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1988/89

SCARBOROUGH COLLEGE  
UNIVERSITY OF TORONTO

CALENDAR

1988-1989

Scarborough Calendar

University of Toronto  

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Scarborough College



Calendar

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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

1988/89

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## IMPORTANT NOTICES

- 1 The College reserves the right to change the content of, or to withdraw any course. In such cases every effort will be made to provide equivalent alternative instruction, but this cannot be guaranteed.
- 2 The College also reserves the right to limit the number of students in any course or any section of a course if the number wishing to take the course should exceed the resources available.
- 3 The College reserves the right to alter the fees and other charges described in the *Calendar*.
- 4 A separate *Calendar* is published by the Faculty of Arts and Science and by Erindale College. Students are reminded that Scarborough College is a separate faculty of the University and that rules covering students at Scarborough College may differ from those in the Faculty of Arts and Science.
- 5 It is the responsibility of students to see that their academic programmes meet the College's regulations in all respects.
- 6 ACADEMIC OFFENCES ARE A SERIOUS MATTER. See page 40.
- 7 The College has a fire safety plan. Copies are available from Physical Plant Services (S303).

## This is Scarborough College

Scarborough College, a constituent College of the University of Toronto, was established just under 25 years ago. Since that time, it has grown from a modest beginning of ten evening classes in a local Scarborough high school to a thriving campus which attracts some 3500 full-time and 1500 part-time students each year, has a faculty component of 220, and offers more than 700 different courses.

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

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

In 1982, the Vincent Bladen Library building was added to the R-wing. Today, more than 200,000 books are available on its shelves, as well as thousands of maps, periodicals, and in its media centre, recordings and fine art slides.

While Scarborough College was originally an integrated part of the University's Faculty of Arts and Science, in 1971 it became a separate University of Toronto faculty, enabling the College to take on more responsibility for developing its own curriculum. In 1975, the only formal Co-operative program at the University was started at Scarborough, the Co-operative Programme in Administration. Two additional Co-operative programs were added in 1984; one in Arts Administration, the other in International Development Studies. A fourth Co-operative programme, in Computer Science and Physics, will enrol its first students in September 1988. Other unique programs offered at the Scarborough Campus include Neurosciences, Cognitive Studies, Terrain and Environment Earth Sciences (Geology), and Medieval Studies.

Scarborough students have full and up-to-date resources available on their campus, such as the excellent library, laboratory and computer facilities, residences and recreational facilities. They may also, as full members of the University of Toronto, take advantage of all the resources of the University as a whole.

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

**Academic Calendar/Summer Session 1988**

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).
May 13	Last day to register for Y, A, F and H courses.
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 16	Classes for Y, A, F and H courses begin.
May 20	Last day to add Y, A, F or H courses.
May 23	Victoria Day. University closed.
June 10	Last day to withdraw without academic penalty from A or F courses.
June 24	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 27-June 30	Final examinations in A and F courses on the St. George and Erindale campuses.
June 30	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 27-July 1	Reading Week (St. George) for H and Y courses.
June 30	Last day to register for B and S courses.
July 1	Canada Day. University closed.
July 4	Classes for B and S courses begin.
July 8	Last day to add B or S courses.
July 22	Last day to withdraw without academic penalty from Y or H courses.
July 29	Last day to withdraw without academic penalty from B or S courses.
August 1	Civic holiday. University closed.
August 12	Last day of classes for Y, B, H and S courses on the St. George and Erindale campuses.
August 15-August 19	Final examinations in Y, B, H and S courses on the St. George and Erindale campuses.
August 19	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 1988/89****1988**

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.
August 19	Last day for early course selection.
September 5	Labour Day. University closed.
September 14	Classes for Y, A, F and H courses begin.
September 23	Last day to add Y, A, F or H courses.
October 10	Thanksgiving Day. University closed.
November 4	Last day to withdraw without academic penalty from F or A courses.
November 15	Christmas Examination Schedule published.
December 13	Last day of classes in the first term. Last day for submission of term assignments in F and A courses.
December 14-December 23	Term test and final examination period.

**1989**

January 2	Classes for B and S courses begin.
January 13	Last day to add B or S courses.
February 10	Last day to withdraw without academic penalty from Y or H courses.
February 13-February 17	Reading Week - no classes held.
February 15	Last day to request conferment of degree at the June Convocation.
February 24	Last day to withdraw without academic penalty from B or S courses. (There will be no "day of grace".)
March 15	Annual Examination Schedule published.
March 24	Good Friday. University closed.
April 7	Last day of classes; no tests or examinations may be held until the beginning of the examination period. Last day for submission of term assignments for Y, H, B or S courses.
April 13-May 5	Final examination period.
June 5	University Spring Convocations are likely to begin.



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#### Centre for University Studies in Language

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 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.  
*Associate Professor*  
 S. Chawla B.A. (Delhi), M.Sc. (McMaster)  
*Senior Tutor*

## Division of Social Sciences

### Anthropology

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

### Commerce

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

### Economics

A. Berry, B.A. (Western), Ph.D. (Princeton), *Professor*  
 D.E. Campbell, B.A. (Queen's), Ph.D. (Princeton),  
*Professor*  
 J. Cohen, B.A. (Columbia), M.A., Ph.D. (California),  
*Professor*  
 N. Gallini, B.A., M.A. (Missouri), Ph.D. (California),  
*Associate Professor*  
 S. K. Howson, B.A., M.Sc. (London), M.A., Ph.D.  
 (Cambridge), *Associate Professor*  
 M. Krashinsky, S.B. (M.I.T.), M. Phil., Ph.D. (Yale),  
*Associate Professor*  
 W. Milne, B.A. (Victoria, B.C.), M.A. (Toronto), Ph.D.  
 (Penn.), *Associate Professor*  
 I.C. Parker, B.A. (Manitoba), M.A. (Toronto), Ph.D.  
 (Yale), *Associate Professor*

M. Devereux, B.A., M.A. (Dublin), Ph.D. (Queen's)  
*Assistant Professor*  
 S. Horton, B.A., M.A. (Cambridge) Ph.D. (Harvard)  
*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*  
 M.F. Bunce, B.A., Ph.D. (Sheffield), *Associate*  
*Professor*  
 A.G. Price, B.Sc. (Wales), M.Sc., Ph.D. (McGill),  
*Associate Professor*  
 E. Relph, B.A., M. Phil. (London), Ph.D. (Toronto),  
*Associate Professor*  
 R.S. Harris, B.A. (Cambridge), M.A. (Ohio), Ph.D.  
 (Queen's), *Assistant Professor*  
 A.M. Sawchuk, B.A. (Manitoba), M.A. (Manitoba),  
 Ph.D. (MacMaster), *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*  
 M.W. Donnelly, B.Sc., M.A., Ph.D. (Columbia),  
*Associate Professor*  
 J. Esbrey, B.Ed., B.A. (West. Australia), B.Sc.  
 (London), M.A., Ph.D. (Toronto), *Associate Professor*  
 A. Rubinoff, A.B. (Allegheny), M.A., Ph.D.  
 (Chicago), *Associate Professor*  
 G. Skogstad, B.A., M.A. (Alberta), Ph.D. (British  
 Columbia), *Associate Professor*  
 S. Solomon, B.A. (McGill), M.A., Ph.D. (Columbia),  
*Associate Professor*  
 J. Teichman, B.A., M.A., Ph.D. (Toronto), *Assistant*  
*Professor*

### Sociology

W.W. Isajiw, B.A. (LaSalle), M.A., Ph.D. (Catholic  
 Univ. of America), *Professor*  
 R.L. James, M.A. (Wayne State) Ph.D. (Oregon),  
*Professor*  
 R. O'Toole, B.A. (Leeds), M.A. (McMaster), Ph.D.  
 (Toronto) *Professor*  
 R. Beals, B.A. (UCLA), M.A., Ph.D. (California),  
*Associate Professor*  
 J.-L. de Lannoy, Sc. Soc. (Louvain), Ph.D.  
 (California), *Associate Professor*  
 M. Hammond, B.A. (California), M.A., Ph.D.  
 (Toronto), *Associate Professor*  
 J. Hannigan, B.A., M.A. (Western Ontario), Ph.D.  
 (Ohio State), *Associate Professor*  
 J.A. Lee, B.A., M.A. (Toronto), Ph.D. (Sussex),  
*Associate Professor*  
 S. Ungar, B.A. (McGill), M.A., Ph.D. (York, Canada),  
*Associate Professor*

J. Tanner, B.Sc. (Hons.) (University of London)  
 PGCE, (Leicester School of Education), M.A., Ph.D.  
 (University of Alberta) *Assistant Professor*  
 A. Tuzlak, B.A., M.A. (Windsor), Ph.D. (York,  
 Canada), *Assistant Professor*

# 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

## Bases of admission

### Equivalent Certificates

The certificates listed below are considered acceptable for admission consideration. *Possession of these minimum requirements in no way guarantees acceptance.*

### Candidates Applying from Ontario Secondary School

#### Admission Requirements for 1988

- 1 Applicants must be eligible to receive the Ontario Secondary School Diploma (OSSD).
- 2 Applicants must present at least six (6) Ontario Academic Credits (OAC's).
- 3 One (1) credit must be English I\*/anglais I and another in either Mathematics or a language other than English.
- 4 No more than two (2) OAC's in any one subject will be accepted.

\*To students whose first (native) language is not English:

- a) Those who have studied for *more than two years* in an English language school system must present an OAC in English I.
- b) Those who have studied for *two years or less* in an English language school system must present one of the following:
  - a score of 580 on the Test of English as a Foreign Language (TOEFL) or 90 on the Michigan English Language Assessment Battery,
  - or
  - OAC English I/anglais I.

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

- i) Applicants may not present more than three credits in Mathematics

- ii) Only **one** of Family Studies or Accounting will be accepted.

- iii) The following courses will not be accepted:

Data Processing  
Law  
Marketing and Merchandising  
Multidisciplinary Studies  
Other Arts Studies  
Other Business Studies  
Physical and Health Education  
Secretarial Practice  
Technological Studies

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

Before 1972: 7 Grade 13 credits are required.

### Prerequisites

Student should choose OACs/Grade 13 subjects which will fulfill the prerequisites for university courses they intend to take. These prerequisites are listed at the end of this section and after the description of each course later in the *Calendar*. The average required for admission varies from year to year, but is expected to be higher than 65%. Students are selected by taking into consideration a wide range of criteria including secondary school marks, distribution of subjects taken, performance in subjects relevant to the academic programme selected, results in senior division prerequisite courses, and supplementary information obtained through the Student Profile.

### Other Canadian provinces

*Alberta, Manitoba, Nova Scotia, Saskatchewan*

- Grade 12

*British Columbia*

- before 1969: Grade 13 or 1st year

University of British Columbia

- 1969 to present: Grade 12

*New Brunswick*

- before 1970: Grade 13 or 1st year

University of New Brunswick

- 1970 to present: Grade 12

*Newfoundland*

- before 1986: 1st year Memorial University

- 1986 to present: Grade 12

*Prince Edward Island*

- before 1983: 1st year University of

Prince Edward Island

- 1983 to present: Grade 12

*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.

### 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, where the applicant:

- 1 is at least 21 years of age; and
- 2 has been resident in Ontario for at least one year as a Canadian citizen or Permanent Resident; and
- 3 achieves high standing in one pre-university course,\* or
- 4 achieves high standing in two OAC/Grade 13 subjects, one of which must be English OAC I\*\*. Students must consult with the Office of Admissions before enrolling in any of these courses.

\*Pre-university courses are offered by Woodsworth College of the University of Toronto. English and History are available at the Scarborough campus.

\*\*The Scarborough Board of Education

Continuing Education Division offers OAC credits in English and Geography at the Scarborough Campus.

### Senior Citizens

The University admits Canadian citizens and Permanent Residents 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 Admissions Officer at 284-3359 for information concerning the application procedure.

### Admission as Special Students

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

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

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

### Application procedures

- Students currently enrolled in an Ontario secondary school should submit applications through their school's guidance office.

- All other applicants should request application forms from the Office of Admissions, giving full details of their educational background and standing.

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

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

### Application dates

Applicants are strongly advised to submit application forms as soon as possible and before the following dates:

Admission to the Summer Session  
Term I (beginning in May) - March 15  
Admission to the Summer Session  
Term II (beginning in July) - May 15  
Admission to the Winter Session Term I  
(beginning in Sept.) - June 1  
Admission to the Winter Session Term II  
(beginning in Jan.) - November 15  
Overseas applicants should apply at least six weeks before these dates.

## Secondary School Prerequisites

The courses below have Grade 13/OAC prerequisites. Students may begin the study of many languages without Grade 13/OAC preparation. Students who already have language skills should contact the Supervisor of Studies about courses appropriate to their level of competence. Specialist Programmes in Commerce and Economics require Grade 13/OAC Calculus.

Scarborough Course	Prerequisite(s)	Recommended Course(s)
Astronomy A02Y	Algebra & Geometry, Physics	Calculus
Chemistry A02Y	Chemistry, Algebra & Geometry, Calculus	
Computer Science A56H	one OAC in Mathematics	
Computer Science A58H	Algebra & Geometry, Calculus	
Geology A01Y		Mathematics and Science courses
Mathematics A04Y	Algebra & Geometry, Calculus	
Mathematics A26Y	Calculus	Algebra & Geometry
Mathematics A27Y	Calculus	Algebra & Geometry or Finite Mathematics
Mathematics A55Y	Algebra & Geometry, Calculus	
Physics A03Y	Calculus	

Notes: The OAC Algebra & Geometry will replace both Grade 13 Functions & Relations and Grade 13 Algebra.  
Students should refer to the Programmes of Study for further information.

# Awards

Unless specified the following awards do not require an application; all Scarborough College undergraduate degree students with excellent academic standing are considered. Scarborough students are also eligible for consideration for the general University of Toronto scholarships and bursaries in addition to the awards listed below. A general condition for holding a scholarship is that the student registers at Scarborough College in the following academic year. In addition students who have been awarded a scholarship which is based on enrolment in a particular programme of study must continue in that programme to receive the award. The official award records are on file in the Office of the Registrar (Room S416).

## 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. 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 40 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 available in Scarborough schools.

### Alfa-Laval Admission Scholarships

Two scholarships are awarded annually to students on the basis of excellent academic achievement in the secondary school program.

### Scarborough Alumni Entrance Scholarship

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

### Associates of Scarborough College Entrance Scholarship

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

### Warner-Lambert Admission Scholarship

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

### Rohm and Haas Canada Admission Scholarship

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

### Ting Sum Tang Memorial Entrance Scholarship

Awarded to a student on the basis of excellent academic achievement in the secondary school programme.

Donor: Federation of Chinese Canadian Professionals (Ontario Education Foundation)

## In-course awards

### 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.

### A.D. Allen Scholarship

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

### Vincent Bladen In-course Scholarships

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

### Scarborough College In-course Scholarships

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

### The 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 Students' Council In-course Award

Awarded to the student entering second, third or fourth year who a) has made an outstanding contribution to the Academic, Social or Cultural life of Scarborough College and b) has a minimum of a "B" average. Applications available in Room S416.

### Bladen Prize in Economics

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

### Tom McFeat Prize in Anthropology

Awarded to the outstanding student entering the fourth year of the Specialist Programme in Anthropology.

### John Pounder Prize in Astronomy

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

### William Beardmore Memorial Prize in History

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

**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 Margaret H. McCoy Johnston Scholarship**

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

**Anita FitzGerald Prize in Women's Studies**

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

**The Katherine Nagel Philosophy Prize**

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

**The Gilchrist Scholarship in Computer Science**

Awarded to the student in a Computer Science programme:  
(a) who has completed CSCC85 during the previous year with a minimum grade of B+; (b) who has completed at least three other full-course equivalents at the B, C or D

level in Computer Science, Mathematics, Physics or Statistics with an average of at least B+ in these courses;  
(c) who has a cumulative grade point average of at least 3.2 and;  
(d) who has the highest average in CSCC85 and all eligible B, C or D level courses.

**The Gilchrist Scholarship in Microbiology-Biochemistry**

Awarded to the student who has completed the third year of study in the Specialist Programme in Microbiology-Biochemistry and who has the highest grade point average in that programme (minimum B+), having completed at least three of the following courses with a grade in each of at least B: BIOB02Y, BIOC48H, JBCC35Y, JBCC36H.

**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.

**The Scarborough College Physics Prize**

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

**Research Prize in Biology**

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

**Management Accounting Student of Merit Scholarship**

Awarded to the student who has completed the third year of study in the Specialist Programme in Commerce or Commerce and Economics, and who has completed the following courses with the

highest average grade: COMB01Y, JCEC02Y, JCEC72H/73H.

**North Scarborough Rotary Club Scholarships**

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

**Clarkson Gordon of Scarborough Award in Commerce**

Awarded to an outstanding student entering third or fourth year in a Commerce Programme, who has achieved a cumulative grade point average of at least 3.3.

**The Harvey Babiak Award in Financial Accounting\***

Awarded to a student completing the third year of the Specialist Programme in Commerce or Commerce and Economics with the highest grade (at least A minus) in COMC01Y.  
Donor: Thorne Ernst & Whinney

**Warner-Lambert Arts Administration Scholarships**

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

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

**SKF Canada International Development Scholarship**

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

**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.

**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****The Governor General's Silver Medal**

Awarded to the outstanding member of the graduating class, chosen from among the winners of the graduation prizes.

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

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

**Ali Tayyeb Prize**

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

**The Irwin Publishing Prize in Classical Studies**

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

**Forrin Prize in Psychology**

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

### **Certified General Accountants Association Graduation Scholarship in Accounting**

Awarded to an outstanding graduating student completing a Commerce programme who has displayed excellent achievement in accounting, with grades not less than A minus in each of COMB01Y and COMC01Y.

### **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.

### **Orpheus Prize in Humanities**

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

### **Digital Equipment of Canada Limited Award of Merit**

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

### **Scarborough College Honours List**

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

### **Graduation With High Distinction and With Distinction**

Scarborough College students who have completed at least ten full courses while registered at Scarborough College or at the University of Toronto's Faculty of Arts and Science will graduate with high distinction if their cumulative grade point average is 3.50 or better and will graduate with distinction if their cumulative grade point

average is between 3.20 and 3.49. Other students with a cumulative grade point average of 3.20 or better will be considered on an individual basis.

### **Bursaries**

#### **University of Toronto Undergraduate Bursaries**

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

Deadline: November 1; however, applications will be accepted until February 28, should emergencies arise.

#### **Scarborough College Bursaries**

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

#### **Paskal Bursary in Psychology**

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

#### **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.

#### **\* 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, in explaining their application in particular cases, and (where appropriate) in assisting students who encounter special difficulties to request special consideration.

### **Calendar changes**

The information published in this calendar outlines the rules, regulations, curricula and programmes for the 1988 Summer Session (May to August) and the 1988-89 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.

### **St. George Campus or Erindale Campus courses**

Students who propose to register in courses on the St. George or Erindale campus should consult page 29 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 1987 Summer Session or the 1987-88 Winter Session should pick up registration information from the Registrar's Office in March or April. Signs will be posted at the College when it is available. New students and students reactivating their enrolment after a year away will be mailed their registration material upon request. There is a \$20 fee for students reactivating their enrolment.



**Winter Session**

Students who were registered at the College in the previous Winter Session will receive registration material in June, along with their Statement of Results. Returning students who were not registered in the previous winter or summer session should get in touch with the Office of the Registrar to request reactivation of their enrolment for which there is a \$20 fee; they will be mailed registration material. New students will receive registration information with their offers of admission.

The Winter Session timetable will be available in early June.

**Fees**

Fees for 1988-89 will be announced in the Registration Instructions. As a guideline, the following fees were charged for 1987-88; fees are expected to increase by about 5% for 1988-89. Full-time students taking the usual load of five courses incurred fees charges of about \$1500 for Canadian citizens or permanent residents or about \$5200 for visa students.

**Students in debt to the University**

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

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

The following debts are taken into consideration when applying sanctions:

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

**Services to Disabled Persons**

A Co-ordinator is available to provide personal support and liaison with academic and administrative departments on campus and with agencies 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.

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

**Course key****The Course Code****1 The Discipline Abbreviation**

The first three letters of the course code indicate, in an abbreviated form, the discipline or subject area of the course. 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: JCEC73H indicates a course offered jointly by Commerce and Economics.

**2 The Course Level**

The fourth letter of the course code indicates the level of the course with "A" indicating the most elementary level and "D" the most advanced.

**3 The Course Number**

The fifth and sixth letters of the course code are course numbers. In most disciplines, these numbers have no significance, except to identify the course in a shorthand form.

**4 Credit Value and Duration of a Course**

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

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.

**2 Prerequisites**

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

**3 Corequisites**

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

**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****1 Supervised Reading 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.

**2 Supervised Research 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.

**3 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** Courses selected must satisfy the degree requirements.

**2** Courses must satisfy the requirements of programmes of study: Specialist Programmes, Major Programmes or College Programmes.

**3** Students proceeding to a three-year degree may include, among the fifteen courses<sup>1</sup> required for their degree, no more than ten courses in any single discipline.

**4** Prerequisites and corequisites for each course, as stated in the course descriptions, must be met, unless waived by the instructor.

**5** Students may not register for credit for a course if they have already passed<sup>2</sup> 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 Scarborough equivalent list).

6 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.

7 Students may not register for credit in a course which is a specific prerequisite<sup>3</sup> for a course they have already passed.

8 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.

9 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.

10 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.

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

- may do so only until the deadlines for adding and withdrawing from courses, stated in the "Academic Calendar" of this Calendar;
- must notify the Registrar of any change by means of a registration change form, submitted by the appropriate deadline.

12 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

### Three-year degree

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

- 1 pass at least fifteen courses
- 2 among these fifteen courses, include no more than ten courses in any single discipline.<sup>4</sup> (Students who first registered at the College before the 1980 Summer Session are exempt from this requirement.)
- 3 among these fifteen courses, pass at least eight B-level, C-level and/or D-level courses
- 4 complete the requirements of a Major Programme or a College Programme. (Students who first registered at the College or the University of Toronto's Faculty of Arts and Science before the 1980 Summer Session are exempt from this requirement.)
- 5 earn a grade of C minus or better in at least ten courses, including at least six B-level, C-level and/or D-level courses. (Students who first registered at the College before the 1980 Summer Session must earn a grade of C minus or better in at least nine courses including at least five B-level, C-level and/or D-level courses.)
- 6 earn a cumulative grade point average of at least 1.50. (Students who first registered at the College before the 1980 Summer Session are exempt from this requirement.)
- 7 for a Bachelor of Science degree, pass at least six B-level, C-level and/or D-level courses in Science, as defined below.

### Four-year degree

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

- 1 pass at least twenty courses
- 2 among these, pass at least thirteen B-level, C-level and/or D-level courses
- 3 complete: (a) a Specialist Programme, or (b) two Major Programmes, or (c) a Major Programme and a College Programme. (Students who first registered at the College or the University of Toronto's Faculty of Arts and Science before the 1980 Summer Session are exempt from this requirement.)
- 4 earn a grade of C minus or better in at least fourteen courses, including at least ten B-level, C-level and/or D-level courses. (Students who first registered at the College before the 1980 Summer Session must earn a grade of C minus or better in at least thirteen courses, including at least nine B-level, C-level and/or D-level courses.)

5 earn a cumulative grade point average of at least 1.50. (Students who first registered at the College before the 1980 Summer Session are exempt from this requirement.)

6 for a Bachelor of Science degree, pass at least nine B-level, C-level and/or D-level courses in Science, as defined below.

### Courses in science for the B.Sc. degree

The following courses are considered to be courses in Science for purposes of determining eligibility for the Bachelor of Science degree.

1 disciplines: Astronomy, Biological Science, Chemistry, Computer Science, Geology, Mathematics, Neurosciences, Physics, Psychology and Statistics.<sup>5</sup>

2 The following courses in Anthropology: ANTB11, ANTB12, (ANTB14)<sup>6</sup>, ANTB15, (ANTB22), ANTB26, (ANTB39), (ANTB40), (ANTB43), (ANTB44), (ANTB47), (ANTB48), (ANTB52), (ANTB53), (ANTC12), ANTC16, ANTC22, (ANTC27), ANTC28, (ANTC29), ANTC35, (ANTC36), ANTC40, ANTC41, (ANTC44), (ANTC45), (ANTC46), ANTC47, ANTC52, ANTC53, ANTD02, ANTD03, ANTD04, ANTD12, ANTD14, ANTD16, ANTD23. In addition, ANTC03, ANTC04, (ANTC13), (ANTC14), ANTD31 and ANTD32 may be used to fulfil the B.Sc. requirements for students researching in appropriate scientific areas of Anthropology.

3 The following courses in Geography: GGRB03, (GGRB15)<sup>6</sup>, GGRB19, (GGRB24), (GGRB29), GGRB30, 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 fulfil the B.Sc. requirements for students researching in appropriate scientific areas of Geography.

4 The following joint courses: BJP, JBC, JLP, JMC, (JMP), JPA and JPM courses.

5 The following courses in Philosophy: PHLB50, PHLC50, (PHLC51).

6 (QUAB02), (QUAC01) and (QUAD01).

7 IDS802

8 Completion of the required courses in a Specialist or Major programme in Science disciplines may not, on their own, yield sufficient B, C, and D level Science credits to meet the requirements of a Bachelor of Science degree.

### 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.

4 A discipline ("a branch of knowledge or of teaching" such as History or Physics or Sociology) is defined, for purposes of this regulation, as a subject area:

a in which courses are listed together in the same section of course descriptions in this Calendar, and b whose courses share the same "discipline abbreviation" in the course code, e.g. HIS or PHY or SOC. Where students register in courses offered jointly by two disciplines, students may count the course in whichever discipline they wish.

5 "MAT" & "STA" courses, are considered to be courses in Science for purposes of determining eligibility for the B.Sc. degree. Other courses in statistical methods offered by various other disciplines may or may not count as courses in Science for purposes of this rule. Thus, for example, ANTC35, GGRB31, PSYB07 and PSYC08 may be counted as science courses; ECOB11, ECOB12 and SOC806 may not.

6 Courses shown in parentheses are courses that were in the curriculum in previous years, but are no longer. These courses may be counted as Science courses for purposes of this rule.

## Programme requirements

These requirements apply to all degree students who first registered at the College in the 1980 Summer Session or thereafter. (Students who transfer from the University of Toronto's Faculty of Arts and Science and who registered there before the 1980 Summer Session are exempt from these requirements.)

### Three-Year Degree

1 To meet the requirements of the three-year degree, students must complete either a Major Programme or a College Programme.

### Four-Year Degree

2 To meet the requirements of the four-year degree, students must complete a Specialist Programme, or two Major Programmes, or a Major and a College Programme.

### Specialist Programmes

3 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 90).

(A list of Specialist Programmes may be found on page 47).

### Major Programmes

4 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 47.)

### College Programmes

5 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 48.)

### Approved Individual Programmes

6 Students may propose individual programmes of study, other than those described in this Calendar.

Such proposals will be considered favourably only from students with cumulative grade point averages of 3.5 or greater. To be approved, individual programmes should specify six to eight courses for a Major or College Programme and ten to fourteen courses for a Specialist Programme. The courses should all be offered on the Scarborough Campus and should form a logical programme. The student

should offer a rationale for the proposal. Proposals should be made to the Associate Dean. Proposals must be submitted at least eight months prior to the session in which the students expect to graduate.

### Course selection and registration for Programmes of study

1 Students are responsible for ensuring that their course selection will enable them to complete the requirements of their Programme(s) by the time they complete their other degree requirements. In certain Programmes, approval by the supervisor of some or all courses is necessary. In all Programmes, the supervisor is available for advice concerning Programme requirements and course selection.

2 While students in their first year of full-time study, or first four courses of part-time study, are not required to select a Programme, they should, when selecting their first year courses, consider carefully the requirements of any Programmes they may later choose to follow. Supervisors, instructors in 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 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 after classes have started from one Programme to another 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 fulfill 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 fulfill 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 is listed as partially equivalent in the Equivalents list should consult with their Programme Supervisor first.

## English proficiency requirement

The English proficiency requirement has been suspended and, therefore, no English proficiency tests have been scheduled for 1988/89. However, students who wish to improve their writing skills are encouraged to make use of the Writing Laboratory and take non-credit courses in writing skills (see page 42).

## 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	Excellent
A	4.0	85-89	
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	Adequate
C	2.0	63-66	
C-	1.7	60-62	
D+	1.3	57-59	Marginal
D	1.0	53-56	
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 drama courses, specific letter grades may not be assigned. Students may instead be graded on a Credit/No credit (CR/NCR) system. Where a student earns a grade of "Credit" in such a course, the course counts as one of the courses at C minus or better required for the degree. 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 counted as one of the courses at C minus or better required for the degree. 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 23). 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

Both a sessional and a cumulative grade point average (GPA) will be calculated for each student at the end of each session, and shown on the student's transcript.

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

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

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

### Determination of academic status

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

#### 1 In good standing

Students who maintain a cumulative grade point average of 1.50 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 1.50.

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 1.50 or better. Students who have cleared probation shall be said to be again "in good standing".

#### 4 Probation continued

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

#### 5 Suspended or refused further registration

Students who do not clear probation or achieve a sessional grade point average of at least 1.70 shall be liable for suspension or refusal of further registration as follows:

Students who have incurred no previous suspension will be *suspended for one year*.

- Students who have previously incurred (at worst) a one year suspension will be *suspended for three years*.
- Students who have previously incurred a three year suspension will be *refused further registration in the College*.

### Determination of academic status for students admitted on condition

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

**1 The standing of students admitted on condition** will be assessed at the end of the session in which such students complete their second full course.

**2 Where such students earn a cumulative grade point average of 1.70 or better**, their conditional status will be removed, and they will be said to be "in good standing".

**3 Where such students earn a cumulative grade point average of less than 1.70**, they will be suspended for one year.

**4 Upon their return from suspension**, their academic status will be assessed according to the appropriate rules above.

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

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

## Courses on other campuses

### Courses on other campuses

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

### Equivalent courses

Students may not register in any course on another campus where an equivalent course is offered on the Scarborough

Campus during the same session. This includes courses offered in different terms of the same session. Two exceptions to this rule exist as follows:

**1** where the course is offered only 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, should be consulted in the Office of the Registrar, Counselling Services, or any Divisional office.

### 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 degree must receive permission from the University of Toronto to do so *prior* to taking the courses. Students who wish to study part-time should apply for a Letter of Permission. Students who wish to study full-time should apply for a Study Elsewhere Year. 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 to the university after the fact. However, students should also be aware that duplication of previous study is not permitted. Students who re-enrol at the university who have been absent for 12 months are required to supply official transcripts if they have studied at another university since leaving.

### (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 Admissions and Awards Officer, on a form available in Room S416. Requests should include the name of the university, the course number, title and description. Requests should be submitted well in advance of the date of the proposed courses. Credit will not be granted for courses for which prior permission has not been requested and approved. A fee of \$25.00 per Letter of Permission is charged.

### Minimum grade requirement

To receive credit for a course taken at another university on a "Letter of Permission" the student must earn at least one full grade higher than the minimum passing grade (i.e. a grade of C minus or better at universities employing a grading

system similar to that of the University of Toronto). Grades are not recorded on transcripts and are not included in any grade point averages. These credits are listed as pass credits only.

### Accountability for courses on Letter of Permission

Students who have requested and received a Letter of Permission must arrange to have the host university send an official transcript to Scarborough College promptly after completion of the course. Students who do not register for their course, or who withdraw without penalty from it, are required to submit a confirming letter from the Registrar of the host university. Failure to meet this or the minimum grade requirement will result in a grade of F being entered automatically on the student's record at Scarborough College. Grades attained at other universities are not included in the student's grade point average. They may, however, affect a student's academic standing.

### Limits on Letters of Permission

- 1 For a three-year degree, students may take a maximum of five courses at other recognized institutions on letters of permission provided that, by the end of their degree programmes they:
  - complete at least eight courses at Scarborough College;
  - complete at least three B-level, C-level and/or D-level courses with a grade of at least C minus at this University.
- 2 For a four-year degree, students may take a maximum of five courses at other recognized institutions on letters of permission, provided that, by the end of their degree programmes they:
  - complete at least eleven courses at Scarborough College;
  - complete five B-level, C-level and/or D-level courses with a grade of at least C minus at this University.
- 3 If students have received transfer credit on admission, the number of courses which they may complete on a letter of permission will be affected as follows:

		Transfer credit on admission:									
	Degree	1	2	3	4	5	6	7	8	9	10
#of courses which may be taken on a Letter of Permission	III Year Degree	5	5	4	3	2	1	0	0	0	0
	IV Year Degree	5	5	5	5	4	3	2	1	0	0

4 No Letter of Permission will be granted for courses taken at other post-secondary institutions within Metropolitan Toronto, correspondence courses, or courses deemed inappropriate for Arts and Science degree credit at this University.

5 A student must have completed the equivalent of one year of full-time study and be in good standing to be eligible for a Letter of Permission.

6 A student who completes the final course(s) for the degree on a Letter of Permission during the Winter Session may not graduate in June, but may do so in November.

7 A maximum of 2.0 courses may be taken on a Letter of Permission during any session.

8 Normally only one (1.0) FCE at the C or D level on a Letter of Permission is permitted.

### (ii) Study Elsewhere year

#### Types of Study Elsewhere years

There are basically two types of Study Elsewhere.

1 Students may apply to register at a host university and follow its courses for credit; these credits will then be translated into Scarborough College credits. These courses will appear on students' Scarborough College transcripts, but the grades assigned by the host university will not be recorded and will not be included in any grade point average.

2 Students may elect to do Scarborough College supervised reading or independent study courses off-campus at a location which will enhance their study. These courses will appear on students' Scarborough College transcripts; grades will be recorded and included in grade point averaging.

3 A combination of the above types is also possible, with some courses followed at a host university for credit transfer, and some Scarborough College supervised study courses taken while the student is on the host campus.

4 The University of Toronto operates study elsewhere opportunities at Aix-en-Provence, Granada, Laval, and Siena.

### Fees and aid

Students taking courses for transfer credit (as in 1 above) pay the appropriate fees at the host university and a fee (\$185 in 87/88) to the University of Toronto in order to maintain registration at Scarborough College.

Students taking Scarborough College supervised study courses elsewhere (as in 2 above) pay regular Scarborough College fees.

Students in a mixed programme (as in 3 above) pay appropriate fees at the host University plus a fee (\$37 in 87/88) for each full course (or equivalent) for which they register for credit transfer plus the regular fee for Scarborough College supervised study courses.

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 for full information.)

### Application

Interested students may obtain an application for a Study Elsewhere year from the Admissions and Awards Officer. Students who intend to count courses in the Study Elsewhere year towards programme requirements must obtain, in advance, the approval of their Programme Supervisor. The proposed programme will be submitted for approval to the Study Elsewhere Committee through the Associate Dean (Academic). Completed applications should be submitted to the Associate Dean or the Admission and Awards Officer by April 1, for studies beginning in the Summer Session, and May 1, for studies beginning in the following Winter Session.

### Regulations

1 To be eligible a student must have a cumulative grade point average of 2.50 or better.

2 A student must have completed at least four courses. (Students normally go on a Study Elsewhere year after at least eight courses.)

3 The proposed Study elsewhere year must be reviewed and approved by the Programme Supervisor before the application is forwarded to the Study Elsewhere Committee if courses are to be counted towards programme requirements. Students should also discuss with their Programme Supervisor how they will satisfy programme requirements.

4 A student may be given credit for a maximum of five full-course equivalents on a Study Elsewhere year;

5 Any plan for a Study Elsewhere year must be compatible with University regulations; that is, students will complete their last five full courses (or equivalent) at the University of Toronto.

## 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; 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.)

## 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, university student number, social insurance number, and date of birth.

- 2 The student's academic record, listed chronologically by session.

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

### Ordering copies

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

To order copies of transcripts, students should visit the Office of the Registrar, or should write to: Office of the Registrar, Scarborough College, University of Toronto, 1265 Military Trail, Scarborough, Ontario, M1C 1A4. Payment by mail should take the form of a cheque or money order payable to "The University of Toronto". There is no charge for copies of transcripts sent to other divisions of the University of Toronto.

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

## Access to student records

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

### Student record information deemed to be public information

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

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

### Access to other parts of the student record

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

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

### Students' access to their own records

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

- 1 official transcripts of their academic record;
- 2 student records in computer files, except information dealing with students' applications for admission (particularly the secondary school principal's confidential recommendation);
- 3 students' paper files, except for information filed before 1 July 1979, when this policy was implemented, information relating to students' applications for admission (letters of reference which have been provided on the understanding that they shall be maintained in confidence) and medical information provided in confidence.

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

## Withdrawal

### Withdrawal from a course

- 1 Students may withdraw from courses without academic penalty up to the dates stated in the Academic Calendar on page 5.
- 2 A student may effect withdrawal from a course by completing a registration change form and submitting the form to the Office of the Registrar. Where this is not possible, the student may write to the Office of the Registrar.



3 Where a student withdraws from a course by the appropriate deadline, no record of registration in the course is shown on the student's transcript.

4 Where students cease to complete course requirements, but do not withdraw officially by the deadline, a grade based on the marks awarded (including a zero for any incomplete work) will be recorded.

5 Students who withdraw from courses by appropriate deadlines are entitled to a fees adjustment. For full information, please refer to the registration information published each session. The amount of the fees adjustment is determined by the date upon which the registration change form or other written notification is received by the Office of the Registrar.

6 Students who withdraw from courses will be given or mailed a receipted copy of their registration change form. Students should retain these copies until after they have received their statement of results for the particular session.

#### Withdrawal from the session

1 Students who wish to withdraw from the College for a given session do so by withdrawing from all courses by the deadlines above.

2 Students must also complete the following procedures and submit a withdrawal form to the Office of the Registrar:

- surrender any Bookstore charge card and arrange payment of any outstanding account;
- return any borrowed books to the Library, pay any outstanding library fines, and surrender their library card;
- return any equipment borrowed from the College Recreation Centre and surrender any recreation centre locker;
- surrender any College locker and return (perhaps for a partial refund) any College parking permit;
- and
- surrender any laboratory locker and equipment.

These procedures are somewhat simplified for part-time students.

3 Students who wish to withdraw from the College are advised to speak with a counsellor in the Counselling Services Office. The counsellor will advise students concerning the academic consequences of their withdrawal (deadline dates,

eligibility for re-admission, etc.), any fees adjustments, and repayment of Ontario Student Assistance.

### Regulations governing special students

"Special students" are students registered at Scarborough College for degree courses:

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

### University grading practices policy

#### Purpose

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

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

#### Meaning of grades

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

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

Grades for each course shall be assigned with references to the meanings as described on page 27.

#### Grades vs. scores

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

#### Approval of grades

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

#### Classroom procedures

- 1 As early as possible in each course (and no later than the division's last date for course enrolment) the instructor shall make available to the class, and shall file with the division, the methods by which student performance shall be evaluated. This should include whether the methods of evaluation shall be essays, tests, examinations, etc., the relative weight of these methods in relation to the overall score, and the timing of each major evaluation.
- 2 After the methods of evaluation have been made known, the instructor may not change them or their relative weight without the consent of at least a simple majority of the students enrolled in the course. Any changes shall be reported to the division.
- 3 Student performance in a course shall be assessed on more than one occasion. No one essay, test, examination, etc. should have a value of more than 80% of the grade.

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

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

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

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

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

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

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

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

7 At least one piece of term work which is a part of the evaluation of a student's performance, whether essay, lab report, review, etc., shall be returned to the student prior to the last date for withdrawal

from the course without academic penalty.

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

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

### Appeals procedure

For procedures for appeals concerning grades and grading practices, see "Procedures for requesting special consideration, petitions, and appeals" (page 37).

### Student access to examination papers

The College provides access to copies of the previous years' final examination papers as well as the opportunity to review examination papers. In addition to the customary re-reading of papers and the re-checking of marks, the College provides the opportunity for students to petition for the re-reading of their examination. For further details, please refer to "Procedures for requesting special consideration, petitions, and appeals" (page 37).

## Examinations

Examinations are held at the end of both terms in each session. Students who make personal commitments during the examination period do so at their own risk. No special consideration will be given and no special arrangements made in the event of personal commitments.

Information regarding dates and times of examinations will not be given by telephone. Students are responsible for reading the timetable carefully and appearing at the time and place specified.

Students taking courses during the day may be required to write evening examinations, and students taking evening courses may be required to write day examinations.

### Examination timetable conflicts

Students scheduled to write two examinations at the same time should report their conflicts to the Administrative Assistant to the Registrar (Room S420A, 284-3300). Arrangements will normally be made for students to write both examinations on the same day, with a supervised break. Where the conflict involves a St. George Campus course, arrangements will normally be made for both examinations to be written at Scarborough College. Requests for such arrangements must be made no later than two full weeks before the commencement of examinations and will not be considered after that time.

### Students with three consecutive examinations

Students scheduled to write three consecutive examinations, including an evening examination, may request special arrangements. Requests for such arrangements must be made with the Administrative Assistant to the Registrar no later than two full weeks before the commencement of examinations. Requests will not be considered after that time.

### Special consideration regarding examinations

Students requesting special consideration because they are unable to write a final examination must submit a petition through the Counselling Services Office no later than the last day of the examination period. Petitions must be accompanied by a medical certificate or other appropriate supporting evidence. Please refer to the information concerning petitions and medical certificates (page 38). Students are expected to be available for examinations throughout this period.

### Identification cards

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

### Examination room regulations

1 All students are advised to read the University of Toronto Code of Behaviour, copies of which are available from the Registrar's Office.

- 2 Students are advised to arrive at the examination room at least fifteen minutes before the scheduled examination time. Invigilators will begin the actual examination at the scheduled time.
- 3 No persons shall be allowed in an examination room during an examination except the students writing the examination and those supervising it.
- 4 Candidates shall bring their photo identification cards and place them in a conspicuous place on their desks. (Students registered in other Faculties or Colleges of the University shall bring their student cards.)
- 5 Bags and books are to be deposited in areas designated by the invigilator and are not to be taken to the examination desk or table. Students may dispose of their purses by placing them, closed, on the floor underneath their chairs.
- 6 The invigilator has the authority to assign seats to candidates.
- 7 No material shall be brought into the examination room or used at an examination except by direction of the invigilator.
- 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 Subcommittee on Standing.
- 2 To enter a petition, the student prepares a written statement:
  - stating clearly the special consideration requested;
  - stating clearly the grounds upon which special consideration is requested, that is, the reason(s) why the student believes an exception to the rules is appropriate in this particular case; and
  - appending documents to evidence special circumstances: medical certificates, etc.
- 3 Students who wish to submit medical certificates in support of their petitions must ask their physician:
  - to verify that the student was examined at the time of the illness;
  - to state briefly the nature of the illness;
  - to indicate the duration of the debility caused by the illness; and
  - to indicate the physician's professional opinion as to whether the student should receive special consideration with his or her academic work on medical grounds.
- 4 Students may seek advice from counsellors in Counselling Services before entering a petition.
- 5 Students are notified in writing of the 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 statement of results they believe that their performance has been adversely affected by the illness or other problem, students may then request special consideration by means of a petition to the Sub-committee on Standing. Where the Sub-committee accepts the validity of a petition, and where the students' examination marks are significantly lower than their term marks, students will normally be allowed to write a special examination during the next examination period. Where students expect to graduate at the

end of a given session, special arrangements may be made for an immediate make-up examination.

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

### Requests for checking of marks in a course

#### Term work

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

#### Final examinations

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

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

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

#### Final grade

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

### Petition of marks in a course

#### Term work

**1** Students who wish to petition their grade on a term examination, an essay or another term assignment, must speak with the course instructor as soon as possible, and certainly before the end of term.

**2** Students who wish to appeal the decision of an instructor with respect to the grading of term work may speak with or write to the Chair of the division offering the course.

**3** Students who wish to appeal their grade on term work returned to students only after the end of term (that is, after the instructor submitted grades for the course), may enter a formal petition to the Sub-committee on Standing. See above for information about the petition procedure. Petitions must be entered within six months of the final examination period and will be treated in the same way as requests for re-reading of a final examination (see below).

#### Final examinations

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

**2** After students have seen the photocopy of their final examination but within six months of the relevant examination period, they may submit a petition to the Sub-committee on Standing to request re-reading of their final examination. The Sub-committee will authorize a re-reading only where a student:

- has articulated clear grounds for reconsideration of some part of the examination, *addressing the substance of the answer* in relation to the mark given it, or otherwise identifying the nature of the alleged misvaluation;
- has demonstrated that the alleged misvaluation 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 undervalued substantially.

If an error is discovered and the mark is changed, the copying fee will be refunded.

**3** Where the Sub-committee on Standing authorizes re-reading of any examination or item of term work, it is the responsibility of the division offering the course to arrange the re-reading and to authorize any change in the grade. It has been the

usual practice in the divisions to have examinations or term work re-read by the course instructor, unless some convincing argument is put forward by the student that the work be re-read by another member of the faculty.

**4** Where the Sub-committee on Standing authorizes re-reading of an examination or item of term work, the amended grade will stand, whether it is higher or lower than the original grade.

**5** Instructors are required to re-read the final examination (if any) and to recheck the calculation of term and final marks before submitting a failing grade for any student.

### Petitions concerning grading practices in a course

**1** Students who believe an instructor has violated a rule of the Grading Practices Policy are expected to discuss this complaint with the instructor at once.

**2** If this discussion does not yield a satisfactory resolution to the problem, students may appeal the decision of the instructor to the Chair of the division offering the course.

**3** If the appeal does not yield a satisfactory resolution to the problem, students may appeal the decision of the division to the Principal of the College.

**4** Students who wish to withdraw from a course after the last day to withdraw without academic penalty on the grounds that the Grading Practices Policy was violated must also submit a petition to the Sub-committee on Standing.

### Academic appeals

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

### The University of Toronto Academic Appeals Board

Students may appeal a decision of the Sub-committee on Academic Appeals to the University of Toronto Academic

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

### University Ombudsman

The Ombudsman assists in any way possible to resolve grievances or complaints, and can recommend changes in academic or administrative decisions where this seems justified. In handling a grievance or complaint, the ombudsman has access to all relevant files and information, and to all appropriate University officials. The ombudsman is independent of all administrative structures of the University, and is accountable only to the President and the Governing Council.

For information, advice, or assistance, contact the Office of the University Ombudsman, University of Toronto, 16 Hart House Circle, Toronto, Ontario M5H 1A1 (Telephone 978-4874).

## Discipline: academic matters

### Code of behaviour on academic matters

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

#### 1 Academic offences

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

- to use or possess an unauthorized aid or aids or obtain unauthorized assistance in, or to personate another person at any

academic examination or term test or in connection with any other form of academic work;

- to represent as that of the member in any academic work submitted for credit in or admission to a course or programme of study or to fulfill a requirement for any degree, diploma or certificate, any idea or expression of an idea or work of another;
- to submit for credit in any course or programme of study, without the knowledge and approval of the member to whom it is submitted, any academic work for which credit has previously been obtained or is being sought in another course or programme of study in the University or elsewhere;
- to submit for credit in any course or programme of study any academic work containing a purported statement of fact or reference to a source which has been concocted;
- to forge or in any other way alter or falsify any academic record, or to utter or make use of any such forged, altered or falsified record;
- to remove books or other library material from a University library without proper authorization, to mutilate library material or misplace it, or in any other way to deprive another member or members of the University of the opportunity to have access to library resources;
- to make use of a computer for an unauthorized purpose or for any purpose other than that for which the computing access code was granted, or to access, use, alter, modify, read or copy datasets that do not belong to the member or are not intended for the use of the member, or to interfere with the legitimate use of a computer by another member or members, or to make use of an account or access code not legitimately belonging to the member or without the knowledge and permission of a member to whom it legitimately belongs; or
- to access any University computer system without proper authorization, to modify, remove, use or prevent access to its programmes or datasets, to damage or mutilate a computer, or in any way to deprive another member or members of the University of the opportunity to have legitimate access to computer resources.

#### 2 Sanctions

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

- censure;

- assignment of a mark of zero or a failure for the piece of academic work in respect of which the offence was committed;
- assignment of a penalty in the form of a reduction of the final mark;
- denial of privileges to use any facility of the University, including library and computer facilities;
- assignment of a mark of zero or a failure for the course in respect of which the offence was committed;
- suspension from attendance in a course or courses, a program, 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 program, an academic unit or division, or the University for such period of time up to five years as may be determined by the Tribunal;
- assignment of a mark of zero or a failure for any completed course or courses in respect of which any offence was committed or in any course or courses which have not been completed at the time the offence was committed;
- recommendation of expulsion from the University;
- recommendation for revocation of one or more degrees, diplomas and certificates.

#### 3 Reporting

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

## Discipline: non-academic matters

### Code of behaviour on non-academic matters

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

The full text of the code is available from the Office of the Registrar. Important parts of it from the point of view of the student are shown below:

#### 1 Non-academic offences

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

- to disrupt College activities by action, threat or otherwise;
- to enter or remain in any College building, facility, room or office with intent to damage, destroy or steal any property that is not their own;
- to destroy, deface or otherwise damage any property that is not their own;
- to assault another person, threaten any other person with bodily harm or with damage to such a person's property or, knowingly, and without just cause, to cause any other person to fear bodily harm or fear damage to his or her property;
- to create a condition which unnecessarily endangers or threatens the health, safety or well being of other persons or threatens the damage or destruction of property;
- to use a position of authority to attempt to force any other person into a sexual relationship, or to subject a person to unwanted sexual attention, or to punish a refusal to comply;
- to subject any other person to verbal or physical abuse or harassment or to discriminate against any other person on the basis of race, creed, colour, national origin, citizenship, religious or political affiliation or belief, sex, sexual orientation, marital status and/or family relationship and place of residence;

- to possess stolen College effects or, on College premises, any property stolen from any other member of the College community;
- to use any College facility, equipment or service contrary to expressed instructions of an authorized person or without just cause;
- to violate the parking or traffic regulations of the College;
- to violate the Residence Code of Behaviour;
- to bring a false charge against any member of the College community under this Code;
- to counsel or aid a person in the commission of an offence;
- if found guilty of an offence, to refuse to comply with a sanction imposed by the Appeals Board.

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

## 2 Sanctions

The following sanctions may be imposed by the College:

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

## Non-credit courses in writing skills

The following courses are open to all students who wish to improve their writing skill.

EWSA01F/S (Basic Writing Skills)

and

EWSA03F/S (Varieties of Academic Writing)

are intended for students whose first language is English.

*Fee: \$60.00 per course*

These courses do not count for credit towards the degree requirements. Timetable information and registration forms may be obtained from the Registrar's Office (S-416B) or Counselling Services (S-302; phone: 284-3292).

Further information about these courses may be obtained from the Writing Laboratory (S-302E; phone: 284-3369).

### EWSA01F/S Basic Writing Skills

*Coordinator: A. Fisher*

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

Session: Summer Evening, Winter Day, Winter Evening

### EWSA03F/S Varieties of Academic Writing

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

Session: Summer Evening, Winter Day

## Part-time Studies and Certificate Programmes

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

### Admission to Scarborough College

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

### Awards

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

### Academic Regulations and Degree Requirements

Part-time students are governed by the same regulations as any other student. Students are responsible for reading through the section of the *Calendar* dealing with Academic Regulations. When in doubt, students should contact Counselling Services for assistance in interpreting regulations and their applications in particular cases. We have noted below several regulations that seem of particular relevance to part-time students. However, this list is by no means exhaustive. It must be emphasized that all rules and regulations apply to 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.

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 equivalents list in the Office of the Registrar or in Counselling Services 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. With some exceptions students may not register for courses on other campuses if equivalent courses are available in that session on the Scarborough Campus. Where the equivalent course is available at Scarborough only during the day, students may register in evening sections on other campuses.

3 Part-time students are governed by the same regulations concerning the dropping of courses as all other students.

4 Students should be aware that special circumstances may on occasion justify an

exception to the academic regulations. Requests for special treatment takes the form of a petition to Scarborough College Sub-committee on Standing. Students who believe that such special consideration is necessary should contact a counsellor in Counselling Services at the earliest possible time to discuss the appropriate form of action. Students should be aware that special consideration may not be granted and should avoid taking any action that will harm them if the petition is rejected.

### Choosing a Programme

Since most students must complete programmes and since evening course offerings are limited, evening students should plan their course selection very carefully bearing in mind pre- and co-requisites and the fact that certain courses may not be available in a particular session. Programmes which are available in the evening are given below with a brief description of cycling arrangements. Students are encouraged to consult their programme supervisor in planning their course selection. A summer 1988 timetable is available in the Registrar's Office.

