287-7378
Writing Laboratory	287-7562
APUS	978-3993

Scarborough Campus
University of Toronto
1265 Military Trail
Scarborough, Ontario M1C 1A4

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1991

JANUARY

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RETURN TO : S415A
Convocation and
Student Records

1991-92

SCARBOROUGH COLLEGE
UNIVERSITY OF TORONTO

CALENDAR

1991 – 1992