### Anthropology Specialist and Major Programme

In general, the Anthropologists attempt to offer on a rotational basis one of the following core requirements [ANTB15Y, ANTB20, ANTB26] every year during the evening. Furthermore, every effort is made to offer at least one additional course that complements the core course offering [ANTB15Y, ANTB20, ANTB26Y] in the previous year.

### Commerce Major Programme

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

### Economics Major Programme

Each of the five courses specifically required for the economics major [EOA01Y, ECOB03Y, ECOB07Y, ECOB11H, ECOB12H] will be offered in the evening at least once each year. ECOA01Y, ECOB03Y, and ECOB11H will be offered in both summer and winter evening sessions each year. ECOB07Y and ECOB12S will be

offered in each winter evening session, and ECOB07Y in most summer sessions. Each winter session, and most summer sessions, will offer at least one other course at the B, C, or D level.

### 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

It is the intention of the Psychology Department to make both the Major and Specialist Programs available to part-time students. Toward that end, certain courses are offered annually in the evening and/or in the summer. Among these are PSYA01Y, PSYB01, and PSYB07, all of which are required for both programs. 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 fulfill the programme requirements are offered in winter and summer evening sessions.

## Certificate Programmes

### Certificate Programme in Business

Woodsworth College of the University of Toronto offers several Certificate programmes which are normally completed in two or three years of part-time study. They are undergraduate level programmes designed in response to a professional demand for University level studies in specific career related areas.

The Certificate Programme in Business is available at the Scarborough Campus. This programme is designed to introduce students to the general theories and concepts of business organization and management and to develop analytic skills in a business environment. It requires six full-course equivalents composed of three and one half required courses (one half-course of which must be taken on the St. George Campus) and two and one half full-course equivalents from a list of optional courses. The programme can be a

base of preparation for various professional designations.

Applicants who through previous post-secondary studies have completed courses appropriate to the Certificate programme may request consideration for advanced standing credit. Regulations concerning advanced standing credit should be discussed with a Student Counsellor at Woodsworth College. Since many of the Certificate courses are Arts and Science degree credit courses, students may, upon successful completion of a Certificate, apply for admission to Scarborough College and request transfer credit for some of their Certificate courses.

More information about the Certificate programme is available from the Admissions and Awards Officer or from Woodsworth College, 119 St. George Street, Toronto, Ontario M5S 1A9 (telephone: 978-8713).

#### **Certificate Programme in Printmaking**

A Scarborough College Certificate programme in printmaking will be available in September 1988. (For further information contact Don Holman, 284-3370.)

## **Programmes of Study and Course Descriptions**

The following Programmes are offered at Scarborough College. All programmes in Commerce, Computer Science, Economics 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 underenrolment, some of these Programmes may have to be withdrawn.

#### **Specialist Programmes**

Anthropology\*  
Arts  
Biological Sciences  
Chemical Physics  
Chemistry  
Chemistry & Biochemistry  
Cell and Molecular Biology  
Cognitive Science  
Commerce  
Commerce & Economics  
Computer Science  
Computer Science & Physics  
Computer Science for Data Management  
Drama  
Ecology & Environmental Studies  
Economics  
Economics & History  
Economics & Mathematics  
Economics & Political Science  
Economics & Quantitative Methods  
English\*  
Fine Art History  
Fine Art Studio  
French  
Geography  
Terrain and Environmental Earth Sciences  
History\*  
Humanities  
Language & Literature  
Linguistics  
Mathematics  
Medieval Civilization  
Modern Languages  
Neurosciences  
Philosophy\*  
Physics  
Political Science  
Psychology\*  
Sociology\*

#### **Major Programmes**

Anthropology\*  
Biochemistry  
Biological Sciences  
Chemistry  
Classical Studies  
Commerce\*

Cognitive Science  
Computer Science  
Drama  
Economics\*  
English\*  
Fine Art History  
Fine Art Studio  
French Language  
French Language & Literature  
Geography  
German Language  
History\*  
History of Ideas  
Italian Language  
Italian Language & Literature  
Linguistics  
Literature  
Mathematics  
Medieval Civilization  
Music History & Literature  
Philosophy\*  
Physics  
Political Science\*  
Psychology\*  
Society, Values & Medicine  
Sociology\*  
Spanish Language  
Statistics  
Women's Studies

#### College Programmes

Canadian Studies  
Development Studies  
Humanities  
Myth & Religion

#### Co-operative Programmes

Co-operative Programme in Administration  
Co-operative Programme in Arts Administration  
Co-operative Programme in International Development Studies  
Co-operative Programme in Computer Science & Physics

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 plans to make available to students who are able to study only in the evening.

## Anthropology

*Assistant Chairman:* M. Lambek

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, as part of complex civilizations and in 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 only, with occasional offerings in the last. Students interested in inquiring about appropriate course sequences in one of the sub-fields are recommended to consult with one of the faculty in that sub-field. Students will be directed to appropriate faculty by the Supervisor of Studies.

#### Specialist Programme in Anthropology

*Supervisor:* F.D. Burton

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  
ANTC52A  
ANTC60S  
ANTD12F  
ANTD31F  
ANTD32S
- 5 At least 2 full-course equivalents in disciplines other than Anthropology must be agreed upon in consultation with the Supervisor.

#### Major Programme in Anthropology

*Supervisor:* F.D. Burton

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

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  
*M. Lambek & Staff*

#### ANTB03F The Americas: An Anthropological Perspective

The origin and development of native cultures in the New World, with particular emphasis upon changes due to European contact.

Special emphasis will be placed on social dynamics and focus on Latin America.

Corequisite: ANTC37(ANTB37) recommended

Session: Winter Day  
*R.W. Shirley*

#### ANTB05F African Cultures and Societies I: Survey

A study of contemporary and traditional African peoples, their cultural backgrounds and historical interrelations. Lectures and readings will provide an overview of African social institutions, religious beliefs and ritual, political and economic organization, colonial and post-colonial experience, and current problems. Prerequisite: ANTA01 or Permission of Instructor

Session: Winter Day

#### ANTB07S Comparative Slavery

An examination of slavery as an institution in several areas of the world, including Brazil, Africa, the Caribbean, and the United States. An effort will be made to examine the modern consequences of slavery as well.

Prerequisite: ANTA01  
Session: Winter Day  
*R.W. Shirley*

**ANTB11F Human Behaviour in the Old Stone Age**

The development of art, technology, religion and lifeways of hunters and gatherers living from two million to ten thousand years ago. Our intellect, interests, emotions, and basic social life are all in part evolutionary products of the success of hunting adaptations over this span of time. Issues to be considered include the nature of prehistoric technological innovation and social change and the reconstruction of ancient ideologies and ecological systems.

Prerequisite: ANTA01 (ANTB26 is recommended).

Session: Winter Day  
H.B. Schroeder

**ANTB12S The Rise of Civilization**

Examination of the two major cultural developments of the past ten thousand years out of which emerged modern human societies: the agricultural and urban transformations. The course emphasizes the ecological-adaptive factors and the archaeological evidence bearing on the beginnings of permanent human settlements, the domestication of plants and animals, and the development of complex social and technological systems.

Prerequisite: ANTA01 (ANTB26 is recommended)

Session: Winter Day  
H.B. Schroeder

**ANTB15Y Biological Anthropology**

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

Specific topics include: the development of evolutionary theory, the 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 Evening  
L. Sawchuk

**ANTB20Y Social and Cultural Anthropology**

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

Prerequisite: ANTA01 or permission of instructor.

Session: Winter Day

**ANTB21Y Canadian Native Peoples**

North American native peoples formed a mosaic of connected yet distinct cultures ranging in complexity from Subarctic hunters to Northwest Coast fishermen and Plains warriors; from Puebloan farmers and Iroquoian confederacies to the urban dwellers of ancient Tenochtitlan. Early contacts with Europeans destroyed the urbanites and some hunters while fundamentally altering others. Later contacts witnessed displacements, confinements, and erosion of traditional culture and widespread poverty.

Twentieth Century Canada marks the regrowth of native culture with the appearance of new societies on trap lines and reserves, the formation of co-operatives, the acquisition of technical skills, unique art forms and a living literature. The pan-Indian movement, and the emergence of the Inuit, Dene, Metis, and other ethnic groups, together disclose both a new identity and a new mosaic.

Prerequisite: ANTA01 or permission of instructor

Corequisite: ANTB38, ANTC28, ANTC30 recommended

Session: Winter Day

**ANTB26Y An Introduction to Prehistoric Archaeology**

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: ANTA01

Session: Winter Day  
H.B. Schroeder

**ANTB54S Anthropology of Sex**

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

Prerequisite: ANTA01; ANTB15

Session: Winter Day

**ANTB55Y Cultures of the Middle East and Islamic World**

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 C04S 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 course in Anthropology and permission of instructor

Session: Winter Day, Winter Evening, Summer Evening  
Members of Faculty

**ANTC05Y Anthropological Study of Religion**

A cross-cultural study of systems of belief and ritual concerning spiritual beings and the cosmos; of social actions, rights and obligations arising out of human dependence on such beings; and of magic, curing, witchcraft and sorcery.

The course is concerned with the anthropological study of supernatural beliefs in small scale non-Western societies. Topics covered (time permitting) will be: the origin and function of religion; symbolism; myth; ritual; shamanism; magic; witchcraft; divination; death; ghosts; ancestor cults; and dynamics in religion. One two-hour session per week.

Exclusion: (ANTB02)

Prerequisite: ANTA01Y

Session: Winter Evening  
J. Boddy

**ANTC10F Complex Societies: Anthropological Perspectives on Development**

A study of peasant and agrarian societies, in which special attention will be paid to problems of detribalization, urbanization, and personal adjustment, as well as to adaptation to urban situations and social control. The study will draw upon Third World economic and social adjustments to new situations.

Exclusion: (ANTB17)

Prerequisite: ANTA01

Session: Winter Day

**ANTC16Y Human Origins**

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

Prerequisite: ANTA01 or permission of instructor

Session: Winter Day  
F.D. Burton



**ANTC22Y Primate Behaviour**

A general review of primate behaviour in its ecological setting.

Humankind represents only a tiny portion of the Order Primates. The interest in our own species has generated a proliferation of studies on the other members of this Order. The anthropological bias in such studies is clearly to gain a perspective on human evolution by assessing processes of adaptation. This purpose is served by examining the systematics, distribution, social behaviour and ecological relationships over the array of non-human primate forms. Three hours of lecture per week. The two hour block permits zoo visits and films. A long paper topic is selected early in the year (it may be a library work or original research.)

Exclusion: (ANTB22)

Prerequisite: ANTA01 or ANTB15 or PSYA01 or BIOA03

Session: Winter Day  
*F.D. Burton*

**ANTC25F Anthropology and Psychology**

An anthropological approach to topics of psychological interest. Amongst the areas we may consider: the relationship between culture and personality; the cultural construction of the "self"; other cultures' conceptions and expressions of the emotions; the life cycle in 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*

**ANTC35F Quantitative Methods in Anthropology**

A consideration of quantitative data and analytical goals, especially in archaeology and physical anthropology. Some elementary computer programming, and a review of program packages suitable for anthropological analyses will be included.

Exclusions: (ANTB43); ECOB11; PSYB07

Prerequisite: ANTA01; ANTB15 and

ANTB26 are recommended

Session: Winter Day  
*L. Sawchuk*

**ANTC37F Prehistory of Mexico and Mesoamerica**

An attempt to understand the development and achievements of the civilization of Mexico. We will consider the two main problems: the beginnings of agriculture and its effects on culture, and the forces which contribute to the emergence or disappearance of civilization. Students will become familiar with the art, crafts and architectural styles of the best known sites which typify the civilizations of this region.

Exclusion: (ANTB37)

Prerequisite: ANTA01; ANTB03F and ANTB38 is recommended

Session: Winter Day  
*M. Latta*

**ANTC41Y Physiological Anthropology**

Physiological Anthropology can be defined as the study of how and why groups of humans vary in their physiological responses and capabilities. The scope of the course will be broader than the above definition suggests: Beyond focusing on environmental physiology from an evolutionary and ecological perspective, we will critically examine selected genetic and anatomical traits, said to be adaptive within certain environmental contexts. The epistemology of our knowledge on biological adaptations will be emphasized. Many lectures will concentrate on either (1) critical evaluation of theories that selected polytypic/polymorphic traits result from evolutionary adaptation, or (2) critical examination of population-scale adaptability to harsh environments, especially the High Arctic and high Andes. Cultural (behavioural and technological) strategies of adaptation to harsh environments will receive some deserved attention, but the course has a primary focus on the biological adaptability of the human species.

Exclusion: (ANTB44)

Prerequisite: ANTA01 or BIOA03; ANTB15 highly recommended

Session: Winter Day

**ANTC50F Death and Burial**

The problem of death and suitable treatment of the dead became a human concern by the late Pleistocene, and it is an important component of all human cultures today. To the archaeologist, burials are uniquely important because they are intentional depositions, intended for preservation into the future, of otherwise lost complex symbolic systems. A selection of ethnographic studies of burial practices will lead to an evaluation of the way in which activities are assimilated into the archaeological record. Next, we will examine archaeological burial data to compare the nature of symbolic response to death with important social and economic cultural processes including the rise of horticulture, urbanization and the development of social stratification.

Prerequisite: Any B level course in Anthropology

Session: Winter Evening  
*M. Latta*

**ANTC60S Fieldwork in Social and Cultural Anthropology**

This course describes how social-cultural anthropologists collect data and construct theory in the course of fieldwork. Students will be introduced to the fieldwork experience both through reading some of the classic descriptions of research in exotic societies and by designing and carrying out a small project or projects here in Toronto. We will cover such topics as the nature and uniqueness of the participant-observation method, note-taking and organization, emic and etic approaches, selecting informants/consultants, informal interviewing, and household surveys. We will also consider such problems as choosing a field site, entering and living in a foreign community, culture shock and cultural bias, and meeting the logistical and medical needs of the researcher. Considerable attention will also be given to ethical issues such as confidentiality and reciprocity that arise in fieldwork. Limited enrolment: 20 with preference given to students in anthropology and international development studies.

Prerequisite: Any B level course in Anthropology or IDS or permission of instructor.

Session: Winter Day

**ANTD01S Pre-Industrial Technology**

A survey of the diverse techniques that create the objects of human "material culture", with emphasis upon those of importance in the archaeological record and a review of the implications of design process and technology for the production of the "extra-somatic adaptive mechanisms" in pre-industrial societies.

Exclusion: (ANTB41)

Prerequisite: ANTA01 and any B or C level course in Anthropology.

Session: Winter Day  
*M. Latta*

**ANTD02S Background to Modern Archaeology: Settlement Patterns**

Archaeological settlement patterns retain traces of human occupations in the past. These may be interpreted on three levels: the individual household, the village or city, and the network of villages and cities which constitute complex social-political structures. We will trace the development of settlement pattern theory, emphasizing the contributions of geography, architecture, materials sciences, environmental studies and ethnology.

Exclusion: (ANTC44)

Prerequisite: Any B level course in Archaeology or related disciplines

Session: Winter Evening  
*M. Latta*

**ANTD16S Biomedical Anthropology**

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

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

Two hours of lectures and one three-hour laboratory session per week.

Exclusion: (ANTC45)

Prerequisite: ANTC51 (ANTB51Y) and one C level course in Physical Anthropology

Session: Winter Day  
*L. Sawchuk*



**ANTD24F Theory and Methodology in Social/Cultural Anthropology**

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

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

Exclusion: (ANTC16), (ANTC17)

Prerequisite: ANTA01 and ANTB20 or permission of instructor

Session: Winter Day

**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.

Exclusion: (ANTC13 and ANTC14)

Prerequisite: Permission of Instructor

Session: Winter Day, Winter Evening, Summer Evening

Members of Faculty

**Courses Not Offered in 1988-89**

- ANTB01Y** Ecological Anthropology  
Exclusion: (ANTB10)  
Prerequisite: ANTA01
- ANTB16Y** Cultures of Modern Canada  
Prerequisite: ANTA01 or permission of instructor
- ANTB23Y** Comparative Mythology
- ANTB30Y** Language and Culture  
Prerequisite: ANTA01
- ANTB38Y** Prehistory of North America North of Mexico  
Prerequisite: ANTA01
- ANTC06S** African Cultures and Societies II: Case Studies  
Exclusion: (ANTB06) Prerequisite: ANTB05
- ANTC11Y** The Anthropology of Women  
Prerequisite: ANTA01 or JHSA01 or permission of instructor
- ANTC18Y** Cultural Evolution  
Exclusion: (ANTB18)  
Prerequisite: ANTA01 or permission of instructor

**ANTC19F/S Economic Anthropology**

Exclusion: (ANTB19)

Prerequisite: ANTA01 or JHSA01 or permission of instructor

**ANTC24Y Primary Group Cultures**

Exclusion: (ANTB24)

**ANTC28F/S The Prehistoric Archaeology of Canada**

Exclusion: (ANTB28)

Prerequisite: ANTB38

**ANTC30S Biological Anthropology of Past and Present Canadian Native Peoples**

Prerequisite: ANTB15 or permission of instructor, ANTB21 recommended

Corequisite: ANTC28 (ANTB28) recommended

**ANTC32 Political Anthropology**

Exclusion: (ANTB32)

Prerequisite: ANTA01

**ANTC33Y The Fourth World: Native Peoples and the Nation State**

Prerequisite: ANTA01 or permission of instructor

Corequisite: ANTB21 or ANTC10 (ANTB17) recommended

**ANTC40Y Anthropological Demography**

Exclusion: (ANTB40)

Prerequisite: ANTA01; ANTB15 is recommended

**ANTC47Y Human Osteology**

Exclusion: (ANTB47)

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

**ANTC48Y Childhood in Contemporary Cultures**

Exclusion: (ANTB46)

Prerequisite: ANTA01 or ANTB20 or permission of instructor

**ANTC49S Law and Society**

Exclusion: (ANTB49)

Prerequisite: ANTA01 and ANTB20 or permission of instructor

**ANTC51Y Medical Anthropology**

Exclusion: (ANTB51)

Prerequisite: ANTA01 and one B level course in Anthropology

**ANTC52A Field Methods in Archaeology**

Exclusion: (ANTB52)

Prerequisite: any B-level course in Archaeology as well

**ANTC53Y Classification and Material Culture**

Exclusion: (ANTB53)

Prerequisite: ANTB26

**ANTC56Y The Anthropology of Food**

Exclusion: (ANTB56)

Prerequisite: ANTA01 and one other B or C level course in Anthropology

**ANTD03Y Analysis of Archaeological Material**

Exclusion: (ANTC29)

Prerequisite: Any B level course in Archaeology

**ANTD04Y Advanced Archaeological Methods: Data Description and Presentation**

Exclusion: (ANTB27)

Prerequisite: ANTB26

**ANTD11Y The Concept of Race in Anthropology**

Exclusion: (ANTC43)

Prerequisite: ANTB15 or one C-level course in Anthropology

**ANTD12F/S Research on the Social Behaviour of Non-Human Primates**

Exclusion: (ANTC12)

Prerequisite: ANTC22 (ANTB22) or permission of instructor

**ANTD14Y New Perspectives on Human Origins**

Exclusion: (ANTC36)

Prerequisite: ANTB15 or 1 C-level course in Physical Anthropology

**ANTD15F Frontiers of Anthropology**

Exclusion: (ANTC15)

Prerequisite: ANTA01 and one B and C-level course in Anthropology

**ANTD23F/S Ethnomedicine**

Exclusion: (ANTC46)

Prerequisite: ANTC51 (ANTB51) or permission of instructor

**Arts****Specialist Programme in the Arts**

Supervisor: John Mayo (284-3163)

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

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

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

**1 The Major Component:**

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

**2 The Minor Component:**

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

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

**Music:**  
MUSA10F, MUSB30S, MUSB17F plus an additional 1.5 full-course equivalent in Music.

**Arts Administration:**

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

COMA01Y Financial Accounting

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

**3 One full-course equivalent from:**

HUMB60F/S Women Artists in Society  
 HUMB70Y Introduction to Cinema  
 LITB60Y Creative Writing I  
 PSYB50F Sensation and Perception  
 PSYB51F Perception and Cognition  
 PHLB03F Philosophy and Art  
 or one full-course equivalent  
 from a relevant discipline  
 (authorization from Programme Supervisor  
 required)

**4 HUMC10H**

to be taken after 10 courses  
 or

HUMD30Y Senior Seminar in Arts  
 Administration

## Astronomy

*Discipline Representative:* C.C. Dyer  
 284-3318

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

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

### ASTA02Y Astronomy and Astrophysics: An Introduction

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

Two lectures and one tutorial/laboratory per week. Practical observations are introduced in the laboratory periods and on scheduled evenings in the fall. Visits to the David Dunlap Observatory and the McLaughlin Planetarium are also arranged.

Exclusion: ASTA03  
 Prerequisite: Grade 13 Physics, Grade 13 Functions and Relations  
 Session: Winter Day  
*R. Carlberg*

### ASTA03Y Introduction to Astronomy

A description of the solar system, sun, stars, galaxies and other phenomena of the Cosmos in which we live. The mechanisms which make our sun and other stars shine are explained, and the nature and evolution of our solar system, star systems, galaxies and the Universe as a whole are discussed in a manner suitable for the non-science student. Methods and techniques for exploring the Universe are described, including the recent use of radio telescopes and telescopes on spacecraft. Two lectures and one tutorial per week. This is supplemented by a planetarium demonstration and a class trip to the David Dunlap Observatory. Using the College's 12 inch Questar telescope,

students also have an opportunity to observe and to photograph heavenly bodies if they wish.  
 Exclusion: ASTA02  
 Session: Winter Day  
*TBA C.C. Dyer*

### ASTB03S Great Moments in Astronomy

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

The course is intended primarily for students not in Physical Science who, in their second or higher years, wish to acquire an understanding of the origins and significance of our present world view. A term paper dealing in detail with an aspect of one of the topics is required.  
 Prerequisite: 4 full-course equivalents  
 Session: Winter Evening

### ASTC01H Research Topics in Astronomy

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

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

For more detailed information see Professors Dyer or Kronberg. The bibliography is dependent upon the topic selected.  
 Prerequisite: ASTA02 or two of 321, 322, 323; PHYB01; permission of instructor  
 Session: Winter Day

### ASTC10Y Relativity and Cosmology

A brief review of the special theory of relativity and of the mathematical background of general relativity theory. General relativistic field equations in free space and in the presence of matter, gravitational radiation, cosmological theories and observations.

Prerequisite: PHYB01

Session: Winter Day

*C.C. Dyer*

### Courses Not Offered in 1988-89

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

**ASTB04F** Quantitative Cosmology  
 Prerequisite: ASTA03Y, or  
 ASTB03S

## Biological Sciences

*Associate Chair:* R. Boonstra (284-3221)  
 Office: S-543

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:** R. Dengler (284-3218) Office: S-552

This programme must include BIOA03Y plus 6 FCE in Biology. Note that at least 1 FCE must be in animal science and 1 FCE in plant science. (The following are the plant science courses:

BIOB06Y, BIOB39F, BIOB40S, BIOCO7S, BIOCC37F, BIOCC38S, BIOCC46S, BIOCC47F, 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 fulfillment of the necessary prerequisites.

- 1 BIOA03Y
- 2 At least six FCE (unspecified) from the following groups: (Note that at least 0.5 FCE must be taken from each group and that courses with an \* can be used to fulfil this requirement in only one group).

Group 1. Structure and Diversity: BIOB25F\*, BIOB26S, BIOB32F, BIOB39F, BIOB40S, BIOCC29F, BIOCC30S, BIOCC37F\*, BIOCC38S.

Group 2. Physiology and Biochemistry: BIOB02Y, BIOB06Y, BIOB17Y, BIOCC31F\*, BIOCC48F\*, JBCC35Y, JBCC36H, BIOD12H, BIOD30S.

Group 3. Ecology and Environmental Biology:

BIOB03S, BIOB12Y, BIOB14F, BIOB28S\*\*, BIOCC03F, BIOCC07S, BIOCC16S, BIOCC19F, BIOCC33S, BIOCC46S, BIOCC47F, BIOCC50F, BIOD10S, BIOD11F, BIOD13F, BIOD15F.

Group 4. Genetics and Cell Biology: BIOB05Y, BIOB23Y, BIOB25F\*, BIOCC31F\*, BIOCC37F\*, BIOCC48F\*, BIOCC06Y, BIOCC20Y, BIOD05S, BIOD17F, BIOD19S, BIOD20H.

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

### Specialist Programme in Biological Sciences

**Supervisor:** R. Dengler (284-3218) Office: S-552

This Programme must include the following 14 full-course equivalents of which at least 1 FCE should be in the Plant Sciences (see Major Programme for a list of Plant Science courses) and at least 3 FCE 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 fulfillment of the necessary prerequisites.

- 1 BIOA03Y
- 2 At least one FCE in Structure and Diversity: BIOB25F, BIOB26S, BIOB32F, BIOB39F, BIOB40S, BIOCC29F, BIOCC30S, BIOCC37F, BIOCC38S.
- 3 At least one FCE in Function: BIOB02Y, BIOB06Y, BIOB17Y, BIOCC31F, BIOD12H, BIOD30S.
- 4 At least one FCE in Ecology and Environmental Biology: BIOB03S, BIOB12Y, BIOB14F, BIOB28S, BIOCC03F, BIOCC06Y, BIOCC07S, BIOCC16S, BIOCC19F, BIOCC33S, BIOCC46S, BIOCC47F, BIOCC50F, BIOD10S, BIOD11F, BIOD13F, BIOD15F.
- 5 At least one FCE in Cell and Molecular Biology: BIOB05Y, BIOB23Y, BIOCC20Y, JBCC35Y, JBCC36H, BIOCC48F, BIOD05S, BIOD17F, BIOD19S, BIOD20H.
- 6 Five other FCE in Biology (unspecified). Note that BIOD01Y or BIOD02Y can be used in filling this requirement.
- 7 Three FCE in cognate disciplines: CHMA02Y, PHYA03Y, MATA26Y or MATA27Y or MATA55Y
- 8 One FCE 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 CSCA56F/S.

### Specialist Programme in Cell and Molecular Biology

**Supervisor:** J. Silver (284-3211) Office: S525

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 fulfillment of the necessary prerequisites.

- 1 BIOA03Y
- 2 Five FCE as follows: BIOB02Y, BIOB05Y, BIOCC20Y, JBCC35Y, JBCC36H or BIOD20H, BIOCC48F or BIOD19S. Courses from the above which are not used to fulfill the requirement of the five FCEs in category 2 may be used to fulfill the requirement of three FCEs in category 3 below.
- 3 Three FCE from the following: BIOB06Y or BIOB17Y; BIOB23Y; BIOB25F or BIOCC37F; BIOD05S; BIOD17F; BIOD01Y or BIOD02Y. Courses from the following St. George

offerings may be taken to satisfy 1.5 FCE of the 3 FCE required for this category:

JBM351Y, JBM353Y, MPL334Y, any MPL400 series course, any BCH400 series course, or any MGB course. Students who wish to enroll in courses offered on the St. George campus should note that entry into many of these courses will be by ballot.

- 4 Four FCE in cognate disciplines: CHMA02Y, CHMB05Y, PHYA03Y, MATA26Y or MATA27Y or MATA55Y
- 5 One FCE from the Biology course offerings at Scarborough Campus not listed above.
- 6 It is strongly recommended that students take a statistics course.

### Specialist Programme in Ecology and Environmental Biology

**Supervisor:** R. Boonstra (284-3221) Office: S543

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 FCE must be in animal science and 1 FCE 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 fulfillment of the necessary prerequisites.

- 1 BIOA03Y
- 2 Five FCE in Ecology and Environmental Biology of which the following 1.5 FCE are mandatory: BIOB12Y and BIOB28S; and 3.5 FCE from the following groups with at least 0.5 FCE from each group: Group 1: BIOCC07S, BIOCC46S, BIOCC47F, BIOD10S, BIOD11F. Group 2: BIOCC16S, BIOCC19F, BIOD13F, BIOD15F. Group 3: BIOB03S, BIOB14F, BIOCC03F, BIOCC33S, BIOCC50F.
- 3 Two FCE in Structure and Diversity: BIOB25F\*, BIOB26S, BIOB32F, BIOB39F, BIOB40S, BIOCC29F, BIOCC30S, BIOCC37F\*, BIOCC38S.
- 4 One FCE in Physiology and Biochemistry: BIOB02Y, BIOB06Y, BIOB17Y, BIOCC31F\*, JBCC35Y, JBCC36H, BIOCC48F\*, BIOD12H, BIOD30S.
- 5 One FCE in Genetics and Cell Biology: BIOB05Y, BIOB23Y, BIOB25F\*, BIOCC06Y, BIOCC20Y, BIOCC31F\*, BIOCC37F\*, BIOCC48F\*, BIOD05S, BIOD17S, BIOD19S, BIOD20H.

- 6 Note that in the above items 3, 4 and 5 courses with an \* can be used to fulfill the requirements of only one of these categories.
- 7 One more full course equivalent from categories 3, 4, 5 or from BIOD01Y or BIOD02Y.
- 8 Three FCE in cognate disciplines: CHMA02Y, PHYA03Y or GLGA01Y or GGRA05Y, MATA26Y or MATA55Y
- 9 For persons interested in pursuing Theoretical Ecology, an additional MAT course should be considered.
- 10 A computer science course such as CSCA56F/S is also recommended.

### Specialist and Major Programmes in Microbiology-Biochemistry

**Supervisors:** J. Silver (Microbiology) (284-3211); J. Gurd (Biochemistry) (284-3221)

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

### BIOA03Y Introductory Biology

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

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

Although this course has no prerequisites, some background in Biology and Chemistry is recommended.

Exclusion: (NSCA02)

Session: Winter Day

The Faculty

**BIOB02Y Basic Microbiology**

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

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

Prerequisite: BIOA03

Session: Winter Day

*J. C. Silver*

**BIOB03S Microbes in the Environment**

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

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

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

Prerequisite: BIOA03

Corequisite: BIOB02

Session: Winter Day

*C. Nalewajko*

**BIOB05Y Genetics**

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

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

regulation of gene activity, chromosome structure, mutation. Lectures, laboratory, problem sessions, discussion.

Prerequisite: BIOA03

Session: Winter Day

*M. F. Filosa*

**BIOB06Y Plant Physiology**

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

The green plant as a functional organism; water and salt uptake and translocation, water loss; mineral nutrition, carbohydrate, protein and lipid metabolism. Enzymology. Photosynthesis and respiration. Growth and development of plants. The objective of this course is to introduce the student to the science of plant physiology, and to provide a training in laboratory techniques and the presentation of scientific data in this field. Lectures and laboratory work.

Prerequisite: BIOA03

Session: Winter Day

*G. F. Israelstam*

**BIOB12Y Fundamentals of Ecology**

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

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

Prerequisite: BIOA03

Session: Winter Day

*R. Boonstra*

**BIOB14F Environmental Biology**

A course designed to explore the biological consequences of major selected problems facing Canada and the World which are a direct consequence of human activities. Each of the problems addressed will deal with the causes, the effects, and the potential solutions. A short introduction section in the course will discuss a number of ecological principles that apply to

communities in order to set the stage for interpreting the implications of these problems. The following will be among the topics discussed: the ecological impact of nuclear war, 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 3rd week. Limited enrolment: 80.

Prerequisite: BIOA03

Session: Winter Day

*R. Boonstra*

**BIOB17Y Animal Physiology**

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

Prerequisite: BIOA03

Session: Winter Day

*C. K. Govind*

**BIOB23Y Developmental Biology**

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

*I. R. Brown and M. E. Reith*

**BIOB25F Vertebrate Histology: Cells and Tissues**

The structure of cells and the various tissue types which make up the vertebrate body: epithelial, connective, muscle, nervous, blood, and lymphatic with emphasis on their involvement in form and function. Two one-hour lectures and three hours of laboratory per week.

Prerequisite: BIOA03

Exclusions: (BIOB27)

Session: Winter Day

*J. H. Youson*

**BIOB26S Vertebrate Histology: Organs**

The histological structure of the major organ systems of the vertebrate body (integument, digestive, respiratory, excretory, reproductive, and endocrine) with particular emphasis on functional morphology, evolution, and development. Two one-hour lectures and three hours of laboratory per week.

Prerequisite: BIOA03, BIOB25

Exclusion: (BIOB27)

Session: Winter Day

*J. H. Youson*

**BIOB28S Elementary Statistics for Biologists**

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

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

Exclusions: PSYB07, PSYC08 (PSYB08),

GGRB31, SOCB06, ECOB11, ECOB12

Session: Winter Day

*I. M. Campbell*

**BIOB32F Vertebrate Morphogenesis**

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

Prerequisite: BIOA03

Exclusion: (BIOB22)

Session: Winter Day

A. H. Weatherley

**BIOC03F Ecology Field Course**

Coverage of basic principles and selected techniques of animal and plant ecology. Students will study a variety of aspects of local ecosystems (both aquatic and terrestrial). Format will consist of extensive field/laboratory work complemented by lectures and tutorials. Limited enrolment: 15

Prerequisite: BIOB12

Session: Winter Day

Members of Faculty (D.D. Williams, Coordinator)

**BIOC06Y Population Genetics and Evolution**

A study of the process of heritable changes in animal populations with special regard to population genetics, population dynamics and species diversity.

The lectures deal with genetic variation and its source, natural selection, genetic drift, and modes of speciation. The laboratories consist of problems in population genetics and the discussion of current literature on evolutionary and population topics.

Prerequisite: BIOA03

Corequisite: BIOB05 or permission of instructor

Exclusion: (BIOB11)

Session: Winter Day

I. M. Campbell

**BIOC20Y Cell Biology**

This course will focus on both structural and functional aspects of cells. Topics to be covered include: the structure and function of cellular organelles, the cytoskeleton, organelle biogenesis, the cell cycle, membrane transport and 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 FCE from the following: BIOB02Y, BIOB05Y, BIOB23Y, BIOB25F (BIOB27Y), BIOB26S (BIOB27Y), BIOC37F (BIOB13Y), BIOC38S (BIOB13Y) or JBCC35Y (JBCC35Y). JBCC35Y may be taken concurrently.

Exclusion: (BIOB20)

Session: Winter Day

M. Reith, R. Dengler, J. Youson

**BIOC29F Invertebrate Zoology**

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

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

Prerequisite: BIOA03

Exclusion: (BIOB08)

Session: Winter Day

D. D. Williams

**BIOC31F Invertebrate Neurobiology**

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

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

Prerequisite: BIOA03

Exclusion: (BIOB31)

Session: Winter Day

C. K. Govind

**BIOC33S General Biology of Vertebrates**

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

Practical work includes selected films, visits to zoo. There will also be required essays and seminars.

Prerequisite: BIOA03

Exclusion: (BIOB22)

Session: Winter Day

A. H. Weatherley

**JBCC35Y Introductory Biochemistry**

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

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

The teaching method will consist of two one-hour lectures per week. The text used is: *Biochemistry* by L. Stryer, W.H. Freeman and Company.

Prerequisites: BIOA03, CHMB05

Exclusion: (JBCC35)

Session: Winter Day

TBA

**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.

The teaching method will consist of three hours of laboratory work plus one hour of lecture each week.

Prerequisites: BIOA03, CHMB05

Corequisite: JBCC35 (JBCC35)

Exclusion: (JBCC36)

Session: Winter Day

TBA

**BIOC37F Plant Structure and Development: Cells and Tissues**

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 Exclusion: (BIOB13) Session: Winter Day R.E. Dengler

**BIOC38S Plant Structure and Development: Organs**

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, proprop, 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.

Exclusion: (BIOB13)

R.E. Dengler

**BIOC47F Plant Community Ecology**

An examination of both the theory and methodology of vegetation analysis, including: description, quantitative analysis and classification of plant communities; the dynamics of vegetation, including succession theory, and the response of vegetation to the climate-change, wildfire, pathogens and other environmental factors.

Primary text: Kershaw "Quantitative and Dynamic Plant Ecology" 2nd edition, illustrated by Canadian examples. Two one-hour lectures and one three-hour laboratory per week. Offered in alternate years.

Prerequisite: BIOB12

Exclusion: (BIOB47)

Session: Winter Day

J. C. Ritchie

**BIOC48F Molecular Physiology of the Bacterial Cell**

A lecture and laboratory course emphasizing the molecular mechanisms of bacterial cell regulation and of cellular processes such as active transport, chemotaxis, secretion and antibiotic resistance. The biological basis of using bacterial host-vector systems in recombinant DNA technology is discussed. Laboratory exercises are 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 and permission of instructor

Exclusion: (BIOB48)

Session: Winter Day

*J. C. Silver*

**BIOC50F Ecology of Arid Regions**

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*

**BJPC70F Theoretical Foundations of Biology I**

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

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

Prerequisite: BIOA03

Exclusions: PHLB70, (PHLB71)

Session: Winter Day

*P. Thompson*

**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.

Exclusion: (BIOC01)

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.

Exclusion: (BIOC02)

Session: Winter

*Members of Faculty*

**BIOD10S Principles and Methods of Pollen Analysis**

The basic and applied aspects of pollen analysis, including: the structure of the pollen wall; pollen classification and identification; pollen in sediments (depositional processes, preservation, sampling and extraction); pollen in the atmosphere; numerical analysis of pollen data; application of palynology.

Two one-hour lectures and one three-hour laboratory per week. Offered in alternate years.

Prerequisites: One of (QUAA03), GLGA01 or BIOA03; plus one of BIOC46, BIOC47 (BIOB47), GLGB02 or (QUAD01) (QUAC01).

Exclusion: (BIOC11)

Session: Winter Day

*J. C. Ritchie*

**BIOD12H Physiology and Biochemistry of Plant Growth and Development**

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

The plant growth hormones and their mechanism of action, germination, dormancy, senescence, tropic responses, growth mechanisms, correlation effects, flowering, fruiting. Biological clock mechanisms. It is hoped to provide an in-depth understanding and to review

critically the processes of growth and development in plants. It should acquaint the student with current literature on the subject, via library research, providing a sound basis for possible future research in this field. Lectures and seminars. Limited enrolment: 12.

Prerequisite: BIOB06

Corequisite: JBCC35 (JBCB35) recommended

Exclusion: (BIOC12)

Session: Winter Day

*G. F. Israelstam*

**BIOD13F Environmental Biology of Fish Populations**

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

Prerequisite: permission of instructor

Exclusion: (BIOC13)

Session: Winter Day

*A. H. Weatherley*

**BIOD15F River Ecology**

The course will begin with an introduction to stream hydrology and sediments, and the adaptations of plants and animals to life in a dynamic habitat. Later topics will cover micro- and macro-distribution of stream faunas and the problems of quantitatively sampling them; biotic interactions; community structure and stability; colonization patterns following disturbance; energy transformations; estimates of production; and man's effects on rivers. Two one-hour lectures and three hours of laboratory work per week. Field trip.

Offered in alternate years with BIOC16S (Marine Biology). Limited enrolment 15.

Prerequisites: BIOB12 or BIOC29 (BIOB08)

or permission of instructor

Session: Winter Day

*D. D. Williams*

**BIOD17F Plant Molecular Biology**

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

plants; genetic engineering of plants.

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

Prerequisites: BIOC20 or JBCC35 (JBCB35) or BIOB05

Session: Winter Day

*M. Reith*

**BIOD19S Molecular Biology of the Gene**

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

Lab sections will meet once every three weeks for a 9 a.m. to 5 p.m. session. Limited to 40 students.

Prerequisites: BIOB05 or JBCC35 (JBCB35)

Exclusion: (BIOB19)

Session: Winter Day

*I. R. Brown*

**BIOD20H Techniques in Cell Biology**

An intensive laboratory course which is designed to introduce the student to a selection of current methods in cell biology. Some of the techniques which will be used to analyze cell structure and function in animals and plants include: light microscopy, fluorescence microscopy, cytochemistry, scanning and transmission electron microscopy including freeze fracturing, autoradiography, electrophoresis, immunological techniques, and organelle and nucleic acid isolation. One three hour laboratory section per week, but some procedures will require work outside of the regular laboratory period. Limited enrolment: 12

Prerequisite: BIOC20 and permission of instructor

Session: Winter Day

*R. Dengler, M. Filosa, M. Reith and J. Youson*



**BIOD30S Physiology of Algae**

Algae are a heterogeneous group, ranging in size from about 1 micrometer to several meters, in morphology from simple unicells to elaborate seaweeds, and in physiology, from exclusively photosynthetic organisms to forms which resemble bacteria and animals in their nutrition. The crucial role of algae as primary producers in aquatic environments has motivated intensive investigations of their physiology.

Course content: Kinetics of growth in culture (batch cultures, chemostats and turbidostats); effects of environmental variables on photosynthesis, respiration, photorespiration, and growth; heterotrophy, osmoregulation; survival and growth in extreme environments. One two-hour lecture and three hours of laboratory/week. The laboratory work involves about five research-style experiments. Limited enrolment: 25. Prerequisites: BIOA03; BIOB02 in 1987/88 but BIOB03 thereafter. Exclusion: (BIOB49) Session: Winter Day C. Nalewajko

**Courses Not Offered 88/89**

- JBHBO1Y** Introduction to Biological Sciences  
Exclusion: (NSCA02)
- BIOB39F** Comparative Morphology of Fungi, Algae and Bryophytes  
Prerequisite: BIOA03  
Exclusion: (BIOB24)
- BIOB40S** Comparative Morphology of Vascular Plants  
Prerequisite: BIOA03  
Exclusion: (BIOB24)
- BIOC07S** Phytogeography of Canada  
Prerequisite: BIOA03
- BIOC16S** Marine Biology: Habitats and Communities  
Prerequisite: BIOC29 (BIOB08) or permission of instructor
- BIOC19F** Limnology  
Prerequisite: BIOB03 or BIOB12
- BIOC30S** The Arthropoda  
Prerequisite: BIOA03, BIOC29 or permission of instructor  
Exclusion: (BIOB08)
- BIOC46S** Plant Population Ecology  
Prerequisite: BIOB12  
Exclusion: (BIOB47)
- BJPC71S** Theoretical Foundations of Biology II  
Prerequisite: BJPC70 (PHLB71)

**BIOD05S**

Exclusion: (PHLB71)

Advanced Genetics

Prerequisite: BIOB05

Exclusion: (BIOC05)

**BIOD11F**

Quaternary Vegetation and Environments

Prerequisite: One of (QUAA03), GLGA01 or BIOA03; plus one of BIOC46, BIOC47 (BIOB47), GLGB02 or (QUAD01) (QUAC01)  
Exclusion: (BIOC11)

**Canadian Studies**

The College offers a large number of courses concerned with Canadian institutions, society, and culture, the pre-history and history of Canada, and its geography and physical environment. The College Programme in Canadian Studies encourages students to work in various disciplines and divisions of the College in order to understand the distinctive approaches of those disciplines to the study of Canadian life and culture.

**College Programme in Canadian Studies**

Supervisor: I.R. Robertson (284-3182)

Students must select nine full-course equivalents as follows:

- 1 FREA10Y Language Practice I (or FREA06Y followed by FREA10Y)
- 2 One of:  
FREB36F/S French-Canadian Novel to 1945  
FREB37F/S French-Canadian Novel since 1945  
FREB38F/S Theatre of French Canada  
FREB43F/S French Language in Canada
- 3 HISB04Y Introduction to Canadian History
- 4 One of the following:  
ANTB16Y Cultures of Modern Canada  
POLB50Y Canadian Government and Politics  
ENGB07Y Canadian Literature in English  
SOCC13Y\* Canadian Society
- 5 Five and one-half further full-course equivalents from the groups A, B and C listed below. The selection must include at least one full-course equivalent from each of the groups. An asterisk indicates a course for which

there is a prerequisite; check the main calendar entry for the course. Not all B-, C- and D-level courses are offered each year.

**Group A**

DRAB06Y

Canadian Drama

ENGB07Y

Canadian Literature in English

ENGB25F/S\*

The Canadian Short Story

ENGCO7F\*

Canadian Poetry in English

ENGCO2Y\*

Canadian Fiction in English

ENGDO7Y

Contemporary Canadian Literature

FARB60Y

The Arts in Canada: 1670 to 1960

FARC19Y\*

The Canadian Landscape

FARB62F/S

Recent Canadian Art

FREB10Y\*

Language Practice

FREB36F/S

French-Canadian Novel to 1945

FREB37F/S\*

French-Canadian Novel since 1945

FREB38F/S\*

Theatre of French Canada

FREB43F/S\*

French Language in Canada

FREC39F/S\*

French-Canadian Poetry

MUSC09F/S\*

Canadian Music

**Group B**

ANTB16Y

Cultures of Modern Canada

ANTB21Y\*

North American Background to Canadian Native Peoples

ANTB38Y\*

Prehistory of North America

ANTC28F/S\*

Prehistoric Archaeology of Canada

ANTC30F/S

Anthropology of Canadian Native Peoples

HISC42Y\*

French Canada: Origins to the Present

HISC43Y\*

The Evolution of Ontario 1850-1950

HISC46Y\*

Atlantic Canada

HISC47Y\*

The Canadian Left, 1867-present

HISC49F/S\*

Canada Between the World Wars

HISD41F/S\*

Old Huronia

HISD45Y\*

History of Canadian Social, Political and Historical Thought

POLB50Y

Introduction to Canadian Politics

POLB51F/S\*

Government and Politics in Ontario

POLB52Y\*

Canadian Constitution

POLB53F/S

Public Policies in Canada

POLB61F/S

Canadian Public Administration: Institutions and Processes

POLB62F/S

Public Policy-Making

POLC54F/S\*

Intergovernmental Relations

POLC55Y

Comparative Provincial Government

POLC61F/S\* Policy Development and Political Evaluation  
POLC84F/S\* Canadian Foreign Policy  
POLC88Y Urban Politics  
POLD51F/S Topics in Canadian Government

POLD71Y\* Canadian Political Ideas  
SOCC13Y\* Canadian Society  
SOCC20Y\* Ethnic and Race Relations  
SOCC23Y\* Population  
SOCC24F/S\* Changing Family Life in Canada  
SOCC25F/S Comparative Race Relations  
SOCC27F/S\* Social Class in Canadian Society  
SOCC34Y\* Sociology of Mass Media and Communications

**Group C**

ECOAO1Y

Introduction to Economics

ECOC31F/S\*

Economics of the Public Sector: Taxation

ECOC32F/S\*

Economics of the Public Sector: Expenditure

ECOB35F/S\*

Public Decision Making

ECOC37F/S\*

Law and Economics

ECOC45F/S\*

Poverty and Income Distribution

ECOC62F/S\*

International Economics: Trade Theory

ECOB81Y\*

North American Economic History

JCEC54F/S

Industrial Relations

COMC15Y\*

Income Tax

GGRB01Y\*

Geography of Resources

GGRB05Y\*

Urban Geography

GGRB13Y

Modern Urban Landscapes

GGRB17Y\*

Rural Geography

GGRB04F/S\*

Urban Residential Geography

GGRB13Y

Modern Urban Landscapes

GGRB17Y\*

Rural Geography

GGRB04F/S\*

Urban Residential Geography

GGRB13Y

Modern Urban Landscapes

GGRB17Y\*

Rural Geography

GGRB04F/S\*

Urban Residential Geography

GGRB13Y

Modern Urban Landscapes

GGRB17Y\*

Rural Geography

GGRB04F/S\*

Urban Residential Geography

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Urban Residential Geography

GGRB13Y

Modern Urban Landscapes

GGRB17Y\*

Rural Geography

GGRB04F/S\*

Urban Residential Geography

GGRB13Y

Modern Urban Landscapes

## Chemistry

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

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

Completion of CHMA02 permits students to take any of the B-level courses in Chemistry. These are divided according to the following subdisciplines: Inorganic Chemistry (CHMB01), Analytical Chemistry (CHMB02), Physical Chemistry (CHMB03) and Organic Chemistry (CHMB05). Thereafter, one can proceed to the following advanced-level courses: CHMC01 (Inorganic), CHMC02 (Physical), CHMC03 (Organic) and JBCC35 (JBCC35Y) (Biochemistry).

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

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

While courses in Physics do not appear among the prerequisites or corequisites of most courses in Chemistry, students are urged to take PHYA03 early in their programmes. Thus, the suggested first-year programme in Chemistry includes CHMA02, MATA55 or MATA26 and PHYA03.

Completion of a Specialist or Major Programme in Chemistry can lead to a number of career opportunities in industry, research, teaching, and government. Students who are interested in these

programmes are urged to consult with the supervisors early in their academic careers.

### Specialist Programme in Chemistry

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

Students should complete the following fourteen required courses:

<b>First year:</b>	
CHMA02Y	General Chemistry
MATA26Y	Calculus
or	
MATA55Y	Calculus with Analysis
PHYA03Y	Physics for the Physical and Life Sciences

### Second and Third years:

CHMB01Y	Inorganic Chemistry I
CHMB02Y	Analytical Chemistry
CHMB03Y	Physical Chemistry I
CHMB05Y	Organic Chemistry I
CHMC01Y	Inorganic Chemistry II
CHMC02Y	Physical Chemistry II
CHMC03Y	Organic Chemistry II
MATB41F	Techniques of the Calculus of Several Variables I
MATB42S	Techniques of the Calculus of Several Variables II

or

MATB05Y\* Analysis

\* Students should note that if they are going to elect MATB05Y they must take MATA04Y and MATA55Y among their first five courses.

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

### Specialist Programme in Chemistry and Biochemistry

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

Students should complete the following fifteen courses:

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

<b>First year:</b>	
CHMA02Y	General Chemistry
BIOA03Y	Introductory Biology
MATA26Y	Calculus
or	
MATA55Y	Calculus with Analysis
PHYA03Y	Physics for the Physical and Life Sciences

### Second and Third years:

CHMB01Y	Inorganic Chemistry I
CHMB02Y	Analytical Chemistry
CHMB03Y	Physical Chemistry I
CHMB05Y	Organic Chemistry I
JBCC35Y	Introductory Biochemistry
JBCC36H	Laboratory in Biochemistry
CHMC01Y	Inorganic Chemistry II
or	
CHMC02Y	Physical Chemistry II
CHMC03Y	Organic Chemistry II
MATB41F	Techniques of the Calculus of Several Variables I
MATB42S	Techniques of the Calculus of Several Variables II

or

MATB05Y Analysis

In addition, CHM447S (St. George) or BCH424S (St. George), two additional CHM full-course equivalent selected from the C- or D- level or 300 - 400 series (St. George), or 400 series BCH courses.

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

### Specialist Programme in Chemical Physics

**Supervisor:** S. Fraser 284-3231.

This programme offers students interested in both Chemistry and Physics the opportunity to combine their studies in the Specialist Programme. For the first two years the course of studies also satisfies the Chemistry Specialist Programme requirements.

Students should complete the following fifteen courses. They include two alternative mathematics sequences. One sequence provides a rigorous mathematical development; the alternative sequence emphasizes technique rather than rigour. Students starting in the MATA26Y sequence are urged to include MATA04Y at some stage in their programme.

<b>First year:</b>	
CHMA02Y	General Chemistry
PHYA03Y	Physics for the Physical and Life Sciences
MATA26Y	Calculus

or  
MATA55Y Calculus with Analysis

### Second and Third years:

CHMB01Y	Inorganic Chemistry I
CHMB03Y	Physical Chemistry I
CHMB05Y	Organic Chemistry I
MATB41F	Techniques of the Calculus of Several Variables I
and	
MATB42S	Techniques of the Calculus of Several Variables II
or	
MATB05Y	Analysis
CHMC02Y	Physical Chemistry II
PHYB01S	Electricity and Magnetism
PHYB03F	Introductory Electronics
PHYB04F	Waves and Vibrations
PHYB08H	Intermediate Physics Laboratory
MATC51F	Differential Equations I
PHY351H	Classical Mechanics

**Fourth year:** Four full-course equivalents must be taken, including a CHM400 series course on the St. George Campus, at least one full-course equivalent from PHYC04F, PHYC05H, PHYC07F, PHYC08S, PHYC09S or a 300 series course on the St. George Campus and two other courses in either third or fourth year Chemistry or third or fourth year Physics and Mathematics.

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

### Major Programme in Chemistry

**Supervisor:** R. Morris 284-3319. 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:

<b>First year:</b>	
CHMA02Y	General Chemistry
MATA26Y	Calculus
or	
MATA27Y	Techniques of Calculus
or	
MATA55Y	Calculus with Analysis
PHYA03Y	Physics for the Physical and Life Sciences



*Second and Third years:*

One of the following sets of options must be taken:

*Inorganic/Organic*

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

*Physical Organic*

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

*Physical Inorganic*

CHMB03Y	Physical I
CHMB01Y	Inorganic I
CHMB02Y	Analytical
MATB41F	Techniques of the Calculus of Several Variables I
MATB42S	Techniques of the Calculus of Several Variables II
one of	
CHMC01Y	Inorganic II
CHMC02Y	Physical II

*Chemistry*

CHMB05Y	Organic I
CHMB01Y	Inorganic I
CHMB02Y	Analytical
CHMB03Y	Physical I

One C-level Chemistry course\*

\* Students should note that if they are going to select CHMC02Y, MATB41F and MATB42S or MATB05Y are required as prerequisites.

**Major Programme in Biochemistry**

Supervisor: R. Morris 284-3319.

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

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

*First year:*

CHMA02Y	General Chemistry
MATA26Y	Calculus
or	
MATA27Y	Techniques of Calculus
or	
MATA55Y	Calculus with Analysis
BIOA03Y	Introductory Biology

*Second and Third years:*

CHMB05Y	Organic Chemistry I
CHMC03Y	Organic Chemistry II
JBCC35Y	Introductory Biochemistry
JBCC36H	Laboratory in Biochemistry
and one full course equivalent selected from:	
CHMB02Y	Analytical Chemistry
CHMB03Y	Physical Chemistry I
BIOB02Y	Basic Microbiology
BIOB17Y	General and Comparative Physiology

\* Students should note that if they are going to elect CHMB03Y, they must take PHYA03Y and MATA26 or MATA27 or MATA55 as prerequisites.

**CHMA02Y General Chemistry**

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

The course includes the quantitative description of gases, solids and solutions and develops ideas of bonding and structure in chemical compounds based on Lewis structures, VSEPR and simple molecular orbital theory. Reactions and equilibria in chemical systems are explored through their thermodynamic properties and chemical kinetics. Time permitting, descriptive topics such as introductory organic chemistry are used to round out the course. Two lectures per week and one four-hour laboratory every second week. Prerequisite: Grade 13 Chemistry (or Grade 12 Chemistry and permission of instructor); Grade 13 Functions and Relations or OAC Calculus. Corequisite: NONE. But MATA26Y or MATA27Y or MATA55Y are strongly recommended and are required for some higher level chemistry courses. Session: Winter Day

**CHMB01Y Inorganic Chemistry I**

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

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

Prerequisite: CHMA02

Session: Winter Day

**CHMB02Y Analytical Chemistry**

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

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

Other recommended courses: CHMB01  
Session: Winter Day

**CHMB03Y Physical Chemistry I**

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

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

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

of chemical kinetics.

Two lectures a week.

Prerequisite: CHMA02; MATA26 or MATA55; PHYA03

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

Session: Winter Day

**CHMB05Y Organic Chemistry I**

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

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

Prerequisite: CHMA02

Session: Winter Day

**JBCC35Y Introductory Biochemistry**

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

Topics covered in the course will include: metabolism of sugars, amino acids and lipids and the relationship of these to the energy metabolism of the cell. The effect of hormones on cellular metabolism; structure and function of enzymes; structure and biosynthesis of nucleic acids; biosynthesis of proteins. Regulation and integration of metabolic pathways will be discussed. Two one-hour lectures per week. The text used is: Biochemistry by L. Stryer, W.H. Freeman & Co. Publishers. Prerequisite: BIOA03; CHMB05  
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: BIOA03; CHMB05

Corequisite: JBCC35(JBCC35Y)

Session: Winter Day

**CHMC01Y Inorganic Chemistry II**

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

The objective of this course is to understand the structure, bonding, spectra and reactions of transition metal complexes. Two hours of lecture per week; seven hours of laboratory per week to be taken in the Spring term. The required text is *Inorganic Chemistry* 3rd edition by J.E. Huheey.  
Prerequisite: CHMB01, CHMB02  
Session: Lectures: Winter Day  
Laboratory: Spring Term - T10-5

**CHMC02Y Physical Chemistry II**

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

The first half of the course emphasizes quantum chemistry and the various techniques for the determination of energy levels in isolated atoms and molecules. The electronic and molecular structure of molecules are then examined through atomic and molecular spectroscopy. Intermolecular forces and modes of energy transfer between molecules ultimately lead into a study of classical and quantum statistical mechanics through which we interpret the behaviour of microscopic systems. Finally, the basis of modern reaction dynamics will be introduced. Lectures, tutorial and laboratory.  
Prerequisite: CHMB03; MATB41 and MATB42, or MATB05Y  
Session: Lectures: Winter Day  
Laboratory: Fall Term - T10-5

**CHMC03Y Organic Chemistry II**

An in-depth treatment of organic reactions and synthesis, stereochemistry and conformational analysis, spectroscopy of organic molecules and reaction mechanisms, and an introduction to aromaticity, photochemistry, free radicals, polymers, organometallic compounds, and the chemistry of naturally occurring molecules such as terpenes, steroids and carbohydrates. This course provides further

experience in organic chemistry to students who have completed one course in the subject. The laboratory experiments are designed to complement the topics covered in lectures, with an emphasis on more advanced techniques, and the use of modern physical techniques and newer synthetic methods.

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

**CHMD45Y Library Thesis**

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

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

Exclusion: CHMD47F/S/H(CHMC47F/S/H)(CHMC45Y)  
Prerequisite: Permission of instructor  
Normally only for individuals who have completed fifteen full-course equivalents including at least two C-level Chemistry courses, and who are pursuing one of the Chemistry Programmes.  
Session: Summer Day, Winter Day  
Members of the Chemistry Faculty

**CHMD46Y Introduction to Research**

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

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

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

**CHMD47F/S/H Library Thesis**

Similar to CHMD45(CHMC45Y) but representing 130 hours of work.

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

Exclusion: CHMD45(CHMC45Y & CHMC47F/S/H)  
Prerequisite: Permission of instructor  
Normally only for individuals who have completed fifteen full-course equivalents and including at least two C-level chemistry courses, and who are pursuing one of the Chemistry Programmes.  
Session: Summer Day, Winter Day  
Members of the Chemistry Faculty

**CHMD52S 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 CHMD48H. 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.  
Prerequisite: CHMC01  
Session: Winter Day

**Courses not Offered in 1988-89**

- CHMD48S** Special Topics in Inorganic Chemistry  
Prerequisite: CHMC01  
**CHMD49S** Special Topics in Physical Organic Chemistry  
Prerequisite: CHMC03  
**CHMD50S** Special Topics in Physical Chemistry  
Corequisite: CHMC02  
**CHMD51S** Special Topics in Synthetic Organic Chemistry  
Corequisite: CHMC03

**Classical Studies**

*Discipline Representative:* J. H. Corbett (284-3182)

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, the social and political history of the Ancient World. In these courses all the source material will be read in translation. But language is an important ingredient in this cultural complex; and the courses in Greek and Latin provide an opportunity to learn the languages and to study the literary and historical texts in the original.

The Classical Studies Major Programme has three options.

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

**Major Programme in Classical Studies**

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

- I. CLASSICAL CIVILIZATION - in which the Greek and Roman authors will be read in translation.
  - 1 CLAA01Y Classical Civilization
  - 2 HUMA11Y Greek and Roman Mythology
  - 3 One of GRHB01Y Greek History from the Bronze Age to the Death of Alexander
  - GRHB02Y Greek and Roman History from the Death of Alexander to the Gracchi
  - GRHB03Y Roman History from the Gracchi to Nero
  - 4 CLAC03Y Greek and Roman Epic
  - or CLAC04Y Greek and Roman Tragedy
  - Exclusions: CLAB02, DRAB14

- 5 Two full-course equivalents to be selected in consultation with the Supervisor from: CLAC01F/S, C02F/S, C21Y, C23F/S, GRHC24F/S, C25Y, C26Y, C27Y, C28Y, C29Y; HUMC12Y, C61F/S.
- 6 Two full-course equivalents to be selected in consultation with the Supervisor from: CLA, GRH, GRK, LAT, PHLB40F, PHLB42F, PHLC40S, PHLC42S, FARA10F/S, FARB04F/S, FARB05F/S, FARB06F/S, FARC05F/S.

## II. CLASSICAL STUDIES - with LATIN

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

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

- 1 CLAA01Y Classical Civilization
- 2 Three full-course equivalents in Classical or Modern Greek, at least one of which must be at the C-level
- 3 GRHB01Y Greek History from the Bronze Age to the Death of Alexander
- 4 Two full-course equivalents to be selected in consultation with the Supervisor from: CLAC01F/S, C02F/S, C03Y, C04Y, C21Y, C23F/S; GRHC24F/S, C25Y, C26Y; GRKC30-C34F, C35-39S, C40Y; HUMC12Y, C61F/S; SOCB20Y (Modern Greek option only).

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

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

## Classics

### CLAA01Y Classical Civilization

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

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

The class will meet twice a week for lecture presentations, with a seminar in the third hour.

Session: Winter Day  
J. Warden, I. R. McDonald

### CLAB10S Greek and Latin for Scientists

An examination of the role of Greek and Latin in the formulation of technical terms in the science disciplines.

The course aims to provide the student who has no previous knowledge of classical Greek or Latin with the ability to determine the meaning of scientific words by analysing their structure, to increase his/her range and comprehension of technical vocabulary, to acquaint him/her with the principles of scientific word formation, and to help him/her develop sound nomenclatural practices. Topics will include: characteristics, rules and codes of scientific nomenclature; Latin and Greek roots, affixes, combining forms, and inflectional patterns, transliteration and pronunciation; malformations, misnomers, and hybrids. Particular emphasis will be placed on the biological and medical sciences.

Exclusion: CLAB11

Session: Winter Day  
I. R. McDonald

### CLAB32S The Age of Nero

Nero's Rome, as it is reflected in the art, architecture, and literature of the day, and in the accounts of later Roman authors.

The course provides an introduction to Imperial Rome, a controversial Emperor, and the striking cultural milieu over which he claimed to preside. It asks what ideas are expressed in Neronian arts; how far the Emperor controlled their expression; and how far the culture (or counterculture) of the court shaped, or was shaped by, the forces of a largely bicultural Empire. A lecture format will be adopted, with frequent use of slides and some opportunity for discussion.

Exclusion: (HUMB24)

Session: Winter Day

J. H. Corbett

### CLAC01F Selected Topics in Classical Literature

A detailed study of an author or a genre in Classical Literature in translation.

For 1988/89 the genre chosen for

study will be the Ancient Novel.

Prerequisite: One full-course equivalent in CLA or another literature.

Session: Winter Day

J. H. Corbett

### CLAC04Y Greek and Roman Tragedy

An exploration of the nature and intent of classical tragic drama, its conventions, historical origins and cultural context. All texts will be read in translation.

The course introduces students to the drama of Aeschylus, Sophocles, Euripides, and Seneca. Its objective is to foster an appreciation of the originality and power of ancient tragedy and its influence on the imagination and literature of the western world.

The greater part of the course will focus on the individual plays of Aeschylus, Sophocles, and Euripides. Insight into ancient perspectives on the nature of tragedy will be sought through reading and discussion of Aristophanes, *Frogs*, and Aristotle, *Poetics*. Selections from Seneca's Roman tragedies will then be studied.

No knowledge of Greek or Latin or of the classical world is assumed.

Prerequisite: CLAA01 or one course in English or another literature

Exclusions: DRAB14, (CLAB02)

Session: Winter Day

I. R. McDonald

### CLAC21Y Greek and Roman Religion

A study of religion in the Greek and Roman world.

The course will explore the origins of Greek and Roman religion, the importance of Homer and Hesiod, city cults, popular religion, the spread of eastern religions, the role of religion as a political instrument, and the introduction of Christianity.

Exclusion: (CLAB21)

Prerequisite: HUMA11 or CLAA01

Session: Winter Day

J. H. Corbett

## Greek and Roman History

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

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

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

Topics will include: the Bronze Age of Greece and Minoan Crete, with some consideration of why and how those cultures rose and fell; the cultural and artistic "Renaissance" of the Greek world; political developments, with special reference to the nature and development of Athenian Democracy and the strange society of Sparta; the Athenian Empire and its relationship to Athenian Democracy; the rise of Macedonia and the conquests of Alexander. To consider how the Greeks viewed their own history, we shall study the Persian Wars as seen through the eyes of Herodotus, and the Peloponnesian War as interpreted by Thucydides; and at all times we shall endeavour to pay the Greeks the compliment of trying to see them as they really were and not as we imagine them.

Session: Winter Evening

A. Boddington

### GRHC26Y Studies in Greek History II

A study of special topics in Greek history. Possible examples are: the institutions of Athens and/or Sparta; the role of the sea power in Greek history; the political and cultural relations between Greeks and other peoples (e.g. the effect of Alexander's conquests).

This course provides more advanced study of issues and problems considered

in GRHB01. The choice of topics to be studied will depend on the interests and qualifications of the students.  
 Prerequisite: GRHB01, or any related GRH, CLA or HUM course  
 Session: Winter Day  
*A. Boddington*

## Greek

### GRKA01Y Introductory Greek

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

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

### GRKB02F Introduction to Greek Authors

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: Grade 13 Greek or GRKA01  
 Session: Winter Day

### GRKB10Y Intermediate Modern Greek

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

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

### GRKB11S Plato: Apology

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

### GRKC23F Modern Greek Cinema and Theatre

An examination of the development of Greek theatre and film from World War II to the present.

Students seeking certification in Classical Studies with Modern Greek will be expected to do their written work in Greek. The course is open to students with no previous knowledge of the Greek language, who will do their written work in English.

Prerequisite: GRKB10Y or CLAA01Y or any related course in Greek or Cinema or Drama.  
 Session: Winter Day  
*G. Kirikopoulos*

### GRKC24S Classical Themes in Modern Greek Literature

A broadly representative study of the way in which the myths, history, and people of classical Greece are reflected in the literature of modern Greece.

Students seeking certification in Classical Studies with Modern Greek will be expected to do their written work in Greek. The course is open to students with no previous knowledge of the Greek language, who will do their written work in English.

Prerequisite: GRKB10Y or CLAA01Y or any related course in GRK, CLA, or GRH  
 Session: Winter Day  
*G. Kirikopoulos*

### GRKC30-34F GRKC35-39S

**GRKC40Y Supervised Reading**  
 Reading of texts in Greek chosen by consultation between students and faculty.

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

Exclusion: (GRKB30-35, GRKB35-39, GRKB40)  
 Prerequisite: GRKB11 (GRKB01) or demonstrated competence in reading classical Greek  
 Session: Winter Day  
*Co-ordinator: I.R. McDonald*

## Latin

### LATA01Y Introductory Latin

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

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

Classes are designed to introduce fundamentals of vocabulary, grammar, and syntax, but this routine will be varied occasionally to allow for lectures, discussions, and slides to increase awareness of the cultural milieu.

Exclusion: Grade 13 Latin, except by permission of the Division  
 Session: Winter Day  
*I. R. McDonald*

### LATB02F Introduction to Latin Authors

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

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

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

Exclusion: LATA10  
 Prerequisite: LATA01 or Grade 13 Latin  
 Session: Winter Day  
*A. Boddington*

### LATB11S Catullus

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

The material studied will be primarily the love poetry of Catullus but some of the invective works and one of the "long poems" will also be examined. After some introductory lectures most of the classes will be devoted to translating and studying individual poems in the light of critical literature. The text used will be the edition

of Kenneth Quinn (Macmillan, 1970).

Exclusion: (LATB01)  
 Prerequisite: LATB02 (LATA10)  
 Session: Winter Day  
*A. Boddington*

### 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 literary qualities and cultural context of the work being read.

Exclusion: (LATB30-34, LATB35-39, LATB40)

Prerequisite: LATB11 (LATB01)  
 Session: Winter Day  
*Co-ordinator: I. R. McDonald*

### LATD01F-D02S Independent Studies

These courses are designed to widen students' knowledge of Latin literature beyond those works and authors which have been studied in earlier courses.

A student will be expected to read considerably more than is required in the Supervised Reading courses. The reading may be confined to one author or grouped around a topic or genre. A student who registers for both D01 and D02 may be permitted to present a major essay, on a topic approved by the faculty in Classics, as the work required for D02. Students will meet regularly throughout the term with a member of the faculty.

N.B. A student interested in Independent Studies should meet with the co-ordinator before enrolling, preferably in the Spring of the preceding year.

Exclusion: (LATC01-02)  
 Prerequisite: At least two of LATC30-39 (LATB30-39); permission of instructor.  
*Co-ordinator: I. R. McDonald*

**NOTE: The following course is also taught by the faculty in Classics.**  
 HUMA11Y Greek and Roman Mythology

For further information see under **Humanities.**

## Courses Not Offered in 1988-89

- CLAB11F/S** The Classical Element in English  
Exclusion: CLAB10
- CLAB30F/S** The Age of Pericles  
Exclusion: (HUMB22)
- CLAB31F/S** The Age of Augustus  
Exclusion: (HUMB23)
- CLAB33F/S** The Age of Homer  
Exclusion: (HUMB25)
- CLAC02F/S** Selected Topics in Classical Civilization  
Prerequisite: One full-course equivalent in CLA or GRH or permission of the Instructor.
- CLAC03Y** Greek and Roman Epic  
Exclusion: (CLAB01)  
Prerequisite: CLAA01Y or one course in English or another literature.
- CLAC23F/S** Christianity in the Greco-Roman World  
Exclusion: (CLAB23)  
Prerequisite: CLAA01 or one of HUMB20, HUMB28, HUMB29, or permission of the Instructor.
- GRHB02Y** Greek and Roman History from the Death of Alexander to the Gracchi
- GRHB03Y** Roman History from the Gracchi to Nero
- GRHC24F/S** Ancient Historiography  
Exclusion: (GRHB24)  
Prerequisite: GRHB01, or one GRH or HIS course
- GRHC25Y** Studies in Greek History I  
Prerequisite: GRHB01, or any related GRH, CLA or HUM course
- GRHC27Y** Studies in Roman History: Pompeii  
Exclusion: (GRHB27)  
Prerequisite: GRHB03, or any related GRH, CLA or HUM course.
- GRHC29Y** Studies in Roman History: Roman Britain  
Prerequisite: GRHB03 or any related GRH, CLA, or HUM course.
- GRKA05Y** Introduction to Modern Greek
- GRKC22Y** Images of Modern Greece: 1936 to the Present  
Exclusion: (GRKB22)  
Prerequisite: GRKB10 or permission of the Instructor.
- LATC20F** Latin Authors II  
Exclusion: (LATB20)  
Prerequisite: LATB11

## Cognitive Science

*Supervisor: A. Gopnik (284-3339)*  
Cognitive Science is the study of knowledge-how human beings, other animals, and even machines acquire knowledge, organize and store that knowledge, and use that particular knowledge to solve problems. Cognitive scientists are particularly interested in the way we use symbolic systems, such as natural or computer languages, drawing, or mathematical notation to organize our knowledge of the world. Cognitive science considers questions like: Are we born with some knowledge already in place? How does our experience of the world allow us to develop knowledge? How does the knowledge we already have affect our experience of the world? Is knowledge stored as visual images, words, or abstract propositions? How do we decide which pieces of information are relevant to a specific problem? How do we master and store the complicated system of rules that allows us to use language? How do language and culture affect our understanding of the world? How is the knowledge stored in a computer like and unlike the knowledge stored in our heads?

Researchers in philosophy and psychology, linguistics, computer science and anthropology all use different methods to investigate these questions and have all provided part of the answers. The cognitive science programmes (Specialist and Major) include courses from all these disciplines--from the humanities and the sciences at both the theoretical and the practical level.

The Faculty of Education, University of Toronto, considers four year graduates of the Specialist Programme in Cognitive Science to have an excellent preparation for application to the Primary Junior Division of the Bachelor of Education Programme. Applicants should have an overall 70% average and appropriate experience.

The Specialist Programme requires 12 courses; the Major Programme requires 7 courses.

## Specialist Programme in Cognitive Science

*Supervisor: A. Gopnik (284-3339)*  
\* Students should check prerequisites/corequisites/exclusions for these courses.  
**Required Courses**  
6.5 full-course equivalents from the following:

- |  |  |  |   |
|--|--|--|---|
| 1 PSYA01Y  | Introduction to Psychology               | 3 PHLB53F/S  | The Art of Thinking                       |
| 2 LINA01Y  | General Linguistics                      | 4 PHLB70F/S*   | Philosophy of Science                     |
| 3 PHLA01Y  | Fundamental Questions of Philosophy      | 5 PHLB80F/S  | Philosophy of Language                    |
|  | Computer Programming                     | 6 PHLC50F/S  | Symbolic Logic II                         |
| 4 CSCA56F/S or CSCA58F/S*                              | Introduction to Computing                | 7 PHLC54F/S  | Metalogic                                 |
| 5 PSYB07F/S  | Data Analysis in Psychology              | <b>Cognate Courses</b>   |   |
| 6 PSYB51F/S*   | Perception and Cognition                 | 1 full-course equivalent chosen from the following:                              |   |
| 7 PSYB57F/S*   | Memory and Cognition                     | 1 ANTB20Y*   | Social and Cultural Anthropology          |
| 8 JLPB55F/S*   | Psycholinguistics                        | 2 ANTC05Y*   | The Anthropology of Religion              |
| 9 PHLB20F/S  | Belief, Knowledge and Truth              | 3 ANTC22Y*   | Primate Behaviour                         |
|  | Theories of Mind                         | 4 ANTC25F/S*   | Anthropology and Psychology               |
| 10 PHLB81F/S   |  | 5 CSCA68F/S*   | Computer Applications                     |
| <b>Optional Courses</b>                                |  | 6 CSCB38F/S*   | Discrete Mathematics for Computer Science |
| Psychology   |  | 7 CSCB58F/S*   | Computer Organization                     |
| 2 full-course equivalents chosen from the following:   |  |  |   |
| 1 PSYB01F/S  | Psychological Research Laboratory        | <b>Major Programme in Cognitive Science</b>                                      |   |
| 2 PSYB10F/S*   | Introduction to Social Psychology        | <i>Supervisor: A. Gopnik (284-3339)</i>  |   |
| 3 PSYB20F/S*   | Introduction to Developmental Psychology | * Students should check prerequisites/corequisites/exclusions for these courses. |   |
| 4 PSYB50F/S*   | Sensation and Perception                 | <b>Required Courses</b>  |   |
| 5 PSYB65F/S*   | Biological Foundations of Behaviour      | 3.5 full-course equivalents  |   |
| 6 PSYC08F/S*   | Experimental Design in Psychology        | 1 PSYA01Y  | Introduction to Psychology                |
| 7 PSYC34F/S*   | Psychometric Methods Laboratory          | 2 LINA01Y  | General Linguistics                       |
| 8 PSYC54F/S*   | Cognition and Representation             | 3 PSYB51F/S*   | Perception and Cognition                  |
| 9 PSYC82F/S  | Theoretical Psychology                   | 4 PSYB57F/S*   | Memory and Cognition                      |
| 10 PSYD53F/S*  | Psychology and the Law                   | 5 JLPB55F/S*   | Psycholinguistics                         |
| 11 PSYD80F/S   | Current Topics in Theoretical Psychology | <b>Optional Courses</b>  |   |
| 12 PSYD85F/S*  | History of Psychology                    | Psychology   |   |
| <b>Linguistics</b>                                     |  | 1.5 full-course equivalents chosen from the following:                           |   |
| 1.5 full-course equivalents chosen from the following: |  | 1 PSYB01F/S  | Psychological Research Laboratory         |
| 1 LINB02F/S*   | Phonology                                | 2 PSYB10F/S*   | Introduction to Social Psychology         |
| 2 LINB09F/S*   | Phonetics                                | 3 PSYB20F/S*   | Introduction to Developmental Psychology  |
| 3 LINB11Y*   | Syntax                                   | 4 PSYB50F/S*   | Sensation and Perception                  |
| 4 LINC12F/S*   | Semantics                                | 5 PSYC08F/S  | Experimental Design in Psychology         |
| 5 JLPD24F/S*   | Developmental Psycholinguistics          | 6 PSYC34F/S*   | Psychometric Methods Laboratory           |
| 6 JLPD55F/S*   | Disorders of Speech and Language         | 7 PSYC54F/S*   | Cognition and Representation              |
| <b>Philosophy</b>                                      |  | 8 PSYC82F/S  | Theoretical Psychology                    |
| 1 full-course equivalent chosen from the following:    |  | 9 PSYD80F/S  | Current Topics in Theoretical Psychology  |
| 1 PHLB14F/S*   | Philosophy of Social Science             | 10 PSYD85F/S*  | History of Psychology                     |
| 2 PHLB50F/S  | Symbolic Logic I                         | <b>Linguistics</b>   |   |
|  |  | 1 full-course equivalent chosen from the following:                              |   |
|  |  | 1 LINB02F/S*   | Phonology                                 |

- 2 LINB09F/S\* Phonetics
- 3 LINB11Y\* Syntax
- 4 LINC12F/S\* Semantics
- 5 JLPD24F/S\* Developmental Psycholinguistics
- 6 JLPD55F/S\* Disorders of Speech and Language

#### Cognate Courses

1 full-course equivalent chosen from the following:

- 1 PHLB20F/S Belief, Knowledge and Truth
- 2 PHLB50F/S Symbolic Logic I
- 3 PHLB70F/S\* Philosophy of Science
- 4 PHLB81F/S Theories of Mind
- 5 PHLC50F/S\* Symbolic Logic II
- 6 CSCA56F/S Computer Programming
- 7 CSCA58F/S\* Introduction to Computing

## Commerce

**Assistant Chairman:** K. Ho (284-3153)  
Commerce courses are designed both for those students who intend to specialize in the area and for those who wish to take one or more Commerce courses to supplement their studies in other areas. Courses in Commerce should help students to develop the analytical skills needed to diagnose and solve problems in business and government.

Students may take Commerce courses as part of a three or four year degree (normally a B.A. degree) and may, if admitted, work towards completing a Major or Specialist Programme. Graduates of a fifteen or twenty course degree programme may be eligible for admission to graduate study in business or may seek employment in accountancy or pursue other industrial, commercial or governmental careers.

The College does not offer the Bachelor of Commerce (B. Comm.) degree. Students who wish to obtain the B. Comm. must either enter or transfer to another college of the University (at the St. George or Erindale campus). Because of differences in course and degree requirements, such transfers should take place as early as possible in a student's career. Since many Commerce courses at the St. George Campus are subject to limits on enrolment, Scarborough College students should not assume that they will be able to take Commerce courses at that campus where a comparable course is not available at Scarborough.

Admission to graduate studies leading

to the Master of Business Administration (MBA) degree is open to all qualified graduates (fifteen or twenty course degrees) regardless of the subjects or disciplines studied at the undergraduate level. Students contemplating graduate study would be well advised to include some courses in Commerce in their undergraduate programme. They should also consider strengthening their preparation for graduate work by taking courses in such areas as Economics, Mathematics, Computer Science, Sociology, Psychology and Anthropology.

**Limited enrolment:** Because of pressures of demand for places, it has been necessary to place enrolment limits on many Commerce courses and on admission to Programmes. Information on how to apply for admission to a Programme and to limited enrolment courses will be available prior to the end of classes in April.

**Prerequisites:** Prerequisites will be strictly enforced for all Commerce courses. Students who knowingly or unwittingly register for courses for which they do not have the necessary prerequisites will be denied access to those courses.

#### Commerce Programmes

There are two Specialist Programmes as well as a Major Programme in Commerce. Registration in all three programmes is limited. Each year seventy students are admitted in total to the two specialist programmes and ninety to the major programme. Applications for admission are accepted after students have completed at least four full-course equivalents (i.e. generally after completing the first year of the degree programme). Applicants must have completed (or be in the process of completing) COMA01 and ECOA01 (plus MATA27 or equivalent if applying to either of the specialist programmes). Admission to programmes is currently based on grades in COMA01, ECOA01 and the applicant's two best other grades (including MATA27 or equivalent if applying to a specialist programme).

The two specialist programmes are designed to provide students with the foundation for a managerial career in commerce, industry or the public sector, or for further study in such fields as accounting, finance, law, management, marketing and organizational behaviour. The Specialist Programme in Commerce and Economics combines commerce courses with a solid grounding in economics. The Specialist Programme in Commerce allows a student the opportunity to pursue some degree of

specialization in a specific area of commerce.

The Major Programme in Commerce is designed to provide students with an introduction to the field that can be used as the basis for graduate or professional studies or as a complement to undergraduate studies in related areas.

Subject to enrolment limits, a student admitted to any of the programmes will have access to the full range of offerings in the discipline. Specific programme requirements are listed below.

#### Specialist Programme in Commerce

**Supervisor:** A. Stawinoga (284-3115)

The Programme requires the completion of the following minimum requirements as part of a twenty-course degree:

- 1 Eight full-course equivalents in Commerce including COMA01, COMB01, JCSB27, JCEC02, JCEC72, JCEC73. (See Note A)
- 2 ECOA01, ECOB03, ECOB07 and (ECOB11 and ECOB12) or (STAB52 and STAB57).
- 3 MATA27 or (MATA26 and MATB41) or (MATA55 and MATB50).
- 4 (CSCA56 and CSCA66) or (CSCA58 and CSCA68).
- 5 Four *additional* full-course equivalents from courses other than COM, ECO, JCE and JEG to include at least one full-course equivalent from among the following courses: CLAA01Y, CLAB11H, CLAB30H, CLAB31H, CLAB32H, CLAB33H, DRAB03Y, DRAB04Y, DRAB06Y, ENGA08Y, ENGB07Y, ENGB08Y, ENGB10Y, ENGB11Y, ENGB14Y, ENGB15Y, ENGB20F, ENGB21S, ENGB25H, ENGB34H, FREB20Y, FREB24Y, FREB26Y, FREB29F, FREB36F, FREB37S, FREB49Y, GRHB01Y, GRHB02Y, GRHB03Y, HISA01Y, HISB02Y, HISB03Y, HISB04Y, HISB06Y, HISB07Y, HUMA01Y, HUMA11Y, ITAC12H, ITAC13H, ITAC22F, ITAC23S, ITAC27H, ITAC31Y, ITAC32H, ITAC33H, ITAC34H, ITAC35H, ITAC36H, ITAC40H, ITAC41H, ITAC43H, ITAC44H, ITAC45H, LITA01Y, MUSA10F, MUSA20S, MUSB14F/S, PHLA01Y, PHLB01F, PHLB03F, PHLB04S, PHLB05F, PHLC05S.

**Note A:** JCE courses may be counted as either Commerce courses or Economics courses. If JCE courses are used to meet the Economics requirements, other COM courses must be substituted in meeting the Commerce requirements.

#### Recommendations for Area Concentration

Students who wish to pursue some degree of concentration in a specific area of Commerce studies should consider the

following lists of recommended courses:  
**Accounting:** COMC01, COMC10, COMC15, COMC30, COMD50, COMD55, COMD60.  
**Marketing:** COMC04, COMC05, COMD07, COMD08, ECOC41, JCEC40.

A course in research methods (SOCB01 or PSYB01).

Other related courses: ANTB16, ANTC10, ANTC19, ANTC32, PSYB10, PSYB50, PSYC11, PSYC12, PSYD15, PSYD16, SOCB13, SOCB23, SOCC34.

**Finance:** JCED70, JCED75, COMC01.

Other related courses: ECOC11, ECOC13, ECOC14, ECOC31, ECOC32, ECOC61.

**Organizational Behaviour:** COMC10, COMC22, COMC25, COMC26, JCEC54.  
A course in research methods (SOCB01 or PSYB01).

Other related courses: ANTB16, ANTB20, ANTC10, ANTC19, ANTC24, ANTC32, POLB61, POLB62, POLB63, POLC60, PSYB10, PSYC12, PSYD15, PSYD16, SOCA01, SOCB02, SOCB04, SOCB07, SOCB10, SOCB13, SOCC07, SOCC13, SOCC22, SOCC35.

#### Specialist Programme in Commerce and Economics

**Supervisor:** T. B. A.

The Programme requires completion of the following minimum requirements as part of a twenty-course degree:

- 1 Six full-course equivalents in Commerce including COMA01, COMB01, JCSB27, JCEC02, JCEC72, JCEC73. (See Note A under Specialist Programme in Commerce).
- 2 Five full-course equivalents in Economics including ECOA01, ECOB03, ECOB07, and (ECOB11 and ECOB12) or (STAB52 and STAB57).
- 3 MATA27 or (MATA26 and MATB41) or (MATA55) and MATB05Y.
- 4 (CSCA56 and CSCA66) or (CSCA58 and CSCA68).
- 5 Four *additional* full-course equivalents from courses other than COM, ECO, JCE and JEG to include at least one full-course equivalent from among the Humanities options listed under the Specialist Programme in Commerce.

#### Major Programme in Commerce

**Supervisor:** T. B. A.

The Programme requires completion of the following as part of a fifteen or twenty-course degree:

- 1 Six full-course equivalents in COM or JCE courses including COMA01, COMB01 and JCSB27Y. (See Note A under Specialist Programme in Commerce.)



2 Two full-course equivalents in Economics including ECOA01.

3 Five additional full-course equivalents, one of which must be at the B, C, or D level, from courses other than COM, ECO, JCE, or JEG, to include at least one full-course equivalent from among the Humanities options listed in the Specialist Programme.

#### Careers in Accountancy

The College offers a significant number of courses which have been recognized as meeting part of the educational training of Chartered Accountants, Certified General Accountants and Certified Management Accountants. A brochure describing the various programmes and listing the recognized Scarborough College courses is available from Counselling Services (284-3292).

#### COMA01Y Financial Accounting

Basic theory and concepts which underlie the preparation of financial statements; development of double entry theory and practice; the accounting cycle from the recording of transactions in double entry form to the year-end entries and the preparation of financial statements; problems of measuring income. The course provides a rigorous introduction to accounting techniques and to the principles and concepts underlying those techniques. Class size is limited to 80 per section.

Session: Winter Day, Winter Evening, Summer Evening

#### COMB01Y Management Accounting

An introduction to cost accounting with emphasis on the use of accounting information in managerial decision-making. Topics include types of cost accounting systems, patterns of cost behaviour, problems of cost determination, allocation, budgeting and control.

Class size is limited to 80 per section.

Prerequisites: COMA01 and ECOA01

Session: Winter Day, Winter Evening, Summer Evening

A. Stawinoga

#### JCSB27Y Organizational Behaviour

Social factors in administration, the structuring of intra-organizational and inter-organizational relationships, and the distribution of power and dependency in society. Empirical studies used in the first term will focus on single organizations. Those used in the second term will focus on industries and other inter-dependent organizations.

Prerequisite: One previous course in

Sociology, Commerce, Economics, or Political Science

Session: Winter Day, Winter Evening, Summer Evening

#### COMC01Y Intermediate Financial Accounting

An examination of some of the theoretical and practical accounting problems involved in income determination and balance sheet valuation. The course builds extensively on the material in COMA01 and, to a lesser extent, COMB01. Potential students should review thoroughly the basic accounting model, preparation of financial statements and accounting principles prior to the start of the course. Limited enrolment: 60.

Prerequisite: COMB01

Session: Winter Day, Winter Evening

#### JCEC02Y Corporation Finance

An examination of the financial environment within which Canadian companies operate. The aim is to cover the main principles of financial management and to discover the social and legal significance of the modern corporation. Limited enrolment: 60.

Prerequisites: COMB01; ECOB03; ECOB11.

ECOB12 is strongly recommended.

Session: Winter Day, Winter Evening

K. Ho

#### COMC04F Principles of Marketing

An introduction to basic concepts and tools of marketing designed to provide students with a conceptual framework for the analysis of marketing problems. The focus is on the nature and scope of marketing in a organizational and societal setting. The subjects include an examination of buyer behaviour, market segmentation and target marketing; the basic elements of the marketing mix-product, price, promotion and channel policies; marketing planning, evaluation and control. Limited enrolment: 60.

Prerequisite: COMB01. ECOB03 is recommended.

Session: Winter Day, Winter Evening, Summer Evening

R. Serpkenci

#### COMC05S Introduction To Marketing Management

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. Prerequisite: COMC04. ECOB11 or equivalent recommended.

Session: Winter Day, Winter Evening, Summer Evening

R. Serpkenci

#### COMC10S Management Control Systems

The course objective is to develop a thorough understanding of planning and control systems in organizations, with an emphasis on behavioural implications of various accounting systems. Limited enrolment: 60.

Prerequisites: COMB01, JCSB27

Session: Winter Evening

A. Stawinoga

#### COMC15Y Income Tax

An examination of the broad principles of federal income tax in Canada and of the detailed provisions involved in the taxation of business enterprises. Limited enrolment: 60.

Prerequisite: Completion of at least ten courses including COMA01 and ECOA01

Session: Winter Evening

S. Lerman

#### COMC22F Personnel Administration

An introduction to the basic concepts, theories and practices of personnel management. Topics include recruitment, selection, training, development, performance appraisal, compensation and human resources planning. Affirmative action, discrimination and equal pay issues will be examined in relation to human rights legislation. Limited Enrolment: 60.

Prerequisite: JCSB27

Session: Winter Day

#### COMC25F Organizational Design

This course reviews design alternatives, involving changes in strategies, structures, environments and people for both business and non-business complex organizations. Limited enrolment: 60.

Prerequisite: JCSB27

Session: Winter Day

#### COMC26S Comparative Organizational Behaviour

This course studies the impact on organizational strategies of different environments, discussing, among other questions,

differences between nations. The course may also deal with societal attitudes in reference to quality of work life. Limited enrolment: 60.

Prerequisite: JCSB27

Session: Winter Day

#### COMC30Y The Legal Environment of Business

An intensive examination of those aspects of the law that most directly affect the operations of a business. Limited enrolment: 60.

Prerequisite: Completion of at least ten courses including COMA01 and ECOA01

Session: Winter Day, Summer Evening

#### JCEC54F/S Industrial Relations

A study of industrial relations in the Canadian setting. Topics include: industrial relations theory and systems; history, philosophy and structure of unionism, labour law, and collective bargaining. Limited enrolment: 80.

Exclusion: (JCEB54)

Prerequisite: Completion of at least ten courses including ECOA01.

Session: Winter Evening

#### JCEC72F Analysis for Decision Making I

A course in the analytical formulation and solution of decision problems. Linear decision models, and especially linear programming, are the tools primarily discussed and employed. Limited Enrolment: 80.

Exclusion: (JCEB72)

Prerequisites: CSCA56 or CSCA58, MATA04 or MATA22 or MATA26 or MATA27 or MATA55, ECOB03

Corequisite: ECOB11 or GGRB31 or STAB57

Session: Winter Day

R. Wolfe

#### JCEC73S Analysis for Decision Making II

A continuation of JCEC72 with less emphasis on deterministic, linear models. Course content will be determined by the instructor and will usually include several of the following: decision making under uncertainty, inventory theory, simulation, non-linear programming, allocation of risk-bearing. Limited Enrolment: 80.

Exclusion: (JCEB73)

Prerequisite: JCEC72(JCEB72)

Session: Winter Day

R. Wolfe



**COMD07F/S Market Research**

A decision oriented course, designed to introduce students to the market research process. Alternative data collection, sampling, analysis, and evaluation procedures are discussed. Exploratory, descriptive and causal research approaches are reviewed. Both theoretical and technical considerations in designing and execution of market research are stressed. Instruction involves lectures and class projects including computer analysis.

Exclusion: (COMC07)

Prerequisites: COMC05, ECOB11 or equivalent. Computer background recommended.

Session: Winter Day or Evening

**COMD08F/S Retail Management and Strategy**

An advanced marketing course designed to provide, through lectures and cases, a decision making perspective in retailing management. Topics include: the evolving nature of retail markets, strategic planning in retailing, profitability and productivity issues, merchandising, buying, location analysis, retail imagery and research.

Exclusion: (COMC08)

Prerequisite: COMC05

Session: Winter Day or Evening

R. Serpkenci

**COMD50F Advanced Accounting**

Consideration of accounting practice in the context of accounting theory and concepts for a number of areas including intercorporate investments, and foreign currency translation.

Exclusion: (COMC50)

Prerequisites: COMC01 and permission of instructor.

Session: Winter Evening

**COMD55F Current Issues in Accounting**

The course will deal with a number of topics in current accounting literature, with particular reference to the problem of the development of theories of, and for, accounting. Topics may also include not-for-profit and government accounting, leases and pensions, and human resource accounting.

Exclusion: (COMC55)

Prerequisite: COMC01

Session: Winter Evening

A. Stawinoga

**COMD60S Auditing**

An introduction to the principles and practice of auditing. The course is designed to provide students with a foundation in the theoretical and practical approaches to auditing by emphasizing auditing theory and concepts, with some discussion of audit procedures and the legal and professional responsibilities of the auditor.

Exclusion: (COMC60)

Prerequisite: COMC01

Session: Winter Evening

**JCED75S Investments**

This course studies and reviews major investment problems, in particular the investment in stocks and bonds, risk and return characteristics, efficient markets, valuation, and portfolio management.

Limited enrolment: 60

Exclusion: (JCEC75)

Prerequisite: JCEC02

Session: Winter Day

**COMD80F/S Supervised Reading Course**

This course is intended for upper-level students whose interests are not covered in one of the other Commerce courses normally offered. The course will only be offered when a faculty member is available for supervision and would only be available to students whose Commerce performance has been well above average. Students interested in this course should consult with the Supervisor of Studies for Commerce well in advance.

Exclusion: (COMC80)

Prerequisite: Permission of Instructor

Session: Summer Day, Summer Evening,

Winter Day,

Winter Evening

**Courses Not Offered 1988-89****COMD20F/S Business Policy**

Exclusion: (COMC20)

Prerequisites: COMB01,

JCSB27, COMC04

Corequisite: JCEC02

**JCED70S**

Advanced Corporation Finance

Exclusion: (JCEC70)

Prerequisite:

JCEC02

**Computer Science**

*Discipline Representative:* W. Enright 284-3340.

Computer science is the study of the use of computers to process information. The form of this information may vary widely, from the businessperson's records, to the scientist's experimental results, to the linguist's texts. One of the fundamental concepts in computer science is the algorithm - a list of instructions that specify the steps required to solve a problem. Computer science is concerned with producing correct, efficient, and maintainable algorithms for a wide variety of applications. Closely related is the development of tools to foster these goals: programming languages for expressing algorithms; operating systems to manage the resources of a computer; and various mathematical and statistical techniques to study the correctness and efficiency of algorithms. Theoretical computer science is also concerned with the inherent difficulty of problems that 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.

The Major Programme in Computer Science provides an introduction to some of the main areas of computer science and also provides preparation for a career in the computer field. It is a suitable programme for a student interested in applying computer science techniques to problems from another research area or for a student interested in a career in secondary school teaching.

The Specialist Programme in Computer Science and Physics provides a thorough understanding of how modern computers work. It requires a good background in modern physics, including electronics. At the same time, more and more problems in physics require the use of computers. This new joint programme involves a carefully selected set of courses which will give the student the needed

expertise in both subject areas. This programme should be an excellent background for work in high-tech industries.

Students interested in computer studies should also refer to Specialist and Major Programmes in Cognitive Science, and the Specialist (Co-operative) Programme in Computer Science and Physics.

**Specialist Programme in Computer Science**

*Supervisor:* G. Cupit (284-3352)

NOTE: Registration in this programme is limited. A maximum of twenty students will be admitted annually to the second year of the programme. Selection will be based on grades in first-year courses in Computer Science and Calculus.

There are eleven courses required for the Specialist Programme in Computer Science. Note that the courses need not be taken in exactly the indicated order, but if an alternative ordering is adopted, care must be taken to ensure that prerequisites are satisfied and other conflicts avoided.

*First year:*

CSCA58F, CSCA68S, MATA04Y, MATA55Y,

NOTE: As an alternative to MATA55 as a first-year requirement for the Specialist Programme in Computer Science, students may be allowed to enter with only MATA26, provided that in a later year they take MATB43 (and the courses leading thereto). See Corrigenda to the *Calendar*.

*Second year:*

CSCB28S, CSCB38F, CSCB58F, (MATB41F and MATB42S) or MATB05Y

*Third year:*

CSCC24S, CSCC51F, CSCC78F, STAB52F, STAB57S, MATB49S or MATC51S or MATC60F

*Third or fourth year:*

Five-half courses to be chosen from the following options. CSCC64S and one of 438, 448, 465, 478

Two of: CSCC50, C51, 446.

Any two of: CSCC54F, C85S, 340, 372, 418, 428, 434, 444, 454, 458, 468, 484, 485, 488. Note that only CSCC50, C54, C64, and C85 are available at Scarborough; the remaining courses must be ballotted for and completed at the St. George campus. Consult the Department of Computer Science Undergraduate Student Handbook.

It is also desirable to have a sequence of approximately four related half-courses in a subject area in which computers can be usefully applied.

**Specialist Programme in Computer Science for Data Management**

*Supervisor:* G. Cupit (284-3352)

NOTE: Registration in this Programme is limited. A maximum of twenty students will be admitted annually to the Second Year of the Programme. Selection will be based on grades in first-year courses in Computer Science and Calculus. There are fourteen courses required for the Specialist Programme in Computer Science for Data Management. The courses may be taken in a different order, but care must be taken to ensure that prerequisites are satisfied and conflicts avoided.

*First year:*

CSCA58F, CSCA68S, MATA26Y or MATA27Y or MATA55Y, MATA04Y, COMA01Y, ECOA01Y

*Second year:*

CSCB28S, CSCB38F, CSCB58F, ECOB03Y or ECOB07Y, (MATB41F and MATB42S) or MATB05Y

*Third year:*

CSCC24S, CSCC78F, COMB01Y, STAB52F, STAB57S

*Third or fourth year:*

CSCC64S, 434

Three half-courses to be chosen from the following options. Any one of: CSCC50S, C51F. Any two of: CSCC54F, C85S, 340, 372, 418, 428, 444, 454, 458, 468, 484, 488, including at least one of: CSCC85, 372, 458, 468, 488.

Note that only CSCC50, C51, C54, C64 and C85 are available at Scarborough; the remaining courses must be ballotted for and completed at the St. George Campus. Consult the Department of Computer Science Undergraduate Student Handbook. In completing the Programme, a student is encouraged not to include any Computer Science courses other than those required above.

**Specialist Programme in Computer Science and Physics**

*Supervisor of Studies:* G. Cupit (284-3352), J. King (284-3318)

Note: Registration in this programme is limited. A maximum of twenty students will be admitted annually to the Second Year of the Programme. Selection will be based on grades in first-year courses in Computer Science, Calculus and Physics. There are 16 courses required for the Specialist Programme in Computer Science and Physics. Note that courses need not be taken in exactly the indicated order, but if

an alternative ordering is adopted, care must be taken to ensure that prerequisites are satisfied and other conflicts avoided.

*First Year*

CSCA58F, CSCA68S, MATA04Y, MATA26Y or MATA55Y, PHA03Y

*Second Year*

CSCB28S, CSCB38F, CSCB58F, CSCC24S, (MATB41F and MATB42S) or MATB05Y, PHYB03F, PHYB01S, PHYB08H

*Third Year*

CSCC78F, CSCC50S, CSCC85S, MATC51F, MATC56S, PHYB04F, PHYB17S, PHYB19S

*Fourth Year*

CSCC64S, CSCC51F, PHYC04F, PHYC09S (C03S), PHYC05H

Two of: CSCC54F\*, 372, 418, 428, 438, 448, 458, 465, 468, 484, 488.

\* STAB57 is a prerequisite to CSCC54

Note that only CSCC54 is available at Scarborough; the remaining courses must be ballotted for and completed at the St. George Campus. Consult the Department of Computer Science Undergraduate Student Handbook.

For the Specialist (Co-operative) Programme in Computer Science and Physics see Co-operative Programmes.

**Major Programme in Computer Science**

*Supervisor:* G. Cupit (284-3352)

NOTE: Registration in this programme is limited. A maximum of thirty students will be admitted annually to the Second Year of the Programme. Selection will be based on grades in first-year courses in Computer Science and Calculus.

Eight full-course equivalents are required. The courses need not be taken in the order given, but care must be taken to ensure that prerequisites are satisfied and conflicts avoided.

*First year:*

CSCA58F, CSCA68S, MATA26Y or MATA27Y or MATA55Y, MATA04Y

*Second year:*

CSCB28S, CSCB58F, CSCB38F, (MATB41F and MATB42S) or MATB05Y

*Third year, or, Third or Fourth year:*

CSCC24S

Four half-courses to be chosen from the following options: (i) at least one of C78F, C54F, C85S, 340, 434, 444, 454, 458, 468, 484, 488

(ii) at least one of C50S, C51F, C64S, 438, 446, 448, 465, 478, JMCC31F, JMCC32F

(iii) at most two of 318 or 418, 300. Note that CSCC24, C50, C51, C54, C64 and C85 and JMCC31 and JMCC32 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.

The following courses are offered only on the St. George Campus. Please consult the Department of Computer Science *Undergraduate Student Handbook* for more details.

<b>CSC300</b>	Computer and society
<b>CSC318</b>	Computer graphics and applications
<b>CSC336</b>	Numerical methods
<b>CSC340</b>	Information systems analysis and design
<b>CSC372</b>	Microprocessor software
<b>CSC418</b>	Interactive computer graphics
<b>CSC428</b>	Human-computer interaction
<b>CSC434</b>	Data management systems
<b>CSC438</b>	Computability and logic
<b>CSC444</b>	Economics of computers
<b>CSC446</b>	Computational methods for partial differential equations
<b>CSC448</b>	Formal languages and automata
<b>CSC454</b>	The business of software
<b>CSC458</b>	Architecture of distributed computer systems
<b>CSC465</b>	Programming methodology
<b>CSC468</b>	Operating systems
<b>CSC478</b>	Computer algebra
<b>CSC484</b>	Applied artificial intelligence
<b>CSC485</b>	Introduction to computational linguistics
<b>CSC488</b>	Language processors

**Computer Science****CSCA04H How Computers Are Used**

Parts of a computer and their interconnection. System operations: commands, files, security. Common applications: games, text processing, spreadsheets. Problem solving with computers: algorithms and basic programming concepts. Other applications and topics: data organization, communications, office automation, artificial intelligence, computing in other academic disciplines. (Students will use

micro-computers and will do some programming, but the aim of the course is to show how computers are used, not to teach programming.) Primarily for non-science students, but may be followed by other CSC courses.

Exclusion: SMC104H; VIC104H; CSC104; grade 12 or 13 computer studies or data processing. This course may not be taken after or concurrently with any other CSC course.

Session: Winter Day

**CSCA56F/S Computer Programming**

Introduction to algorithms, computer organization and computer programming. Emphasis is on learning to program in a high-level language. Various applications of computers will be discussed.

This course is intended for students who want to learn programming for use in their own area of interest. It introduces students to algorithms and acquaints them with the capabilities and limitations of computers. The Turing language is introduced as a tool for the precise specification of algorithms for computers, and for their communication to people. Some applications of programming techniques will be considered. Two hours of lecture and one two-hour tutorial per week.

Exclusion: CSCA58

Prerequisite: One grade 13 course in Mathematics

Session: Winter Day, Winter Evening

**CSCA58F Introduction to Computing**

An introduction to algorithms and problem solving with computers. Programming in a high-level language such as Turing, including an introduction to simple data structures, string manipulation, recursion, linked lists, hashing, program correctness, and floating-point calculations. Comparison of several internal sorting algorithms. Brief exposure to machine language programming. (More intensive than CSCA56; intended primarily for students who plan to pursue any of the Programmes in Computer Science or Cognitive 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: Grade 13 Functions and Relations, and Grade 13 Calculus

Corequisite: MATA26 or MATA55 or MATA27

Session: Winter Day

**CSCA66S Programming Applications**  
Practical approaches to solving problems involving data structures, non-numerical applications, and data processing.

This course is a continuation of CSCA56 and it covers sample problems from several areas. Particular emphasis is placed on business applications. Students interested in other applications should consider CSCA68 instead.

Exclusion: CSCA68

Prerequisite: CSCA56 or CSCA58

Session: Winter Day

#### **CSCA68S Computer Applications**

A continuation of CSCA58. An introduction to the representation and applications of graphs, computer simulation models, artificial intelligence, and numerical methods, including the use of data types such as stacks, queues, trees and heaps. Some exposure to languages such as Fortran, PL/I, and Pascal. Two hours of lectures, and a two-hour tutorial per week.

Exclusion: CSCA66

Prerequisite: CSCA58, or CSCA56 and permission of instructor

Corequisite: MATA26 or MATA55 or MATA27

Session: Winter Day

#### **CSCB09S Software Tools in Unix and C**

Introduction to programming in the C language and to the use of programmable command interpreters ("shells") in the UNIX operating system. Practice with UNIX software tools; their strengths and weaknesses.

Prerequisite: CSCA68H

Session: Winter Day

#### **CSCB28S Principles of Data Processing Systems**

The emphasis is on development and evaluation of techniques of managing large centralized data processing environments, and includes exposure to and programming in languages for data processing. Topics include: external storage devices; buffering; blocking; file access methods; [algorithms for external sorting]; sequential, index sequential, and direct file organization; methods of indexed sequential file organization, including B-trees and variants; methods of direct file organization, including external hashing; organization of and algorithms for multiple attribute files; data encoding; and introduction to data base management. Enrolment limit: 100

Prerequisite: CSCA68

Session: Winter Day

#### **CSCB38F Discrete Mathematics for Computer Science**

A rigorous treatment of certain aspects of discrete mathematics with applications to computer science. Emphasis on the basic properties and fundamental algorithms concerning integers (including induction, Euclidean algorithm, modular arithmetic), and on logic (including propositional and predicate calculus and simple formal theories). Application to topics such as program correctness, formal program verification, algorithms from graph theory, and elementary set theory.

Corequisite: MATA04Y (MATA40)

Prerequisite: CSCA68

Session: Winter Day

#### **CSCB58F Computer Organization**

This course is designed to give students an understanding of the operation and the hardware of a modern digital computer. No knowledge of electronics is necessary.

Specific topics include: an introduction to boolean algebra, the design and analysis of gate networks, memory devices, the organization of a simple microprogrammed machine, basic data representation, assembly language, addressing structures, mechanisms for input and output, the structure of peripheral devices, some case studies of particular machines. There will be three laboratory periods in which students will conduct experiments with digital logic circuits.

Enrolment limit: 100.

Prerequisite: CSCA68

Session: Winter Day

#### **CSCC24S Principles of Programming Languages**

A wide variety of programming styles and the programming languages that support them. Emphasis on recursion and concurrency; other programming regimes such as backtracking and coroutines. Language features such as pattern matching, programs as data, and module encapsulation. Examples from languages such as Lisp, Concurrent Euclid, Prolog, Smalltalk, and Simula.

Enrolment limit: 100.

Exclusion: (CSCB68)

Prerequisite: CSCB38 (strongly recommended: CSCB58)

Session: Winter Day

#### **JMCC32F Graph Theory and Algorithms for its Applications**

Graphs, subgraphs, isomorphism, trees, connectivity, Euler and Hamiltonian properties, matchings, vertex and edge colourings, planarity, network flows and strongly regular graphs. A selection of applications to such problems as timetabling, personnel assignment, tank form scheduling, travelling salesmen, tournament scheduling, experimental design and finite geometries. Explicit algorithms and their computational complexity will be discussed whenever possible.

Prerequisite: MATB44 (or CSCB38) and at least one other B-level course in mathematics or computer science

Session: Winter Day

#### **CSCC50H Numerical Algebra and Optimization**

The efficiency and stability of solution techniques for systems of linear equations and least squares problems, including LU- and QR-based methods. Algorithms for optimization problems, including linear programming, and for systems of non-linear equations.

Exclusion: CSC336H

Prerequisite: CSCA68, MATA04Y, MATB41F and MATB42S or MATB05Y

Session: Winter Day

#### **CSCC51H Numerical Approximation, Integration and Ordinary Differential Equations**

Analysis of methods for approximation, integration, and the solution of ordinary differential equations. Emphasis on the convergence and stability properties of the algorithms, rather than on their implementation.

Exclusion: ACT323H, CSC336H, (JMCC51)

Prerequisite: CSCA68, MATA04Y, MATB41F and MATB42S or MATB05Y

Recommended Preparation: CSCC50

Session: Winter Day

#### **CSCC54F Computer-Based Simulation Models**

Constructing and using models of complex systems. Representing models as simulation programs for computers. Implementing simulation models using such simulation languages as GPSS and DYNAMO. Methods of generating uniformly distributed pseudo-random numbers and stochastic random variates with specific distributions. Validation of simulation models by statistical analysis. Case

studies of some applications of computer-based simulation.

Prerequisite: CSCA68, STAB57

Session: Winter Day

#### **CSCC64S Effective and Efficient Computing**

Measuring algorithm performance. Techniques of efficient algorithm design: divide and conquer, greedy method, dynamic programming, graph traversal, change of representation. Introduction to complexity theory: models of computation, P, NP, polynomial time reduction, NP-completeness. Introduction to the theory of computation: Church's thesis, computable and uncomputable functions, recursive and recursively enumerable sets, universality, many-one reduction.

Prerequisite: CSCB38H

Session: Winter Day

#### **CSCC78F Information Structures**

An advanced study of major classes of information structures with an emphasis on the design, analysis, and implementation of non-numerical algorithms, using an abstract data types approach. Advanced topics on linear lists, their implementation, searching and sorting. Trees, tree traversal, tree directories. Sets and graphs, efficient operations, and advanced applications. Relations and the relational algebra. Storage management, allocation, and garbage collection. Two hours of lecture and a one hour tutorial.

Exclusion: CSCC34 before 1982/83

Prerequisite: CSCB28 and CSCB38 or (CSCB68)

Session: Winter Day

#### **CSCC85S Microprocessor Systems**

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**

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 Arts and Science students specializing in computer science. It can be taken as an F or S course in a single term, or as an H course spread over an entire winter or summer session. Projects must be completed by the last day of classes in the term or session the course is taken.

**Prerequisite:** Three C-level computer science half-courses, a GPA of 2.50, and permission of the Programme Supervisor.  
**Enrolment procedures:** Project Supervisor's note of agreement to be presented to the Programme Supervisor by whom a Special Permission will be issued for registration.

**Session:** Winter Day

### CSCD95H Computer Science Project

Same description as CSCD94H. Normally a student may not take two project 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 1988-89

JMCC31F Combinatorics

## Co-operative Programme in Administration

**Director:** A.N. Sheps

**Co-ordinator:** Beverley Abramson (284-3226)

**Supervisor:** J. Esbrey (284-3168)

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

- policy and economic analysis
- decision-making in both government and business

- the allocation of resources
- the management of policies and programmes dealing with complex social, economic, political and business problems
- financial and management accounting
- urban, regional and social planning

The Programme prepares students for permanent employment in government, regulatory agencies, crown corporations and business enterprises, or for further studies in the social sciences, law, public or business administration, planning, or social work. Graduates receive a four-year B.A. with a Specialist certification in Administration.

### Admission to the Programme

**a.** From Grade 13/OAC programme (or equivalent): 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.

An appropriate grade 13 curriculum would include at least one course from Functions and Relations, or Algebra or Calculus, and at least three courses from English, History and other Humanities. Social Sciences courses are not required.  
**b.** From first-year university: Students accepted by the University and College may apply whether or not they have completed any part of the Programme's curriculum. The timing of their first work placement will depend upon the particular university courses already completed.

Admissions are granted on the basis of applicants' interest and potential ability in administration, accomplishment and grades in both verbal and quantitative studies, and a letter of reference from a high school teacher or university instructor. Interviews may be required. Enrolment is limited and only a small number of applicants can be accepted each year. Admissions are considered annually in May and early June.

**Fees:** Every student in a co-operative programme is required to pay additional fees as established by the University.

### Specialist (Co-operative) Programme in Administration

This Programme requires eight four-month terms of study, four work terms and two "off" terms over a five year period. Students begin with a full academic year of study, then alternate study and work

terms, and conclude with a final eight months of study. Exceptionally, with the agreement of the Director and Co-ordinator, a fifth work term may be allowed. Work terms are arranged and scheduled by the Office of Co-operative Programmes but must be won by students in competition with co-operative students from this and other universities. During work terms students serve in the administration of government departments, crown corporations, business enterprises and public agencies.

Performance on each work term is evaluated by both the employer and Co-ordinator. Also students must submit to the Supervisor for evaluation a report for each work term which integrates knowledge gained during the placement with academic study already completed.

To maintain standing in the Programme, to be eligible for a work term, and to receive specialist certification upon graduation, a student must

- complete a full-time course of studies (at least two full-course equivalents and normally 2.5) during each study term
- maintain a cumulative grade point average of 2.5
- 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 placement a student must be in good standing in the Programme and must have completed

- for the first work term: seven full-course equivalents, including COMA01, ECOA01, one of HISB02 or HISB03 or HISB04, POLB50, JCSB27
- for the second work term: nine full-course equivalents including the above courses and COMB01, ECOB03. At least one of POLB53, POLB61, POLB62 or POLC64
- for the third work term: eleven full-course equivalents including the above courses, a statistics half-course from section A, IV, below, and at least two of POLB53, POLB61, POLB62 or POLC64

- for the fourth work term: thirteen full-course equivalents including the above courses.

In the first two years of study all students follow a common core of studies (section A below). Beginning in the third year, students choose an advanced option (Section B, below) from the following fields of administrative studies: Economic Policy, Policy Analysis, Programme Management, Social Policy, and Urban and Regional Policy. The choice should be made on the basis of the student's career goals and personal interests and skills.

Advanced courses in Commerce, Computer Science, Economics, Geography, Mathematics, and Psychology have prerequisites so students must plan their studies with care.

Each student's curriculum requires the annual approval of the Supervisor.

The first two years in the Programme should consist of:

**First Year:** (Winter Session) COMA01, ECOA01, one of HISB02 or HISB03 or HISB04, JCSB27, POLB50

**Second Year:** (Summer and Winter Sessions) COMB01, ECOB03, at least two elective full-course equivalents, and a work term. Students interested in the Programme Management or Economic Policy advanced options, or in careers in Commerce or Economics, may select MATA27 (Calculus) as early in their studies as possible, although it is not a required course for the co-op curriculum or for the Programme Management or Economic Policy options.

Students who take MATA27Y (Calculus) in their first year may postpone taking JCSB27Y, but must complete it before they are eligible for a third work term. A Statistics course, ECOC32F/S or ECOB35F/S, and a Computer Science course should also be included as early as possible in a student's programme.

The curriculum requirements are as follows:

**A Core Courses:** eleven full-course equivalents, to be selected as follows:

1. **Behavioural Foundations** (two full-course equivalents)

**a Required:**

\*JCSB27Y Organizational Behaviour

**b one full-course equivalent from:**

POLB66Y	Psychology and Politics
POLD65F/S	Topics in Political Leadership
PSYB10F/S	Introduction to Social Psychology

PSYC11F/S	Social Psychology Laboratory	ECOC08F/S	Econometrics
SOCB04Y	Political Sociology	ECOC31F/S	Economics of the Public Sector: Taxation
SOCC07F/S	Sociology of Occupations and Professions	ECOC32F/S	Economics of the Public Sector: Expenditures
SOCC13F/S	Industrial Sociology	ECOC41F/S	Industrial Organization
* Prerequisite waived for Administration students		ECOC48F/S	Monetary Economics and Stabilization Policy
II. <i>Public Policy Development and Evaluation</i> (four and one-half full-course equivalents)		c one full-course equivalent from:	
a Required:		POLB53F/S	Public Policies in Canada
ECOA01Y	Introduction to Economics	POLB61F/S	Canadian Public Administration: Institutions and Processes
ECOB03Y	Price Theory	POLB62F/S	Public Policy-Making
POLB50Y	Introduction to Canadian Politics	POLC54F/S	Intergovernmental Relations
b Two of:		POLC55Y	Comparative Provincial Government
POLB53F/S	Public Policies in Canada	POLC60F/S	Administrative Politics
POLB61F/S	Canadian Public Administration: Institutions and Processes	POLC61F/S	Policy Development and Political Evaluation
POLB62F/S	Public Policy-Making	POLC63F/S	Administrative Theories and Policy-Making
POLC64F/S	Comparative Public Administration	POLC64F/S	Comparative Public Administration
c one of:		POLD62F/S	Organized Interests and the State
ECOB35F/S	Public Decision Making	II. <i>Policy Analysis</i> (four full-course equivalents)	
ECOC32F/S	Economics of the Public Sector: Expenditures	a three full-course equivalents from:	
III. <i>Historical and Cultural Foundations</i> (two full-course equivalents)		POLB53F/S	Public Policies in Canada
To be selected from the curricular offerings of the Humanities Division at least one of which must be:		POLB61F/S	Canadian Public Administration: Institutions and Processes
HISB02Y	Britain from the 18th Century to the Present	POLB62F/S	Public Policy-Making
HISB03Y	History of the United States	POLC54F/S	Intergovernmental Relations
HISB04Y	Introduction to Canadian History	POLC55Y	Comparative Provincial Government
IV. <i>Programme Management</i> (two and one-half full-course equivalents)		POLC60F/S	Administrative Politics
a Required:		POLC61F/S	Policy Development and Political Evaluation
COMA01Y	Financial Accounting	POLC63F/S	Administrative Theories and Policy-Making
COMB01Y	Management Accounting	POLC64F/S	Comparative Public Administration
b one-half full-course equivalent from:		POLC87Y	Comparative Politics of Industrial Societies
ECOB11F/S	Quantitative Methods in Economics	POLD51F/S	Topics in Canadian Government
GGRB31F/S	Data Analysis in Geography	POLD62F/S	Organized Interests and the State
STAB52F/S	Probability and Statistics I	POLD65F/S	Topics in Political Leadership
STAB57F/S	Probability and Statistics II	b one full-course equivalent from:	
PSYB07F/S	Data Analysis in Psychology	ECOB07Y	Macroeconomic Theory and Policy
SOCB06F/S	Social Statistics	ECOB12F/S	Quantitative Methods in Economics: Applications
B Advanced Options: Students must choose one of the following categories:		ECOB35F/S	Public Decision Making
I. <i>Economic Policy</i> (four full-course equivalents)		ECOC31F/S	Economics of the Public Sector: Taxation
a Required:			
ECOB07Y	Macroeconomic Theory and Policy		
ECOB12F/S	Quantitative Methods in Economics: Applications		
b one and one-half full-course equivalents from:			

ECOC37F/S	Law and Economics	SOCB05Y	Urban Sociology
ECOC41F/S	Industrial Organization	SOCC06F/S	Applied Sociology
JEGB27F/S	Location and Spatial Development	PSYC08F/S	Experimental Design in Psychology
III. <i>Programme Management</i> (four and one-half full-course equivalents)		b one-half full-course equivalent from:	
a two full-course equivalents from:		COMC04F/S	Principles of Marketing
COMC04F/S	Principles of Marketing	COMC05F/S	Introduction to Marketing Management
COMC05F/S	Introduction to Marketing Management	SOCB23Y	Population
COMD08F/S	Retail Management and Strategy	SOCC07F/S	Sociology of Occupations and Professions
JCEC02Y	Corporation Finance	SOCC11F/S	Sociology of Law and Law Enforcement
JCEC72F/S	Analysis for Decision Making I	SOCC13F/S	Industrial Sociology
JCEC73F/S	Analysis for Decision Making II	c one full-course equivalent from:	
b Required: one of:		ECOC37F/S	Law and Economics
ECOB12F/S	Quantitative Methods in Economics: Applications	POLB53F/S	Public Policies in Canada
PSYC08F/S	Experimental Design in Psychology	POLB61F/S	Canadian Public Administration: Institutions and Processes
c one-half full-course equivalent from:		POLB62F/S	Public Policy-Making
POLB53F/S	Public Policies in Canada	POLC54F/S	Intergovernmental Relations
POLB61F/S	Canadian Public Administration: Institutions and Processes	POLC55Y	Comparative Provincial Government
POLB62F/S	Public Policy-Making	POLC61F/S	Policy Development and Political Evaluation
POLC55Y	Comparative Provincial Government	POLC63F/S	Administrative Theories and Policy-Making
POLC60F/S	Administrative Politics	POLC64F/S	Comparative Public Administration
POLC61F/S	Policy Development and Political Evaluation	POLD62F/S	Organized Interests and the State
POLC63F/S	Administrative Theories and Policy-Making	V. <i>Urban and Regional Policy</i> (four full-course equivalents)	
POLC64F/S	Comparative Public Administration	a Required:	
POLD62F/S	Organized Interests and the State	GGRB05Y	Urban Geography
d one and one-half full-course equivalents from:		GGRB17Y	Rural Geography
CSCA56F/S	Computer Programming	JEGB27F/S	Location and Spatial Development
CSCA58F/S	Introduction to Computing	b one and one-half full-course equivalents from:	
CSCA66F/S	Programming Applications	GGRC04F/S	Urban Residential Geography
CSCA68F/S	Problem Solving with Computers	GGRC07F/S	Countryside Conservation
CSCB28F/S	Programming Techniques for Data Processing	GGRC13F/S	Urban Political Geography
COMC22F/S	Personnel Administration	GGRC18F/S	Urban Transportation Policy Analysis
COMD20F/S	Business Policy	GGRC31F/S	Development and Planning of Metropolitan Regions
ECOC41F/S	Industrial Organization	POLC60F/S	Administrative Politics
SOCC07F/S	Sociology of Occupations and Professions	POLC61F/S	Policy Development and Political Evaluation
SOCC13F/S	Industrial Sociology	POLC63F/S	Administrative Theories and Policy-Making
including at least one half-course from Computer Science		POLC64F/S	Comparative Public Administration
IV. <i>Social Policy</i> (four and one-half full-course equivalents)		POLC88Y	Urban Politics
a Required:		SOCC26F/S	Sociology of Urban Growth
SOCB01Y	Methods in Social Research		

## Co-operative Programme in Arts Administration

Director: A.N. Sheps

Co-ordinator: D. Paul Schafer (284-3161)

Supervisor: John Mayo (284-3163)

The Co-operative Programme in Arts Administration is designed for students with an interest in both the arts and business or management. The programme combines academic study with practical work experience and typically requires up to five years to complete. Work placements are arranged with the management of galleries, museums, performing groups, arts service organizations and government cultural agencies. The curriculum combines specially designed courses in arts administration and policy, and studies in Commerce, Economics, Political Science and other administrative skills with a major and a minor in Drama, Fine Arts, or Music.

Arts Administration students learn from both courses and practical experience about

- the economic and financial problems of the arts
- government decision making and funding
- policy formulation and implementation, especially with reference to the arts
- the management and marketing of complex arts policies, programmes and enterprises

The Programme prepares students with a knowledge of both the arts and management and finance for permanent employment as arts administrators, or for further studies in Business Administration, Museum Studies, Drama, Music or Art History.

Graduates receive a four year B.A. with specialist certification in Arts Administration.

### Admission to the Programme

a From Grade 13/OAC programme (or equivalent): Students must apply to and be accepted by Scarborough College and the University of Toronto. On the University of Toronto Supplementary Application they must indicate their choice of Scarborough College and the Co-operative Programme in Arts Administration. They will then be asked to make a special application directly to the Office of Co-operative Programmes.

b From first-year University: Students accepted by the University and College may apply whether or not they have completed any part of the first year curriculum. The timing of their first work placement will depend on the particular university courses they have already completed.

Admissions are granted on the basis of applicants' academic performance, background in one or more of the arts, interest and potential ability in Arts Administration, and a letter of reference from a high school teacher or university instructor. Interviews may be required. Enrolment is limited and only a small number of applicants can be accepted each year. Decisions about admissions are normally made annually in May and early June.

### Fees:

Every student in a co-operative programme is required to pay additional fees as established by the University.

### The Specialist (Co-operative) Programme in Arts Administration

requires twenty courses (four years) of study and two work terms of four months each. Exceptionally, with the agreement of the Director and 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 a student's needs and abilities but generally students will serve in the administration or management of galleries, museums, concert halls, theatres, broadcasting organizations, government, private or voluntary cultural agencies or offices at the municipal, provincial or federal levels, performing groups, studios and studio co-operatives, arts service organizations, university cultural projects, and public relations offices of corporations which support the arts.

Performance on work terms will be evaluated by both employer and 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 2.5
- receive a satisfactory evaluation for work term performance and work term reports
- complete a full-course of study (at least two full course equivalents and normally 2.5) during each study term

### NOTES:

- 1 EACH COURSE MAY BE COUNTED ONLY ONCE IN SATISFYING WORK PLACEMENT AND PROGRAMME REQUIREMENTS.
- 2 IT IS THE STUDENTS' INDIVIDUAL RESPONSIBILITY TO ENSURE THAT THEY HAVE COMPLETED THE CORRECT COURSES TO MAKE THEM ELIGIBLE FOR EACH WORK TERM AND THAT THEY HAVE CORRECTLY 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:

- three full-course equivalents from the major field
- one full-course equivalent from the minor field
- COMA01Y (Financial Accounting)
- ECOA01Y (Introduction to Economics)
- JCSB27Y (Organizational Behaviour) and
- HUMB90Y (Introduction to Arts Administration)

Normally, students return to their studies after each work term (and must be registered in courses after the completion of their last work term). They register in HUMD30Y (Senior Seminar on Arts Administration) after the completion of at least one work term.

All students must complete the Administrative field (eight full-course equivalents, Section A, below), a major field (six full-course equivalents) in one of Drama, Fine Art History, Fine Art Studio, or Music (Section B, below), and a minor field (three full-course equivalents), different from the major, in one of Drama, Fine Art History, Fine Art Studio, or Music (Section C, below). They must select their major and minor fields upon registering in the Programme.

The first year of study should consist of two courses from the major field, one course from the minor field, and at least one of COMA01Y and ECOA01Y.

It is strongly recommended that the students take a French or a foreign

language course.

Careful attention should be paid to the prerequisites for various advanced courses in the Arts Fields.

Each student's curriculum requires the annual approval of the Supervisor.

### The course requirements are as follows:

Twenty full-course equivalents, seventeen of which must be selected as follows: eight full-course equivalents from Section A, six full-course equivalents from Section B, three full-course equivalents from Section C.

### A Administrative Field of Study

a. Required:

COMA01Y	Financial Accounting
ECOA01Y	Introduction to Economics
ECOB35F/S	Public Decision Making
HUMB90Y	Introduction to Arts Administration
HUMD30Y	Senior Seminar in Arts Administration
JCSB27Y*	Organizational Behaviour
b. Two of:	
POLB53F/S	Public Policies in Canada
POLB61F/S	Canadian Public Administration: Institutions and Processes
POLB62F/S	Public Policy-Making
POLC64F/S	Comparative Public Administration

### plus

1.5 full-course equivalents from any of ECOB03, ECOB07, CSCA04F/S, CSCA56\*, COM, JCE, POLB53, POLB61-64, POLC60-64. (These include courses in micro and macro economics, computer application, public policy, public administration, marketing and personnel management, corporate and organizational interests, and decision-making.)

\* Prerequisite waived for Arts Administration Co-operative students

### B Major Field

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 105)

and



one full-course equivalent from the courses listed under the Major Programme in Drama, Group B (page 105)

#### II Fine Art History

Required:

Five full-course equivalents in art history, one from each of the following areas:

Classical  
Medieval  
Renaissance  
Baroque

Modern (1750 to the present)

and

One additional full-course equivalent in art history at the C-level

See pages 124-128 for Fine Art History courses.

#### III Fine Art Studio

Required:

FARA90Y Foundation Studies in Studio  
FARB70F/S Introductory Drawing  
FARB72F/S Introduction to Printmaking  
FARB74F/S Intermediate Drawing  
FARB75Y Introduction to Painting

and

2.5 additional full-course equivalents in Fine Art Studio of which one must be at C-level. (see pages 128-131)

#### IV Music

Required:

MUSA10F Introduction to Music I  
MUSB17F/S Materials of Music I  
MUSB30F/S Introduction to Music: History and Literature  
MUSC04F/S Materials of Music II

and

4 additional full-course equivalents from Music

#### C Minor Field

Three full-course equivalents from one of the following fields which must be different from the major field.

#### I Drama

Required:

Three of:

DRAB01Y An Introduction to the Practical Elements of Theatre  
DRAB03Y The History of Theatre I  
DRAB04Y The History of Theatre II  
DRAB06Y Canadian Drama  
ENGB11Y Varieties of Drama

#### II Fine Art History

Required:

FARA10F/S Ancient Art and Architecture  
FARA11F/S Medieval Art  
FARA12F/S Renaissance and Baroque Art  
FARA13F/S Modern Art: 1750 to the Present

and

1 additional full-course equivalent in Fine Art History at the B-level. (see pages 124-128)

#### III Fine Art Studio

Required:

FARA90Y Foundation Studies in Studio  
or  
FARA70F/S Two and Three Dimensional Design

and

FARA71F/S Colour

plus

2 additional full-course equivalents in Fine Art Studio. (see pages 128-131)

#### IV Music

Required:

MUSA10F/S Introduction to Music I  
MUSB17F/S Materials of Music I  
MUSB30F/S Introduction to Music: History and Literature  
MUSC04F/S Materials of Music II

plus

1 additional full-course equivalent in Music. (see page 183)

\* Prerequisite waived for Arts Administration Co-operative Students.

#### HUMB90Y Introduction to Arts Administration

The theory and practice of arts administration in Canada and abroad.

The course will examine all aspects of arts administration, from the economic and financial problems of artists and arts organizations to the formulation and implementation of arts policy, including such topics as the marketing of artistic products; publicity, promotion and fund-raising; audience development; management of facilities; corporate support; the granting system; and municipal, provincial and federal responsibility for arts policy. The teaching method will include lectures, course papers and occasional guest speakers.

Session: Winter Day  
P. Schafer

#### HUMD30Y Senior Seminar on Arts Administration

An examination of key problems and issues in arts administration.

Capitalizing on the practical experience students have had in the field, this seminar will analyze such basic problems as the tension between the arts and administration; board management relations; union negotiations; planning; the politics of art; censorship; and future directions in Canadian and international arts development. Students will be expected to present comprehensive papers on these

topics for discussion and evaluation.

Enrolment is limited to students who have completed at least one work term in the Specialist Co-operative Programme in Arts Administration.

Session: Winter Day

P. Schafer

## Co-operative Programme in Computer Science and Physics

Supervisor: J. King (284-3318)

Co-ordinator: G. Cupit (284-3352)

Director: A.N. Sheps (284-3250)

The Co-operative Programme in Computer Science and Physics is a work-study programme which combines academic studies in computer science, mathematics and physics with work placements in public and private enterprises. The Programme alternates study during the regular academic term (September to May) with work terms during the summer term (May to August).

The Programme prepares students for permanent employment with government and business enterprises concerned with research and technology as well as for graduate study in Computer Science. Graduates receive a four-year B.Sc. with a Specialist certification in Computer Science and Physics.

#### Admission to the Programme

a. From Grade 13/OAC programme (or equivalent): Students must apply to and be accepted by Scarborough College and the University of Toronto. On the University of Toronto Supplementary Application form they must indicate their choice of Scarborough College and the Co-operative Programme in Computer Science and Physics. They will then be asked to make a special application directly to the Office of Co-operative Programmes.

b. From First-year University: Students accepted by the University and College may apply whether or not they have completed the first year curriculum. The timing of their work placement will depend upon the particular university courses they have already completed.

Admissions are granted on the basis of the applicants' academic performance, background in relevant subjects, and a letter of reference from a high school teacher or university instructor. An interview may be required. Enrolment is

limited and only a small number of applicants can be accepted each year. Decisions about admissions are normally made annually in May and early June.

Fees: Every student in a co-operative programme is required to pay additional fees as established by the University.

#### The Specialist (Co-operative) Programme in Computer Science and Physics

This programme requires twenty courses (four years) of study and two work terms of four months each. Exceptionally, with the agreement of the Director and Co-ordinator, a third work term may be allowed. Students are eligible for their first work term after their first two years of study. Work placements are arranged by the Office of Co-operative Programmes but must be won by students in competition with all applicants for the position.

Performance on work terms will be evaluated by both employer and 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 a work term, and to receive specialist certification upon graduation a student must

- maintain a cumulative grade point average of 2.5
- receive a satisfactory evaluation for work term performance and work term reports
- be registered as a full-time student during study terms

There are 16 courses required for the Programme. Note that courses need not be taken in exactly the indicated order, but, if an alternative ordering is adopted, care must be taken to ensure that prerequisites are satisfied and other conflicts avoided.

EACH STUDENT'S PROGRAMME  
REQUIRES THE ANNUAL APPROVAL OF THE SUPERVISOR.

First Year: CSCA58F, CSCA68S  
MATA04Y, MATA26Y or  
MATA55Y  
PHYA03Y  
Second Year: CSCB38F, CSCB58F,  
CSCB28S, CCCC24S  
MATB41F and MATB42S  
or MATB05Y  
PHYB03F, PHYB01S,  
PHYB08H  
Third Year: CCCC78F, CCCC50S,  
CCCC85S  
MATC51F, MATC56S  
PHYB04F, PHYB17S, PHYB19S



Fourth Year CSCC51F, CSCC64S  
THREE OF: PHYC04F, C05H, C07F, C08S, C09S  
TWO OF: CSCC54F, 372, 418, 428, 438, 448, 458, 468, 484, 488

Note that only CSCC54 is available at Scarborough; the remaining courses must be balloted for and completed at the St. George Campus. Consult the Department of Computer Science Undergraduate Student Handbook.

**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).

## Co-operative Programme in International Development Studies

*Director:* A.N. Sheps

*Co-ordinator:* D. Paul Schafer (284-3161)

*Supervisor:* Rorke Bryan (284-3115)

The Co-operative Programme in International Development is intended for students with an interest in international development, in geography, ecology and economics, and in the relations of Canada with the Third World. The Programme combines academic study in the social and ecological sciences with practical work experience in a Third World country, and typically requires up to five years to complete. An eight to twelve month work placement, usually with a Canadian-sponsored development project or agency abroad, is a central part of the programme. One of the distinctive features of the curriculum is the integration of political, economic and social development studies with courses in ecological and physical resource management. International Development Studies students learn through both studies and practical experience about:

- development economics and social and political change in the Third World
- international relations
- environmental sciences, especially the management of natural resources in developing countries
- the geography, culture, language and history of the area in which they are interested.

The Programme prepares students for employment with Canadian and international governmental and non-governmental development agencies and projects. It also provides background for further studies in environmental geography, economics and political science.

Graduates receive a four-year B.A. or B.Sc. with specialist certification in International Development Studies.

#### Admission to the Programme

**a.** From Grade 13/OAC programme (or equivalent): Students must apply to and be accepted by Scarborough College and the University of Toronto and must indicate their interest in the International Development Studies Programme on the University of Toronto Supplementary Application. They will then be asked to make a special application directly to the Office of Co-operative Programmes.

**b.** From first-year university: Students accepted by the University and College may apply whether or not they have completed any part of the first year curriculum. The timing of their work placement will depend upon the particular university courses they have already completed.

Admissions are granted on the basis of the applicants' academic performance, background in relevant subjects, verbal skills, interest and potential ability in international development studies and work, and a letter of reference from a high school teacher or university instructor. Enrolment is limited and interviews are usually required. Admissions decisions are normally made from late May until early July.

**Fees:** Every student in a co-operative programme is required to pay additional fees as established by the University.

#### The Specialist (Co-operative) Programme in International Development Studies

This programme requires twenty courses (four years) of study and a work term of approximately eight to twelve months duration. The work term will normally begin no sooner than the end of the third year and no later than January of the fourth year of the Programme.

Work placements are arranged by the Office of Co-operative Programmes but must be won by students in competition with all applicants for the positions. Students may be responsible for financing part of the living expenses associated with placements. The location of the placements will vary according to each student's disciplinary and regional preferences and abilities, the availability of positions, and the practicability and safety of development work. Generally, students will serve with the administration or management of research, development and aid projects of Canadian or local universities, scholars, agencies and organizations in a developing country or, in some cases, with the Canadian offices of government or non-government development agencies.

The objective of the work placement is to provide students with experience and appreciation of the practical difficulties of development work and the flexibility required in the application of theoretical concepts. Before the work term students must, in consultation with the Programme Supervisor, develop a proposal for a research subject. A critical or analytical paper on the research subject and if possible based on the work placement experience is then written during the final year in the Programme after students return from their placements. Performance on placements will be evaluated by the employer, the Co-ordinator and the Supervisor. Shortly after their return (typically in September or October of the final year) students must submit a brief evaluation of their placement to the Programme's Supervisor.

#### 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 f.c.e.

After the work term students return to their studies and enroll in IDSD01Y (International Development Studies: Advanced Seminar) and such other courses as are necessary to complete their degrees.

To maintain standing in the Programme and to receive specialist certification upon graduation, a student must

- maintain a cumulative grade point average of 2.5
- receive satisfactory evaluations for work placement performance and the research paper
- be registered as a full-time student during study terms

All students must complete

- a common core programme (at least nine full-course equivalents) in resource management sciences and development economics and politics (Section A, below)
- an advanced option (at least three full-course equivalents) in either political economy or ecological management (Section B, below)
- a regional language and culture option (Section C, below)
- IDSD01Y, an advanced seminar related to their work placement experience
- other elective courses (Section D, below)

#### NOTES:

1. EACH COURSE MAY BE COUNTED ONLY ONCE IN SATISFYING WORK PLACEMENT AND PROGRAMME REQUIREMENTS.
2. IT IS THE STUDENTS' INDIVIDUAL RESPONSIBILITY TO ENSURE THAT THEY HAVE COMPLETED THE CORRECT COURSES TO MAKE THEM ELIGIBLE FOR THE WORK TERM AND THAT THEY HAVE CORRECTLY COMPLETED PROGRAMME AND DEGREE REQUIREMENTS FOR GRADUATION.

In the first two years of study students must complete as much of the common core programme and of language studies as possible. The core programme contains two courses specially designed for International Development students: IDSB01Y: International Development Studies, Political Economy (page 102); and IDSB02Y: International Development Studies: Physical and Ecological Resource Management (page 102). 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 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:**

IDS801Y	International Development Studies: Political Economy
IDS802Y	International Development Studies: Physical and Ecological Resource Management
ECOA01Y	Introduction to Economics
BIOB14F/S	Environmental Biology
POLB80Y	International Relations
One F.C.E. in Forestry	(courses to be announced - St. George)
ANTC10F/S	Complex Societies: Anthropological Perspectives on Development
*GGR206H	Introduction to Hydrology
GGRC27Y	Soil Management and Conservation

**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**

ECOB03Y	Price Theory
and at least two 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

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
GGRB24Y	Environmental Pollution
GGRC28Y	The Hydrology of Surface and Subsurface Waters
GGRC32F/S	Research Seminar in Soil Management

*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 less developed 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 Programme Supervisor. Some approved courses for two regions are listed below. STUDENTS INTERESTED IN OTHER REGIONS AND LANGUAGES SHOULD CONSULT THE PROGRAMME SUPERVISOR 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
*POL442H	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	
FREA09Y	Practical French I
FREA10Y	Language Practice I
FREA17F/S	Intermediate Conversation I
FREB10Y	Language Practice II
FREB17F/S	Intermediate Conversation II
FREB19Y	Practical French II
*NEW280Y	Introductory Swahili
*NEW380Y	Intermediate Swahili

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

**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:

COMA01Y	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 Programme Supervisor and the agreement of the host university, be taken for programme credit.

**IDSB01Y International Development Studies: Political Economy**

Introduces students to major development problems, the principal social, economic and political factors that condition these and the impact on them of various development strategies pursued in a sample of third-world countries. The course is composed of five sections: the evolution and meaning of the term "third world"; the evolution of the 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**

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

**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  
R. Bryan

**NOTE:**

FOR courses: these courses are offered by the Faculty of Forestry. The Calendar of that Faculty should be consulted for complete course descriptions. For International Development Studies students the prerequisites for FOR456H are IDSB02Y and GGRB29Y. FOR455H has no prerequisites but enrolment is limited and students should apply early. FOR455H is offered in alternate years only.

GGR courses: The normal prerequisites in GGR B-level courses may be waived by permission of the instructor for IDS students. Students in the Ecological Management stream who plan to graduate with a Bachelor of Science degree should make sure that their course selection satisfies the B.Sc. degree requirements.

**Development Studies****College Programme in Development Studies**

Supervisor: 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  
\*ECOA01Y Introduction to Economics  
\*ECOB03Y Price Theory  
\*ECOB07Y Macroeconomic Theory and Policy

\*ECOB11F/S Quantitative Methods in Economics  
\*GGRB03Y Climatology  
GGRB19Y General Geomorphology  
GGRB24Y Environmental Pollution

\*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  
\*GGRC32F Research Seminar in Soil Management  
\*GGRC33F Africa: Perspectives in Geography and Development  
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 College Programme in 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, ECOA01Y, GGRA05Y, SOCA01Y

*Second Year:*

ECOB03Y, GGRC27Y, SOCC35Y, POLB80Y, POLB91Y

*Third Year:*

ECOC66F, ECOC67S, SOCC17F, GGRB24Y, GGRB28S, 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:*

ECOA01Y, POLA01Y, SOCA01Y, ANTA01Y, GGRA05Y

*Second Year:*

ECOB03Y, POLB50Y, SOCC35Y, POLB91Y, IDSB02Y

*Third Year:*

ECOC66F, ECOC67S, SOCC17F, POLB80Y, GGRB28S

*Fourth Year:*

POLB70Y, ANTC10F, POLC87Y, POLD93F, POLD94S, GGRB31S, IDSB01Y

## Drama

*Discipline Representative:* K. Theil (284-3178)

The Drama courses at Scarborough College have been devised to serve both students who intend to specialize in Drama and Theatre studies and those who have a casual interest in the subject.

At present we offer two types of courses which complement each other: theoretical and practical. The theoretical courses are in the History of Theatre, in which the student becomes familiar with the development of the theatre from a non-literary point of view from its classical beginnings to the present day. These courses are augmented by courses in the dramatic literatures of several countries which are offered by members of the faculty who specialize in these areas.

Advanced students may choose an Independent Studies course or Directed Reading course, where they work individually under the supervision of their own tutors.

In the practical courses, the students become acquainted with all aspects of theatre production in studio situations, both as actors and technicians. The students study with faculty members and with professional artists and teachers. Participation in public productions at the College is encouraged.

### Drama students may like to refer to the following:

*Specialist Programme in the Arts:* Page 55  
*Specialist in Co-operative Programme in the Arts:* Page 94

### Specialist Programme in Drama

*Supervisor:* K. Theil (284-3178)

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 Art and Nature of Comedy

- DRAB06Y Canadian Drama
- DRAB10B Improvisational Theatre: Commedia dell'Arte
- DRAB12B Medieval and Early Tudor Drama: The Texts and Their Production
- DRAB13B The Victorian Theatre
- DRAB14A Greek Tragedy in Performance
- DRAB15A A History of Musical Theatre
- ENGB10Y Shakespeare
- ENGC33Y\* English Drama to 1642
- ENGDI5F\* Early Shakespeare
- ENGDI6S\* Problems in Later Shakespeare
- ENGDI7S Marlowe and Jonson
- ENGDI28F Drama in English Canada 1920-1970
- FREB29F/S\* French Drama of the Eighteenth Century
- FREB30F/S\* French Theatre of the Early Modern Period
- FREB31F/S\* Contemporary French Theatre: The Theatre and the Absurd
- FREB38F/S\* The Theatre of French Canada
- FREB39F/S\* Workshop in Modern French Theatre
- FREB41F/S\* French Classicism: The Theatre
- ITAC27F/S\* Modern Italian Theatre from Pirandello to the Present
- ITAC35F/S\* Italian Sixteenth Century Theatre
- ITAC41F/S\* Italian Eighteenth Century Theatre
- LITB15Y\* Dramatic Literature and Political Revolution
- LITB16F\* The Crisis of Contemporary Society in Modern Italian Drama

\* Students should check these courses for prerequisites

- 7 Three full-course equivalents chosen from the following (no more than one full-course equivalent may be chosen from DRAD20Y-DRAD28S).
  - DRAC02Y The Directors' Theatre
  - 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 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
- ANTB23Y Comparative Mythology
- 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
- HUMA11Y Greek and Roman Mythology
- HUMB70Y Introduction to the Cinema
- LINA01Y General Linguistics
- LINA04F/S Introduction to Language
- MUSA10F/S Introduction to Music
- MUSB17F/S Materials of Music I
- MUSB30S Introduction to Music History and Literature
- PHLB03F/S Philosophy and Art
- PSYA01Y Introduction to 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:* K. Theil (284-3178)

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 (and no more than one full course equivalent from DRAD20Y-DRAD28S) may be taken within the three-year degree.

#### 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 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 Canadian Drama
- DRAB10B Improvisational Theatre: Commedia dell'Arte
- DRAB12B Medieval and Early Tudor Drama: the Texts and their Production
- DRAB13B The Victorian Theatre
- DRAB14A Greek Tragedy in Performance
- DRAB15A A History of Musical Theatre
- DRAC02Y The Director's Theatre
- ENGB10Y Shakespeare
- ENGC33Y\* English Drama to 1642
- ENGC50Y\* Modern Drama
- ENGDI5F\* Early Shakespeare
- ENGDI6S\* Problems in Later Shakespeare

- ENGD17S Marlowe and Jonson  
 ENGD28F/S\* Drama in English Canada 1920-1970  
 FREB29F/S\* French Drama of the Eighteenth Century  
 FREB30F/S\* French Theatre of the Early Modern Period  
 FREB31F/S\* Contemporary French Theatre: the Theatre and the Absurd  
 FREB38F/S\* The Theatre of French Canada  
 FREB39F/S\* Workshop in Modern French Theatre  
 FREB41F/S\* French Classicism: The Theatre  
 HUMB70Y Introduction to Cinema  
 ITAC27F/S\* Modern Italian Theatre from Pirandello to the Present Day  
 ITAC35F/S\* Italian Sixteenth Century Theatre  
 ITAC41F/S\* Italian Eighteenth Century Theatre  
 LITB15Y\* Dramatic Literature and Political Revolution  
 LITB16F\* The Crisis of Contemporary Society in Modern Italian Drama

\* Students should check these courses for prerequisites.

\*\* Prerequisite: ten full-course equivalents

#### **DRAB01Y An Introduction to the Practical Elements of Theatre**

An introductory practical course, concentrating on the non-literary aspects of theatre.

In the workshops the student will study basic acting techniques (rudiments of voice, movement, script interpretation, building a character), and will also be introduced to such technical skills as lighting, sound, makeup, set construction and painting. In addition, the student will be expected to participate in at least one production per term. Three two-hour workshops per week, plus additional time as necessary for rehearsals and/or production meetings etc. Careful preparation for each of the workshops is essential.  
 Session: Winter Day  
 C. Smith, K. Pearl

#### **DRAB04Y The History of Theatre II**

A study of the history of the theatre in the nineteenth and twentieth centuries and study of the non-literary aspects of modern theatre in Europe and North America in the proper historical and socio-political context.

Major topics of concentration will deal with the European romantic theatre; the early theatre in North America;

melodrama; the advent of realism; the naturalistic theatre; the symbolist trends; the expressionistic theatre; the epic theatre; contemporary theatre. Another area of study will include ballet, opera, and so called "lesser" theatrical forms, i.e. music hall, vaudeville, burlesque theatre, circus. There will be two one-hour classes and a one-hour optional seminar per week.

The text will be Oscar Brockett: *History of Theatre*, Third Edition. Other texts will be announced in the spring.

Session: Winter Day  
 C. Smith

#### **DRAB12Y Medieval and Early Renaissance Theatre: The Texts and Their Production**

This course will study the varied forms of medieval and early renaissance drama. Texts studied will include liturgical plays of the 11th and 12th century, biblical pageant and cycle plays, the morality play, Tudor humanist texts, interludes, folk drama, and farce. The last part of the course will involve an examination of some of the early plays of the public theatres.

Students will study the evolution of staging practices, development of character types, and examine acting styles of the period. The practical part of the course will culminate in the production of one of the plays studied.

Session: Winter Day  
 K. Pearl

#### **DRAC01Y Intermediate Workshop in Theatre Performance**

This course is designed to enable advanced students to concentrate on problems related to the staging of plays in studio situations.

A portion of the course is devoted to work with TV-video tape equipment. A minimum of three hours weekly in formal groups, and additional time in rehearsal, will be devoted to advanced exercises in acting skills, scene work, and work on productions.

Prerequisite: DRAB01  
 Session: Winter Day  
 K. Pearl, C. Smith

#### **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 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  
 K. Theil

#### **DRAD01Y Advanced Workshop: Performance and Directing**

Detailed textual analysis, in-depth scene study, and elements of directing for the stage. The course will also include work on theatrical technique in areas such as period style, masks, improvisation, stage fighting, etc. Students are expected to work on group projects, as well as on specific assignments according to their individual area of interest.

Prerequisites: DRAB01Y, DRAC01Y  
 Session: Winter Day

#### **DRAD20-24Y**

#### **DRAD25H, C26H**

#### **DRAD27H, C28H Supervised Reading Courses**

This is an advanced reading course for drama students. The student wishing to take this course should consult with K. Theil, the Programme Supervisor, who will

arrange in co-operation with the student a reading list and set the specific requirements for the course.

The emphasis in this course will be on advanced individual projects exploring specific areas of the history of theatre, and/or dramatic literature. Proposals by students for specific projects will be assessed by the Supervisor in consultation with other members of faculty.

Prerequisite: One B-level full-course equivalent in Drama, and permission of instructor.  
 Session: Winter Day  
 K. Theil

#### **Courses Not Offered in 1988-89**

**DRAB03Y** The History of Theatre I

**DRAB05Y** The Art and Nature of Comedy

**DRAB06Y** Canadian Drama

**DRAB10B** Improvisational Theatre: The Commedia dell'Arte

**DRAB13A** The Victorian Theatre

**DRAB14A** Greek Tragedy in Performance

**DRAB15A** A History of Musical Theatre

**DRAC02Y** The Directors' Theatre

Prerequisite: DRAB03Y

Corequisite: DRAB04Y

Exclusion: (DRAB02Y)

## Economics

Assistant Chair: N. Gallini

The Economics curriculum offers a wide variety of theoretical and applied courses. The curriculum provides an excellent background for careers in business, government, and the professions. Many of the courses are not intended exclusively for specialists in the discipline but can be of value to students with very diverse interests.

There are certain courses that are central to the curriculum: the introductory course (ECOA01Y); the initial B-level courses - *Price Theory* (ECOB03Y) and *Macroeconomic Theory and Policy* (ECOB07Y); at least one course that provides a different perspective either on contemporary economic theory, or on ways of organizing economic activity - *Economic History* (ECOB81Y, ECOB82Y, ECOC83Y), the *Literature of Economics* (ECOC25F, ECOC26S), *Comparative Economic Systems* (ECOB68). A student who wants to pursue Economics in depth should consider seriously acquiring a background in

Accounting, Statistics, and Computer Science and, most important of all, Mathematics (especially Calculus, Probability Theory, and Linear Algebra).

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:* W. Milne

**NOTE:** Registration in this Programme is limited.

Students will be selected to enter the Second Year of the Programme, on the basis of GPA for those four courses taken to date in which the student's grades are highest (including ECOA01). Students wishing to register in the Programme at a later date may be admitted at the discretion of the supervisor.

*Supervisor:* The Supervisor of Studies in Economics.

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:

ECOA01Y  
MATA27Y or MATB05Y or MATB41F  
ECOB03Y  
ECOB07Y  
ECOB11F/S or (STAB52F and STAB57F/S)  
ECOB12S  
ECOC25F or ECOC26S or ECOD05S or ECOD07S  
ECOC11Y  
ECOC66F or ECOB68S or ECOB81Y or ECOB82Y or ECOC83Y  
ECOC13F  
ECOC14S

A D-level course in economics.

At least one course from the following introductory Humanities courses:

CLAA01Y, CLAB11H, CLAB30H, CLAB31H, CLAB32H, CLAB33H, DRAB03Y, DRAB04Y, DRAB06Y, ENGA08Y, ENGB07Y, ENGB08Y, ENGB10Y, ENGB11Y, ENGB14Y, ENGB15Y, ENGB20F, ENGB21S, ENGB25H, ENGB34H, FREB20Y, FREB24Y, FREB26Y, FREB29F, FREB36F, FREB37S, FREB49Y, GRHB01Y, GRHB02Y, GRHB03Y, HISA01Y, HISB02Y, HISB03Y, HISB04Y, HISB06Y, HISB07Y, HUMA01Y, HUMA11Y, ITAC12H, ITAC13H, ITAC22F, ITAC23S, ITAC27H, ITAC31Y, ITAC32H, ITAC33H, ITAC34H, ITAC35H, ITAC36H, ITAC40H, ITAC41H, ITAC43H, ITAC44H, ITAC45H, LITA01Y, MUSA10F, MUSA20S, MUSB14F/S, PHLA01Y, PHLB01F, PHLB03F, PHLB04S, PHLB05F, PHLCO5S. Where students are enrolled in Majors in both Economics and Commerce, the same course may be used to satisfy the distributional requirement, without counting against the regulation that only two courses used to satisfy programmes may overlap (see **Programme Requirements**, Regulations concerning Programmes of Study, item 2, earlier in the Calendar). Students are urged to take ECOA01Y, and either MATA27Y or MATA26Y or MATA55Y in their first year of full-time study (or equivalent). MATA27Y is adequate for satisfying the mathematics requirements of the Programme. However, students considering the possibility of graduate work in Economics are urged to take B-level Calculus as well, and to take Mathematical Statistics (STAB52F and STAB57S) instead of ECOB11F/S.

**NOTE:** Students taking MATA26Y or MATA55Y must complete additional courses in Mathematics in order to satisfy the Programme requirements (namely, MATB05Y or MATB41F). ECOB03Y, ECOB07Y and ECOB11F/S or (STAB52F and STAB57S) should normally be taken in the second year of full-time study.

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

#### Specialist Programme in Commerce and Economics

**NOTE:** Registration in this Programme is limited. Students will be selected to enter the Second Year of the Programme on the basis of GPA for those four courses taken to date in which the student's grades are highest (including ECOA01Y and COMA01Y).

Please refer to *Commerce and Economics*.

#### Specialist Programme in Economics and History

**NOTE:** Registration in this Programme will be limited. Students will be selected to enter the Second Year of the Programme on the basis of GPA for those four courses taken to date in which the student's grades are highest (including ECOA01Y). Students wishing to enter at a later date may be admitted at the discretion of the Supervisor. *Supervisor:* The Supervisor of Studies in Economics

*Requirements:* Thirteen and one half courses in a programme of at least twenty courses of which six and one half are in economics and seven are in history.

Required courses in economics:

ECOA01Y  
ECOB03Y  
ECOB07Y  
ECOB11F/S

Two full course equivalents, at least one of which must be in economic history, from the following courses in economic history or the history of economic thought - ECOC25F, ECOC26S, ECOB81Y, ECOB82Y, ECOC83Y, ECOD05S, ECOD07S

One additional full course equivalent in 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

**NOTE:** Registration in this Programme is limited.

Students will be selected to enter the Second Year of the Programme, on the basis of GPA for those four courses taken to date in which the student's grades are highest (including ECOA01Y). Students wishing to register at a later date may be admitted at the discretion of the Supervisor.

*Supervisor:* The Supervisor of Studies in Economics

This Programme is designed for students

considering the possibility of graduate work in mathematical economic theory. Students must complete at least fifteen full-course equivalents in Economics, Mathematics, Statistics, Computer Science and Humanities. The specific requirements are as follows:

ECOA01Y  
MATA26Y or MATA27Y or MATA55Y  
MATA04Y  
CSCA56F/S or CSCA58F  
ECOB03Y  
ECOB07Y  
ECOB13F  
(MATB41F and MATB42S and MATB43S) or MATB05Y  
MATB44F and MATB49S  
STAB52F and STAB57S  
ECOC13F and ECOC14S  
MATC51F  
MATC53Y  
JCEC72F  
JCEC73S

One and one-half other full-course equivalents in ECO or JCE. One course from among the Humanities options listed for the Specialist Programme.

Where students are enrolled in Majors in both Economics and Commerce, the same course may be used to satisfy the distributional requirement, without counting against the regulation that only two courses used to satisfy programmes may overlap (see **Programme Requirements**, Regulations concerning Programmes of Study, item 2, earlier in the Calendar). It is recommended but not required that students include in their programme an additional half-course in computer science and ECOC11Y.

#### Specialist Programme in Economics and Political Science

**NOTE:** Registration in this Programme is limited.

Students will be selected to enter the Second Year of the Programme on the basis of GPA for those four courses taken to date in which the student's grades are highest (including ECOA01). Students wishing to register in the Programme at a later date may be admitted at the discretion of the Supervisor.

*Supervisor:* The Supervisor of Studies in Economics. Six full-course equivalents are required in each of the two disciplines.\* The specific courses required are listed below. In addition, mention is made of courses in other disciplines that complement the Specialist Programme.



Required courses in Economics:

ECOA01Y  
ECOB03Y  
ECOB07Y  
ECOC31S, ECOC32F  
ECOC25F or ECOC26S or ECOD05S or  
ECOD07S  
ECOB35S or ECOC66F  
ECOB11F/S or (STAB52F and STAB57S)

Required courses in Political Science:

POLA01Y  
POLB50Y  
POLB70Y or POLC74Y

Three additional full-course equivalents from at least two of the five sub-fields listed below:

**A** Canadian Government, Public Administration - POLB53F/S, POLC52Y, POLC54F/S, POLC55Y

**B** Public Administration and Public Policy - POLB53F/S, POLB61F/S, POLB62F/S, POLC60F/S, POLC61F/S, POLC62F/S, POLC63S, POLC64F/S

**C** International Relations - POLB80Y, POLC82Y, POLC81S, POLC84Y

**D** Comparative Politics, Industrialized Countries - POLB86Y, POLB87Y, POLC85Y, POLC87Y, POLC88Y, POLC89Y,

**E** Comparative Politics, Developing Countries - POLB91Y, POLC95Y, POLC96Y, POLD93S, and POLD94S

Related (but not required) courses in other disciplines:

MATA26Y or MATA27Y, CSCA56F, COMA01Y

\*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

**NOTE:** Registration in this Programme is limited to an annual entry of 10 students. Students will be selected to enter the Second year of the Programme on the basis of GPA for those four courses taken to date in which the student's grades are highest (including ECOA01). Students wishing to enter the Programme at a later date may be admitted at the discretion of the supervisor.

**Supervisor:** The Supervisor of Studies in Economics

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:

ECOA01Y  
CSCA58F  
CSCA68S  
MATA26Y or MATA27Y or MATA55Y  
ECOB03Y  
ECOB07Y  
ECOB13S  
MATA04Y

STAB52F and STAB57S  
(MATB41F and MATB42S) or MATB05Y  
CSCB28S or CSCB68F

ECOC11Y  
ECOC13F  
ECOC14S

JCEC72F

One half-course from: CSCC34F, CSCC51S, CSCC78F, MATB43S, MATC53Y, STAC42F, STAC52F

One half-course from the D-level courses in Economics.

One course from among the Humanities options for the Specialist Programme. Where students are enrolled in Majors in both Economics and Commerce, the same course may be used to satisfy the distributional requirement, without counting against the regulation that only two courses used to satisfy programmes may overlap (see **Programme Requirements**, Regulations concerning Programmes of Study, item 2, earlier in the Calendar).

### Major Programme in Economics

**NOTE:** Registration in this Programme is limited.

Students will be selected to enter the Second Year of the Programme on the basis of GPA for those four courses taken to date in which the student's grades are highest (including ECOA01). Students wishing to register at a later date may be admitted at the discretion of the Supervisor.

**Supervisor:** The Supervisor of Studies in Economics.

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: ECOA01Y, ECOB03Y, ECOB07Y, ECOB11F/S or (STAB52F and STAB57S) and ECOB12F/S and one full-course equivalent chosen from the C-level courses in Economics. The Humanities course must be selected from

the options listed for the Specialist Programme. Where students are enrolled in Majors in both Economics and Commerce, the same course may be used to satisfy the distributional requirement, without counting against the regulation that only two courses used to satisfy programmes may overlap (see **Programme Requirements**, Regulations concerning Programmes of Study, item 2, earlier in the Calendar). It is recommended, but not required, that a student also include one course chosen from ECOC66F, ECOB68S, ECOB81Y, ECOB82Y, ECOC83Y.

**Note:** Students who have been admitted to the Programme prior to the summer of 1983 will not be required to take ECOB12.

### ECOA01Y Introduction to Economics

A study of economic theory and its application to contemporary Canadian economic problems. Problems discussed will include: unemployment, inflation, pollution, poverty, monopoly.

Session: Summer Evening, Winter Day, Winter Evening

### IDSB01Y Political Economy of International Development

Introduces students to major development problems, the principal social, economic, and political factors that condition these, and to the impact on them of various development strategies pursued in a sample of Third-World countries.

**NOTE:** This course counts no more than half full-course equivalent in Economics for any Economic programme.

Prerequisite: One course in either Economics or Political Science

Session: Winter Day

### ECOB03Y Price Theory

Intermediate level development of the principles of microeconomic theory. Initially the primary emphasis is on static partial equilibrium analysis, but general equilibrium analysis is developed later in the course. The topics covered are: consumer theory, theory of production, theory of the firm, theories of competition, monopoly and oligopoly, factor prices and welfare economics. Class size is limited to 80 per section.

Prerequisite: ECOA01

Session: Summer Evening, Winter Day, Winter Evening

### ECOB07Y Macroeconomic Theory and Policy

An exposition of macroeconomic theory with detailed discussion of the theory of output, employment and the price level, and of policy techniques for influencing and controlling the levels of these variables. There is some discussion of Canadian institutions and markets as well as of the policy experiences of Canada and other countries. Class size is limited to 80 per section.

Prerequisite: ECOA01

Session: Winter Day, Winter Evening

### ECOB11F/S Quantitative Methods in Economics: I

An introduction to probability and descriptive statistics. Topics to be covered will include: marginal and conditional probability, statistical independence, the Central Limit Theorem, confidence intervals and hypothesis testing, and some aspects of distribution theory. The theory in this course will be applied to economic problems. The format of the course will be lectures and tutorials. Limited Enrolment: 80 per section.

Exclusions: ANTC35(ANTB43); GGRB31; PSYB07; SOCB06; STAB52 **Note:** (STAB52 and STAB57) are counted as equivalent to ECOB11

Prerequisite: ECOA01

Session: Summer Evening, Winter Day (F), Winter Evening (S)

### ECOB12S Quantitative Methods in Economics: II

An introduction to statistics and regression analysis as used in economic analysis. Topics to be covered include: analysis of variance (ANOVA); the simple regression model, testing of hypotheses in the regression model, an introduction to multiple regression. This course will include a series of computer-oriented assignments to give the student familiarity with practical problems in regression analysis. Limited Enrolment: 80 per section.

Prerequisite: ECOB11 or GGRB13 or STAB52 and STAB57

Session: Summer Evening, Winter Day, Winter Evening

### ECOB13S Application of Mathematics to Economics

Calculus, linear algebra, and to some extent real analysis, will be used to prove some important propositions in economic theory. Some of the results will be extensions or refinements of ideas already discussed in ECOB03 and ECOB07 although the course also covers new ground. The



course is designed to give new insight into the performance of economic systems as well as to highlight the role of mathematics in economic theory - as an aid to precise thought and as a powerful tool for simplifying. Limited Enrolment: 60. Prerequisite: ECOA01; MATA27 or MATA55 or MATB41 or MATB05Y. Session: Winter Day.

### JEGB27F Location and Spatial Development

An examination of the use of competitive location theory in the analysis of regional economic growth and decline. Topics include Ricardian rents and spatial equilibrium, trade flows and spatial price equilibrium, geographical market areas and spatial pricing policies, the location of a firm with mobile resources, industry location in equilibrium, trade theory and regional specialization, and the regional growth theories of Borts-Stein and Myrdal. Two hours of lectures and one tutorial hour per week. Prerequisite: ECOA01. Session: Winter Day. J. Miron

### ECOB35F Public Decision Making

A study of decision making by governments from an economic perspective. The course begins by examining various rationales for public involvement in the economy and then examines a number of theories explaining the way decisions are actually made in the public sector. The course concludes with a number of case studies of Canadian policy making. Limited Enrolment: 60. Prerequisite: ECOA01. Session: Winter Day. M. Krashinsky

### ECOB68S Comparative Economic Systems

An introduction to alternative ways of organizing economic activities - allocating resources, distributing income, accumulating capital. Part of the time will be spent examining these alternatives from a theoretical perspective; the rest will be devoted to studies of particular economies, especially Canada, the Soviet Union and Yugoslavia. Prerequisite: ECOA01. Corequisite: ECOB03. Session: Winter Day.

### ECOB81Y North American Economic History

A survey of important themes in the economic history of Canada and the United States. A comparative approach is employed to develop such themes as the role of natural resource staple industries, and urbanization, and the relationship of the state to economic change in the two countries. Prerequisite: ECOA01. Session: Winter Day. I. Parker

### ECOB82Y European Economic History

A study of the emergence of industrial society in Europe since the Middle Ages with some emphasis on the comparative experience of Britain and other European countries and the growth of the nineteenth century world economy. Particular attention is paid to technical change, the expansion of markets, population growth, the economic effects of public policy, and consequent changes in income levels and the structure of the economy. Prerequisite: ECOA01. Session: Winter Day.

### JCEC02Y Corporation Finance

An examination of the financial environment within which Canadian companies operate. The aim is to cover the main principles of financial management and to discover the social and legal significance of the modern corporation. Limited Enrolment: 60. Prerequisites: COMB01; ECOB03; ECOB11. ECOB12 is strongly recommended. Session: Winter Day, Winter Evening. K. Ho

### ECOC11Y Econometrics

A formal development of multiple regression analysis using matrix algebra. Application of statistical techniques in testing economic theory. The implication and treatment of special statistical problems that arise in estimating economic relationships. A research paper is required. Exclusion: ECO327Y. Prerequisite: ECOB03, ECOB07, ECOB12, MATA04Y or MATB41 or permission of instructor. Session: Winter Day. W. Milne

### ECOC13F Advanced Microeconomic Theory

An upper level extension of the ideas studied in ECOB03. The course offers a more sophisticated treatment of such topics as equilibrium, welfare economics, theories of the firm, linear programming, income distribution, risk and uncertainty. Prerequisites: ECOB03; ECOB11; MATA27 or MATA55. Session: Winter Day. D. Campbell

### ECOC14S Advanced Macroeconomic Theory

Post-Keynesian developments in macroeconomic (including monetary) theory; empirical testing of Keynesian and post-Keynesian macroeconomic theories, and the uses of macroeconomic models. Prerequisites: ECOB03; ECOB07; ECOB11; MATA27 or MATA55. Session: Winter Day. M. Devereux

### ECOC25F History of Economics I: Adam Smith to Karl Marx

A study of the literature of classical Political Economy, especially the work of Adam Smith, Malthus, Ricardo, J.S. Mill, and Marx. Exclusion: (ECOB20). Prerequisite: ECOB03 or ECOB07. Corequisite: ECOB03 or ECOB07 (which ever is not used to satisfy the prerequisite). Session: Winter Day. I. Parker

### ECOC31S Economics of the Public Sector: Taxation

A course concerned with the revenue side of government finance. In particular, the course deals with existing tax structures, in Canada and elsewhere, and with criteria for tax design. Some attention will also be given to the use of government fiscal policy to regulate the level of economic activity. Exclusion: (ECOB31). Prerequisite: ECOB03. Session: Winter Day. M. Krashinsky

### ECOC32F Economics of the Public Sector: Expenditures

A study of resource allocation in relation to the public sector, with emphasis on decision criteria for public expenditures. The distinction between public and private goods is central to the course. Special topics discussed include: pollution, the

economics of education, fiscal federalism, urban problems. Exclusion: (ECOB32). Prerequisite: ECOB03. Session: Winter Day. M. Krashinsky

### ECOC37S Law and Economics

A study of laws and legal institutions from an economic perspective. Includes the development of a positive theory of the law suggesting that laws frequently evolve so as to maximize economic efficiency. The efficiency of various legal principles is examined. Topics covered are drawn from: externalities, property rights, environmental law, contracts, torts, product liability and consumer protection, criminal law, and procedure. Limited Enrolment: 60. Exclusion: (ECOB37). Prerequisite: ECOB03 (ECOB03 will be accepted as a corequisite when ECOC37/ECOB37 is taught in the second term of the winter session). Session: Winter Day. M. Krashinsky

### ECOC41F/S Industrial Organization

The economics of the firm in a market environment. The aim is to study business behaviour and market performance as influenced by concentration, entry barriers, product differentiation and diversification. Limited Enrolment: 60. Exclusion: (ECOB41). Prerequisite: ECOB03. Session: Winter Day. N. Gallini

### ECOC48S Monetary Economics

This course examines monetary theory and institutions focusing on the relationship among money, prices and economic activity. Topics include: money supply definitions and relevance, a detailed examination of the demand for and supply of money, the term structure of interest rates, targets and instruments of monetary policy, the use of rules versus discretionary monetary policy. Limited enrolment: 60. Exclusion: ECO348H. Prerequisite: ECOB07. Session: Winter Day. W. Milne

**ECOC51S Labour Economics**

The application of the basic tools of labour economics to various policy issues such as: fertility and family formation; labour force participation; hours of work, overtime and moonlighting; mobility and migration; the effect of market structures on the wage-employment decision; the role of wage structures; causes, types and incidence of unemployment; wage-price guidelines and the wage-price-employment trade-offs; the impact of institutional constraints such as unions, feather-bedding, minimum wages, wage parity, sex discrimination, occupational licensing, unemployment insurance, wage subsidies and negative income tax plans. Exclusion: (ECOB51) Prerequisite: ECOB03 Session: Winter Day

**JCEC54F/S Industrial Relations**

A study of industrial relations in the Canadian setting. Topics include: industrial relations theory and systems; history, philosophy and structure of unionism, labour law, and collective bargaining. Limited enrolment: 80. Exclusion: (JCEB54) Prerequisite: Completion of at least ten courses including ECOA01. Session: Winter Evening

**ECOC61S International Economics: Finance**

Macroeconomic theories of the balance of payments and the exchange rate in a small open economy. Recent theories of exchange-rate determination in a world of flexible exchange rates; the forward exchange market. The international monetary system: fixed "versus" flexible exchange rates; international capital movements, eurocurrency markets and their implications for monetary policy. Exclusion: (ECOB61) Prerequisite: ECOB07 Session: Winter Day S. Howson

**ECOC62F International Economics: Trade Theory**

An outline of the standard theories of international trade: analysis of the factors on which a country's trade with other countries is based and the welfare implications of this trade; and empirical tests of these theories. Economic growth and international trade. The instruments and effects of trade policy (tariffs, quotas,

nontariff barriers); the theory of customs unions.

Exclusion: (ECOB62)  
Prerequisite: ECOB03  
Session: Winter Day  
S. Howson

**ECOC66F Economic Development**

An introduction to the processes of growth and development in less developed countries and regions. Topics include the role of international trade and investment in developing countries, the problems of population growth and unemployment, inequalities in income distribution, the roles of agriculture and industry. Limited Enrolment: 60. Exclusion: (ECOB66) Prerequisite: ECOB03 Session: Winter Day S. Horton

**ECOC67S Development Policy**

A consideration of how government policy can affect the pace and nature of development in Third World countries. Emphasis will be on the most important policies including those relating to population growth, international trade and investment, public finance, education, and technology. Exclusion: (ECOB67) Prerequisite: ECOC66(ECOB66) Session: Winter Day

**JCEC72F Analysis for Decision Making I**

A course in the analytical formulation and solution of decision problems. Linear decision models, and especially linear programming, are the tools primarily discussed and employed. Limited Enrolment: 80. Exclusion: (JCEB72) Prerequisite: CSCA56 or CSCA58, MATA22 or MATA26 or MATA27 or MATA04 or MATA55, ECOB03 Corequisite: ECOB11 or GGRB31 or STAB57 Session: Winter Day R. Wolfe

**JCEC73S Analysis for Decision Making II**

A continuation of JCEC72(JCEB72) with less emphasis on deterministic, linear models. Course content will be determined by the instructor and will usually include several of the following: decision-making under uncertainty, inventory theory, simulation, non-linear programming, allocation

of risk-bearing. Limited Enrolment: 80. Exclusion: (JCEB73) Prerequisite: JCEC72(JCEB72) Session: Winter Day R. Wolfe

**ECOD01F Topics in Advanced Economic Theory**

These courses are devoted to some aspect of economic theory not usually covered at the undergraduate level, or to recent work extending or revising received theory, or to alternatives to orthodox economic theory.

A detailed list of courses and instructors will be available to students early in the summer. Exclusion: (ECOC15 and ECOC16) Prerequisite: ECOC13 and ECOC14 and permission of instructor. Session: Winter Day

**ECOD02S Topics in Advanced Economic Theory**

This course is devoted to some aspect of economic theory not usually covered at the undergraduate level, or to recent work extending or revising received theory, or to alternatives to orthodox economic theory.

Details will be available to students early in the summer. Exclusion: (ECOC15 and ECOC16) Prerequisite: ECOC13 or ECOC14 and permission of instructor. Session: Winter Day

**ECOD07S The Economics of Karl Marx**

A study of Marx's approach to economic theory and economic history. Discussion will centre on Marx's theory of capitalism and will emphasize the theory of exploitation and the process of accumulation. Exclusion: (ECOC07) Prerequisites: ECOB03, ECOB07, ECOC25(ECOB20) or ECOC26(ECOB21) Session: Winter Day

**ECOD11F and ECOD12S Supervised Reading**

For upper-level students whose interests are not covered in one of the other courses normally offered. Students are expected to design the course with the guidance of a staff member interested in the area of study being proposed. The courses will normally be made available only to students whose performance in Economics courses has been well above average.

Students interested in supervised reading courses are urged to contact faculty members well in advance, as not all faculty will be available for these courses in any single term.

Exclusion: (ECOC11 and ECOC12) Prerequisite: Permission of instructor Session: Summer Day, Summer Evening, Winter Day, Winter Evening

**ECOD13F Workshop in Economics**

Workshops deal with detailed problem areas in economics. In past years these have included such subjects as natural resources, technical change, international investment, multinational firms, economic discrimination, or extensions of applied topics covered at the B-level.

Details will be available to students early in the summer. Exclusion: (ECOC17; ECOC18; ECOC19; ECOC20) Prerequisites: ECOB03; ECOB07; MATA26 or MATA55; and permission of instructor Session: Winter Day

**ECOD14S Workshop in Economics**

The workshop deal with detailed problem areas in economics. In past years these have included such subjects as natural resources, technical change, international investment, multinational firms, economic discrimination, or extensions of applied topics covered at the B-level.

A detailed list of the courses and instructors will be available to students early in the summer. Exclusion: (ECOC17; ECOC18; ECOC19; ECOC20) Prerequisites: ECOB03; ECOB07; MATA26 or MATA55; and permission of instructor Session: Winter Day

**JCED75F/S Investments**

This course reviews major investment problems, in particular the factors affecting term structure and risk structure of yields on financial claims. Limited enrolment: 60. Exclusion: (JCEC75) Prerequisite: JCEC02 Session: Winter Day K. Ho

## Courses Not Offered in 1988-89

- ECOC26S** History of Economics II: Origins of Modern Economic Theory  
*Exclusion:* (ECOB21)  
*Prerequisite:* ECOB03 or ECOB07  
*Corequisite:* ECOB03 or ECOB07 (whichever is not used to satisfy the prerequisite).
- ECOC45F** Poverty and Income Distribution  
*Exclusion:* (ECOB45)  
*Prerequisite:* ECOB03
- ECOC83Y** Economic History 1914-1971  
*Exclusion:* (ECOB83)  
*Prerequisites:* ECOA01 and 3 B-level courses in Economics or History
- ECOD05S** The Economics of J.M. Keynes  
*Exclusion:* (ECOC05)  
*Prerequisites:* ECOB03, ECOB07, ECOC25(ECOB20) or ECOC26(ECOC21)
- ECOD15F** Workshops in Economics  
*Exclusion:* (ECOC17; ECOC18; ECOC19; ECOC20)  
*Prerequisite:* ECOB03; ECOB07; MATA26 or MATA55; and permission of instructor
- ECOD17F**  
**ECOD18S**  
**ECOD19F**  
**ECOD20S** Workshops in Economics  
*Exclusion:* (ECOC21, ECOC22, ECOC23, ECOC24)  
*Prerequisite:* ECOB03; ECOB07; MATA26 or MATA27 or MATA55; For ECOD19 (ECOC23) and ECOD20 (ECOC24), ECOC13 or ECOC14 will be a prerequisite, and permission of instructor
- JCED70S** Advanced Corporate Finance  
*Exclusion:* (JCEC70)  
*Prerequisite:* JCEC02

## English

*Discipline Representative:* M. Cuddy-Keane (284-3175)

The study of English encompasses English, Canadian, and American literatures as well as other literatures written in the English language. The curriculum offers a broad range of courses designed to enable students to gain a comprehensive knowledge of a rich literary tradition. In addition, sequences of courses are available (in historical periods, in specific genres, in national literatures, and in particular authors) that allow students to pursue individual interests at greater depth. In all courses, emphasis is placed on close responsive reading, critical thinking, and clarity of expression.

At the A-level, the curriculum offers two kinds of course. A01 and A02 deal with works from a broad historical spectrum, and provide a basic grounding for further studies in English: they are designed particularly, but not exclusively, for students planning a Specialist or Major Programme in English. For students not intending to pursue an English Programme, A08 provides a good alternative introduction to English at the university level through the study of Twentieth-Century literature. At the 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:* M. Cuddy-Keane (284-3175)  
Ten full-course equivalents in English and two in other disciplines in the Division of Humanities are required. They should be selected as follows.

- 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:
 

CLAB11H	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
HUMA11Y	Greek and Roman Mythology
LINA01Y	General Linguistics
LITB01Y	Formation and Transformation of Literary Tradition
LITB60Y	Creative Writing I

## Major Programme in English

*Supervisor:* M. Cuddy-Keane (284-3175)  
Seven full-course equivalents in English are required. They should be selected as follows:

- 1 ENGA01Y English Literature: Practical Criticism and Interpretation
- 2 ENGA02Y English Literature: Historical Survey
- 3 Four additional full-course equivalents in English at the A, B, or C-level, one of which must be at the C-level. These four courses must include:
  - a) one full-course equivalent in periods before 1800 (See List A)
  - b) one full-course equivalent in periods after 1800 (See List B)

- 4 One full-course equivalent in English at the D-level

See also the Specialist Programme in **Language and Literature.**

## LIST A:

*Pre-1800 courses:*

- |           |  |
|-----------|--|
| ENGB01Y   | Old English Language and Literature                    |
| 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  |
| 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                                       |
| ENGB34F/S | The Short Story  |
| ENGC02Y   | Canadian Fiction in English                                    |
| ENGC07F/S | Canadian Poetry in English                                     |
| ENGC12Y   | Major American Authors   |
| ENGC42Y   | The Romantics  |
| ENGC43Y   | Victorian Poetry   |
| ENGC46Y   | Fiction 1832-1900  |
| ENGC50Y   | Modern Drama   |
| ENGC51Y   | Modern Poetry  |
| 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

An introduction to methods of literary criticism through the close reading of texts representative of various literary genres, and through frequent exercises in analytical writing.

Why do we study literature rather than just read it? What is involved in analyzing a poem, a play, a novel, or an essay? Do different kinds of literature require different kinds of analysis? How do we use critical terms and concepts such as

metaphor, narrative perspective, and tragicomedy? This course will consider such questions, mainly through the close analysis of literary texts. Frequent written assignments should stimulate students to think critically, to formulate their ideas coherently, and to express themselves clearly and persuasively. The texts are *The Norton Anthology of English Literature* (Fifth Edition), Vols. 1 and 2, *Hamlet*, *Pride and Prejudice*, *Great Expectations*, and additional texts to be specified by the instructors.

Teaching will involve a mixture of lecture and discussion, with emphasis on active class participation. All sections will require the writing of essays (a total of at least 7500 words).

Session: Winter Day, Summer Evening  
Course Co-ordinator: J.L. Matus

#### ENGA02Y English Literature: Historical Survey

A survey of English literature from the Middle Ages to the twentieth century, in the context of relevant intellectual, aesthetic, social, and political developments. Normally taken in conjunction with ENGA01Y.

This course provides a general introduction to the main periods of English literary history -- the Medieval, Renaissance, Restoration, Eighteenth-Century, Romantic, Victorian, and Modern periods. Reading will be extensive, involving selections from at least twenty major writers. The texts are *The Norton Anthology of English Literature* (Fifth Edition), Vols. 1 and 2; Fielding, *Joseph Andrews*; Austen, *Pride and Prejudice*; and Dickens, *Great Expectations*; further texts will be announced.

This is a lecture and examination course. Students are advised to combine this course with English A01Y in order to balance their programme by means of small group discussions, close textual study, and practice in essay writing.

Session: Winter Day  
E. P. Vicari, M. Cuddy-Keane

#### ENGA08Y Twentieth-Century Literature

An introduction to critical reading and writing through a selection of modern literature.

This course will explore literature of the twentieth century, through the study of short stories and novels by such writers as Conrad, Lawrence, Forster, Hemingway,

Fitzgerald and others; plays by Ibsen, Chekhov, Miller, Pinter and others; and a selection of poetry. Essays based on the reading will provide practice in university-level writing and training in methods of analysis and exposition.

Note: this course is intended primarily as an alternative to ENGA01Y, and therefore may be of particular interest to students who do not expect to take a Specialist or Major Programme in English.

Session: Winter Day  
M. S. Tait

#### ENGB10Y Shakespeare

A study of at least eleven plays by Shakespeare, both as unique works of art and in the larger context of his work as a Renaissance dramatist. Reading will begin with the comedies (*A Midsummer Night's Dream*; *As You Like It*), and will include tragedies (*King Lear*; *Romeo and Juliet*; *Antony & Cleopatra*), histories (*Henry IV, pt I*; *Richard II*), romances (*A Winter's Tale*; *The Tempest*), a Roman play (*Coriolanus*), and a problem comedy (*Measure for Measure*).

Assignments will stress close reading of Shakespeare's language, and will encourage familiarity with selected criticism.

Session: Winter Day  
M. Gadpaille

#### ENGB11Y Varieties of Drama

A study of drama from ancient Greece to the present day.

The course introduces students to a wide range of drama through the study of at least twelve plays, including Sophocles, *Oedipus Rex*; Shakespeare, *King Lear*; Jonson, *Volpone*; Ibsen, *The Wild Duck*; Beckett, *Krapp's Last Tape*; Caryl Churchill, *Cloud Nine*. 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, tragicomedy, and such concepts as realism, expressionism, and the theatre of the absurd.

Session: Winter Day  
K. Theil

#### ENGB14Y Varieties of Fiction

About 16 works will be studied, including short stories, novels, and novellas.

The focus of the course is not on the historical development of fiction, but on the nature of narrative, and will study

such things as the significance of beginnings and endings, the role of the narrator, and the relationship between realism and fantasy.

Texts to be announced.  
Session: Winter Day  
J. L. Matus

#### ENGB15Y English Poetry

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, and Yeats. The text will be *The Norton Anthology of Poetry* (Third Edition).

Session: Winter Evening  
M.S. Tait

#### ENGB20S Contemporary Literature in English: Africa and the West Indies

A study of twentieth-century African and West Indian prose fiction.

Attention will be given to the cultural and political backgrounds as well as to the rhetorical traditions. The works of the most significant writers will be emphasized: e.g. Achebe, Amadi, Soyinka, Harris, Naipaul, Mittelholzer, Mais.

Session: Winter Day  
W.J. Howard

#### ENGB25F The Canadian Short Story

A study of contemporary short stories written by Canadian authors.

This course will not be a historical survey, but an examination of collections by eight of the contemporary writers whose work has brought the Canadian short story into international prominence. Attention will also be paid to technical aspects of the short story as a literary form.

The course will use single author collections rather than an anthology. Reading will begin with Alistair MacLeod's *The Lost Salt Gift of Blood* and will include selections from: Alice Munro, *Something I've Been Meaning To Tell You*; Margaret Atwood, *Dancing Girls*; Mavis Gallant, *The End of the World and Other Stories*; and Jack Hodgins, *Spit Delaney's Island*.  
Session: Summer Evening  
M. Gadpaille

#### ENGB34S The Short Story

An introduction to the short story as a literary form.

The course examines the special appeal of the short story for writers and readers; the particular effects it is best able to produce; and its origins and recent development. The reading will be drawn from different countries and periods in order to explore the variety of possibilities within the form.

Session: Winter Day  
M. Gadpaille

#### ENGC02Y Canadian Fiction in English

A study of Canadian fiction in English from its origins in the eighteenth century, through the search for form and tradition in the nineteenth and early twentieth centuries, to the contemporary period of new exploration and consolidation.

The course examines authors confronting the problem of finding a fictional form and voice for their responses to Canada and of locating themselves in a viable tradition; it focuses on several contemporary novelists both in terms of that tradition and through close readings of specific novels.

Texts will include Ross, *As for Me and My House*; Mitchell, *Who Has Seen the Wind?*; Callaghan, *The Loved and the Lost*; Davies, *Fifth Business*; Laurence, *A Bird in the House*; Atwood, *Surfacing*.  
Prerequisite: One full-course equivalent in English.

Exclusion: (ENGB27)  
Session: Winter Day  
M. Gadpaille

#### ENGC12Y Major American Authors

A close study of works by at least four and no more than six authors. Three of the authors will be drawn from the following list: Cooper, Dickinson, Emerson, Hawthorne, Melville, Whitman, Twain, 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 Evening  
J. Kay

**ENG32Y Prose and Poetry of the English Renaissance, 1500-1660**

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 the works of More and Erasmus, 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.

Prerequisites: ENGA01, ENGA02; or ENGB15

Exclusion: (ENGB09)

Session: Winter Day

E. P. Vicari

**ENG35F Dryden and the Restoration**

A study of English plays, poems and non-fiction prose of the period 1660-1700.

The literature of this period reflects the struggle between traditional conservative attitudes, emphasizing authority and social order, and the new dynamic trend towards democratic secularization.

In addition to Dryden, authors to be studied will include Butler, Rochester, Congreve and Wycherley.

Prerequisite: ENGA01, ENGA02; or ENGB15

Exclusion: (ENGB71)

Session: Winter Day

W. J. Howard

**ENG36S English Literature of the Early Eighteenth Century**

A study of English poetry and prose, 1700-1745.

This course studies the effects of the rapidly expanding publishing industry in the early part of the eighteenth century; it considers the significance of a broadened reading audience and its relationship to the ways in which writers altered traditional genres and introduced new ones.

In addition to Pope and Swift, authors to be studied include Addison, Steele, and Defoe.

Prerequisites: ENGA01, ENGA02; or ENGB15

Exclusion: (ENGB72)

Session: Winter Day

W. J. Howard

**ENG42Y The Romantics**

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

**ENG46Y Fiction 1832-1900**

A study of the development of the English novel in the Victorian period.

This course cultivates an understanding of the English novel in its most assured period of creation through study of the following works: C. Bronte, *Jane Eyre*; E. Bronte, *Wuthering Heights*; Thackeray, *Vanity Fair*; G. Eliot, *Middlemarch*; Dickens, *David Copperfield*, *Hard Times*; Trollope, *The Way We Live Now*; Hardy, *Far from the Madding Crowd*, *Jude the Obscure*; Moore, *Esther Waters*; James, *What Maisie Knew*.

Students are advised to read as many of these novels as possible before classes begin.

Prerequisites: ENGA01, ENGA02; or ENGB14; or HISD21

Exclusion: (ENGB16)

Session: Winter Day

A. Thomas

**ENG50Y Modern Drama**

A study of developments in English, American, and European drama in the late nineteenth and twentieth centuries.

This course offers a concentrated study of important works of modern theatre from Ibsen to the present. Central to the course is a definition of such terms as realism, expressionism, the theatre of the absurd, epic theatre, as they may be usefully applied to the work of major modern playwrights. Texts will include: Ibsen, *A Doll's House*; Chekhov, *The Seagull*; Strindberg, *Miss Julie*; Brecht, *Galileo*; plays by Pirandello, Shaw, Pinter, T. Williams, Stoppard, Churchill.

Prerequisites: ENGA01, ENGA02; or ENGA08; or ENGB11

Exclusion: (ENGB31)

Session: Winter Day

A. Thomas

**ENG52Y Fiction 1900-1960**

An intensive study of at least twelve novels, with particular attention given to developments in fictional form and in the theory of the novel.

The early twentieth century was a period of radical innovation and experiment in the novel. This course explores the relationship between new ways of writing novels and the new "modernist" consciousness of such things as the subjective nature of reality and the unconscious motivations of action. In addition, a selection of novels from the period after World War II will be studied to illuminate more recent trends of both retrenchment and development. Texts will include Conrad, *Lord Jim*; Joyce, *A Portrait of the Artist as a Young Man*; Woolf, *To The Lighthouse*; Forster, *A Passage to India*. Students are urged to do some reading in advance and to use the editions specified.

Prerequisites: ENGA01, ENGA02; or ENGA08; or ENGB14

Exclusion: (ENGB33)

Session: Winter Day

M. Cuddy-Keane

**ENG54F American Fiction since 1960**

A study of the range and variety of recent fiction writing in the United States.

Approximately 8 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: Winter Day

R. Brown

**ENG59Y English Literary Criticism**

A study of the central issues of literary theory and criticism, their importance in English literary history, and their relationship to European thought.

Reading will include works by Sidney, Johnson, Dryden, Wordsworth, Coleridge, Arnold, Eliot, Richards and Frye among others. Important Classical texts will also be read, and English criticism will be placed in the context of the European critical tradition.

Prerequisites: ENGA01, ENGA02, and two further full-course equivalents in English.

Exclusion: (ENGB95)

Session: Winter Day

E.P. Vicari

**ENG13S Spenser**

A study of the poetic development of a major English writer in the context of the Elizabethan period.

This course examines Spenser's creative adaptations of ancient and medieval forms of thought and expression to fit modern experience. His narrative practice will be studied in the light of current theories of narratology; another focus of attention will be the structure and interpretation of literary allegories and myths. The reading list will include: *The Shepheardes Calendar*, *Amoretti*, *Four Hymnes*, *The Faerie Queene* and a selection of minor poems. Text: *Spenser: Poetical Works*, ed. Smith & Selincourt (Oxford, 1969).

Limited Enrolment: 20

Prerequisites: ENGA01, A02 and three further full-course equivalents in English; or ENGC30 (ENGB02); or ENGC32 (ENGB09)

Session: Winter Day

E. P. Vicari

**ENG17S Marlowe and Jonson**

A study of selected plays by Marlowe and Jonson.

Emphasis will be upon the unique qualities which distinguish these dramatists from Shakespeare and other playwrights of the English Renaissance.

Texts will include: *Tamburlaine*, parts 1 and 2; *Dr. Faustus*; *Edward II*; *The Silent Woman*; *Volpone*; *The Alchemist*.

Limited Enrolment: 20

Prerequisites: ENGA01, ENGA02, and three further full-course equivalents in English; or ENGB10 and one further full-course equivalent in English; or ENGC32 (ENGB09); or ENGC33 (ENGB12)

Session: Winter Day

M. S. Tait

**ENG40F Joseph Conrad**

Conrad's development as an artist traced through close analysis of four or five novels and some shorter fiction.

Some biographical and critical material will also be required reading. Prior reading of the following texts is strongly recommended: *The Nigger of the Narcissus*, *Heart of Darkness*, *Nostramo*, *The Secret Agent*, *Under Western Eyes*.

Limited enrolment: 20

Prerequisites: ENGA01, ENGA02, and three further full-course equivalents in English; or ENGC52 (ENGB33).

Exclusion: (ENGC97)

Session: Winter Day

K. Theil

**ENG41F T.S. Eliot**

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

**ENG46S F. Scott Fitzgerald and Ernest Hemingway**

A study of some patterns in American literature between the wars, as they emerge in the work of Fitzgerald and Hemingway. Texts will include *The Great Gatsby*, *Tender is the Night*, *The Sun Also Rises*, *A Farewell to Arms*, and some short fiction, letters, and critical writing by each novelist.

Limited Enrolment: 20

Prerequisites: ENGA01, ENGA02, and three further full-course equivalents in English; or ENGC12 (ENGB24); or ENGC52 (ENGB33).

Exclusion: (ENGC93)

Session: Summer Evening, Winter Day

K. Theil

**ENG50F Mavis Gallant**

A study of Mavis Gallant's novels and shorter fiction, with particular attention to her development as a short-story writer.

Reading will include the novels *Green Water*, *Green Sky* and *A Fairly Good Time*, and four collections of stories: *The End of the World and Other Stories*; *My Heart is Broken*; *Home Truths*; and *From the Fifteenth District*.

Limited Enrolment: 20

Prerequisite: ENGA01, ENGA02, and three further full-course equivalents in English; or any two of ENGB07, ENGB25, ENGB34; or ENGC02 (ENGB27)

Session: Winter Evening

M. Gaspaille

**ENG72F Nineteenth-Century Women Writers**

A study of selected works by nineteenth-century women writers.

Approximately six works, by writers such as Jane Austen, Mary Shelley, Elizabeth Gaskell, Charlotte Bronte, George Eliot, Kate Chopin, and Edith Wharton, will be studied. The focus will be on understanding both the nature of fiction and the tradition established by women writers. Texts will include Austen, *Mansfield Park*

and Bronte, *Villette*.

Limited enrolment: 20

Prerequisites: ENGA01, ENGA02, and three further full-course equivalents in English; or one of ENGC42 (ENGB05), ENGC43 (ENGB06), ENGC46 (ENGB16), LITB45

Exclusion: (ENGC82)

Session: Winter Day

J.L. Matus

**ENG77S Black Women Writers in America**

A study of contemporary fiction by black women writers in America, with emphasis on literary technique.

The course will explore the various ways in which these writers have adapted and created fictional strategies to express their particular concerns. The following works will be studied: Paule Marshall, *Praisesong for the Widow*; Toni Morrison, *Song of Solomon*, *Tar Baby*; Gloria Naylor, *The Women of Brewster Place*; Linden Hills; Ntozake Shange, *Betsey Brown*; Alice Walker, *Meridian*, *The Color Purple*.

Limited enrolment: 20

Prerequisites: ENGA01, ENGA02, and three further full-course equivalents in English; or any two of: ENGB08, ENGB14, ENGB20, ENGC12 (ENGB24), ENGC54 (ENGB36); or ENGC52 (ENGB33); or LITB45

Session: Winter Day

J.L. Matus

**ENG78S The Open Road in North American Fiction**

An investigation of the myth of the open road in North American fiction, with an emphasis on contemporary writing.

The course will focus on eight books, examining them both as independent works and as part of an ongoing tradition. Texts will include: Twain, *Huckleberry Finn*; Kerouac, *On the Road*; Tom Wolfe, *The Electric Kool-Aid Acid Test*; Jim Harris, *A Good Day to Die*; Persig, *Zen and the Art of Motorcycle Maintenance*; Kroetsch, *The Studhorse Man*; Bobbie Ann Mason, *In Country*.

Limited Enrolment: 20

Prerequisites: ENGA01, ENGA02, and three further full-course equivalents in English; or two of ENGA08, ENGB14, ENGC54 (ENGB36); or ENGC02 (ENGB27); or ENGC12 (ENGB24)

Session: Winter Evening

R. Brown

**ENG79F Award-Winning Fiction in English**

Works of Fiction from the last two decades that have received major literary prizes, such as the Nobel and Booker Prizes and the Governor General's Award.

The course will focus both on a close analysis of the award-winning texts and on an examination of the critical reception before and after the granting of the award, to see what is revealed about standards, trends, and extra-literary influences.

Limited Enrolment: 20

Prerequisites: ENGA01, ENGA02, and three further full-course equivalents in English; or two of ENGB14, ENGB20, ENGB21; or ENGC02 (ENGB27); or ENGC52 (ENGB33)

Session: Winter Day

W. J. Howard

**ENG80S Biography and Autobiography**

A study of the conventions and practice of biography and autobiography, with emphasis on literary biography.

Heavy light reading, with writers and subjects taken from a list that includes More, Aubrey, Hume, Johnson, Carlyle, C. Bronte, Dickinson, Freud, James, Woolf, Joyce.

Limited Enrolment: 20

Prerequisites: ENGA01, ENGA02, and three further full-course equivalents in English; or ENGA08, ENGB14.

Session: Winter Day

H. Jackson

**ENG98Y Senior Essay**

A scholarly project, chosen by the student and supervised by one faculty member. Approval by the faculty in English must normally be obtained by the student before the end of the previous spring term.

The student writes a substantial essay on a literary subject under the supervision of a member of staff. It is the responsibility of the student to locate a supervisor; advice on this matter may be sought from the Discipline Representative. The following deadlines should be observed: by the last day of the previous spring term a brief statement of the area of the project, signed by the supervisor, is to be sent to Professor M. Cuddy-Keane. By November 15th a more specific statement of the project is to be sent to Prof. Cuddy-Keane, including the exact title of the proposed study and a short description of its subject and method. After the 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 1988-89**

**ENGB01Y** Old English Language and Literature

**ENGB07Y** Canadian Literature in English: An Introduction

**ENGB08Y** American Literature: An Introduction

**ENGB21F/S** Contemporary Literature in English: Australia and India

**ENGC07F/S** Canadian Poetry in English  
Prerequisites: one full-course equivalent in English  
Exclusion: (ENGB26)

**ENGC30Y** Chaucer  
Prerequisites: ENGA01, ENGA02

Exclusion: (ENGB02)

**ENGC33Y** English Drama to 1642  
Prerequisites: ENGA01, ENGA02; or ENGB11

Exclusion: (ENGB12)

**ENGC37F/S** English Literature of the Late Eighteenth Century

Prerequisites: ENGA01, ENGA02; or ENGB15

Exclusion: (ENGB73)

**ENGC38Y** Fiction before 1832  
Prerequisites: ENGA01, ENGA02; or ENGB14

Exclusion: (ENGB17)

**ENGC43Y** Victorian Poetry  
Prerequisites: ENGA01, ENGA02; or ENGB15

Exclusion: (ENGB06)

**ENGC51Y** Modern Poetry  
Prerequisites: ENGA01, ENGA02; or ENGA08; or ENGB15

Exclusion: (ENGB32)

**ENGC53S** British Fiction Since 1960  
Prerequisites: ENGA01, ENGA02; or ENGA08; or ENGB14

Exclusion: (ENGB35)

**ENGC55F** Drama Since 1960  
Prerequisites: ENGA01, ENGA02; or ENGA08; or ENGB11; or one DRA course

Exclusion: (ENGB40)

**ENG01Y** Studies in Beowulf and Other Old English Poetry

Exclusion: (ENGC01)

**ENG02Y** Studies in Medieval Literature

Exclusion: (ENGC03)



- ENG03Y** Studies in Renaissance Literature  
*Exclusion:* (ENG04)
- ENG04Y** Studies in Restoration and Eighteenth Century Literature  
*Exclusion:* (ENG05)
- ENG05Y** Studies in Nineteenth Century Literature  
*Exclusion:* (ENG06)
- ENG06Y** Studies in Twentieth Century Literature  
*Exclusion:* (ENG08)
- ENG07Y** Studies in Canadian Literature  
*Exclusion:* (ENG029)
- ENG08Y** Studies in American Literature  
*Exclusion:* (ENG024)
- ENG010 - ENG058F/S** Studies in Major Writers
- ENG070 - ENG089F/S** Selected Topics

NOTE: At the D-level, English offers a wide variety of special studies in major writers and selected topics. A different combination of courses is offered each year in order to provide as much range as possible over a two or three-year period. Normally, prerequisites for D-level courses are: ENGA01, ENGA02, and three further full-course equivalents in English; or two courses in the area of specialty. For further information, consult the Discipline Representative.

## Fine Art

### Discipline Representative:

Fine Art History: R. Siebelhoff (284-3334)  
Fine Art Studio: J. Hoogstraten (284-3370)  
The Fine Art curriculum offers courses in the two complementary fields of art history and studio. The courses offered in art history deal primarily with the development of the arts in the West from classical times to the present day. The studio curriculum has been designed to develop creative thinking and provides opportunities for a first hand acquaintance with materials, forms, and concepts of the visual arts.

Students are encouraged to take relevant courses in other disciplines in

order to enhance their background knowledge and to become familiar with a variety of views of fine art.

Students who wish to supplement Scarborough offerings in art history with courses on the St. George campus should also pay careful attention to the requirements described in the calendar of the Faculty of Arts and Science. It should be noted that course offerings are not identical on both campuses. Requirements for a 300- or 400- level course on the St. George campus can be met at Scarborough by taking an A- and a B-level survey in the same area as the upper level course. (See also Page 29 of this *Calendar*.)

Since the ability to read foreign languages is necessary in many advanced fields of art history, and since admission to some upper level art history courses on the St. George campus depends upon a reading knowledge of certain foreign languages (particularly French, German and Italian), specialization in art history will normally require competence in one of these languages. Students are encouraged to develop language skills throughout their programme of study.

Students in studio courses are required to meet part of the cost of materials for each half-course.

### Fine Art students may like to refer to the following:

Specialist Programme in the Arts: Page 55  
Co-operative Programme in Arts Administration: Page 94

### Specialist Programme in Fine Art History

*Supervisor:* R. Siebelhoff (284-3334)

Students must complete twelve full-course equivalents as follows:

- 1 FARA10F; FARA11S; FARA12F; FARA13S
- 2 Four B-level course equivalents with at least one half full-course equivalent from each of the following areas:  
Classical  
Medieval  
Renaissance  
Baroque  
Modern (1750 to the present)
- 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 in cognate fields selected with the approval of the supervisor.

**Major Programme in Fine Art History**  
*Supervisor:* R. Siebelhoff (284-3334)  
Students must complete seven full-course equivalents as follows:

- 1 FARA10F; FARA11S; FARA12F; FARA13S
- 2 Three full-course equivalents at the B level with at least one half full-course equivalent in each of the following areas:  
Classical  
Medieval  
Renaissance  
Baroque  
Modern (1750 to the present)
- 3 Two full-course equivalents in art history at the C/D level (or at the 300/400 level on the St. George Campus).

NOTE: Students in the Specialist or Major Programmes may satisfy some of their programme requirements through a Study Elsewhere programme operated by the University of Toronto at Siena.

### Specialist Programme in Fine Art Studio

*Supervisor:* J. Hoogstraten (284-3370)

Students must complete fourteen full-course equivalents: ten in studio; any two full-course equivalents in art history one of which must be FARA13S; and two additional courses in cognate disciplines. The courses in studio must include:

- 1 FARA90Y
  - 2 FARB70F/S; FARB72F/S; FARB75Y; FARB82F/S; FARB84B
  - 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
- Two additional full-course equivalents in cognate disciplines are to be chosen in consultation with the supervisor.

### Major Programme in Fine Art Studio

*Supervisor:* J. Hoogstraten (284-3370)

Students must complete six full-course equivalents as follows:

- 1 FARA90Y
  - 2 FARA13S
  - 3 FARB70F/S\*
  - 4 FARB72F/S\*
  - 5 FARB74F/S\*
  - 6 FARB75Y\*
  - 7 Two and one-half additional courses, one of which must be at the D-level\*.
- \* Students should check these courses for prerequisites.

## Fine Art History

### FARA10F Ancient Art and Architecture

Art and architecture from Archaic Greece to the decline of Rome.

A survey of major monuments and trends in Greece and Rome. Emphasis on archaic sculpture, classical architecture and sculpture, Hellenistic art, Roman Republican portraiture and Imperial architecture.  
Session: Winter Day

### FARA11S Medieval Art

A survey of the arts in Europe from the late Roman Empire to the end of the Gothic period. The study will consider architecture, sculpture, painting, illumination and the minor arts.

The objective of this course is to familiarize students with European artistic traditions from their origins in an early Christian, Mediterranean context through their development under the influences of classical, byzantine, moslem and pagan forms, to the triumphant creation of an entirely new iconographic and stylistic language of expression which determined the nature of renaissance art. Texts will include E. Kitzinger, *Early Medieval Art*; R. Krautheimer, *Early Christian and Byzantine Architecture*; O. von Simson, *The Gothic Cathedral*, and others. Trips to the Royal Ontario Museum when galleries open.

Session: Winter Day  
TBA

### FARA12F Renaissance and Baroque Art

A survey of architecture, painting and sculpture from ca. 1400 to ca. 1750.

A selection will be made of the most important monuments, primarily from Italy and the Netherlands. These will include works by such artists as Leonardo da Vinci, Michelangelo, Rembrandt, Rubens and Bernini. Slides and films will be used and visits will be made to the A.G.O. and the R.O.M. Texts: Frederick Hartt, *Art, A History of Painting, Sculpture, Architecture*. Vol. II, *Renaissance, Baroque, Modern World*. New York, Abrams, 1976.  
Session: Winter Day  
TBA



**FARA13S Modern Art: 1750 to the Present**

A selective study of Western European and North American painting, sculpture and architecture from the period of the French Revolution to the Second World War.

Works of art will be chosen and analyzed on the basis of their key roles in the rapid succession of artistic movements during this period. By a thorough study of these works, the course will attempt to present a comprehensive view of artistic conditions in major centres throughout the modern Western world.

Session: Winter Evening  
TBA

**FARB04F Archaic Greek Sculpture (650-480 B.C.)**

A study of the evolution of Greek sculptural forms up to the classical period.

The course follows the technical and aesthetic development of Greek monumental sculpture from its early phases in the late seventh century B.C. through its maturation in the Archaic phase (650-480 B.C.). The sculptural production of this period consists of statues of youths and maidens, usually dedicated to sanctuaries; low relief in stone; and architectural sculpture, which adorned the exteriors of temples and other important buildings. Because of circumstances of preservation this early phase is well represented by original works, in contrast to later Greek Sculpture known largely through Roman copies. Representative sculptures will be analyzed.

Session: Winter Day  
M. Shaw

**FARB05S Classical Greek Sculpture (480-300 B.C.)**

A study of the evolution of Greek sculptural forms (statues, architectural and other reliefs) from the rise of the classical style to its maturity.

This course follows the technical and aesthetic developments of Greek sculpture during its classical phase (480-300 B.C.). Sculptural activity will be viewed as far as possible within its cultural context.

Thematically and chronologically, this course is a sequel to FARB04, but can still be taken independently. The sculptures examined are statues in marble and bronze, funerary reliefs, as well as architectural sculpture which decorated the exterior of most Greek temples and some other important buildings. Representative

sculptures will be analyzed technically and stylistically in illustrated lectures.

Session: Winter Day  
M. Shaw

**FARB29Y Baroque Painting in The Netherlands**

An examination of portraiture, landscape and still life in the Dutch Republic from ca. 1600 to ca. 1675.

The first few lectures will deal with the geographical and topographical situation around 1600 and will proceed with a historical survey of the area during the seventeenth century. The class will then explore the origins of Dutch seventeenth century painting by looking at innovations which were made in Flanders and Italy in the late sixteenth century and which prepared the way for the Utrecht Caravagisti. The approach towards the material will be problem oriented. Attributions will be evaluated on documentary, stylistic and iconographic grounds, while artists' works will be studied in an acceptable chronological order. Slides and films will be used, and there will be a visit to the A.G.O. Text: Rosenberg, Slive and Ter Kuile, *Dutch Art and Architecture 1600-1800*, Harmondsworth, 1972 (a paperback edition in The Pelican History of Art series). Students will be provided with a bibliography.

Session: Winter Evening  
R. Siebelhoff

**FARB37F Rococo to Romanticism**

Painting and sculpture produced in France between the revolutions of 1789 and 1848.

Two dominant artistic movements known as Neo-Classicism and Romanticism will be traced. Special emphasis will be placed on the developments in Paris with its principal painter David and his pupils - Gericault, Ingres, Delacroix. Interpretations of several subject categories will be studied, in particular historical subjects, contemporary political events and portraiture. From the viewpoint of style, the emphasis will be placed on the different approaches by the Neo-Classicalists and the Romantics to identical subjects. The development of landscape painting will also be studied. Use of slides and films, visits to the Art Gallery of Ontario and the Albright Knox Gallery.

Session: Winter Day  
R. Siebelhoff

**FARB43S Impressionism**

The development of Impressionism and its impact on modern art.

The course will commence with an exploration of nineteenth century landscape painting, thus establishing the main sources of Impressionism. Thereafter it will focus on those aspects of the work of Manet and Degas which are essential to the movement. Of equal importance are contemporary theories of colour. The background of the individual members of the Impressionist group will be traced up to the first Impressionist exhibition. The exhibitions between 1874-86 will be discussed, followed by a selective study of the artists during the last decade of the century.

Use of slides and films, visits to the A.G.O. and the Albright-Knox Gallery in Buffalo. Bibliography will include John Rewald, *The History of Impressionism*, N.Y.: NOMA, 1946.

Session: Winter Day  
R. Siebelhoff

**FARB48S Art from 1900-1950**

A survey of twentieth-century European art and architecture.

Cubism and Fauvism in France; the German Expressionists; the rise of abstract painting and sculpture; constructivism and the Bauhaus; Dada and Surrealism. These movements and others will be discussed in relation to the careers of major painters and sculptors. There will be weekly two-hour slide lectures, and a trip to the Albright-Knox Gallery in Buffalo. Pre-or Corequisite: FARA13 recommended  
Session: Winter Day  
TBA

**FARB60Y The Arts in Canada: 1670-1960**

A selective survey of Canadian painting, sculpture and architecture.

Topics of study will include the beginnings of Quebec art and its growth to the mid-nineteenth century, the development of an independent Canadian landscape school, the Group of Seven and painting between the wars, early modern artists, history of native art. Visits will be made to important Canadian art collections. Prerequisite: FARA13 is recommended but not required.

Session: Winter Day  
L. Carney

**FARB62F Recent Canadian Art**

An introduction to the work of major Canadian artists, chiefly painters and sculptors, from the last three decades.

Each weekly session will be devoted to the work of either one or two artists of national importance. The course will also examine these painters' and sculptors' links with traditions in art.

A two hour slide lecture each week. Taped interviews and films will also be used. The bibliography will consist mostly of exhibition catalogues, and will be discussed in class. Prerequisite: Another course in modern art is recommended but not required as preparation.

Session: Winter Day  
L. Carney

**FARC14S Art Around 1900**

The exploration of Symbolism and Art Nouveau with reference to the stylistic and literary origins.

This study emphasizes the development in several centres such as Paris, Vienna and Munich. The coincidence of these developments will be researched, and the contribution of individual artists will be evaluated. Careful attention will be paid to literary prototypes of visual images. Texts: Mario Praz, *The Romantic Agony*, London, New York: Oxford University Press, 1970 (there exist several editions); and Robert Schmutzler, *Art Nouveau*, New York: Abrams, 1962 (now available in soft cover). The teaching method will involve lectures, slides, films and visits to galleries.

Prerequisite: one full-course equivalent at the B-level in Art History  
Session: Winter Day  
R. Siebelhoff

**FARC16S Expressionist Trends**

An examination of such major figures among so-called Expressionist painters as Van Gogh, Ensor, Munch, the Fauves, Kirchner, Nolde, Kandinsky, and the New York School.

After an introductory section each student will develop one topic in collaboration with the instructor; this will be presented in seminar and finally in written form. Two-hour seminar per week. Pre-or Corequisite: FARB46 or FARB48 and at least one additional half-course in art history.

Session: Winter Day  
TBA

**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*

## Fine Art Studio

**FARA90Y Foundation Studies in Studio**

An introduction to basic problems in design and colour and the relation of these problems to the visual arts. There will be an emphasis in this class on each student's exploration and investigation of these problems.

There will be lectures, demonstrations and group critiques.

Exclusion: FARA70 and FARA71\*

Prerequisite: Students may pre-register but will not be admitted to the course unless granted permission of the instructor during the first week of classes. A portfolio must be submitted at this time.\*\*

\*Students who have completed FARA70 and FARA71 and who wish to enter the Specialist Programme will be given due consideration on submission of a portfolio on the last day of classes.

\*\*Students who are not accepted into FARA90 will be transferred into FARA70 and FARA71 if they so wish. Session: Winter Day, Winter Evening  
*A. Brannen, J. Hoogstraten*

**FARB70F Introductory Drawing**

An introductory course for students wishing to explore the techniques and concepts of drawing.

This course is designed to introduce the student to the potentials inherent in drawing. Three hours per week of studio work including group and individual critiques. The student will be responsible for attending every class, keeping a definitive

sketchbook and submitting a series of finished drawings at the end of term. Enrolment limited according to space available and permission of instructor. Prerequisite: FARA90 or permission of instructor  
Session: Winter Day  
*D. Holman*

**FARB72F Introduction to Printmaking (Screen Process Printing)**

Materials and methods in edition printing.

This course is designed to introduce the student to the art of printmaking through the use of the silk screen medium. The course will include lectures and demonstrations of the silkscreen, etching, and lithographic techniques of printmaking. The student will be expected to conceive and print several serigraphs. Trips to public and private galleries to view prints will be mandatory.

Limited Enrolment: 15

Prerequisite: FARA90 or permission of instructor

Corequisite: FARB70

Session: Winter Evening  
*D. Holman*

**FARB73Y Photographic Issues in the Visual Arts**

An introduction to the photographic issues in the visual arts.

A studio course which explores the impact of still photography on the process and conceptualization of contemporary art. The student will be introduced to various ways in which artists have employed photographic technology. Students will be required to produce a number of experimental photographic works. Some of the alternative processes to be investigated will be Kwik Print, gum bichromatic, cyanotype Van Dyke Brown, xerography. Students should have a camera. A pinhole camera is acceptable. Enrolment limited according to space available and permission of instructor.

Prerequisite/Corequisite: FARA90 or permission of instructor  
Session: Winter Evening  
*A. Brannen*

**FARB74S Intermediate Drawing**

An investigation of the creative act of drawing and its use in the development of the artist's personal visual perception.

This course will give Fine Art students an opportunity to expand their knowledge and skills in the art of drawing. The class will meet three hours every week for work in the studio and for personal and group critiques. The student will be responsible

for attending every class, keeping a definitive sketchbook and producing a number of finished drawings. The final portfolio must include all the drawings done for projects, drawings done from the models, and the sketchbook(s). Enrolment limited according to space available and permission of instructor. Prerequisite: FARA90 or permission of instructor  
Session: Winter Day  
*J. Hoogstraten*

**FARB75Y Introduction to Painting**

An introduction to principles and techniques of painting. Emphasis will be placed on experimentation and the investigation of the possibilities of painting.

There will be both group and individual critiques held at appropriate intervals during the course. Enrolment limited according to space available and permission of instructor.

Prerequisite: FARA90 or permission of instructor  
Session: Winter Day  
*J. Hoogstraten*

**FARB82F Introduction to Lithography**

An introduction to stone lithography edition printing involving a detailed investigation of materials and techniques.

The course will include working demonstrations and lectures explaining and demonstrating the artistic nature of stone lithography. The student will be expected to draw and execute several lithographs.

Limited Enrolment: 10

Prerequisite: FARA90; FARB72 or permission of instructor

Session: Winter Evening  
*D. Holman*

**FARB83S Intermediate Lithography**

An extension of FARB82.

The objective of the course is to explore further the art of stone lithography in multi-colour printing. The content and method are the same as for FARB82H. Limited enrolment: 10

Prerequisite: FARB82 and permission of instructor

Corequisite: FARB74

Session: Winter Evening  
*D. Holman*

**FARB84A Introduction to Etching**

An introduction to etching and relief printing exploring the use of materials and techniques involved in the process of creative 'Fine Art Printing'. Limited Enrolment: 15.

Prerequisite: FARB72 or permission of instructor  
Session: Summer Evening  
*A. Brannen*

**FARC76Y Intermediate Painting I**

A course designed to develop competence in contemporary materials with an emphasis on understanding recent attitudes in painting. Limited enrolment: 15

Prerequisite: FARB75 or permission of instructor

Session: Winter Day  
*J. Hoogstraten*

**FARC82F/S****FARC83F/S****FARC84F/S****FARC86F/S****FARC87F/S****FARC88F/S****Supervised Studies in Studio: Intermediate Level**

These courses may be in any of the fields of drawing, painting and printmaking. Students are required to submit a portfolio along with their proposal outlining intended research. The courses are intended for students who can demonstrate the need to pursue further study in any of the above areas. Students are also required to meet with instructors on a regular basis for critiques of work in progress. Limited enrolment: 3.

Prerequisite: FARA90, and permission of instructor which is based on the evaluation of the proposal and/or portfolio  
Session: Winter Day  
*D. Holman, J. Hoogstraten*

**FARD21Y Advanced Studio: Individual Study in Painting**

This course is only for students who would like to develop further a mature painting ability. Students must convince the instructors that they are able and willing to assume the responsibility of carrying this course without intensive guidance.

The student will have an opportunity to work independently while receiving ongoing, advanced criticism from the instructors. The content of this course, methods to be used, and evaluation of work are determined co-operatively by the

student and the instructors. Limited enrolment: 5.

Prerequisite: Permission of instructor must be obtained by the first week of classes.

Exclusion: (FARC21)

Session: Winter Day

J. Hoogstraten

#### **FARD22Y Advanced Studio: Individual Study in Printmaking**

The purpose of this course is to give the promising student an opportunity to work independently while receiving advanced criticism. The content, method and evaluation of the course will be decided upon by both the student and the instructor.

Limited enrolment: 5.

Prerequisite: Permission of instructor must be obtained by the first week of classes.

Exclusion: (FARC22)

Session: Winter Day

D. Holman

#### **FARD24F/S**

#### **FARD25(FARC25H)F/S**

#### **Independent Studies in Studio: Advanced Level**

These courses may be in any one of the fields of drawing, painting and printmaking.

Students are required to submit a portfolio along with their proposal outlining intended research. These courses are intended for the student who can demonstrate the need to pursue independent study in one of the above areas. Students must meet with the instructors at appointed times, but they are expected to work independently. Content, method and evaluation to be planned in cooperation with instructor.

Limited enrolment: 3

Prerequisite: at least one B-level course in the field of study; a portfolio demonstrating proficiency in this field; permission of instructors which is based on the evaluation of the portfolio.

Exclusions: (FARC24), (FARC25)

Session: Winter Day

D. Holman, J. Hoogstraten

#### **FARD90F/S**

#### **FARD91F/S**

#### **Independent Studies in Studio: Advanced Level**

These courses may be in any one of the fields of drawing, painting and printmaking.

Students are required to submit a portfolio along with their proposal outlining

intended research. These courses are intended for the student who can demonstrate the need to pursue independent study in one of the above areas. Students must meet with the instructor at appointed times, but they are expected to work independently.

Content, method and evaluation to be planned in co-operation with instructor. Limited enrolment: 3.

Prerequisite: at least one B-level course in the field of study, a portfolio demonstrating proficiency in this field, and permission of instructor which is based on the evaluation of the portfolio.

Exclusion: FARC91S

Session: Winter Day

D. Holman, J. Hoogstraten

#### **Courses Not Offered in 1988-89**

**FARA70F** Two and Three Dimensional Design

**FARA71S** Colour

**FARB06F/S** Ancient Rome

**FARB10F** Carolingian and

Romanesque Art

**FARB15F** Renaissance in Italy

**FARB16Y** The Arts in Northern Europe

ca. 1400-1500

**FARB19F** Michelangelo

**FARB27F** Baroque Painting in South-

ern Europe 1600-1650

**FARB41S** Architecture in the Western

World since 1750

**FARB46F** Post Impressionism

**FARB54F** New York in the Twentieth

Century

**FARB92Y** Introduction to Sculpture

Concepts

Prerequisite: FARA90 or per-

mission of Instructor

**FARC05F/S** Classical Art: Wallpainting

in Ancient Egypt and the

Bronze Age Aegean (ca. 3200

B.C. - ca. 1200 B.C.)

**FARC07F/S** Gothic Architecture

**FARC09F/S** Advanced Studies in the

Renaissance

Prerequisite: one full-course

equivalent at the B-level in

art history.

**FARC10S** Italian Renaissance Architec-

ture

**FARC11S** Frans Hals, Rembrandt and

Vermeer

**FARC12F/S** Southern Baroque Art: Gian-

lorenzo Bernini

Prerequisite: one full-course

equivalent at the B-level in

art history.

**FARC13F/S** Nineteenth Century Realism

**FARC15S** Cubism and Related Move-

ments

Prerequisite: FARB46F/S or

FARB48F/S, and at least one

additional half-course in art

history.

**FARC17F** Leonardo da Vinci

Prerequisite: One full-course

equivalent at the B-level in

art history.

**FARC18F/S** Later Greek Architecture

**FARC19Y** The Canadian Landscape

Exclusion: (FARB61Y)

**FARC77B** Intermediate Painting II

**FARC80F/S** Drawing from the Figure I

Prerequisite: FARB74 or per-

mission of instructor.

**FARC81F/S** Drawing from the Figure II

Prerequisite: FARB74 or per-

mission of instructor.

**FARC85A** Intermediate Etching

Prerequisite: FARB84 or per-

mission of instructor.

## **French**

*Discipline Representative:* L. Mignault (284-3197)

The courses offered in French are designed primarily for students with Grade 13 French who wish to continue their study of the language and of the literature of France and French Canada. Such students normally register in FREA10Y, which serves to consolidate previous language experience; this course is the prerequisite for all advanced language and literature courses in our programme of French studies.

Courses may be combined in a variety of ways, providing prerequisite requirements are met, but students intending to pursue a Specialist Programme in French are invited to consider taking both FREA10(FREB06) and FREA30(FREB02) in their first year. They may then choose courses from within the following groups:

- 1 the main trends of French and French Canadian literature;
- 2 the genres: poetry, theatre and novel in various periods;
- 3 language practice courses;
- 4 advanced language and civilization courses.

Students interested in the language and linguistic aspects of French study are invited to consider taking in their programmes LINA05Y, *Practical Language*

*Study*, and/or LINB05Y, *Romance Languages*.

Students interested in literary aspects are invited to consider the relevant courses offered under LIT and HUM.

Students should also consult the entries in the calendar under *Language and Literature* and *Modern Languages*.

The French discipline sponsors three Programmes, details of which are given below. In general, students may include only one full "civilization" course for credit in the three Programmes named below; they may thus take for *Programme credit* either FREB20Y or two of FREB21, FREB22, FREB23 and FREC33.

**N.B.** In the normal course of events, a student may not take an A-level French course at the same time as a B-level French course or after a B-level French course. Students in the Specialist or Major Programmes may satisfy their programme requirements through a Study Elsewhere Programme such as the ones operated by the University of Toronto at Aix-en-Provence and Laval.

#### **Specialist Programme in French**

*Supervisor:* P. Moes (284-3307)

Students should complete twelve full-course equivalents, including ten French courses as specified below (items 1-5) and two others (see item 6) 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 three full-course equivalents in French Literature and French Canadian Literature, one of which should deal with a period prior to 1800 and one with a period after 1800
- 4 four full-course equivalents at C- or D-level (or from the 300 and 400 series courses on the St. George Campus). Both FREC10Y and supervised reading courses may count toward this requirement.
- 5 It is recommended that the student include in his/her Programme one full-course equivalent from the series FRED02-D07, FRED90 (Supervised Reading) involving individual research in a specific area. (Such a course may also count toward satisfying requirements in (2), (3) and (4) above.) Normally, no more than two full-course equivalents in the area of supervised reading may be credited for requirements for the Specialist Programme.

- 6 Two full-course equivalents outside French but from related areas of study, to be agreed upon in consultation with the Supervisor.

Students interested in literature are urged to include FREA30Y in their Programme. The following may not count toward a Specialist Programme:

- 1 any A-level French course with the exception of FREA09, FREA10, FREA17 and FREA30.
- 2 more than two courses from the series FRE425 to FRE469, (specialized seminars) offered on the St. George Campus.
- 3 FREQ17, FREQ18 (Commercial French), FREQ19 (Practical French) FREQ18 (Translation for Business and Professional Needs).

#### Major Programme in French Language Supervisor: U. Lesser-Sherman (284-3151)

Students should complete seven full-course equivalents, including:

- 1 FREA10Y, FREQ10Y, FREQ10Y (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: FREQ08F, FREQ18Y, FREQ25Y, FREQ42Y, FREQ43S, FREQ48Y, FREQ09Y, FREQ16Y, FREQ18S.
- 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:

- 1 any A-level French course with the exception of FREA10, FREA17 and FREA30.
- 2 FREA09.

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 French Language and Literature

Supervisor: P. Moes (284-3307)

Students should complete seven full-course equivalents, including:

- 1 FREA10Y, FREQ10Y, (except where substitution of other French courses is permitted for students with special proficiency in the French language)

- 2 one of the following courses: FREQ08F, FREQ25Y, FREQ42Y, FREQ48Y, FREQ09Y, FREQ10Y, FREQ16Y
- 3 three full-course equivalents from the remaining courses in French and French Canadian literature and civilization
- 4 one additional full-course equivalent in French, to be chosen in the area either of language study or of literature and civilization
- 5 students may include in their Major Programme a maximum of one supervised reading course.

Students interested in literature are urged to include FREA30Y in their Programme. The following may not count toward a Major Programme in French Language and Literature:

- 1 any A-level French course with the exception of FREA10, FREA17 and FREA30
- 2 FREA09, FREQ18, FREQ19, and FREQ18

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.

Language requirements will be waived by permission of the Supervisor in the case of students judged to have highly 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 Programmes in *Modern Languages* (listed under *Language Studies*) and *Language and Literature*.

#### FREA10Y Language Practice I

This course is designed to help students reinforce and develop those language skills (writing, reading, understanding and speaking) which are necessary for taking advantage of upper level courses.

Three hours per week of grammar review, vocabulary-building exercises, reading and discussion of texts representing various styles and cultures, composition, debates and exercises that class and instructor may choose to devise. One laboratory period a week specifically

designed for oral-aural practice.

For students planning to specialize in French, FREA30Y is recommended as a companion course.

Exclusion: (FREQ06), native or near-native proficiency in French

Prerequisite: Grade 13 French or FREA16 or equivalent.

Session: Winter Day/Winter Evening  
F. Mugnier-Manfredi and Staff

#### FREA30Y Introduction to Literary Analysis

An introduction to methods of critical analysis through the study of selected works from the fields of French and French Canadian drama, fiction and poetry of the nineteenth and twentieth centuries.

FREA30(FREQ02) is intended to prepare the student for more advanced study in French and French-Canadian literature. It deals with a wide range of themes, styles and genres, and can also provide, for the non-specialist, an introduction to several major writers of the modern period.

Two hours of classes a week are devoted to *lecture expliquée*, class discussion and student presentations.

Exclusion: (FREQ02)

Prerequisite: Grade 13 French or equivalent or FREA16

Corequisite: FREA10(FREQ06)

Session: Winter Day

F. Mugnier-Manfredi

#### FREQ08F Practical Translation

Translation practice from French to English and English to French.

Texts from fields such as literature, business, politics, law, science and technology, art and advertising will be translated, analysed and discussed in terms of type of language and style of expression.

Class time is devoted to increasing the student's proficiency. Evaluation will be based on class participation, written and oral assignments and an examination.

Prerequisite: FREA10 or equivalent

Session: Winter Day

S. Mittler

#### FREQ10Y/B Language Practice II

A continuation of FREA10(FREQ06) work, including grammar, composition, oral practice, readings and language laboratory work. Not normally open to native speakers of French.

This course is concerned with the development of fluency, accuracy of expression, and style.  
Exclusion: (FREQ16), native proficiency in French.

Prerequisite: FREA10(FREQ06) or equivalent

Session: Winter Day, Summer Evening  
C. Evans and Staff

#### FREQ18Y Commercial French

The French language in a commercial or economic context.

This course is of interest to students in French, to Business and Economics Majors, and to all who wish to improve their skills in preparation for entry into a specialized area of the job market. In order to provide the student with the basic elements of commercial techniques as practised in the business communities of Quebec and France, the programme will consist of theoretical and practical sessions. Class meetings will also be devoted to correspondence writing and to exercises that include the vocabulary and structures involved in the language of business.

This course may not count towards a Specialist Programme in French, or the Major Programme in French Language and Literature.

Prerequisite: FREA10(FREQ06), or permission of the instructor

Session: Winter Day

W.J. Bancroft

#### FREQ21F France Today

An introduction to the study of political, social, and intellectual developments in France since 1945.

The topics to be discussed will include France and the European community; France and the francophone world; the political parties; the unions; the socialist experience; decentralization; decolonization; the educational system; the media; French cultural values. This course is designed to interest both the specialist and the non-specialist; in particular, it provides valuable background for advanced literature courses (and for FREQ33H).  
Prerequisite: FREA10(FREQ06Y)  
Session: Winter Day  
F. Mugnier-Manfredi

**FREB22S The Society and Culture of French Canada I**

A study of the historical, social and cultural development of French Canadian society, from the origin to 1959.

The lectures will be in French and will focus on those factors which provide the necessary background for an understanding of contemporary French Canadian Society. As such this course is a preparation for the second part (FREB23S). Students are strongly urged to take FREB43, The French Language in Canada, prior to B22/B23.

Prerequisite: FREB10Y (or B16Y) or equivalent competence (consult instructor).

Session: Winter Day  
L. Mignault

**FREB25Y Introduction to French Linguistics**

A study of the linguistic structure of French and of linguistic theories from the beginning of the twentieth century as applied to modern French.

Prerequisite: FREA10(FREB06)

Session: Winter Evening  
J. Kirkness

**FREB29F French Drama of the Eighteenth Century**

A study of some of the most important plays of the period with special emphasis on the concept of drama, its styles and techniques, which they illustrate.

The best known plays of the three major theatrical genres: tragedy, comedy and the so-called *drame bourgeois*, form the core of the course. In addition to reading, analyzing, discussing and appreciating them in their eighteenth century context, the class will look at these plays as practical demonstrations of certain theories concerning the nature of theatre, and what it is meant to communicate.

In the past required texts have included *Turcaret* (Lesage), *Zaire* (Voltaire), *Le Mariage de Figaro* (Beaumarchais) and others.

Prerequisite: FREA10(FREB06)

Session: Winter Day  
P. Moes

**FREB30F French Theatre of the Early Modern Period**

A study of trends in French drama from the late nineteenth century to the Second World War.

Authors include Becque, Jarry, Claudel, Cocteau, Giraudoux, Anouilh and Montherlant.

Prerequisite: FREA10(FREB06) or equivalent

Session: Winter Day  
C. Bertrand-Jennings

**FREB31S Contemporary French Theatre**

An examination of the philosophical concept of the "absurd" and its influence in modern French Theatre.

Authors studied will probably include Camus, Sartre, Ionesco, Beckett, Genet and Duras.

Prerequisite: FREA10(FREB06) or equivalent.

Session: Winter Day  
C. Bertrand-Jennings

**FREB38F The Theatre of French Canada**

A study of the dramatic literature of French Canada, with emphasis on the period after 1960.

A brief introduction to the history of Theatre in French in this country is provided, but most of the required texts come from the period of the past thirty years and are intended to reflect the cultural and political renaissance of Quebec and Acadia. Texts will probably include: Gélinas, *Tit-Coq*; Dubé, *Un simple Soldat*; Loranger, *Une Maison, un jour*; Barbeau, *Joualez-moi d'amour*; Tremblay, *Les Belles-soeurs*; Maillet, *La Sagouine*; Boucher, *Les Fées ont soif*.

Prerequisite: FREA10(FREB06) or equivalent.

Session: Winter Evening  
L.E. Doucette

**FREB40S French Classicism: Poetry and Prose**

The non-dramatic literature of the seventeenth century: satire, lyric poetry, the essay, the fable and the novel. Attention will be given to several of the major figures whose influence on European as well as on French thought and literary practice was profound and lasting. These include Malherbe, Pascal, Boileau, La Fontaine, La Rochefoucauld, La Bruyère and Mme de Lafayette.

Classes will be conducted as seminars in French. FREB41 is the recommended companion course.

Prerequisite: FREA10(FREB06Y)

Session: Winter Day  
J. Curtis

**FREB41F French Classicism: The Theatre**

A study of the development of classical tragedy and comedy in the seventeenth century, with emphasis on themes and dramatic structure as seen through the major plays of the period.

The course concentrates on a few selected plays by Corneille, Molière and Racine, considered both as works of art and as the literary expressions of a specific society.

Classes will be conducted as seminars in French. FREB40 is the recommended companion course.

Prerequisite: FREA10(FREB06)

Session: Winter Day  
J. Kirkness

**FREB42Y General History of the French Language**

The nature and pattern of change in the language from Latin to contemporary French.

In the fall term, the course will follow the chronological development of French from its beginnings in Latin; it will thus review the origins and characteristics of Old and Middle French with specific reference to phonology and morphology.

Sound changes will be studied in detail. In the spring term, attention will be given to the social and regional variations in the language of Modern France and to the impact on the vocabulary of social and technological change and of other languages.

Prerequisite: FREA10(FREB06)

Session: Winter Day  
C. Evans

**FREB43F The French Language in Canada**

The history and present state of the French Language in Canada.

Topics will be chosen for study from the history of the expansion of French beyond Europe (with particular reference to North America) and the development and current status of French in Canada.

Prerequisite: FREA10 (B06) or equivalent.

Session: Winter Day  
L. Mignault

**FREB70Y The Twentieth Century: In Search of the Novel**

A study of writers mostly of the earlier part of the century and primarily concerned with aesthetic and psychological questions in narrative fiction.

The course studies the works of such authors as Gide, Proust, Mauriac, Colette, Butor and Beckett.

Modern approaches to human psychology, language, time and space will be examined in the light of ongoing attempts to modify the shape and content of the traditional novel.

Prerequisite: FREA10(FREB06)

Session: Winter Evening  
W.J. Bancroft

**FREC09Y Comparative Stylistics**

A comparative study of expression in English and French, including practice in translating and analysis of selected examples of the translator's art.

Basic terminology and concepts of comparative stylistics will be studied in *Stylistique comparée du français et de l'anglais* by Vinay and Darbelnet (pub. Beauchemin; text and workbook). On the practical side, there will be translating and discussion of passages in English and in French representing various styles and levels of expression: formal, colloquial, technical, literary, journalistic. Classes involve discussion and practical work. Prerequisite: FREB10(FREB16) and FREB08  
Session: Winter Day  
J. Curtis

**FREC10Y Language Practice III**

A continuation of FREB10 (FREB16), including reading, grammar, composition, translation and stylistic exercises, discussion and/or debates. This is a course designed to bring the student to an advanced level of competence in written and oral skills. Vocabulary building exercises and grammar studies are combined to develop effective communication skills.

Emphasis in this course will be put equally on the oral and written components of French through (a) the study of grammar, (b) the reading and analysis of texts in modern prose, (c) the writing of essays in French, (d) discussions in the classroom.

Exclusion: FREC06

Prerequisite: FREB10(FREB16)

Session: Winter Day  
L. Mignault; F. Mugnier

**FREC24S The French Novel in the Eighteenth Century**

The evolution in the 18th Century of the novel as a literary form and as a social phenomenon.

Historical and literary background will be provided of the 18th Century novel. Texts studied will be chosen from the novels of such authors as Lesage, Laclos, Marivaux, Prévost, Voltaire, Rousseau and Diderot.

The course will be conducted as a seminar with lectures. Student participation in the form of oral and written contributions is expected.

Exclusion: (FREC32); (FREC33)

Prerequisite: One B-level course in the group FREB10(FREB16)-B81, excluding FREB17, FREB18, FREB19.

Session: Winter Day

P. Moes

**FREC26Y Prose Fiction From 1800 to 1900: From Romanticism to Naturalism**

An examination of the ways in which the major writers of nineteenth-century France developed the techniques of the novel while exploring the preoccupations of their society. This will be achieved through a close study of specific texts by authors such as Constant, Stendhal, Balzac, Sand, Flaubert, Maupassant, Zola and Huysmans.

The course will be conducted as a seminar, with active participation of the students highly encouraged.

Exclusions: (FREC32); (FREC33); (FREC34).

Prerequisite: One B-level course in the group FREB10(FREB16)-B81, excluding FREB17, FREB18, FREB19.

Session: Winter Day

C. Bertrand-Jennings

**FREC33S French Civilization: Continuity and Change**

Some of the theses of leading French thinkers concerning the development of France in the past, present and future.

This course is directed to students who wish a broad historical overview of the social events and literary movements they normally study in period and genre fragments. The first half of the course will look chronologically at behavioural patterns in specific periods of French cultural history that include the Middle Ages, the Renaissance, the Enlightenment and the Romantic era; two of the most enduring patterns, the rational and individualist traditions, will then be analysed and their mutation through the centuries developed as a focus through which to view, in the

second half of the course, contemporary French issues such as technological progress, superpower alternatives, mass consumption and the safeguarding of the quality of life. Texts, alternately artistic, sociological, economic or political in content, will include selections from Ariès, Bernal, Crozier, Duby, Foucault, Le Roy Ladurie, Touraine, Zeldin, and other scholars.

Prerequisite: One B-level course in the group FREB10(FREB16)-81, excluding FREB17, FREB18, FREB19; or permission of instructor.

Session: Winter Day

S.E. Mittler

**FREC34S Cross-currents in Contemporary French Fiction**

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 Cauweler, *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, FREB19.

Session: Winter Day

S. Mittler

**FREC39S French-Canadian Poetry**

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-Denis Garneau, Anne Hébert and Alain Grandbois.

Prerequisite: One B-level course in the group FREB10(FREB16)-FREB81, excluding FREB17, FREB18, FREB19.

Session: Winter Day

L.E. Doucette

**FREC40Y Modern French Poetry from Baudelaire to Valéry**

A study of such major nineteenth century post Romantic poets as Baudelaire, Gautier, Nerval, Verlaine, Mallarmé and Rimbaud. Twentieth century poets will include such major figures as Apollinaire, Péguy, Claudel and Valéry. Emphasis will be placed on the characteristic aspects of French Poetry and on poetic analysis rather than on historical development.

Prerequisite: One B-level course in the group FREB10(FREB16)-FREB81, excluding FREB17, FREB18, FREB19.

Session: Winter Day

W.J. Bancroft

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 some relation to the student's previous work, and should differ significantly in content and/or concentration from topics offered in regular courses.

Interested students should contact Prof. L. Mignault.

Exclusions: (FREC02, FREC03, FREC04, FREC05, FREC07, C90)

Prerequisite: One B-level course in the group FREB10(FREB16)-FREB81, excluding FREB17, FREB18, FREB19.

Session: Winter Day

**Courses Not Offered in 1988-89**

**FREA06Y** Introductory French I  
Exclusion: Grade 12 French or equivalent

**FREA09Y** Practical French I  
Exclusion: (FREC09) FREB06, not open to native speakers of French

Prerequisite: FREA16 or Grade 13 French or equivalent

**FREA16Y** Introductory French  
Exclusion: Grade 13 French or equivalent

**FREA17S** Elementary Conversation II  
Corequisite: FREA16

**FREA18Y** Introductory Business French  
Exclusion: FREA10(FREB06) or equivalent

Prerequisite: Grade 12 French or equivalent

**FREB17S** Intermediate Conversation II  
Prerequisite: FREB06 or equivalent

Corequisite: FREB19

**FREB19Y** Practical French II  
Exclusion: Not open to native speakers of French

Prerequisite: FREA10(FREB06) or equivalent

Corequisite: FREB17

**FREB20Y** History of French Civilization

**FREB24Y** French Thought and Literature in the Age of Enlightenment

**FREB26Y** The Romantic Current in French Literature

**FREB36F** French-Canadian Novel to 1945

**FREB37S** French-Canadian Novel since 1945

**FREB39S** Workshop in Modern French Theatre

**FREB48Y** Theoretical and Practical Phonetics

**FREB49Y** The Twentieth Century: The Search for Identity

**FREB80F** Representation of Women in French Literature

**FREB81F** Women's Consciousness in French Literature

**FREC18S** Translation for Business and Professional Needs

**FREC22Y** Introduction to Medieval French Language and Literature

**FREC23S** The French Novel in the Seventeenth Century

**FREC25Y** Literature of the Renaissance

**FRED16B** Advanced French  
Exclusion: (FREC16)  
Prerequisite: FREC10(FREC06)



## Geography

**Assistant Chair:** M.F. Bunce

The Geography curriculum offers courses dealing with the processes, problems and management of physical and human environments. There are Major and Specialist Programmes, and courses in Geography are listed as options in Canadian Studies, Women's Studies, the Co-op Programmes in Administration and in International Development Studies, Terrain and Earth Science, Quaternary Studies and Economics. Specific courses, such as those on Environmental Pollution and Soil Management, should be of general interest to students specializing in Physical and Life Sciences, while those on Modern Urban Landscapes, Urban Geography and Rural Geography may appeal to students specializing in other disciplines in Social Science.

Geography Programmes can be taken for either a B.A. or a B.Sc. degree depending on the courses selected. In general courses in human geography qualify for a B.A. and those in physical geography lead to a B.Sc.; courses which count towards a B.Sc. are listed in the section on Degree Requirements at the front of this calendar.

### Specialist Programme in Geography

**Supervisor:** A. Sawchuk

The requirements for this Programme are twelve full-course equivalents, which must include:

- 1 One of GGRA04Y or GGRB13Y (Note: GGRA04Y is a prerequisite for upper level courses in human geography).
- 2 One of GGRA05Y or GGRB24Y (Note: GGRA05Y is a prerequisite for upper level courses in physical geography).
- 3 One full-course equivalent from GGRB30F, GGRB31S, GGRC23F/S, GGRC24F/S
- 4 GGRD01Y
- 5 At least three full-course equivalents in Geography at the C-level or D-level, other than GGRD01Y (GLGC06F/S may be counted towards this requirement)
- 6 Two full-course equivalents in disciplines other than Geography to be agreed on in consultation with the Supervisor.

### Major Programme in Geography

**Supervisor:** A. Sawchuk

The requirements for this Programme are seven full-course equivalents in Geography, which must include:

- 1 One of GGRA04Y, GGRA05Y, GGRB13Y, GGRB24Y
- 2 GGRB30F or GGRB31S
- 3 At least two full-course equivalents from GGRB01Y, GGRB03Y, GGRB05Y, GGRB17Y, GGRB19Y, JEGB27F, GGRB28S
- 4 At least two full-course equivalents in Geography at the C-level or D-level

### GGRA04Y Introduction to Human Geography

An examination of the principles which underly the environments people make at local, regional and global scales, and the processes by which these are created, modified and maintained. Fundamental geographical concepts discussed include: spatial scales and patterns; linkages and disparities; regional integration and differentiation; location, distance and proximity; urban influence; relationships between people, societies and physical environments; cultural landscape; and sense of place. These are considered with reference to specific topics such as the connections between the First and Third Worlds, forms of urban and rural settlement, population growth, the use and abuse of resources, and the influence of changing technologies on spatial patterns. Session: Winter Day  
*M.F. Bunce, E.C. Relph*

### GGRA05Y Introduction to Physical Geography

An introduction to the principles of physical geography and the major physical environmental systems at the surface of the earth, including the interrelationships between systems and human impacts. The course covers the basics of meteorology and climatology, hydrology, soils and biogeography, oceanography and geomorphology. The course is designed for specialists in geography but is also suitable for non-specialists interested in obtaining a broad background in physical geography, and should be of general interest to students in the physical and life sciences. Exclusion: GLGA01Y  
Session: Winter Day  
*A. Sawchuk, T.B.A.*

### GGRB01Y Resource Management

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: Winter Day

*T.B.A.*

### IDS02Y International Development Studies: Physical and Ecological Resource Management

Introduces students to the physical and ecological bases of natural resource management, and their role in constraining development in Third World countries. The course includes study of: basic climatic processes, climatic differentiation; the hydrologic cycle and its role in water resource management; principles of soil development and nutrient cycling; processes of plant colonization and community development. It will include case studies of natural resource management and mismanagement in developing countries. Students will be encouraged to develop specific regional interests in course tutorials.

Session: Winter Day

*R. Bryan, A. Davis*

### GGRB03Y Climatology

A scientific analysis of Earth's climate through study of the governing physical and dynamical controls. The first term focuses on basic elements of Earth's meteorology. Major topics include: atmospheric composition, nature and significance of atmospheric radiation, physical controls on surface and global energy budgets, atmospheric moisture and cloud development, and atmospheric motion, including air mass and front concepts and upper air circulation.

The second term examines Earth's major climates. Topics include comparisons and contrasts of: mid-latitude temperate climates, and Asian/African monsoons. The remainder of the term is devoted to an examination of the nature and theories of climatic change. Two hours of lectures per week plus an additional lab/tutorial hour as needed.

Prerequisite: GGRA05Y or GLGA01Y, or an

A-level science course with permission of instructor

Session: Winter Day

*A. Sawchuk*

### GGRB05Y Urban Geography

An introduction to the geography of the North American city, emphasizing the importance of historical development to our understanding of the present.

The first half of the course looks at cities as reflections of, and influences upon, North American society. The second half deals with the internal organization of the city, with the operation of the land market, patterns of residential, commercial and industrial land use, with planning and urban politics. Examples will be drawn in part from Canadian cities.

Prerequisite: GGRA04Y or an A-level course in the Social Sciences or the Humanities

Session: Winter Day

*T.B.A.*

### GGRB13Y Modern Urban Landscapes

An examination of the appearance of modern cities, especially in terms of architecture and urban planning and with reference to two questions: How have cities come to look as they do? What can be learned about modern societies by studying their visual environments? The fall term will be devoted chiefly to an historical survey of architectural styles and town planning approaches from 1880 to the present; the spring term emphasizes the analysis, evaluation and interpretation of urban landscapes.

Session: Winter Day

*E.C. Relph*

### GGRB17Y Rural Geography

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 patterns of studying rural areas.

Prerequisite: GGRA04Y or an A-level course in the Social Sciences or the Humanities

Session: Winter Day

*M.F. Bunce*



**GGRB19Y General Geomorphology**

Processes of surficial material development and landform evolution; weathering processes and soil development; hillslope form and process; principles of fluvial geomorphology and drainage system analysis; introductory coastal geomorphology; processes of landform evolution in arid regions; the geomorphic role of climatic changes; Pleistocene and present day glaciation; geomorphology as an applied geotechnical field. Field excursions, laboratories, lectures.

Prerequisite: GGRA05Y or GLGA01Y, or IDSB02Y with permission of instructor

Session: Winter Day  
R. Bryan, B. Greenwood

**GGRB24Y Environmental Pollution**

The physical causes of environmental degradation with emphasis on the pollution of water systems by human usage. The course outlines the types and sources of major pollutants and suggests strategies to reverse or avoid the deteriorations caused by them.

The aim is to examine the complexity of the controls in undisturbed water-air systems, and to give students an understanding of how the residues of human population affect the quality of natural systems.

Session: Winter Day  
A.G. Price

**JEGB27F Location and Spatial Development**

An examination of the use of competitive location theory in the analysis of regional economic growth and decline. Topics include Ricardian rents and spatial equilibrium, trade flows and spatial price equilibrium, geographical market areas and spatial pricing policies, the location of a firm with mobile resources, industry location in equilibrium, trade theory and regional specialization, and the regional growth theories of Borts-Stein and Myrdal. Two hours of lectures and one tutorial hour per week.

Prerequisite: ECOA01Y  
Session: Winter Day.  
J. Miron

**GGRB28S Geography and Development**

An examination of the major theoretical perspectives on socio-economic development and the explanations of geographical phenomena each entails. The focus of the course will be upon certain geographical aspects of socio-economic change in the contemporary Third World.

Growth theory and other narrowly economic perspectives on development, modernization theory, Marxist and Neo-Marxist perspectives will figure prominently amongst the theoretical perspectives critically discussed in the course. The implications of each for the analysis of spatial inequality and the formulation of urban and regional policy will be stressed.

Prerequisite: GGRA04Y or another A-level course in Social Sciences

Session: Winter Day  
T.B.A.

**GGRB30F Geographic Methods**

An introduction to basic methods employed in geography, including data handling, graphic representation, map and air photo interpretation and field survey techniques.

The aim of the course is to provide students with skills needed for the analysis of geographical problems. A one-hour lecture and two-hour laboratory each week.

Prerequisite: GGRA04Y or GGRA05Y or GGRB13Y or GGRB24Y

Session: Winter Day  
T.B.A.

**GGRB31S Data Analysis in Geography: An Introduction**

Topics include probability models, frequency and sampling distributions, population parameters and statistical estimation, hypothesis testing, correlation and regression analysis, sampling theory, and analysis of variance. Applications to Geography include spatial sampling, trend surfaces, evaluation of spatial patterns, and spatial auto-correlation. Extensive use is made of a package of computer programs for statistical analysis. Two hours of lectures and one tutorial hour per week.

Exclusion: Any university-level half or full course in statistical methods

Prerequisite: GGRA04Y or GGRA05Y or GGRB13Y or GGRB24

Session: Winter Day  
J. Miron

**GGRC04F Urban Residential Geography**

An examination of the residential geography of North American cities, with an emphasis on the Toronto Metropolitan area.

In the lectures, patterns of residential land use will be discussed, together with their causes and their social and political consequences. Within this framework, topics will include the separation of home from work; class, ethnic and gender

segregation; neighbourhood change; suburbanization and whitepainting. In research projects students will be given the opportunity to apply these ideas to Toronto.

Prerequisites: GGRB05Y and GGRB30F

Session: Winter Day

T.B.A.

**GGRC06S Gender and the City**

This course will look at differences in the geographical experience of men and women. It will focus on the way gender roles are reflected in, and reproduced by, the geography of the city. Topics will include the separation of home and "work", the nature of the home environment; the use of public space, and city-suburban differences. It will also consider the problems of creating an environment that provides equal opportunities for men and women. Specific issues include electronic "homework" and day care. Students will be encouraged to carry out field research in Toronto.

Prerequisite: GGRB05Y or JHSA01Y

Session: Winter Day  
T.B.A.

**GGRC13S Urban Political Geography**

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.  
T.B.A.

**GGRC18F Urban Transportation Policy Analysis**

This course examines current problems in urban transportation planning using a policy-analytic framework. Topics include the setting of community goals, economic and social cost-benefit analysis, evaluation of redistributive impacts, impacts of transport projects on land values and urban form, travel demand forecasting,

congestion, travel time valuation, mass transit subsidies, pollution from traffic, and energy use in alternative transportation systems. Two hours of lectures and one tutorial hour per week.

Prerequisite: GGRB05 or GGRB27 or JEGB27

Session: Winter Day  
T.B.A.

**GGRC23F Computer Modelling in Physical Geography**

The course aims to introduce students to the nature and role of computer modelling in physical geography. There will be a strong emphasis on numerical modelling with examples from climatology, geomorphology, and hydrology. Students will be taught the FORTRAN 77 language and, by the end of the course, should be competent to write programmes to fulfil most of their computing needs. Two hours of lectures and a two hour lab period per week.

Prerequisites: Any two of GGRB03Y, GGRB19Y, GGRB24Y; GGRB31S strongly recommended

Session: Winter Day  
A. Sawchuk

**GGRC24F Advanced Quantitative Methods in Geography**

This course covers Monte Carlo simulation, smoothing, filtering, clustering, re-expression, PLUS and PRODUCT Analysis, multiple regression, spectral analysis, trend surface analysis, and nominally-scaled variables. An intuitive and non-rigorous approach is used to highlight problems and potential statistical approaches.

Two hours of lectures and one tutorial hour per week.

Prerequisite: A university level half course in quantitative methods such as GGRB31 or equivalent

Session: Winter Day T.B.A.

**GGRC26Y Coastal Geomorphology**

The mechanics of coastal processes leading to morphological change in the coastal zone will provide the focus for studying the evolution of Canada's present shorelines, especially those of the lower Great Lakes. Field and laboratory studies will complement lectures on the theoretical aspects of sediment erosion, transport and deposition in the coastal zone. The course

should be of interest to students in limnology, geology and marine studies.

Exclusion: (GGRB15Y)

Prerequisites: GGRB19Y; courses in science and quantitative methods (e.g. GGRB31S) will be useful.

Corequisite: GGRB19

Session: Winter Day

B. Greenwood

#### **GGRC27Y Soil Management and Conservation**

Application of soils geography to problems of resources use and management. Soil erosion and conservation procedures.

Drainage and reclamation of wet soils; reclamation of polder soils. Soil survey and agriculture. Problems of soils in Arctic and Sub-Arctic environments. Soils of arid and semi-arid lands; irrigation salinization, reclamation.

Exclusion: (GGRB29Y)

Prerequisite: GGRA05Y or GLGA01Y or IDSB02Y

Session: Winter Day

T.B.A.

#### **GGRC28Y The Hydrology of Surface and Subsurface Waters**

A quantitative study of the processes governing the behaviour of water at or near the surface of the earth. Conventional techniques of analysis and prediction are considered as well as some of the applications to problems of water resources management planning.

Many of our problems, particularly those involving extreme hydrologic events, stem from two sources: our lack of understanding of the operation of natural hydrologic processes; and our inability to predict and understand the consequences of our manipulations of those processes. It is hoped that this course will result in a better understanding of hydrologic processes, and in a working knowledge of ways in which "hydrologic risk" can be assessed. Two hours of lectures and one one-hour laboratory per week.

Prerequisites: One of GGRB03Y, GGRB19Y, GGRB24Y, IDSB02Y; and GGRB31S or equivalent

Session: Winter Day

A.G. Price

#### **GGRC29S Problems in Modern Agricultural Land Use**

Examination of the land use problems created by rapid changes in modern agriculture. Emphasis will be placed on the impact of high technology, corporate economics and urbanization upon agricultural land use and landscapes.

The course is thematic in approach and will include such topics as changes in land tenure, chemical applications in farming, the agribusiness, fragmentation, land abandonment and conversion, urbanization of farmland. One two-hour seminar each week plus individual consultation.

Prerequisite: One of GGRB17Y, GGRB01Y, GGRB24Y, IDSB01Y, IDSB02Y

Session: Winter Day

M.F. Bunce

#### **GGRC30S Boundary Layer Climates**

A rigorous introduction to radiative and turbulent energy exchanges in the lowest 2 km of the Earth's atmosphere. The central focus will be on computing these exchanges for a variety of atmospheric conditions and surface types. Approaches used will include both instrumentation and mathematical/numerical (i.e. computer) modelling. Students will receive hands-on experience with both approaches.

Specific topics include: modelling radiation fluxes in a variety of media (e.g. the atmosphere, plant communities), heat transfer within the ground and water bodies, and the eddy correlation, flux-gradient, and aerodynamic models of turbulent transfer. One two-hour lecture and one two-hour laboratory per week.

Prerequisite: GGRB03Y and GGRC23F/S

Session: Winter Day

A. Sawchuk

#### **GGRD01Y Supervised Research**

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: (GGRC01Y)

Prerequisites: Any fifteen full-courses equivalents including at least five full-course equivalents in geography and one full-course equivalent from GGRB30F, GGRB31S, GGRC23F/S, GGRC24F/S

Session: Winter Day

#### **GGRD02F Environmental Philosophies**

A critical review of different philosophical attitudes to both human and natural environments, with special attention to their assumptions and implications. Philosophical perspectives considered will include positivism and rationalism; utilitarianism; marxism and capitalism; geography. Issues discussed will include the environmental roles of humility, preservation, conservation, management, planning and domination; technology for liberation or subjugation; environmental equality and social justice; responsibility to the present and the future; sustainability; ecofascism; environmental ethics; mutual aid; and deep ecology.

Exclusion: GGRC12F/S

Prerequisite: Any ten full course equivalents; by the end of the year in which this course is taken at least five other full course equivalents in Geography must have been completed.

Session: Winter Day

E.C. Relf

#### **GGRD03F/S Theoretical Geomorphology**

History and philosophy underlying modern theories of landform evolution. Emphasis will be placed on readings and seminar work dealing with the modelling of geomorphic systems and the constraints imposed by space and time. Limited enrolment: 20

Exclusion: GGRC05F/S

Prerequisite: GGRB19Y and either GGRC26Y or GGRC27Y or GGRC28Y; a background in science will be useful.

Session: Winter Day

B. Greenwood

#### **GGRD05S Hillslope Geomorphology**

The course will involve a review of the development of major concepts of hillslope evolution, detailed theoretical and practical study and measurement of hillslope processes, and application of the principles of hillslope geomorphology to problems of land-use management, such as soil erosion and lake bluff collapse. Limited enrolment: 15.

Exclusion: (GGRC35F/S)

Prerequisites: GGRB19Y and one of GGRC26Y or GGRC28Y

Session: Winter Day

R. Bryan

#### **Courses Not Offered in 1988-89**

**GGRC07F/S** Countryside Conservation

Prerequisite: GGRB17Y or

GGRB05Y or GGRB13Y

**GGRC08F/S** Project Management

Prerequisite: GGRB01Y or IDSB01Y or IDSB02Y; and GGRB30F or GGRB31S or any university level course in statistical methods.

**GGRC20F/S** Issues in Rural Development

Prerequisite: One of GGRB01Y, GGRB17Y, GGRB28S, IDSB01Y, IDSB02Y

**GGRC31F/S** Development and Planning of Metropolitan Regions

Prerequisite: GGRB31S or equivalent, and one of GGRB05Y or JEGB27F

**GGRC32F/S** Research Seminar in Soil Management

Prerequisite: GGRC27 (GGRB29Y)

**GGRC34F/S** Landscape Interpretation

Prerequisite: GGRB13 and GGRB30

**GGRD04F/S** Sedimentary Models

Exclusion: (GGRC25F/S)

Prerequisite: GGRB19Y and either GGRC26Y or GGRC28Y or GGRD05F/S

**GGRD06F/S** Climatic Change

Exclusion: GGRC37) Prerequisite: GGRB03Y and GGRC23F/S

## Terrain and Environmental Earth Sciences

### Specialist Programme in Terrain and Environmental Earth Sciences

*Supervisor:* N. Eyles (284-3254)

TEES is a four year specialist programme that has recently been developed at Scarborough in response to an escalating demand in industry for geologists with expertise in environmental problems. The TEES programme provides students with a good background in all the fundamental aspects of geology by studying earth materials at and near the surface, the land forms into which these materials have been shaped, and the processes that form them. While the emphasis is on geology, the programme is multi-disciplinary in nature and is strongly supported by the basic sciences and physical geography. The programme comprises sixteen courses and draws upon courses offered on both the St. George and Scarborough Campuses.

#### First year:

GLGA01Y or GGRA05Y	Introduction to Geology
MATA26Y or MATA55Y CHMA02Y PHYA03Y	Introduction to Physical Geography Calculus Calculus with Analysis General Chemistry Physics for the Physical and Life Sciences must be taken within the first 10 courses of the programme.
BIOA03Y	Introductory Biology must taken within the first 15 courses of the Programme.

#### Second year:

GLGB02S	Principles of Stratigraphy and Sedimentology
GLGB05F GLGB06S GGRB19Y MATB41F	Introductory Mineralogy Optical Mineralogy General Geomorphology Techniques of the Calculus of Several Variables I
STAB52F or GGRB31S CSCA04H or CSCA56F or	Probability and Statistics I Data Analysis in Geography How Computers are Used Computer Programming

CSCA58F GLGB03S	Introduction to Computing Field Camp I: The Appalachian Mountains
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#### Third year:

GLG318F GLG319S GEO326F/ GLGC06S	Introductory Petrology I Introductory Petrology II
GGRC28Y	Glacial and Periglacial Geology*
CHMB03Y or CHMB02Y GLGC10F	Hydrology of Surface and Sub-surface Waters Physical Chemistry I Analytical Chemistry Exploration Techniques in Hydrogeology

#### Fourth year:

GLGD01S GLG400H	Contaminant Hydrogeology Environmental Geochemistry
GGRD04H or GLG429F	Sedimentary Models Sedimentology of Clastic Rocks
GLG332F	Geometry and Kinematics of Tectonic Structures
GLGD05F	Field Camp II: The Western Prairies and the Rocky Mountains

\*Note: This course is given on the St. George Campus

## Geology

*Discipline Representative:* J. Westgate (284-3249)

Geology is concerned with the origin and evolution of the Earth as evidenced primarily through the study of rocks. The subject is multidisciplinary in nature and draws heavily upon the physical and biological sciences. Students wishing to pursue a specialist programme in Geology on the Scarborough Campus should register in the Terrain and Environmental Earth Sciences (TEES) Programme. Further details on the Geology programme at the University of Toronto can be obtained from the Discipline Representative.

### GLGA01Y Planet Earth: an Introduction to Geology

Fundamental concepts of physical and historical geology are discussed in the context of the Earth as a planet. 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 Grade 13 course in Mathematics and Grade 13 Chemistry or Biology or Physics are recommended.

Exclusion: GGRA05Y

Session: Winter Day

J. Westgate

### GLGA03S Geological Hazards

This course will focus on the geological background and possible solutions to major hazards affecting man and his environment, including such topics as landslides, erosion, earthquakes, volcanic eruptions and asteroid impacts, flooding, glaciation, subsidence, and the disposal of toxic wastes. It will be of interest to a wide range of students in the life, social, and physical sciences, and offers an opportunity for the 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

Physical and chemical processes of sedimentation, properties and classification of sedimentary rocks, sedimentary environments and facies, diagenesis, stratigraphic nomenclature and classification.

Prerequisite: GLGA01Y or GGRA05Y

Session: Winter Day

N. Eyles

### GLGB03S Field Camp I: The Appalachian Mountains

The stratigraphy, sedimentology, and structure of Palaeozoic rocks of the Appalachian Mobile Belt 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

Crystallography, physical properties, origin and occurrence of minerals; and the descriptive mineralogy of approximately eighty common and useful minerals.

Prerequisites: GLGA01Y or GGRA05Y, CHMA02Y

Exclusion: GLGB01Y

Session: Winter Day

D. Gorman

### GLGB06S Optical Mineralogy

Optical mineralogy and identification of the principal rock-forming minerals in thin section by the use of the polarizing microscope; introduction to petrography.

Prerequisite: GLGB05F

Exclusion: GLGB01Y

Session: Winter Day (Enrolment limit of 20)

J. Gittins

### GLGC10F Exploration Techniques in Hydrogeology

Following an introduction to the principles of hydrogeology and the mechanics of groundwater flow, emphasis is directed towards practical methods of groundwater exploration and assessment. These methods include drilling, surface and borehole geophysics, pumping test analysis and resource evaluation.

Session: Winter Day

Prerequisites: GLGA01Y or GGRA05Y, MATA26Y or MATA55Y

Exclusion: (GLGC01Y) (GLGB04F)

Staff

### GLGD02H/D03Y Research Project

This course is designed to give students experience in the design, implementation, and reporting of a substantial research project involving laboratory and/or fieldwork. Existing faculty research allows a broad range of possible topics. The project may be designed as a half or full course and should be undertaken after the end of the 3rd Year, subject to faculty availability. Faculty permission and supervision is required and the course is only open to those students who have either completed or are undertaking specialist courses in the area of intended study.

Exclusion: (GLGC03H or Y)

Session: Winter Day

Staff

**GLGD04S Readings in Quaternary Geology**

A seminar course with a focus on recent advances in Quaternary geology, especially those pertinent to North America. Prerequisites: GLGC06S or GEO326F or by permission of Instructor.

Exclusion: (GLGC08S)

Session: Winter Day

J. Westgate

**GLGD05F Field Camp II: The Western Prairies and the Rocky Mountains**

The third year field camp is designed to familiarize the student with several geological settings and modern environments. The camp is set in Alberta and will traverse the western prairies, the foothills and the Rocky Mountains, offering field mapping and project work in a wide range of sedimentary terrains. Particular emphasis is placed on structural, hydro and petroleum geology, and sedimentary environments in time, including a visit to the Tyrrell Museum of Palaeontology at Drumheller. This course will be held during the first week of the fall term.

Prerequisites: GLGB02S, GLGB03S and GLGC06S or GEO326F and GLGC10F (B04F)

Exclusion: (GLGC05S)

Session: Winter Day

N. Eyles and K.W.F. Howard

**Courses Not Offered in 1988/89**

**GLGC06S** Glacial and Periglacial Geology  
Prerequisite: GLGB02S or GGRB19Y

**GLGD01S** Contaminant Hydrogeology  
Prerequisite: GLGC10F (GLGB04F) and CHMA02Y or MATB41F and CHMB03Y or CHMB02Y  
Exclusion: (GLGC01Y), (GLGC09S)

**German**

Discipline Representative: H. Wittmann (284-3197)

Courses in German provide opportunities for the study of the language and of the literature of Germany, Austria and part of Switzerland. Language and literature courses may be combined in various ways by students who have completed the prerequisite courses. Also available is a Major Programme in German Language. Students of German are encouraged to

take courses in Fine Art, History, Humanities, Linguistics, Literature, Philosophy and in other languages as an enrichment of their programme. Courses in *German Literature* in translation are listed under Literature.

**Major Programme in German Language**

Supervisor: U. Lesser-Sherman (284-3151)  
The Programme consists of the following courses:

GERA09H	Language Practice I
GERA10Y	Introductory German
GERB19Y	Language Practice II
GERB20Y	Intermediate German
GERC01F/S	The Last Hundred Years
GERC02F/S	Practicum in the History and Structure of the German Language
GERC03F/S	Methods of Interpreting Literature
GERC10Y	Advanced Conversation and Composition
LINA01Y	General Linguistics (a more theory-oriented course)
or	
LINA05Y	Practical Language Study

Language requirements will be waived by permission of the Supervisor in the case of students judged to have highly 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:

JHFC40Y	Vienna and the Origins of Contemporary Culture
LITA01Y	Introduction to Literature
LITB15Y	Dramatic Literature and Political Revolution
LITB18F/S	Nineteenth Century Prose
LITB19F/S	Twentieth Century Prose
LITB23Y	Expressionism
LITB33Y	Post-War Europe
LITB38F/S	Features of Post-war German Literature
LITB44Y	The Holocaust in Modern Literature
LITB50F/S	Science, Power and Hell: The Story of Dr. Faust
LITC10Y	Masterpieces of the German Novel
LITC21Y	Romanticism

**GERA09H Language Practice I**

A practicum offered in conjunction with GERA10Y. The focus is on pronunciation and elementary oral composition.

This practicum is designed to reinforce and supplement by oral drills and practice the grammar work done in GERA10Y, as well as to expand the students' skills of expression and comprehension in German. There are two hours of supervised language laboratory and oral drills.

Corequisite: GERA10

Session: Winter Day

U. Lesser-Sherman

**GERA10Y Introductory German**

The fundamentals of grammar and syntax.

In this course the students will acquire a basic knowledge of the German language. One comprehensive textbook will be used and a variety of reading materials will be introduced to initiate conversation.

The students are exposed to the four language skills from the beginning of the course (listening, speaking, reading, writing). They are encouraged to practise these skills in a variety of combinations. There are four hours of intensive grammar and structural work per week.

Corequisite: GERA09

Session: Winter Day

Staff

**GERB19Y Language Practice II**

A practicum offered in conjunction with GERB20Y. The focus is on oral and written composition at the intermediate level.

This practicum is designed to increase the students' vocabulary and fluency in German. There are three hours of supervised discussion, essay writing and reading each week.

Prerequisite: Grade 13 or GERA09 and A10

Corequisite: GERB20

Session: Winter Day

H. Wittmann

**GERB20Y Intermediate German**

Intensive language work focusing on readings and oral and written composition.

The course is designed to expand the active and passive vocabulary of the students through a variety of reading materials. A thorough grammar review accompanies the reading selections. As the course progresses, the emphasis will shift to literary discussions and conversation. Short stories will supplement the textbook. Mimeographed material on current events will be introduced from time to time to

spark class discussion.

Corequisite: GERB19

Prerequisite: Grade 13 German or GERA09 and A10

Session: Winter Day

U. Lesser-Sherman

**GERC01F The Last Hundred Years**

German Civilization from 1870 to the present.

Beginning with the unification of Germany in 1871, we will examine the impact of the two World Wars, the democratic interlude and the rise of Nazism on the social and artistic life of Germany. A close look at present day Germany, East and West, will conclude the course.

Exclusion: GERB24F/S

Session: Winter Day

U. Lesser-Sherman

**GERC03S Methods of Interpreting Literature**

An introduction to the techniques of literary analysis.

Poems and short pieces of prose will be analysed in close reading. Prosody and metrics will be dealt with in some detail; special attention will also be given to the relationship between form and content. In the final section patterns of rhetoric, syntax, and style will be investigated in the analysis of prose texts. The course is intended to familiarize the student with the fundamental criteria and techniques required for the analysis of literary works.

All sessions are informal tutorials: they have free-flowing discussions with a high degree of student involvement. Each student is asked to prepare a number of short presentations.  
Prerequisite: GERB19 and B20  
Exclusion: (GERB50S)  
Session: Winter Day  
H. Wittmann

**GERC10Y Advanced Composition and Conversation**

A continuation of language work done in GERB19Y and B20Y.

A variety of language exercises will be centered around 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

**GERD01Y Advanced Language Practice**

A continuation of language work done in German C10Y.

This course is intended for students who want to specialize in German language and want to enhance their fluency. Texts of some degree of complexity will be read and analyzed. Special emphasis will be put on the attainment of idiomatic fluency in a variety of contexts both of a practical, career oriented and a literary nature. Students' needs and objectives will help determine the content of the exercises.

Exclusion: (GERC50Y)

Prerequisite: GERC10Y

Session: Winter Day

U. Lesser-Sherman

**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 1988-89**

**GERC02S** Practicum in the History and Structure of the German Language

Prerequisites: Grade 13 German or GERA09 and GERA10

Exclusion: (GERB33S)

**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

GRKC23F Modern Greek Cinema and Theatre  
GRKC24S Classical Themes in Modern Greek Literature

GRKC30-34F  
GRKC35-39S Supervised Reading  
GRKC40Y

For further information see under *Classical Studies*.

**Greek and Roman History**

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

GRHC26Y Studies in Greek History II

For further information see under *Classical Studies*.

**History**

*Discipline Representative:* J.P.B. Kenyon (284-3205)

The study of history is intended to enhance our understanding of human society by examining the experiences of particular peoples and their societies in the past. Its findings depend upon the precise evaluation of specific evidence. History's concerns and goals are humanistic; its methods draw from all forms of scholarly endeavour. History courses, therefore, can play a part in a number of interdisciplinary programmes and can serve as an adjunct to courses in Politics, Philosophy, Literature, Economics and Sociology.

The History curriculum combines a variety of approaches and teaching in order to satisfy a number of purposes. HISA01Y provides both a general introduction to the study of history at the university level, and the preparation for further studies in European history. A series of survey courses (HISB02-09) provides a comprehensive foundation of knowledge in their particular areas, and also serves as preparation for more detailed and advanced studies. In 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.

**Specialist Programme in History**

*Supervisor:* J.S. Moir (284-3141)

Students must complete twelve full-course equivalents as follows:

**A**  
Ten must be in History (HIS or GRH). These ten must include HISA01Y and five upper-level courses. Upper-level courses must be chosen from HISC10Y-HISD99Y, GRHC24F/S-GRHC29Y, or HIS300 and 400 level courses on the St. George campus. Of the ten at least two must deal with the period prior to 1815 (see list). Students are also required to take courses in at least three different areas (Greek and Roman, Medieval European, Modern European, British, Canadian, United States, Russian), and to take upper-level courses in at least two different areas with at least two of these in the same area.

**B**  
Two must be full-course equivalents in disciplines other than History and be agreed upon in consultation with the Supervisor.

Pre-1815 courses

**LIST A**

Full-year courses exclusively within a period before 1815

GRHB01Y Greek History from the Bronze Age to the Death of Alexander  
GRHB02Y Greek and Roman History from the Death of Alexander to the Gracchi  
GRHB03Y Roman History from the Gracchi to Nero  
GRHC25Y\* Studies in Greek History I  
GRHC26Y\* Studies in Greek History II  
GRHC27Y\* Studies in Roman History: Pompeii  
GRHC29Y\* Studies in Roman History: Roman Britain  
HISB06Y Europe in the Middle Ages  
HISC11Y\* France from Reformation to Revolution, 1500-1789  
HISD14Y\* The European Mentality in the Early Modern Period  
HISC18Y\* Europe under the Enlightened Despots  
HISC23Y\* Tudor and Stuart England  
HISD32Y\* The American Colonies and the British Empire  
HISC61Y\* The Beginnings of France: Constantine to Charlemagne

HISC83Y\* Europe in the Reformation Era, 1500-1650  
HISD62Y\* The Crusades

**LIST B**

Half-year courses exclusively within a period before 1815

GRHC24F/S Ancient Historiography  
HISD41F/S\* Old Huronia  
HISC84F/S\* Popular Culture in Early Modern Europe  
HISD11S\* Crime and Punishment  
HISD13S\* The Scientific Revolution  
HISD34F/S\* Revolutionary America 1760-1790

**LIST C**

Full-year courses covering a period before 1815 in the first half of the year (equivalent to half-year course credit)

HISA01Y The European World  
HISB07Y Russia from the Thirteenth Century to the Present  
HISC10Y\* The Sexes since 1350  
HISC46Y\* Atlantic Canada

\* Students should check these courses for prerequisites.

**Specialist Programme in Economics and History**

For details refer to Economics.

**Major Programme in History**

*Supervisor:* J.S. Moir (284-3141)

Students must complete seven full-course equivalents in History (HIS or GRH). These seven must include HISA01Y and three upper-level courses. Upper-level courses must be chosen from HISC10Y-HISD99Y, GRHC24F/S-GRHC29Y, or HIS300 and 400 level courses on the St. George campus. Of the seven at least one must deal with the period prior to 1815 (see list). Students are also required to take courses in at least two different areas (Greek and Roman, Medieval European, Modern European, British, Canadian, United States, Russian), and to take at least two upper-level courses in one of these two areas.

Pre-1815 courses

**LIST A**

Full-year courses exclusively within a period before 1815

GRHB01Y History of Greece from 2000 B.C.  
GRHB02Y Greek and Roman History from the Death of Alexander

- GRHB03Y Roman History from the Gracchi to Nero  
 GRHC25Y\* Studies in Greek History I  
 GRHC26Y\* Studies in Greek History II  
 GRHC27Y Studies in Roman History: Pompeii  
 GRHC29Y\* Studies in Roman History: Roman Britain  
 HISB06Y Europe in the Middle Ages  
 HISC11Y\* France from Reformation to Revolution, 1500-1789  
 HISD14Y\* The European Mentality in the Early Modern Period  
 HISC18Y\* Europe under the Enlightened Despots  
 HISC23Y\* Tudor and Stuart England  
 HISD32Y\* The American Colonies and the British Empire  
 HISC61Y\* The Beginnings of France: Constantine to Charlemagne  
 HISC83Y\* Europe in the Reformation Era, 1500-1650  
 HISD62Y\* The Crusades

**LIST B**

Half-year courses exclusively within a period before 1815

- GRHC24F/S Ancient Historiography  
 HISD41F/S\* Old Huronia  
 HISC84F/S\* Popular Culture in Early Modern Europe  
 HISD11S\* Crime and Punishment  
 HISD13S\* The Scientific Revolution  
 HISD34F/S\* Revolutionary America 1760-1790

**LIST C**

Full-year courses covering a period before 1815 in the first half of the year (equivalent to half-year course credit)

- HISA01Y The European World  
 HISB07Y Russia from the Thirteenth Century to the Present  
 HISC10Y\* The Sexes since 1350  
 HISC46Y\* Atlantic Canada

\* Students should check these courses for prerequisites.

**HISA01Y The European World: An Introduction to History**

A survey of European history from the Middle Ages to the present.

This course examines the most prominent changes in social and economic organization, in thought and in politics, as Europe developed from a feudal and agrarian to a modern and industrial order. The teaching method is based on lectures and tutorials. A set of readings from primary and secondary sources will be

assigned, but further reading by the student is essential.

Session: Winter Day  
*J. L. Pearl, E. W. Dowler*

**HISA02S The Twentieth Century World**

The background to the international conflicts and national tensions which fill our daily news.

This course concentrates on major political and social problems; explores the disintegration of the great European empires and the formation of a new balance of power between western, communist, and third world powers; examines the practice of democracy and dictatorship within nations; investigates the impact of scientific and technological change on the world economy and on morality.

Session: Winter Day  
*W. M. Dick and Staff*

**HISB02Y Britain from the Eighteenth Century to the Present**

An examination of the political, social, economic and religious forces which transformed an aristocratic society into an industrial power, and of the reasons for the decline of British power in the twentieth century.

The course will be concerned with the problems caused by the transformation of an agrarian into a highly industrialized economy, of an aristocratic into a liberal democratic society, and of a society based on the ideology of the Enlightenment into one committed to that of evangelical humanitarianism. It will also consider why, in the twentieth century, the British have abandoned their imperial role and have concentrated on the establishment of a welfare state. Two lectures and one tutorial per week.

Session: Summer Evening; Winter Day  
*M. Bastable (Summer)*  
*J. P. B. Kenyon (Winter)*

**HISB03Y History of the United States**

Major themes from the Revolution to the present. The course will focus on such questions as independence, political organization, political parties, territorial expansion, nationalism and sectionalism, reform movements, the slavery and civil rights question, the response to industrialization progressivism and the United States as a world power. Two lectures and one tutorial per week.

Session: Winter Day  
*A. N. Sheps, W. M. Dick*

**HISB04Y Introduction to Canadian History**

An introduction to the history of Canada from the first European contacts to the present.

Topics studied include: exploration and settlement; the institutions and life of New France; the British Conquest and its results; the impact of the American Revolution on British North America; development of the British colonies in North America; the confederation movement; the political, economic, social, and cultural history of the new nation-state established in 1867. Two hours of lectures and one tutorial hour per week. Regular attendance at and participation in tutorials are required.

Session: Winter Day  
*I. R. Robertson*

**HISB07Y Russia from the Thirteenth Century to the Present**

The Russian people, state and culture, with emphasis on the major social, institutional and ideological changes from the rise of Moscow to the present.

Wherever possible readings have been selected from primary source materials so that students will become acquainted not only with the facts but the flavour of Russian history. Lectures and tutorials.

Session: Winter Evening  
*E. W. Dowler*

**HISC10Y The Sexes Since 1350**

An explanation of changing definitions of femininity and masculinity from the Renaissance to the recent past.

Topics will include: changes in expectations for men and women in their domestic, parental, and public roles (with the latter including education, employment, politics, and war); relations between the sexes; feminism and anti-feminism. The focus will be on the British Isles, Western Europe, and Canada, and on the nineteenth and twentieth centuries. Lecture and discussion; three hours.

Exclusion: (HISB10)  
 Prerequisite: One of HISA01, HISB02, HISB03, HISB04, or HISA01  
 Session: Winter Day  
*L. J. Abray*

**HISC11Y France from Reformation to Revolution 1500-1789**

The development of French politics and society from the wars of religion to the reign of Louis XVI.

This period is characterized by rapid, often traumatic change in which France forcefully asserted itself as the principal power on the European continent. Special consideration will be given to the relations between political developments and social, religious and intellectual phenomena. One two-hour lecture and one tutorial session per week.

Exclusion: (HISB11)  
 Prerequisite: HISA01Y  
 Session: Winter Day  
*J. L. Pearl*

**HISC23Y Tudor and Stuart England**  
 England from the end of the Wars of the Roses to the Glorious Revolution, 1485-1688.

The course gives an overview of political, economic, social, and cultural patterns. Special attention will be given to four themes: the powers and personalities of the rulers; Parliament and the rule of law; the great religious crisis and its spill-over into civil war; the cultural heritage. Two lecture hours and one tutorial per week.

Exclusion: (HISB23)  
 Prerequisite: Any B-level course  
 Session: Winter Day  
*L. J. Abray*

**HISC25Y British Imperialism in India**  
 The impact of imperialism on India.

Topics will include the motive behind British imperialism; the problems of administration; the transfer of power; neo-colonialism. Two lectures a week. Exclusions: (HISB22) (HISB25)  
 Prerequisite: HISB02 or permission of instructor

Session: Winter Day  
*J. P. B. Kenyon*

**HISC31F Slavery in the American South**

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  
 Session: Winter Day  
*M. Wayne*



**HISC35Y Twentieth Century America**

A topical study of the United States since the turn of the century.

A traditionally rural culture of individual opportunity and national isolationism faces the problems created by urbanization, industrialization and world power. The tensions created by the appearance of large-scale organization, by the expansion of governmental power, and by the changing role of the U.S. in world affairs, are the themes of this course. One two-hour session and one tutorial per week. A second tutorial will be opened if necessary.

Exclusion: (HISB35)

Prerequisite: HISB03

Session: Winter Day

*W.M. Dick*

**HISC42Y French Canada: Origins to the Present**

A thematic study with particular emphasis on Quebec in the nineteenth and twentieth centuries.

The course examines what unites and divides French Canadians, the impact of English dominance, nationalism, industrialization, urbanization, demographic problems, the role of the Catholic church, and relations between Francophones and Anglophones in Canada. Although Quebec receives pride of place we shall also look at communities in the Maritimes, Ontario, the West, New England, and the American South.

Exclusion: (HISB42)

Prerequisite: HISB04

Session: Summer Evening

*G. Comeau*

**HISC43Y The Evolution of Ontario since 1850**

An examination of the growth of Ontario from a rural, agricultural society to an urbanized, industrial province and of the contribution of demographic, political, economic and social forces to that growth.

Topics will include changes in transportation and communication, the establishment of industries and trade unions, the development of commercial, educational and public service institutions, the impact of immigration, provincial political parties and movements, and Ontario's place in the Canadian Confederation.

Two lectures per week, first term; seminar, second term.

Exclusion: (HISB43)

Prerequisite: HISB04

Session: Winter Evening

*J.S. Moir*

**HISC46Y Atlantic Canada**

An examination of the Maritime provinces and Newfoundland from the first European contacts to Confederation in each province.

Subjects to be investigated include: native peoples and the impact of European contact; French regime and the development of a distinctive Acadian people; the dispersal of the Acadians; British settlement; responses to the American Revolution; the Loyalist impact; colonial economies and social structures; literary and intellectual developments; struggles for responsible government, and its eventual loss in Newfoundland; religious and ethnic tensions; fishermen's movements in Newfoundland; the coming of Confederation. One two-hour lecture per week, and the class will be divided into two tutorial groups, each meeting once every two weeks. Written work will include two research papers.

Exclusion: (HISB46)

Prerequisite: HISB04

Session: Winter Day

*I.R. Robertson*

**HISC47Y The Canadian Left, 1867 to the Present**

An investigation of farmer, labour, and socialist movements since Confederation, their roots in the changing social structure, and their political manifestations.

The emphasis will be on the twentieth century, and attempts will be made to assess the significance of the international affiliations and/or origins of the various movements, and to account for the unique character of the Canadian Left. In broad terms, the course objectives are (i) to encourage the study of social classes who have been excluded from the exercise of power in Canada, and to examine the ways in which they have organized to protect their interests; and (ii) to explore the relationship between social change and popular, reform, radical, and socialist movements. One two-hour lecture per week, and the class will be divided into two tutorial groups, each meeting once every two weeks throughout the year. Written work will include two research papers.

Exclusion: (HISB47)

Prerequisite: HISB04

Session: Winter Day

*I.R. Robertson*

**HISC84F Popular Culture in Early Modern Europe**

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

Session: Winter Day

*J.L. Pearl*

**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 course 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**

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.

Session: Winter Day

*J. L. Pearl*

**HISD15Y Social History**

A seminar in the history of "ordinary people" in Europe and North America from the late eighteenth century to the early twentieth century.

The course examines how revolution, population pressure and industrialization altered pre-industrial society, how early forms of social protest changed into mass organizations, and how governments and "governing classes" responded to pressures from below. In short, this is the study of the evolution of modern society. Three hour seminar. Limited enrolment: 15

Exclusions: (HISB15) HISC15

Prerequisites: HISA01 and two other courses in post-1815 history, either European or North American.

Session: Winter Day

*W. M. Dick*

**HISD20H Anglo-Saxon England**

An examination, chronological and topical, of aspects of life in Anglo-Saxon England.

Topics will include law and kinship, political organization, the economic system, the conversion to Christianity, religious organization, the Viking invasions, the Danish imperium, the golden age of Edward the Confessor, and the effects of the Norman Conquest. Seminar.

Exclusion: (HISC20)

Prerequisite: One B-level course in History or English.

Session: Winter Day

*J.S. Moir*

**HISD24Y Apartheid, South Africa and the British Empire**

An investigation of the reasons why South Africa has become one of the most racist societies in the World, discussing in particular its early frontier-type settlement, its strong religious character, the changes resulting from major economic developments in the 20th century, the influence of British Imperial policy.

Limited enrolment: 20

Exclusions: (HISB21) (HISB24) (HISC24)

Prerequisite: HISB02 or permission of instructor

Session: Winter Evening

*J.P.B. Kenyon*



## Courses Not Offered in 1988-89

<b>HISB06Y</b>	Europe in the Middle Ages	<b>HISD14Y</b>	The European Mentality in Early Modern Period 1500-1700 Exclusion: (HISC14) Prerequisite: One B-level History course
<b>JEBB09F/S</b>	History of Biology	<b>HISD17Y</b>	European Society and Culture in the Twentieth Century Exclusion: (HISC17) Prerequisite: HISA01 and one B or C level course in History
<b>HISC16Y</b>	Modern France 1750 to the Present Exclusion: (HISB16) Prerequisite: HISA01 or permission of instructor.	<b>HISD19F/S</b>	Weimar Culture Exclusion: (HISC19) Prerequisite: HISA01 and one B or C level course in History
<b>HISC18Y</b>	Europe Under the Enlightened Despots, 1700-1789 Exclusion: (HISB18) Prerequisite: (HISA01)	<b>HISD21Y</b>	Urbanization and Social Changes in 19th Century England Exclusion: (HISC21) Prerequisite: HISB02
<b>HISC33F/S</b>	Society and Politics in the United States 1790-1850 Exclusion: (HISB33) Prerequisite: HISB03	<b>HISD32Y</b>	The American Colonies and the British Empire Exclusion: (HISC32) Prerequisite: HISB02, HISB03, HISB04 or HISC18(HISB18)
<b>HISC44F/S</b>	Canadian Religious Traditions Prerequisite: HISB04	<b>HISD34F</b>	Revolutionary America 1760-1790 Exclusion: (HISC34) Prerequisite: Any one of HISB02 or HISB03 or HISB04
<b>JHPC44Y</b>	Canadian Social Issues: Historical and Philosophical Perspectives Prerequisite: HISB04 or PHLB01	<b>HISD41F/S</b>	Old Huronia Exclusion: (HISC41) Prerequisite: HISB04 Corequisite: Field trip to be arranged.
<b>HISC48Y</b>	The History of the Canadian Mosaic Prerequisite: HISB04	<b>HISD43F/S</b>	Selected Topics in Canadian Religious History Exclusion: (HISC43) Prerequisite: HISC44
<b>HISC49S</b>	Canada Between the World Wars Prerequisite: HISB04	<b>HISD45Y</b>	History of Canadian, Social, Political and Historical Thought Exclusion: (HISC45) Prerequisite: HISB04
<b>HISC61Y</b>	The Beginnings of France Constantine to Charlemagne Exclusion: (HISB61) Prerequisite: Any B-level course in History or Greek and Roman History	<b>HISD62Y</b>	The Crusades Exclusion: (HISC62) Prerequisite: HISB06
<b>HISC83Y</b>	Europe in the Reformation Era Exclusion: (HISB13) Prerequisite: HISA01	<b>HISD78Y</b>	The Russian Intelligentsia Exclusion: (HISC78) Prerequisite: HISB07 or RUSA01
<b>HISC87Y</b>	Germany in the Nineteenth and Twentieth Century Exclusion: (HISB17) Prerequisite: HISA01		
<b>HISD13F/S</b>	The Scientific Revolution Exclusion: (HISC13) Corequisite: HISC14 Prerequisite: HISA01 and one B or C level course in History		

## The History of Ideas

What has man made of man? The History of Ideas studies the impact of major ideas on the development of western civilization.

The Programme described below will enable you to develop a solid grounding in the intellectual and social history of mankind, and will help you to sharpen your skills in practical critical thinking. You will focus your studies in areas of your own interest. The two courses in your last year of study will help you to concentrate your studies around a central problem of your choice, drawing together issues and ideas you have studied in your previous years.

## Major Programme in History of Ideas

*Supervisor:* W.C. Graham (284-3279)  
Students must complete at least eight full-course equivalents (at least 2 at the C- or D-level) as follows:

- 1 HUMA01Y
- 2 PHLA01Y
- 3 HISA01Y
- 4 1 full-course equivalent in the Social Sciences
- 5 1 full-course equivalent in Mathematics or the Natural Sciences (Life Sciences or Physical Sciences)
- 6 2 full-course equivalents in History and/or Philosophy at the B- or C-level in consultation with the Supervisor
- 7 1 full-course equivalents at the C- or D-level in the area of concentration chosen by the student in consultation with the Supervisor

## Humanities

*Discipline Representative:* C. Ponomareff (284-3258)

The Humanities are concerned with man's never-ending reflection on the human condition, with the development and communication of his thought, and with the creation and enjoyment of the beautiful. They are thus an integral part of liberal education.

The majority of courses in the Humanities are offered by the various disciplines comprising the Humanities Division and are listed alphabetically under the discipline heading in this calendar, along with the Specialist and/or Major Programme centered on a particular discipline. The Humanities Division, however, also offers a

Specialist Programme in the Humanities and a College Programme in the Humanities which involve students in a wide range of Humanities disciplines: these programmes are outlined below. Following these programmes is a list of courses which will appeal to students who wish to explore the Humanities outside the traditional disciplinary framework. For the most part, these courses offer an alternative to examination within current precise national, historical, and disciplinary boundaries, opting instead to restructure subjects of interest around a theme which itself creates its own reasoned limits. Students may find this a particularly attractive point of view from which to study an enduring human myth, a more unified approach to literature, an aspect or aspects of a loose historical period, or a movement of broad cultural relevance.

Students taking Humanities courses may wish to consider the *Literature Programme*.

Humanities courses fall into the following broad categories, for all of which HUMA01Y serves as a useful, though not always a required, prologue:

*Civilization and Culture*

HUMA01Y	Prologue
HUMB03Y	Celtic Mythology and Medieval Celtic Civilization
HUMB07F/S	Russian Culture
HUMB12F/S	The Paris Commune, 1871 to the Present
HUMB13Y	The Russian Revolution of 1917: Promise and Fulfillment, Ideals and Realities
HUMB16F/S	The Image of the Self in Liberal Society
HUMB19F/S	Beyond Consciousness
HUMC09F/S	The Civilization of Spain I
HUMC13F/S	The Civilization of Spain II
HUMC14Y	Topics in Latin American Culture and Literature
HUMC11Y	The Darwinian Revolution
JHFC40Y	Vienna and the Origins of Contemporary Culture

see also:

CLAA01Y	Classical Civilization
CLAB30F/S	The Age of Pericles
CLAB31F/S	The Age of Augustus
CLAB32F/S	The Age of Nero
CLAB33F/S	The Age of Homer
LITB08Y	The European Experience: Man and Society in the Twentieth Century French and the Italian Novel

*Myth, Religion and Reality*

- HUMA10Y Introduction to the Study of Religion
- HUMA11Y Greek and Roman Mythology
- HUMB04S Celtic Christianity 400-1500 AD
- HUMB20Y Primitive Christian Literature and Myth
- HUMB26Y Women in the Major Western Religions
- HUMB28Y Major Religious Traditions, East and West
- HUMB29F/S Religion and Western Culture
- HUMC12Y Studies in Greek Mythology and its Influence

## See also:

- ANTB23Y Comparative Mythology
- LITB11F/S Science Fiction
- LITB31Y World Visions from the Late Middle Ages to the Renaissance
- LITB47F/S Fantasy in Narnia and Middle Earth
- LITB48F/S Utopia: From More to Huxley
- LITB49F/S Atlantis

*Women's Studies*

- JHSA01Y Introduction to Women's Studies
- JHSD01H Senior Project in Women's Studies
- HUMC61F/S Women in Ancient Greece
- LITB45Y Literary Considerations and Feminism

*Science and Humanities*

- JBHB01Y Introduction to Biological Sciences
- JBHB09F/S History of Biology

*Film Studies*

- HUMB70Y Introduction to Cinema
- JHIC71F/S Italian Cinema
- see also:
- GRKC23F Modern Greek Cinema and Theatre

*Arts Studies*

- HUMB90Y Introduction to Arts Administration
- HUMD30Y Senior Seminar on Arts Administration

**Specialist Programme in the Humanities**

*Supervisor:* W.C. Graham (284-3279)

The Humanities Specialist Programme is designed for the student who, while pursuing a four-year degree, wishes to concentrate his or her studies in the Humanities. After an introduction to a wide range of disciplines within the Division, the student has the option (see item 7) of doing more specialized work in a specific discipline or of taking advantage of our wide interdisciplinary offerings (listed under HUM) to develop a less traditional area of specialization.

Twelve full-course equivalents are required, as follows:

- 1 HUMA01Y
- 2 PHLA01Y
- 3 HISA01Y
- 4 Two consecutive courses (two full-course equivalents) in a language foreign to the student
- 5 One full-course equivalent in the arts: DRA, FAR, MUS
- 6 One full-course equivalent in literature or linguistics: CLA, DRA, ENG, FRE, HUM, ITA, LIN, LIT.

**NOTE:** A course taken to satisfy one area requirement may not be used to satisfy another area requirement. Students intending to take a DRA or HUM course to fulfil one of the area requirements should consult with the Supervisor about the appropriateness of a particular course. A course in MAT or AST may replace one of requirements 2, 3, 5 or 6.

- 7 Four and one-half further full-course equivalents in Humanities subjects, at least three of which must be at the C- or D-level. (For the purpose of the Programme, Mathematics is also considered to be a Humanities subject.) These five courses should focus on one area or theme and should involve some depth of coverage. Students may elect to fulfil this requirement through the Individual Study Year (HUMD95-99Y). Choice of courses must be approved by the Supervisor.

- 8 HUMC10H

**College Programme in the Humanities**

*Supervisor:* W.C. Graham (284-3279)

The Humanities College Programme is designed for the student who wishes what has been known as a "liberal education". The Programme will seek to develop the critical intellectual skills of the student and to acquaint him with basic forms of approach in several areas of human endeavour. It will accomplish this by developing a coherent group of courses,

within the framework established below, for each student registered in the Programme.

Nine full-course equivalents are required, as follows:

- 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, LIT, RUS, SPA.

**NOTE:** A course taken to satisfy one area requirement may not be used to satisfy another area requirement. Students intending to take a DRA or HUM course to fulfil one of the area requirements should consult with the Supervisor about the appropriateness of a particular course. A course in MAT or AST can replace one of the requirements 2, 3, 4 or 5 above.

- 6 One full-course equivalent emphasizing major ideas in the sciences or social sciences: ANTA01Y, ANTB23Y, ASTA03Y, JBHB01Y, POLB70Y, POLC74Y, SOCB03Y. Other courses offered by the Divisions of Life Sciences, Physical Sciences and the Social Sciences may be chosen to fulfil 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.

**HUMA01Y Prologue\***

Twenty books of central importance in Western civilization.

A comprehensive examination will be given at the completion of each subset of ten books. There is a one-hour tutorial for each book. The examination will stress the student's ability to relate the books in his 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*; Virgil, *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 coordinators. Titles may change if editions become unavailable.

\* *What's past is prologue*

Shakespeare, *The Tempest*, Act 2, Sc. 1.

Session: Winter Day

Co-ordinator: W.C. Graham,

**JHSA01Y Introduction to Women's Studies**

This is an interdisciplinary course which brings the perspectives of philosophy, psychology, political theory, sociology, anthropology, history, language, literature and the arts to the study of the position of women in western civilization. The goal is to enable students not only to enter into the contemporary feminist debates but to understand the significance of these debates within the disciplines under discussion. Issues to be addressed include: the patriarchal foundations of our culture; the politics of the family including the psychological dynamics of socialization, women's work in the home and the paid labour force; contemporary feminist issues including reproductive freedom, sexual politics, and the relationship between a politics of sisterhood and the dynamics of mothering.

Session: Winter Day

Co-ordinator: P. J. Mills

**HUMA11Y Greek and Roman Mythology**

The emergence and treatment of myths and legends in the Greco-Roman World.

The course will examine the more important myths and legends and their representation in classical literature, drama and art, and will partly be concerned with ancient and modern theories of myth. This course will be useful to students engaged in literary and art-historical studies and will serve as an introduction to other courses in classics.

Session: Winter Day

M. Joyal

**HUMB03Y Celtic Mythology and Mediaeval Celtic Civilization**

The history of Celtic civilization from c.800 B.C to the end of the medieval period.

Emphasis is placed on the religious political and mythological structure of the Celtic world-view with particular attention to the cultural connections with neighbouring civilizations.

Session: Winter Day  
*Claude Evans*

**HUMB04S Celtic Christianity 400-1500 A.D.**

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  
*J. Anderson*

**HUMB90Y Introduction to Arts Administration**

The theory and practice of arts administration in Canada and abroad.

The course will examine all aspects of arts administration, from the economic and financial problems of artists and arts organization to the formulation and implementation of arts policy, including such topics as the marketing of artistic products; publicity, promotion and fund-raising; audience development; management of facilities; corporate support; the granting system; and municipal, provincial and federal responsibility for arts policy. The teaching method will include lectures, course papers and occasional guest speakers.

Session: Winter Day  
*P. Schafer*

**HUMC10S Humanities Seminar**

A special half-credit seminar course, taken normally after the completion of ten credits. Each member of the seminar undertakes an individual project and gives a report on it.

This seminar is required for those registered in the Specialist Programme in Humanities and in the History of Ideas and in the Arts, and in the College Programme in Myth and Religion: it is taken after completion of ten full-course equivalents. Topics for the seminars should be chosen in consultation with the Supervisor. They should build upon work taken in other courses, and should attempt to relate material from two or more disciplines.

Exclusion: HUMB15 (HUMB10)

Prerequisite: Any ten courses.

Session: Winter Day

*Co-ordinator: W.C. Graham*

**HUMC13F/S The Civilization of Spain II**

A continuation of HUMC09F

Social, intellectual and artistic components of the civilization of Spain from the end of the seventeenth century to the present will be studied, and illustrated by slides and other reference materials. Two hours per week in lecture/tutorial format.

Exclusion: HUMB15, (HUMB10)

Session: Winter Day

*K. Godde*

**JHSD01H Senior Project in Women's Studies**

A research project chosen by the student, approved by the Supervisor in Women's Studies, and supervised by one faculty member. After the topic has been approved, a second reader will be appointed.

The student will write a substantial essay or give a major presentation on an approved topic in Women's Studies.

The course is designed for students completing the Major Programme in Women's Studies and is normally taken after completion of ten full-course equivalents.

Students are advised to design a project in an area in which they have already done some concentrated study and, where possible, to build upon work taken in previous courses.

Arrangements with the faculty in Women's Studies and the supervisor must be made by the student before the end of

the pre-registration period in the spring.

Exclusion: (JHSC01H)

Prerequisite: Open to students majoring in Women's Studies who have already completed ten full course equivalents.

Session: Winter Day

*Staff*

**HUMD30Y Senior seminar on Arts Administration**

An examination of key problems and issues in arts administration.

Capitalizing on the practical experience students have had in the field, this seminar will analyze such basic problems as the tension between the arts and administration; board management relations; union negotiations; planning, the politics of art; censorship; and future directions in Canadian and international arts development. Students will be expected to present comprehensive papers on these topics for discussion and evaluation.

Enrolment limited to students who have completed at least one work term in the Specialist Co-operative Programme in Arts Administration.

Exclusion: (HUMC30)

Session: Winter Day

*P. Schafer*

**HUMD91F****HUMD92S****HUMD93Y Supervised Readings**

Independent study of an advanced and intensive kind, under the direction of a faculty member. The material studied should bear some significant relation to the student's previous work, and should differ significantly in content and/or concentration from topics offered in 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

**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*

**Courses Not Offered in 1988-89**

**HUMA10Y** Introduction to the Study of Religion

**JBHB01Y** Introduction to Biological Sciences

Exclusion: (NSCA02) Not open to students who have taken BIOA03

**HUMB07S** Russian Culture

Exclusion: (RUSA01)

**HUMB12F/S** The Paris Commune, 1871 to the Present

**HUMB13Y** The Russian Revolution of 1917: Promise and Fulfillment, Ideals and Realities

**HUMB16F/S** The Image of the Self in Liberal Society

**HUMB19F/S** Beyond Consciousness

Prerequisite: At least one full-course equivalent in either PSY or PHL or English or another literature

**HUMB20Y** Primitive Christian Literature and Myth

Prerequisite: No formal prerequisite, but some knowledge of the biblical literature will be presupposed. Greek is desirable but not required.

**HUMB26Y** Women in the Major Western Religions

**HUMB28Y** Major Religious Traditions, East and West

**HUMB29S** Religion and Western Culture

**HUMB60F/S** Women Artists in Society

**HUMB70Y** Introduction to Cinema

**HUMC09F** The Civilization of Spain  
Exclusions: HUMB15, (HUMB09)

- HUMC11Y** The Darwinian Revolution  
Prerequisite: BIOB05 or BIO06 (BIOB11) or PHLB70 or JBPC70 and permission of the instructor.
- HUMC12Y** Studies in Greek Mythology and Its Influences  
Exclusions: HUMB34, HUMB35, HUMB36, (HUMB11)
- HUMC14Y** Topics in Latin American Culture and Literature  
Exclusions: SPAB38 (HUMB14)
- JHFC40Y** Vienna and the Origins of Contemporary Culture  
Prerequisites: Either one of LITA01, ENGA01, FREA30(FREB02) or a B-level course in Fine Art History, or one course in literature.
- HUMC61S** Women in Ancient Greece  
Exclusion: (HUMB61)  
Prerequisite: JHSA01 or one course in CLA
- JHIC71S** Italian Cinema  
Exclusions: (HUMB71), (JHIB71), (JHIB90)

## Italian

*Discipline Representative:*  
D. McAuliffe (284-3315)

Scarborough College offers a wide range of courses on the language and literature of Italy from the Middle Ages to the present. For students who have no previous training in the language the study of Italian begins at the elementary level with ITAA01 or ITAA11. ITAA01 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. Students with other types of language preparation should consult the Discipline Representative before choosing their course of study. In all courses, emphasis is given to spoken as well as written aspects of the language.

*Courses offered by other disciplines* may prove directly valuable to students in Italian as adjuncts to their plan of study or as an enrichment of their total programme. Similarly, certain aspects of Italian literature complement other areas of interest, such as *Fine Art, Music, English, French, Latin, Spanish, Humanities and Literature*.

Students enrolled in Italian, some of whom may later wish to enrol in the Faculty of Education or to continue their

studies at the graduate level, are strongly urged to confer with their instructors at the earliest possible date in order to establish a comprehensive and coherent plan of study.

Students are not allowed to take any A-level courses in Italian while taking or after completing any B-level course in Italian.

Students may be excluded from any course if their knowledge of Italian is deemed by the instructor to exceed the level of the language of that course.

Students in the Major Programmes may satisfy some of their programme requirements through a Study Elsewhere Programme operated by the University of Toronto at Siena.

**Major Programme in Italian Language**  
*Supervisor:* U. Lesser-Sherman (284-3151)  
The Major Programme in Italian Language consists of seven full-course equivalents, as follows:

Option A (for students who have no prior knowledge of Italian or its dialects):

- |             |  |
|-------------|--|
| 1 ITAA01Y   | Introductory Italian   |
| ITAA02H     | Introductory Italian 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:<br>ITAB06S, ITAC04H, ITAC05F/S, ITAC20F/S, ITAC23F/S, JHIC71F/S |
| 7 LINA05Y   | Practical Language Study   |
| or          |  |
| LINA01Y     | General Linguistics (a more theory-oriented course than LINA05Y)   |

Option B (for students with some prior knowledge of Italian or one of its dialects):

- |             |  |
|-------------|--|
| 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 LINA05Y | Practical Language Study  |
| or        |   |
| LINA01Y   | General Linguistics (a more theory-oriented course than LINA05Y)  |

Language requirements will be waived by the Supervisor in the case of 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

*Supervisor:* D. McAuliffe (284-3315)

Students are required to complete seven full-course equivalents as follows:

- 1 Three full-course equivalents in Italian Language
- 2 Three full-course equivalents, including ITAC22F/S, ITAC23F/S and ITAC31Y, in Italian Literature.
- 3 One full-course equivalent selected in consultation with the Programme Supervisor from among the offerings in Italian or from LIT or HUM course offerings which concentrate on Italian culture, civilization and literature.

Language requirements will be waived by permission of the Supervisor in the case of students judged to have advanced knowledge of Italian. Equivalent courses from the discipline's offerings will be substituted. Students are strongly advised to discuss their programme as soon as possible with the Supervisor.

See also the Specialist Programmes in *Modern Languages* (under *Language Studies*) and *Language and Literature*.

### ITAA01Y Introductory Italian

An elementary course for students with no knowledge of Italian. 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: ITAA11

Corequisite: ITAA02. It is strongly recommended that students enrolled in ITAA01 and ITAA02 take ITAA03 concurrently with them in the Spring term.

Session: Winter Day  
D. McAuliffe

### ITAA02H Introductory Italian Language Practice

Practical application of the language structures introduced in ITAA01.

As with the corequisite A01Y, our aim is to provide a relaxed, friendly atmosphere in which to learn basic standard Italian. 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.

Corequisite: ITAA01  
Session: Winter Day  
D. McAuliffe

### ITAA03S Conversation II

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. Students are expected to participate in classroom discussion, make oral presentations, and take an oral examination.

Corequisite: ITAA01 or ITAA11  
Session: Winter Day  
S. Mittler

**ITAA11Y Elementary Italian**

An elementary course for native speakers with little or no knowledge of standard Italian usage. Short contemporary texts will be studied.

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: ITAA01

Corequisite: It is strongly recommended that students enrolled in this course take ITAA03H concurrently with it.

Session: Winter Day

J. Campana

**ITAB01Y Intermediate Italian I**

A continuation of ITAA01. Intensive review of grammar, with drills, exercises and compositions.

The course concentrates on explaining and practising the more difficult parts of Italian grammar. This will alternate with reading and discussion of passages of modern Italian prose and poetry. The student will be asked to prepare written grammar exercises, as well as to write comments on or summaries of the readings discussed in class. The course will be conducted in Italian whenever possible.

Exclusion: ITAB11

Prerequisite: ITAA01

Corequisite: It is strongly recommended that students enrolled in this course take ITAB03 and B06 concurrently with it.

Session: Winter Day

T.B.A.

**ITAB03F Intermediate Conversation I**

An advanced course in conversation for those students with sufficient knowledge of Italian. Attention will be given to idioms and special constructions in readings or in discussions focusing on Italian culture and civilization.

This course offers the opportunity to improve oral and aural skills in Italian. Students will be expected to prepare topics of common interest for discussion in class by doing background reading on selected

topics and by preparing the specialized vocabulary of those topics. At least one oral report and two skits (one prepared and one improvised) will be required of each student.

Corequisite: ITAB01 or ITAB11

Session: Winter Day

J. Campana

**ITAB06S Intermediate Conversation II**

A continuation of ITAB03.

This course aims to develop as fully as possible the student's facility with the language and continues the program outlined in ITAB03.

Corequisite: ITAB01 or ITAB11

Session: Winter Day

T.B.A.

**ITAB11Y Intermediate Italian II**

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 comments on or summaries of the readings discussed in class. The course will be conducted in Italian.

Exclusion: ITAB01

Prerequisite: ITAA11

Corequisite: It is strongly recommended that students enrolled in this course take ITAB03 and ITAB06 concurrently with it.

Session: Winter Day

J. Campana

**ITAC01Y Language Practice**

An advanced language course focusing on complex problems of Italian grammar, with readings, translations and compositions.

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

**ITAC05F Practical Translation**

Practice in translating from English to Italian and from Italian to English, combined with analysis and discussion of a wide variety of texts in terms of type of language and style of expression. Examples of colloquial, journalistic, literary, technical and business expression will be translated and analysed.

Class time is devoted to increasing the student's proficiency. Evaluation will be based on written and oral assignments, class participation and an examination.

Exclusion: (ITAB05)

Corequisite: ITAB01 or ITAB11

Session: Winter Day

S. Mittler

**ITAC22F Introduction to Modern and Contemporary Literature**

An introduction to literary movements, masterpieces and authors from the eighteenth century to contemporary times.

Selections from the works of influential novelists, poets and dramatists will be examined in relation to the different linguistic and cultural backgrounds from which they sprang, and to the major modern theme of the individual in society. Texts include works by Goldoni, Manzoni, Leopardi, Verga, D'Annunzio, Pirandello, Pavese, and Calvino.

This course will be conducted in Italian and will be a combination of lectures and discussion.

Exclusion: (ITAB22)

Prerequisite: ITAB01 or ITAB11

Session: Winter Day

D. McAuliffe

**ITAC23S Survey of Italian Literature from the Middle Ages to the Renaissance**

An introduction to the main literary movements, masterpieces and authors from the beginning of Italian literature to the end of the seventeenth century.

This course is intended to give the student a knowledge of the early development of Italian literature in its historical context as well as to develop the student's ability to read the early literary language of Italy. The passages to be read and discussed will include selections from "Dolce Stil Novo", Dante's *Divine Comedy*, Petrarch's *Canzoniere*, Boccaccio's *Decameron*, Poliziano's *Stanze*, Machiavelli's *Principe*, Ariosto's

*Orlando Furioso*, Tasso's *Gerusalemme Liberata*.

Lectures and discussion in Italian.

Exclusion: (ITAB23)

Prerequisite: ITAB01 or ITAB11

Session: Winter Day

D. McAuliffe

**JLIC32S Petrarch and Boccaccio**

A study, through the works of two major writers, of the beginnings of the Renaissance and the rise of Humanistic thought and culture.

The class will read and discuss selections from Boccaccio's *Decameron*, and Petrarch's *Canzoniere*, *Segreto*, and *Trionfi*. The course is intended to provide an insight into two writers representative of their times who have deeply influenced Italian and, indeed, all of western European literature. Special consideration will be given to the historical and cultural context in which the authors lived and wrote.

Lectures will be in English. Students wishing to count the course towards a Programme in Italian will read the texts and do their assignments in Italian; an additional one hour tutorial will be provided for them. Exclusion: (ITAB32)

Prerequisite: For those taking the course as part of a Programme in Italian, ITAB01 or ITAB11; for others, LITA01 or ENGA01 or FREA30 (FREB02Y) or one course in Literature.

Session: Winter Day

D. McAuliffe

**ITAC45F The Nineteenth Century Italian Novel in Transition**

A study of important changes on the Italian social and literary scene from about 1870 to 1923.

Topics will include: Verga's use of *Verismo* to translate the new realities of a united Italy; Fogazzaro's version of middle class life; D'Annunzio's esthetics and cult of the *superuomo*; Pirandello's analysis of the nation's shortcomings, particularly in the South; and Svevo's enquiry into the distortion of memory. Texts are: G. Verga, *Malavoglia*; A. Fogazzaro, *Piccolo mondo antico*; A. D'Annunzio, *Il fuoco*; L. Pirandello, *I vecchi e i giovani*; and I. Svevo, *La coscienza di Zeno*.

Exclusion: (ITAB45)

Prerequisite: ITAB01 or ITAB11; a course in Italian Literature such as ITAC22 and ITAC23 is recommended but not required.

Session: Winter Day

S. Mittler

**JHIC71S Italian Cinema**

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 which may be substituted by a cinematic project (a short film plus a scenario). *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 1988-89****ITAC04H Advanced Composition**

Exclusion: (ITAB04)

Corequisite: ITAB01 or ITAB11

**ITAC12F/S The Twentieth Century Novel**

Exclusion: (ITAB12)

Prerequisite: ITAB01 or ITAB11; a course in Italian Literature such as ITAC22 and ITAC23 is recommended but not required.

**ITAC13F/S Modern Italian Poetry**

Exclusion: (ITAB13)

Prerequisite: ITAB01 or ITAB11; a course in Italian Literature such as ITAC22 and ITAC23 is recommended but not required.

**ITAC20F/S Modern Italy**

Exclusions: (HUMB18), (ITAB20)

Prerequisite: ITAB01 or ITAB11

**ITAC27F/S Modern Italian Theatre from Pirandello to the Present Day**

Exclusions: (HUMB54), (LITB16), (ITAB27)

Prerequisite: ITAB01 or ITAB11; a course in Italian Literature such as ITAC22 and ITAC23 is recommended but not required.

**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.

**JLIC33F/S Machiavelli and Aspects of the Italian Renaissance**

Exclusions: (HUMB50), (LITB35), (ITAB33)

Prerequisite: For those taking the course as part of a Programme in Italian, ITAB01 or ITAB11; for others, LITA01 or ENGA01 or FREA30 (FREA02Y) or one course in Literature.

**ITAC34F/S Chivalric Poetry of the Renaissance**

Exclusion: (ITAB34)

Prerequisite: ITAB02 or ITAB11; a course in Italian Literature such as ITAC22 and ITAC23 is recommended but not required.

**ITAC35F/S Italian Sixteenth Century Theatre**

Exclusion: (ITAB35)

Prerequisite: ITAB01 or ITAB11; a course in Italian Literature such as ITAC22 and ITAC23 is recommended but not required.

**ITAC36F/S Lyric Poetry of the Renaissance (from Poliziano to Michelangelo)**

Exclusion: (ITAB36)

Prerequisite: ITAB02 or ITAB11; a course in Italian Literature such as ITAC22 and ITAC23 is recommended but not required.

**ITAC40F/S Reformation and Baroque Literature**

Exclusion: (ITAB40)

Prerequisite: ITAB01 or ITAB11; a course in Italian Literature such as ITAC22 and ITAC23 is recommended but not required.

**ITAC41F/S Italian Eighteenth Century Theatre**

Exclusion: (ITAB41)

Prerequisite: ITAB02 or ITAB11; a course in Italian Literature such as ITAC22 and ITAC23 is recommended but not required.

**ITAC43F/S Foscolo and Leopardi**

Exclusion: (ITAB43)

Prerequisite: ITAB01 or ITAB11; a course in Italian Literature such as ITAC22 and ITAC23 is recommended but not required.

**ITAC44F/S Manzoni**

Exclusion: (ITAB44)

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

**Commerce and Economics**

JCEC02Y Corporation Finance

JCEC54S Industrial Relations

JCEC72F Analysis for Decision Making I

JCEC73S Analysis for Decision Making II

JCED70F Advanced Corporate Finance

JCED75S Investments

**Commerce and Sociology**

JCSB27Y Organizational Behaviour

**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

**Humanities and Social Science**

JHSA01Y Introduction to Women's Studies

JHSD01H Senior Project in Women's Studies

**Linguistics and Psychology**

JLPB55H Psycholinguistics

JLPC24S Developmental Psycholinguistics

JLPD55S Disorders of Speech and Language

**Literature and Italian**

JLIC32F Petrarch and Boccaccio

JLIC33S Machiavelli and Renaissance Thought

**Mathematics and Computer Science**

JMCC31H Combinatorics

JMCC32H Graph Theory and Algorithms for its Applications



## Language and Literature

### Specialist Programme

Supervisor: R. Skyrme

Students wishing to follow this Specialist Programme should complete the *Major in Language and Literature* in two of the following disciplines:

English  
French  
Classical Studies (Greek or Latin)  
Italian

In addition, one full-course equivalent should be chosen from the following, the choice to be approved by the Supervisor:  
ENGCS9Y English Literary Criticism  
FARA10F Ancient Art and Architecture  
FARA11S Medieval Art  
FARA12F Renaissance and Baroque Art  
FARA13S Modern Art 1750 to the Present

HUMA01Y Prologue  
HUMA11Y Greek and Roman Mythology  
HUMC12Y Studies in Greek Mythology and its Influence

LITA01Y Introduction to Literature  
PHLB03F/S Philosophy and Art  
PHLB04F/S Philosophy of Literature

## Languages Studies

### Centre for University Studies in Language

Co-ordinator: U. Lesser-Sherman, Room R-4006 (284-3151)

The Centre was created to ensure coherent and integrated language programmes based on innovative and current teaching methods. The Centre's *resource room* (R4104) provides a stimulating environment for all language students. An experienced staff member will assist and encourage you to explore our computer programmes, videos, tapes and VCRs.

Please come in and browse through our books, foreign newspapers and magazines, or simply meet other students.

Students interested in language studies (modern and classic) should consult with the Co-ordinator, who is the Supervisor for all language Programmes.

The following Programmes are offered in Languages:

### Specialist Programme in Modern Languages

The Modern Languages Specialist Programme enables a student to gain a high degree of fluency in two languages, or in one language together with a concentration in Linguistics. In the case of every combination, there is a common core for the Programme consisting of a 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, (Spanish) Granada.

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 LINA05Y Practical Language Study (or, with permission of Supervisor, LINA01Y General Linguistics) except where already included in the Major Programme.
- 3 LATA01Y or FREA06Y for students with no background in either language
- 4 One full-course equivalent from the following, the choice to be approved by the Supervisor, for every combination other than French/Spanish:  
ANTB30Y Language and Culture  
HISA01Y European World  
HUMA01Y Prologue  
LINB05Y Romance Languages

### Major Programme in French Language

Seven full-course equivalents, including:

- 1 FREA10Y, FREA10Y, FREC10Y
- 2 two full-course equivalents from the following: FREA08F, FREA18Y, FREA25Y, FREA42Y, FREA43S, FREA48Y, FREC09Y, FREC16Y, FREC18S.
- 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:

- 1 any A-level French course with the exception of FREA10, FREA17 and FREA30.
- 2 FREA09.

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:

- |           |   |
|-----------|---|
| GERA09H   | Language Practice I   |
| GERA10Y   | Introductory German   |
| GERB19Y   | Language Practice II  |
| GERB20Y   | Intermediate German   |
| GERC01F/S | The Last Hundred Years  |
| GERC02F/S | Practicum in the History and Structure of the German Language |
| GERC03F/S | Methods of Interpreting Literature                            |
| GERC10Y   | Advanced Conversation and Composition                         |
| LINA05Y   | Practical Language Study                                      |
| or        |   |
| LINA01Y   | General Linguistics (a more theory-oriented course)           |

### 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  |
| ITAA02H     | Introductory Italian 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 LINA05Y   | Practical Language Study  |
| or          |   |
| LINA01Y     | General Linguistics (a more theory-oriented course than LINA05Y)  |

Option B (for students with some prior knowledge of Italian or one of its dialects):

- |             |   |
|-------------|---|
| 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 LINA05Y   | Practical Language Study  |
| or          |   |
| LINA01Y     | General Linguistics (a more theory-oriented course than LINA05Y)  |

### Major Programme in Spanish Language

Seven full-course equivalents as follows: SPAA01Y

Introductory Spanish (Note: Students who have Grade 13 Spanish must complete, in place of SPAA01 and A02, one and one-half full course equivalents from SPA, HUM or LIT courses which concentrate on Spanish language, culture, or literature, to be arranged with the Supervisor.)

- |         |   |
|---------|---|
| SPAA02H | Language Practice I                             |
| SPAB01Y | Intermediate Spanish                            |
| SPAB02H | Language Practice II                            |
| SPAB04F | Phonetics                                       |
| SPAB12S | History of the Spanish Language I               |
| SPAC01Y | Advanced Spanish                                |
| HUMC09F | The Civilization of Spain I                     |
| HUMC13S | The Civilization of Spain II                    |
| or      |   |
| HUMC14Y | Topics in Latin American Culture and Literature |
| SPAC21F | Stylistics and Translation                      |
| SPAC22S | History of the Spanish Language II              |

N.B. Language requirements for any of the above Programmes will be waived by permission of the Supervisor in the case of students judged to have highly 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 - with Latin  
Classical Studies - with Greek  
Language and Literature  
Linguistics



The following **courses** are offered in Languages. (For full course descriptions, pre- and corequisites etc., see under French, Classics, German, Italian, Russian, Spanish. Courses in brackets are not offered this year.)

**FREA10Y** Language Practice I  
**FREA16Y** Introductory French II  
**(FREA06Y)** Introductory French I)  
**(FREA09Y)** Practical French I)  
**FREA17Y** Elementary Conversation II  
**FREA18Y** Introductory Business French  
**FREB08F** Practical Translation  
**FREB10Y/B** Language Practice II  
**FREB17S** Intermediate Conversation II  
**FREB18Y** Commercial French  
**FREB19Y** Practical French II  
**FREB25Y** Introduction to French Linguistics

**FREB42Y** General History of the French Language  
**FREB43F** The French Language in Canada

**FREC10Y** Language Practice III  
**FREC18S** Translation for Business and Professional Needs  
**FRED16B** Advanced French

**GERA09H** Language Practice I  
**GERA10Y** Introductory German  
**GERB19Y** Language Practice II  
**GERB20Y** Intermediate German  
**GERC02S** Practicum in the History and Structure of German Language

**GERC10Y** Advanced Composition and Conversation  
**GERD01Y** Advanced Language Practice

**GRKA01Y** Introductory Greek  
**GRKA05Y** Introductory Modern 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  
**ITAC04H** 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** Language Practice I  
**SPAB01Y** Intermediate Spanish  
**SPAB02H** Language Practice II  
**SPAC01Y** Advanced Spanish

See also courses in LINGUISTICS

## Latin

Courses are offered in introductory Latin (LATA01, LATB02) and Latin literature (LATB11), LATC30, etc.).

**LATA01Y** Introductory Latin  
**LATB02F** Introduction to Latin Authors  
**LATB11S** Catullus  
**LATC30F-34F**  
**LATC35S-39S** Supervised Reading  
**LATC40Y**  
**LATD01F-02S** Independent Studies

For further information see under *Classical Studies*

## Linguistics

*Discipline Representative:* J.D. Woods (284-3346)

Linguistics is the science of language. For the linguist, language is a phenomenon of the human mind and of human society. Not all linguists are exclusively concerned with the description of language (an interest reflected in, e.g., LINA01, LINB11, and LIND04). Linguists draw on the findings of Philosophy, Psychology, Sociology, and Biology to create new frontiers of research. This new science is reflected in LINB14, LINC15, JLPB55, JLPB24 and other courses. (See too the programme in *Cognitive Science*.)

Language is, of course, of interest to many people who see it as a humanistic and not a technical concern. To meet this interest we have designed such courses as LINA04 and LINB27.

Students of foreign languages may find LINA05 and LINB05 of use.

**Specialist Programme in Linguistics**  
*Supervisor:* J.D. Woods (284-3346)  
 The Specialist Programme in Linguistics involves a core of three basic full-course equivalents, as follows:

- 1 LINA01Y General Linguistics  
or  
LINA05Y Practical Language Study
- 2 LINB11Y Syntax
- 3 Two of:  
LINB02S Phonology  
LINB09F Phonetics  
LINC06F/S Language Change
- 4 Four full-course equivalents on the C- or D-level in LIN or JLP, or in a related discipline, as approved by the Supervisor of studies.
- 5 Two further full-course equivalents in LIN or JLP. If LINC06F/S has contributed to satisfying both requirement 3 and requirement 4, two and a half further full-course equivalents in LIN or JLP are necessary. Only one of LINA01Y and LINA05Y may be counted towards the Specialist Programme. LINA04S and LINB05Y cannot be counted towards the Specialist Programme.

6 One full-course equivalent from among the following courses:

ANTB30Y\* Language and Culture  
 ENGB01Y Old English Language and Literature  
 FREB25Y\* Introduction to French Linguistics  
 FREB42Y\* General History of the French Language  
 FREB43F/S\* The French Language in Canada  
 FREB48Y\* Theoretical and Practical Phonetics  
 GERC02F/S\* Practicum in the History and Structure of the German Language  
 PHLB80F Philosophy of Language  
 SPAB04F/S\* Phonetics  
 SPAB12F/S\* History of the Spanish Language

\*Students should check these courses for prerequisites.

- 7 Two full-course equivalents in a language which is not the student's native language.

- 8 In addition to his/her native language and the language taken under (7), the student must have some knowledge of a third language; this requirement can be satisfied by either: (a) a demonstration that the student's knowledge is equivalent to that acquired in one full course at the university level (to be decided in consultation with the Supervisor), or (b) the student's taking one further course in such a language at the university level.

## Major Programme in Linguistics

*Supervisor:* J.D. Woods (284-3346)

Students must complete seven full-course equivalents, as follows:

- 1 LINA01Y General Linguistics  
or  
LINA05Y Practical Language Study
- 2 LINB11Y Syntax
- 3 Two of:  
LINB02S Phonology  
LINB09F Phonetics  
LINC06F/S Language Change
- 4 Students must also complete *either* four further full-course equivalents in LIN or JLP, of which at least two must be on the C- or D-level; *or* three further full-course equivalents in LIN or JLP, of which at least one must be on the C- or D-level, plus one C-level full-course equivalent in a language. (Only the first option is permitted when this programme is taken as part of the Modern Languages Specialist Programme.) Only one of LINA01Y and LINA05Y can be counted towards the Major. LINA04S and LINB05Y cannot be counted towards the Major.

## LINA01Y General Linguistics

An introduction to various methods of linguistic analysis, to the nature of the systems of rules and principles which underlie language, and to the relationships between language and society and between language and biology.

Topics such as the following will be included: sound patterns in languages, word formation, sentence structure, meaning, different varieties of language and social attitudes towards them, how languages change, how children learn language, language and the brain. Enrolment limited to 55 students per section.

Exclusion: (LINA05Y)  
 Session: Winter Day  
*R.I. Binnick and TBA*

**LINA04S Introduction to Language**

A general introduction to the nature of language. This is a non-technical introduction and cannot serve as a prerequisite for further linguistics courses (unless specified).

Topics such as the following will be covered: the relationship between human and animal systems of communication, and between language and culture; language change; how children learn language; bilingualism in Canada. There will be lectures, discussions, films. Exclusion: LINA04 may not be taken by students who have credit for LINA01 or LINA05. LINA01 and LINA04 may not be taken in the same session. Session: Winter Day  
T.B.A.

**LINA05Y Practical Language Study**

This course is intended for students who are interested in studying language theory in order to apply it to further studies in languages offered at Scarborough College.

Areas of study will include traditional grammar, word formation and sentence structure, phonetics and sound systems, meaning and language use.

Exclusion: (LINA01Y)

Prerequisite/Corequisite: One course at the university level in a language offered at Scarborough College.

Session: Winter Day

J.D. Woods

**LINB02S Phonology**

The sounds of language and their analysis: theoretical approaches to the sound patterns of various languages.

An introduction to phonological theory and method, especially such areas as segmental phonology, phonological patterns, distinctive phonological rules, underlying representations, rule ordering, derived representations, non-phonological effects, and natural phonology. We will discuss material from the text and problems which are to be solved.

Students are strongly urged to take LINB09F before LINB02S.

Prerequisite: LINA01 or LINA05

Session: Winter Day

J.D. Woods

**LINB08F Scripts**

Alphabets and other writing systems, their history, development and use. Hieroglyphics, Cuneiform, and other ancient scripts. History of the Latin and related alphabets.

Prerequisite: LINA01, LINA05, or LINA04

Session: Winter Day

R.I. Binnick

**LINB09F Phonetics**

The physiological and acoustic bases of speech.

An examination of the means by which speech sounds are produced, and of the physical properties of these sounds. Emphasis will be placed on such practical considerations as phonetic transcriptions. We will discuss material from the prescribed readings and problems which are to be solved.

Students are strongly urged to take LINB09F before LINB02S.

Prerequisite: LINA01 or LINA05

Session: Winter Day

J.D. Woods

**LINB11Y Syntax**

The study of sentence structure in language.

Students will learn how to analyze linguistic data so as to determine the principles and constraints which govern sentence formation and the expression of meaning via sentence structure. Further, attention will be paid to those features of syntax which appear to be universal in languages; a focus of concern will be the question of what general theory of syntax can best explain these universals.

Prerequisite: LINA01 or LINA05

Session: Winter Day

R. I. Binnick

**LINB27F/S Animal Communication and the Nature of Language**

An examination of how some animals communicate and what this can tell us about how to form a theory of language.

Topics include: non-human communication; the relationship of human language to animal communication; non-linguistic communication by humans.

Lectures, discussion and films.

Prerequisite: One course in LIN, or PSY, or SOC, or ANT.

Session: Winter Day

T.B.A.

**JLPB55S Psycholinguistics**

Theories and experiments that address the question: how is language comprehended and produced and how is the ability to use language related to other psychological abilities?

Lectures and discussion.

Prerequisite: PSYA01 or LINA01

Session: Winter Day

A. Gopnik

**LINC12S Semantics**

The role of meaning in the structure, function and use of language.

Topics include lexical (word and idiom) meaning, conveyed vs. literal meaning, the role of real world knowledge and other presuppositions in understanding language, and the relationship between form and content in sentences and larger linguistic units.

Prerequisite or Corequisite: LINB11

Session: Winter Day

R.I. Binnick

**JLPC24S Developmental Psycholinguistics**

This course investigates the development of language in children. How do children acquire phonological, syntactic, semantic and pragmatic rules? How is language development related to other kinds of cognitive developments?

There will be lectures and discussions.

Exclusions: (LINB15), (JLPB24)

Prerequisite: One full-course equivalent at the B-level in LIN or PSY.

Session: Winter Day

A. Gopnik

**LINC25F Second Language Learning**

The psychological, sociological and linguistic factors which affect the ability of a child or an adult to learn a language after a mother tongue has been acquired.

The course begins with an examination of the theoretical cognitive basis of second language learning and a comparison with child first language acquisition. In the second section, the question of individual differences among learners (in attitude, intelligence, and personality) is discussed with respect to the success or failure of second language mastery. The third topic involves the strategies which learners adopt, either consciously or unconsciously, to learn the language more effectively and to communicate, given their limited knowledge of the language. Finally, all these issues are assimilated in an attempt to produce a coherent description of second language communicative competence.

There will be lectures and discussion based on assigned readings.

Prerequisite: One linguistics course or language course involving the study of grammar. One psychology course recommended.

Session: Winter Day

T.B.A.

**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

**Courses Not Offered in 1988-89****LINB05Y Romance Languages**

Exclusion: HUMC14Y

**LINB14F Interpersonal Communication**

Prerequisite: LINA01,

LINA05, or SOCA01; or

LINA04 with permission of instructor

Exclusion: (LINB07)

**LINB16F Morphology**

Prerequisite: LINA01 or

LINA05

**LINC06F/S Language Change**

Exclusion: (LINB04)

Prerequisite or Corequisite:

LINB02 and LINB16

**LINC15F/S Varieties of Language**

Exclusions: (LINB07),

(LINB15)

Prerequisite: LINA01,

LINA05, or SOCA01; or

LINA04 with permission of instructor

**LINC28F/S Language and the Sexes**

Exclusion: (LINB28)

Prerequisite: One full-course or equivalent on the B level in LIN, SOC, ANT, or PSY

- LIND21Y** Investigation of a Language  
Exclusion: (LINC21)  
Prerequisite or Corequisite:  
LINB02, LINB11
- JLPD55F** Disorders of Speech and Language  
Exclusions: (LINB29F),  
(JLPC55)  
Prerequisite: Either JLPB55,  
PSYB60, or PSYB65, and one  
C level half course in PSY; or  
one B level FCE in LIN

## Literature

*Discipline Representative:* H. Wittmann  
(284-3197)

The courses in this Programme offer an inter-disciplinary approach to literature. They are designed to expose the students to some of the fundamental questions concerning literary works and to develop their critical skills. Texts will be read in English. The Programme offers students a wide range of choices from four sections arranged according to Genre, Movement, Period, Theme and from Creative Writing, within the framework of required courses which form the backbone of the Programme. Students are encouraged to pursue their study of literary texts from the perspective of related disciplines and to draw on the resources of such areas as Philosophy, History, Music or Fine Art. LITA01Y is the core course of the Programme.

### Major Programme in Literature

*Supervisor:* H. Wittmann (284-3197)

Seven full-course equivalents as follows:

- I LITA01Y Introduction to Literature
- II LITB01Y Formation and Transformation of Literary Tradition
- III 4 full-course equivalents, to be selected from the following subsections:  
Genre  
Movement  
Period  
Theme  
Creative Writing
- IV One half-course from Studies in Critical Theory
- V LITD20F Colloquium in Literature (Essay)

After LITA01 and LITB01 students are encouraged to develop areas of concentration within the sub-sections of III above.

Students wishing to study literature in the original language will have the opportunity to do so.

Choice of courses must be approved by the Supervisor.

### FIRST YEAR

LITA01Y Introduction to Literature

### SECOND YEAR

LITB01Y Formation and Transformation of Literary Tradition  
Prerequisites: LITA01, or  
ENGA01, or FREA30  
(FREB02Y), or one course in literature

### Genre

- CLAC03Y Greek and Roman Epic  
CLAC04Y Greek and Roman Tragedy  
Exclusion: DRAB14
- DRAB03Y The History of Theatre I  
DRAB04Y The History of Theatre II  
DRAB05Y The Art and Nature of Comedy
- DRAB06Y Canadian Drama  
ENGB34F The Short Story  
ENGCS0Y Modern Drama  
LITB04Y Fairytales and Folktales  
LITB05F/S Emergence of Modern Prose  
Exclusion: (HUMB43)
- LITB07Y\* 19th Century Russian Novel  
Exclusion: (HUMB58)
- LITB08Y The European Experience:  
Man and Society in the 20th  
Century French and Italian  
Novel  
Exclusion: (HUMB17)
- LITB11F/S Science Fiction  
Exclusion: (HUMB27)
- LITB15Y Dramatic Literature and Political Revolution  
Exclusion: (JHGB50)
- LITB16F/S The Crisis of Contemporary Society in Modern Italian Drama  
Exclusions: ITAC27(ITAB27),  
(HUMB54)
- LITB17F/S Russian Short Fiction of the 19th & 20th Centuries
- LITB18F/S Nineteenth Century German Prose  
Exclusion: (HUMB51F/S)
- LITB19F/S Twentieth Century German Prose  
Exclusion: (HUMB56F/S)
- LITC10Y Masterpieces of the German Novel from 18th Century to the Present  
Exclusion: (JHGB51)

- LITC12F/S Dostoevsky's Fiction  
Exclusions:  
(RUSB17),(LITB21)
- LITC30F/S\* Lyric Poetry of the Middle Ages  
Exclusion: (HUMC01)
- LITC31S Comparative Study of Contemporary Fiction  
Exclusion: (HUMC19)

### Movement

- LITB22Y\* Modernism  
Exclusions: (RUSB24,  
SPAB33, HUMB42)
- LITB23Y\* Expressionism
- LITC21Y\* Romanticism

### Period

- CLAA01Y Classical Civilization
- LITB31Y\* World Visions from the Late Middle Ages to the Renaissance
- JHFC40Y Vienna and the Origins of Contemporary Culture
- LITB32S The Spanish Civil War  
Exclusion: (HUMB45)
- JLIC32F/S Petrarch and Boccaccio
- LITB33Y\* Post-War Europe
- JLIC33F/S Machiavelli and Renaissance Thought  
Exclusion: (LITB35S)
- LITB36F Soviet Russian Literature 1917-1980: The Official Writing  
Exclusion: (LITB34)
- LITB37S Soviet Russian Literature 1917-1980: The Unofficial Writing  
Exclusion: (LITB34)

- LITB38F/S Features of Post-War German Literature  
Exclusion: (HUMB57F/S)

### Theme

- LITB40F/S Disaster and Literary Imagination  
Exclusions: LITB40,  
(HUMB44)
- LITB41Y\* Time and Literature
- LITB42Y\* Women and Literature  
Exclusions: (HUMB64),  
LITB45
- LITB44Y The Holocaust in Modern Literature  
Exclusion: (JHGB52)

- LITB45Y\* Literary Considerations and Feminism  
Exclusions: (HUMB64),  
LITB42
- LITB47F/S Fantasy in Narnia and Middle Earth  
Exclusion: (HUMB39)
- LITB48F/S Utopia from More to Huxley  
Exclusion: (HUMB38)
- LITB49F/S Atlantis  
Exclusion: (HUMB37)
- LITB50S Science, Power and Hell: The Story of Dr. Faustus
- LITB51S Beyond Nihilism: Three Ways to Salvation
- HUMC12Y Studies in Mythology
- HUMC14Y Topics in Latin American Culture and Literature

### Creative Writing

- LITB60Y Creative Writing I  
Exclusion: (HUMB80)
- LITC61F Creative Writing II
- LITC62S
- LITC63Y
- LITD64F Independent Studies
- LITD65S Creative Writing
- LITD66Y

### THIRD YEAR

#### Literary Criticism

- PHLB03F/S Philosophy and Art (Aesthetics)
- PHLB04F/S Philosophy of Literature
- LITC01-C09F/S\* Studies in Critical Theory

### Colloquium

- LITD20F/S\* Colloquium in Literature  
\* Students should check these courses for prerequisites.

### LITA01Y Introduction to Literature

An introduction to the understanding and enjoyment of literature through the reading of novels, short stories, plays, and poems drawn from literatures of various countries. All readings will be in 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 and Philosophy.  
Session: Winter Day  
H. Wittmann/P. León

**LITB01Y Formation and Transformation of Literary Tradition**  
Literature in its historical context. An examination through reading of the birth and development of the European literary tradition.

The course will be based on a reading list of material drawn from the Classical to the Modern period. Each student will meet weekly with a Director of Studies to discuss the reading and to arrange writing assignments.

Prerequisites: LITA01 or ENGA01 or FREA30(FREB02Y) or one course in literature.

Session: Winter Day

J. Kirkness, H. Wittmann, C. Ponomareff, D. McAuliffe, K. Theil, A. Franceschetti

**LITB15Y Dramatic Literature and Political Revolution**

A study of plays which deal with the various aspects of political revolution.

Political Revolution is perhaps the most striking feature of modern political change. From about 1800, dramatists have been fascinated with the political, social and psychological issues raised by the apparent either/or of revolutionary change.

Texts will be drawn from European and North American literatures. All texts will be read in English.

Exclusion: (JHGB50)

Prerequisites: LITA01 or ENGA01 or FREA30(FREB02Y) or one course in literature.

Session: Winter Day

H. Ohlendorf

**LITB17S Russian Short Fiction of the 19th and 20th Centuries**

The many guises of marginal man in the stories of Pushkin, Gogol, Turgenev, Dostoevsky, Chekhov, Gorky, Zamyatin, Solzhenitsyn and others.

Prerequisites: LITA01 or ENGA01 or FREA30(FREB02Y) or one course in literature

Session: Winter Day

C. Ponomareff

**LITB19F Twentieth Century German Prose**

Main literary trends in Germany from the turn of the century to the present.

The course is divided into three parts with the following themes: i) crisis of consciousness and language (Hofmannsthal, Rilke, Musil, Kafka); ii) the conflict of art and life (Mann, Hesse);

iii) art and morality (Grass, Böll). It intends to show the genesis of modern prose as it emerges from the conflict between the consciousness of the writer and an increasingly complex reality shaped by the revolution of science and technology. Its main goals are to explore the resulting attitude of the writers toward language, the structure of society and the concept of individuality.

Prerequisite: LITA01 or ENGA01 or FREA30(FREB02Y) or one course in Literature. (GERB19 and GERB20 for students studying in the original)

Exclusion: HUMB56F

Session: Winter Day

H. Ohlendorf

**LITB22Y The Modernist Adventure**

A comparative exploration of the crisis of modern artistic consciousness in selected works of French, German, Hispanic, and Russian literature, 1870-1914. The course will examine, in terms of their historical context, literary evolution and relevance to the twentieth century, themes and attitudes associated with such topics as: pessimism, escape, and spiritual quest; revolution and the creative will; hypersensitivity and introversion; sex, magic, and the occult; drugs and dreams; the cult of artifice; legend, myth, and fantasy; the role of music and pictorial art.

Representative (mainly prose) texts will be read and discussed in English. Guest lectures on selected subjects.

Prerequisite: LITA01 or ENGA01 or FREA30(FREB02Y) or one course in literature

Exclusions: (RUSB24), (SPAB33), (HUMB42)

Session: Winter Day

C. V. Ponomareff, R. Skyrme

**LITB37S Soviet Russian Literature 1917-1980: The Unofficial Writing**  
Varieties of unofficial writing in Soviet Russia.

The course focuses on Russian underground writing which began in the 1920's and grew into the dissident movement of 1960's and after.

Exclusion: (LITB34)

Prerequisite: LITA01 or ENGA01 or FREA30(FREB02Y) or one course in literature.

Session: Winter Day

C. V. Ponomareff

**LITB40F Disaster and the Literary Imagination**

An exploration of the impact of totalitarianism, war and the Holocaust on the post-Second World War European literary imagination.

The course will look at Russian and West German writers (in translation).

Prerequisite: LITA01 or ENGA01 or FREA30(FREB02Y) or one course in literature

Exclusion: (HUMB44)

Session: Winter Day

C. V. Ponomareff

**LITB50S Science, Power, and Hell: The Story of Dr. Faustus**

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.

Prerequisite: LITA01 or ENGA01 or FREA30(FREB02Y) or one course in literature

Session: Winter Day

H. Ohlendorf

**LITB60Y Creative Writing I**

An introduction to the writing of poetry and short fiction.

This course will provide students with the experience of writing, discussing and revising their own work in a group workshop. Exercises to be assigned will bear on special questions of technique and form and there will also be discussion of the work of some contemporary writers and visits by writers. Limited enrolment: 16

Exclusion: (HUMB80)

Prerequisite: Permission of instructor; by interview or portfolio by September 8.

Session: Winter Day

M. Tait

**JLIC32S Petrarch and Boccaccio**

A study, through the works of two major writers, of the beginnings of the Renaissance and the rise of Humanistic thought and culture.

The class will read and discuss selections from Boccaccio's *Decameron*, and Petrarch's *Canzoniere*, *Segreto*, and *Trionfi*. The course is intended to provide an insight into two writers representative of their times who have deeply influenced Italian and, indeed, all of western European literature. Special consideration will be given to the historical and cultural context in which the authors lived and wrote.

Lectures will be in English. Students wishing to count the course towards a Programme in Italian will read the texts and do their assignments in Italian; an additional one hour tutorial will be provided for them.

Exclusion: (ITAB32)

Prerequisite: For those taking the course as part of a Programme in Italian, ITAB01 or ITAB11; for others, LITA01 or ENGA01 or FREA30(FREB02Y) or one course in literature.

Session: Winter Day

D. McAuliffe

**LITD20F Colloquium in Literature**

A detailed study of an author or a special literary phenomenon.

This colloquium is required for the Literature Major and is normally taken in third year after the completion of one of LITC01-C09F/S. A major essay is a requirement of this course.

Exclusion: (LITC20)

Prerequisites: PHLB03 or PHLB04 or one of LITC01-C09F/S

Session: Winter Day

H. Wittmann

**For additional courses accepted in the Literature Programme, see the following:**

CLAA01Y	Classical Civilization
CLAB01Y	Greek and Roman Epic
CLAB02Y	Greek and Roman Tragedy
DRAB03Y	The History of Theatre I
DRAB04Y	The History of Theatre II
DRAB05Y	The Art and Nature of Comedy
DRAB06Y	Canadian Drama
ENGB31Y	Modern Drama
ENGB34S	The Short Story
HUMC12Y	Studies in Greek Mythology
HUMC14Y	Topics in Latin American Culture and Literature

JHFC40Y Vienna and the Origins of Contemporary Culture  
 PHLB03F/S Philosophy and Art  
 PHLB04F/S Philosophy of Literature

**Courses Not Offered in 1988/89**

**LITB04Y** Fairytales and Folktales  
 Prerequisite: LITA01 or ENGA01 or FREA30(FREB02) or one course in literature.  
**LITB05F/S** Emergence of Modern Prose  
 Exclusion: (HUMB01)  
 Prerequisite: LITA01 or ENGA01 or FREA30(FREB02) or one course in literature.  
**LITB07Y** The Nineteenth Century Russian Novel 1830-1880  
 Exclusions: (RUSB11), (HUMB58)  
 Prerequisite: LITA01 or ENGA01 or FREA30 (FREB02Y) or one course in literature  
**LITB08Y** The European Experience: Man and Society in the 20th Century French and Italian Novel.  
 Exclusion: (HUMB17)  
 Prerequisite: LITA01 or ENGA01 or FREA30(FREB02) or one course in literature.  
**LITB11F/S** Science Fiction  
 Exclusion: (HUMB27)  
 Prerequisite: LITA01 or ENGA01 or FREA30(FREB02) or one course in literature.  
**LITB13Y** Russian and English 19th Century Fiction  
 Exclusion: (HUMB40) (previously HUMB31)  
 Prerequisite: LITA01 or ENGA01 or FREA30(FREB02) or one course in literature.  
**LITB16F** The Crisis of Contemporary Society in Modern Italian Drama  
 Exclusions: ITAC27(ITAB27), (HUMB54)  
 Prerequisite: LITA01 or ENGA01 or FREA30(FREB02) or one course in literature.  
**LITB18F/S** Nineteenth Century German Prose  
 Exclusion: (HUMB51)  
 Prerequisite: LITA01 or ENGA01 or FREA30 (FREB02Y) or one course in literature

**LITB23Y** Expressionism  
 Prerequisite: LITA01 or ENGA01 or FREA30(FREB02)  
**LITB31Y** World Visions from the Late Middle Ages to the Renaissance  
 Exclusion: (HUMB33)  
**LITB32S** The Spanish Civil War: Fact to Fiction  
 Exclusion: (HUMB45)  
 Prerequisite: LITA01 or ENGA01 or FREA30(FREB02) or one course in literature.  
**LITB33Y** Post-War Europe  
 Prerequisite: LITA01 or ENGA01 or FREA30(FREB02) or one course in literature.  
**LITB36F** Soviet Russian Literature 1917-1980: The Official Writing  
 Exclusion: (LITB34)  
 Prerequisite: LITA01 or ENGA01 or FREB02 or one course in literature.  
**LITB38F/S** Features of Post-War German Literature  
 Exclusion: (HUMB57)  
 Prerequisite: LITA01 or ENGA01 or FREA30 (FREB02Y) or one course in literature  
**LITB41Y** Time and Literature  
 Prerequisite: LITA01 or ENGA01 or FREA30(FREB02) or one course in literature.  
**LITB42Y** Women and Literature  
 Exclusion: (HUMB64), LITB45  
 Prerequisites: LITA01 or ENGA01 or FREA30(FREB02) or JHSA01 or one course in literature  
**LITB45Y** Literary Considerations and Feminism  
 Exclusion: (HUMB44)  
 Prerequisite: LITA01 or ENGA01 or FREA30(FREB02) or one course in literature.  
**LITB47F/S** Fantasy in Narnia and Middle Earth  
 Exclusion: (HUMB39)  
 Prerequisite: LITA01 or ENGA01 or FREA30(FREB02) or one course in literature  
**LITB48F/S** Utopia: From More to Huxley  
 Exclusion: (HUMB38)  
 Prerequisite: LITA01 or ENGA01 or FREA30(FREB02) or one course in literature.  
**LITB49F/S** Atlantis  
 Exclusion: (HUMB37)  
 Prerequisite: LITA01 or ENGA01 or FREA30(FREB02) or one course in literature

**Mathematics**

*Staff member responsible for curriculum:*  
 E. Mendelsohn (284-3342)

The development of mathematics was induced by the inherent need to describe and analyse elements of the physical world as accurately as possible. Applied mathematics and statistics are still concerned with the building of models for use in real-world contexts. Pure mathematics is concerned with systems of axioms and the true statements or theorems which can be deduced from them. While pure mathematics is not necessarily initially motivated by practical considerations, there are numerous instances where the solution of problems in other branches of science has been based upon previously developed pure mathematical theory. The wide applicability of both the techniques of the subject and the method of reasoning employed suggests that most students could profit by taking some courses in mathematics.

**Comparison of A Level Calculus Courses**

\*MATA55Y Calculus with Analysis  
 MATA26Y Calculus  
 MATA27Y Techniques of Calculus

MATA55 is a theory course. The emphasis is on why theorems are true, and students are expected to learn how to follow this logic and how to develop proofs themselves. A student who completes MATA55 together with MATA04Y may take any of the second year Mathematics courses.

MATA26 is a practical course taught at a high level. The emphasis is on applications rather than theorems. A student who completes MATA26 may take in second year: MATB41F, MATB42S, MATB43S, STAB52F, STAB57S, and if they have MATA04Y as well, MATB25Y, MATB70S, MATB44F.

MATA27 is intended for those Commerce and Economics students who do NOT expect to take MATB41F, MATB42S in second year. It is an EXCLUSION to all second year calculus and analysis courses, except MATB41F, MATB42S, and almost all higher level mathematics courses.

\* MATA55Y is not offered in 1988/89 due to the restructuring of the programme. Students are advised to take MATA26Y followed by MATB41, MATB42 and MATB43.

**LITB51F/S** Beyond Nihilism: Three Ways to Salvation  
 Prerequisite: LITA01 or ENGA01 or FREA30 (FREB02Y) or one course in literature

**LITC01-09F/S** Studies in Critical Theory  
 Prerequisite: LITB01 and two full-course equivalents in LIT

**LITC30F/S** Lyric Poetry of the Middle Ages in the Mediterranean Area  
 Prerequisite: LITA01 or ENGA01 or FREB02 or one course in literature

**LITC31F/S** Comparative Study of Contemporary Fiction  
 Exclusion: (HUMC19)  
 Prerequisite: LITA01 or ENGA01 or FREA30(FREB02) or one course in literature  
**JLIC33F/S** Machiavelli and Renaissance Thought  
 Prerequisite: For those taking the course as part of a Programme in Italian, ITAB01 or ITAB11; for others, LITA01 or ENGA01 or FREA30 (FREB02Y) or one course in literature

**LITC61F-62S**

**LITC63Y** Creative Writing II  
 Exclusion: for LITC61(LITB61)/62 is LITC63(LITB63); for LITC63(LITB63) is LITC61(LITB61)/62  
 Prerequisite: LITB60 or (HUMB80) or permission of instructor

**LITD64F-D65S**

**LITD66Y** Independent Studies: Creative Writing  
 Exclusion: for LITD64(LITC64)/65 is LITD66(LITC66); for LITD66(LITC66) is LITD64(LITC64)/65  
 Prerequisite: LITB60 or (HUMB80) and permission of instructor

**Specialist Programme in Mathematics**  
*Supervisor:* E. Moore (284-3352)

The Specialist Programme is designed to give students a thorough grounding in the main areas of Mathematics. It is aimed at those students who may wish to pursue a career in mathematical research, teaching or in applications within government and industry.

In this Programme a total of eleven full-course equivalents is required:

First year: MATA04Y or (MATA40F, MATA45S), MATA55Y\*, C5CA58F and C5CA68S;

Second year: MATB25Y, MATB44F, MATB49S, MATB05Y\* or (MATB50F\*, MATB55S\*), STAB52F, STAB57S;

Third year: MATC49S, MATC51F, MATC56S, MATC53Y, MATC60F, MATC65S;

Fourth year: One further half-course from MATB70S, MATC43F, MATC54F, JMCC31F, JMCC32F, C5CC51F, (JMCC51), STAC42S, STAC52S, STAC67F

In any given year, some C-level courses may not be offered. Students should check on this with the divisional office.

Students are urged to choose at least two additional courses in other disciplines where mathematics is applied, such as Astronomy, Biology, Chemistry, Computer Science, Economics and Physics.

**Major Programme in Mathematics**  
*Supervisor:* H. S. Rosenthal (284-3352)

The Major Programme is designed for students who wish a good basic understanding of mathematical technique rather than the full development of the theory. Students with a serious interest in the applications of mathematics and statistics could usefully combine this programme with a major programme in a field involving such applications.

In this Programme a total of eight full-course equivalents is required:

- 1 MATA26Y or MATA55Y
- 2 MATA04Y or (MATA40F, MATA45S), MATB44F, C5CA58F, C5CA68S, STAB52F, and STAB57S.
- 3 MATB41F and MATB42S or MATB05Y or (MATB50F and MATB55S)
- 4 One further full-course equivalent from each of groups (a) and (b) and one-half course equivalent from group (c):

- a MATC51F, MATC56S, MATC53Y, MATC60F, MATC65S
- b STAC42S, STAC52S, STAC67F, C5CB28S, C5CB58F, C5CC50S, C5CC51F (JMCC51)
- c MATB25Y, MATB49S, MATB70S, MATC43F, MATC49S, MATC54F, JMCC31F, JMCC32F

In any given year, some C-level courses may not be offered. Students should check with the divisional office.

**MATA04Y Linear Algebra I**

Systems of linear equations, vector spaces, subspaces, basis dimension. Linear transformations, range and kernel, matrix representations. Complex numbers and polynomials. The determinant and characteristics equation of a matrix. Eigenvectors and eigenvalues for a linear transformation. Change of basis and canonical forms.

Prerequisite: Grade 13 Calculus and one other Grade 13 Mathematics or OAC Calculus and OAC Algebra

Exclusions: (MATA40), (MATA45)

Session: Winter Day

**MATA26Y Calculus**

Limits and continuity, derivatives, related rates, extremum problems, graph sketching, Newton's method, indefinite and definite integrals, numerical integration, Taylor approximation and differential equations.

Students must have a calculator with memory and the exponential logarithmic and trigonometric functions and their inverses.

MATA26Y introduces the basic techniques of calculus with a strong emphasis on methods of approximation. The course will develop these ideas by the investigation of specific examples.

MATA26Y is a demanding course which will equip the student for most sciences and for further work in mathematics.

Exclusion: MATA27; MATA55

Prerequisite: Grade 13 Calculus or OAC Calculus and OAC Algebra

Session: Winter Day

**MATA27Y Techniques of Calculus**

Limits and continuity, derivatives, applications to related rates and extremum problems, graph sketching, Rolle's theorem and Mean Value Theorem, indefinite and definite integrals, L'Hopital's rule, partial differentiation, Lagrange multipliers, first order differential and difference equations, elementary matrix algebra.

Students must have a calculator with memory and the exponential, logarithmic and trigonometric functions and their inverses.

MATA27 is intended for those Commerce and Economics students who are NOT expecting to take MATB04Y or (MATB41F, B42S)

Exclusion: MATA26; MATA55

Prerequisite: Grade 13 Calculus or OAC Calculus and (OAC Algebra or OAC Finite Mathematics)

Session: Winter Day

**MATA45S Linear Algebra I**

Note: MATA45S will be offered for the last time in 1988-89. It is intended only for those who have completed MATA40F in a previous year.

Complex numbers and polynomials. The determinant and characteristic equation of a matrix. Eigenvectors and eigenvalues for linear transformations of  $R^n$  and  $C^n$ . Change of basis and canonical forms for orthogonal and unitary transformations. Diagonalization of quadratic forms.

Prerequisite: MATA40

Exclusion: MATA04Y

Session: Winter Day

**MATB05Y Analysis**

Basic set Theory; Elementary properties of metric spaces; Compactness, convergence and continuity for such spaces.

Differential calculus in  $R^n$ , partial derivatives, implicit differentiation, the total differential of a function. Extrema with side conditions. The calculus of vector functions. Series of functions, power series, Taylor formulas. Integration in Euclidean space, multiple integrals, transformation of variables, integration of forms and exterior calculus. Curves and surfaces in  $R^n$ , curve integrals orientation, winding number and arc length. Surface Integrals Green's and Stokes Theorem.

Prerequisite: MATA04 or (MATA45) and MATA55

Exclusion: MATA27, MATB41, MATB42

Session: Winter Day

**MATB25Y Geometry**

Isometries in Euclidean plane and space. Similarities. Inversion in a circle. The Inverse plane. Circle preserving transformations. Non-Euclidean geometry. Projective and affine geometry. Finite geometries. Free completions. Desargues's theorem and Pappus's theorem. Projectivities, homologies, elations. The fundamental theorem of projective geometry.

This course explores some facets of present-day geometric research. In addition, the interplay between geometry and algebra is emphasized.

Prerequisites: MATA04 or (MATA45)

Corequisite: MATB44

Session: Winter Day

**MATB41F Techniques of the Calculus of Several Variables I**

Vector algebra in  $R^n$ , lines and planes in  $R^3$ , complex numbers, matrices, determinants and linear equations. Functions of several variables, partial derivatives, tangent planes, Jacobian matrix, chain rule and total derivative. Vector fields in  $R^n$ . Gradient, divergence and curl. Multiple integrals, spherical and cylindrical coordinates, law of transformation of variables.

Exclusion: MATB05Y (MATB50)

Prerequisite: MATA26, MATA27 or

MATA55

Session: Winter Day

**MATB42S Techniques of the Calculus of Several Variables II**

Paths and path integrals. Surfaces, parametric representations of surfaces, surface integrals. Divergence, Gauss' and Stokes' theorems. Sequences and series of numbers and functions. Taylor series and complex Fourier series. Extremal problems. Extremal problems with constraints and Lagrange multipliers.

Exclusion: MATB05Y (MATB50, MATB55)

Prerequisite: MATB41

Session: Winter Day

**MATB43S Introduction to Analysis**

The least upper bound principle for  $R$ , limits in  $R$  and  $R^2$ , 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 the A26 - B41 - B42 stream, and who wish to acquire the analytic techniques which are essential for more advanced work. In particular MATB43S together with MATB42S may be used instead of MATB55S for prerequisite purposes. There will be a fundamental emphasis on rigorous analytic proofs.

Exclusions: MATA27, MATA55

Prerequisites: MATA26, MATA04 or

(MATA45)

Corequisite: MATB42

Session: Winter Day



**MATB44F Algebraic Structures I**

Groups: subgroups, normal subgroups, quotient groups, homomorphisms, permutation groups. Rings: ideals, quotient rings, homomorphisms, Euclidean rings, polynomial rings. Extension fields, roots of polynomials.

Exclusion: (MATC44)

Prerequisites: MATA04 or (MATA45)

Session: Winter Day

**MATB49S Linear Algebra II**

Dual spaces, the transpose of a linear transformation, polynomial algebras over a field, prime factorization in  $F(x)$ , determinants, Cayley-Hamilton theorem, invariant and cyclic subspaces, Jordan and rational canonical forms.

Exclusion: (MATB40)

Prerequisite: MATB44

Session: Winter Day

**MATB70S Introduction to Number Theory**

Some properties of integers. Prime numbers. Congruences. Quadratic residues. Diophantine equations. Rational approximation. Three lectures per week. Prerequisites: MATA04 or (MATA45)

Session: Winter Day

**JMCC32F Graph Theory and Algorithms for its Applications**

Graphs, subgraphs, isomorphism, trees, connectivity, Euler and Hamiltonian properties, matchings, vertex and edge colourings, planarity, network flows and strongly regular graphs. A selection of applications to such problems as timetabling, personnel assignment, tank formation scheduling, travelling salesmen, tournament scheduling, experimental design and finite geometries. Explicit algorithms and their computational complexity will be discussed whenever possible.

Prerequisite: MATB44 (or CSCB38) and at least one other B-level course in Mathematics or Computer Science

Session: Winter Day

**MATC43F Linear Algebra III**

Inner product spaces, bilinear forms, Sylvester's Law, orthogonal and symplectic groups, tensor products, exterior algebra.

Exclusion: (MATB45)

Prerequisite: MATB49

Session: Winter Day

**MATC51F Differential Equations I**

First order equations: separable, homogeneous, linear, exact, integrating factors. Brachistochrone, exponential growth, cooling bodies. Second order equations: reducible, linear, constant coefficients, Euler equations. Wronskian, undetermined coefficients, variation of parameters. Initial value problems. Higher order linear equations. Vibrations, electric circuits, laws of Kepler and Newton. Power series solutions and method of Frobenius. Laplace transforms. Three lectures per week. Prerequisites: MATA04Y; MATA26Y or MATA55; MATB05 or MATB41F and MATB42S. (The prerequisites from this group may be taken concurrently with C51)

Session: Winter Day

**MATC54F Differential Geometry I**

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, geodesics, parallel transport, Gauss Bonnet theorem. Geometry on surfaces of constant curvature.

Prerequisites: MATA04 or (MATA54) and MATB05 or MATB42 or (MATB55)

Corequisite: MATC51

Session: Winter Day

**MATC60F Complex Analysis I**

Complex arithmetic. Polynomials and elementary functions. Differentiation and the Cauchy Riemann equations. Cauchy's integral formula for differentiable functions and their Taylor expansion. Properties of analytic functions including Liouville's theorem, identity theorem, maximum modulus theorem and open mapping theorem. Laurent expansion and classification of isolated singularities. Residue calculus.

Prerequisites: MATB05 or (MATB55) or MATB42

Session: Winter Day

**MATC65S Complex Analysis II**

Applications of complex analysis to geometry, physics and number theory. Fractional linear transformations and the Lorentz group. Solution to the Dirichlet problem by conformal mapping and the Poisson kernel. The Riemann mapping theorem. The prime number theorem.

Prerequisite: MATC60

Session: Winter Day

**STAB52F Probability and Statistics I**

An introduction to probability theory. The probability model. Presentations of probability. Marginal probability. Statistical independence. Conditional probability. Mean value. Weak Law of Large Numbers and the Central Limit Theorem. Theory and applications.

Exclusion: ECOB11, (MATB52)

Prerequisite: MATA26, MATA27 or MATA55

Session: Winter Day

**STAB57S Probability and Statistics II**

An introduction to statistics. The statistical model. Large sample methods. Distribution-free methods. The likelihood function. Estimation. Testing hypotheses. Linear models. Design of experiments. Theory and applications.

Exclusion: PSYB07, ECOB11, (MATB57)

Prerequisite: STAB52 (MATB52)

Session: Winter Day

**STAC52S Experimental Design**

The statistical aspects of collecting and analyzing experimental data. Complete randomization and restricted randomization schemes. Factorial designs.

Exclusion: PSYC08 (PSYB08H)

Prerequisite: STAB57

Session: Winter Day

**STAC62F Stochastic Processes**

This course continues the development of probability theory begun in STAB52F. Topics covered include Poisson processes, Gaussian processes, Markov processes, renewal theory, queueing theory, martingales and stochastic differential equations.

Prerequisite: STAB52F

**Courses Not Offered in 1988-89**

<b>MATA55Y</b>	Calculus with Analysis
<b>MATC32F</b>	Advanced Topics in Mathematics
<b>JMCC31F</b>	Combinatorics
<b>MATC49S</b>	Algebraic Structures II
<b>MATC53Y</b>	Real Analysis
<b>MATC56S</b>	Differential Equations II
<b>STAC42S</b>	Multivariate Analysis
<b>STAC67F</b>	Regression Analysis

**Medieval Civilization**

Courses in the following Programmes encompass the breadth of European and Mediterranean culture running from the late Roman period and culminating, in the West, in the Renaissance of the fifteenth century.

**Specialist Programme in Medieval Civilization**

Supervisor: J.H. Corbett

Students will be expected to complete ten full-course equivalents from the following areas:

- 1 The Arts (Fine Art, Archaeology, Drama and Music)
- 2 History
- 3 Language and Literature
- 4 Philosophy and Religion

Students are to select three full-course equivalents each from three of the four areas, and one from the remaining area. HISB06Y is required of all participants. Two of the ten full-course equivalents must be C- or D-level seminars or C- or D-level reading courses requiring major research papers. Independent study in areas not otherwise covered, such as historical geography and linguistics, may be undertaken through reading courses. The curriculum can be supplemented according to the rules of the College by courses on the St. George campus. Course selection must be approved by the Supervisor.

**Arts**

<b>ANTC52A*</b>	Field Methods in Archaeology
<b>ANTD03Y*</b>	Analysis of Archaeological Material
<b>DRAB03Y</b>	The History of Theatre I
<b>DRAB12B</b>	Medieval and Early Tudor Drama: Texts and their Production



FARA11S	Medieval Art
FARB10F/S	Carolingian and Romanesque Art and Architecture
FARB16Y	The Arts in Northern Europe ca. 1400-1500
FARC06F/S*	Early Medieval Art
FARC07F/S*	Gothic Architecture
HUMC09H	The Civilization of Spain I
MUSB04F/S	Music of the Renaissance

<b>History</b>	
ANTB55Y	Cultures of the Middle East and the Islamic World
ANTD01S*	Pre-Industrial Technology
GERC02F/S*	Practicum in the History and Structure of the German Language
GRHB03Y	Roman History from the Gracchi to Nero
HISB06Y	Europe in the Middle Ages
HISB07Y	Russia from the Thirteenth Century to the Present
HISC61Y*	The Beginnings of France: Constantine to Charlemagne
HISD20F/S*	Anglo-Saxon England
HISD62Y*	The Crusades

<b>Language and Literature</b>	
ENGB01Y	Old English Language and Literature
ENG30Y*	Chaucer
ENG33Y*	English Drama to 1642
ENG01Y*	Advanced Studies in Beowulf and other Old English Poetry
FREB42Y*	General History of the French Language
FREC22Y*	Introduction to Medieval French Language and Literature
GERC02F/S*	Practicum in the History and Structure of the German Language
ITAC23S*	Survey of Italian Literature from the Middle Ages to the Renaissance
ITAC31Y*	Dante and Medieval Culture
JLIC32F/S	Petrarch and Boccaccio
ITAC34F/S*	Chivalric Poetry of the Renaissance
LATA01Y	Introductory Latin
LATC30-34F*	Supervised Reading
LATC35-39S*	Supervised Reading
LATC40Y*	Supervised Reading
LITC30F/S*	Lyric Poetry of the Middle Ages in the Mediterranean Area
SPAB12S*	Exclusion: (HUMC01) History of the Spanish Language I

<b>Philosophy and Religion</b>	
CLAC21Y*	Greek and Roman Religion
CLAC23F/S	Christianity in the Greco-Roman World
HUMA11Y	Greek and Roman Mythology
HUMB20Y	Primitive Christian Literature and Myth
HUMB28Y	Major Religious Traditions, East and West
HUMC12Y	Studies in Greek Mythology and its Influences
LITB31Y	World Visions from the Late Middle Ages to the Renaissance
PHLB40F/S	Plato and His Predecessors I
PHLC40S*	Plato and His Predecessors II
PHLB42F	Aristotle I
PHLC42S*	Aristotle II
PHLB44F	Philosophers of the Middle Ages I
PHLC44S*	Philosophers of the Middle Ages II
PHLB61F/S	Philosophy of Religion
PHLC61F/S*	Studies in Philosophy of Religion

\* Students should check these courses for prerequisites.

### Major Programme in Medieval Civilization

Supervisor: J.H. Corbett

Students will be expected to complete seven full-course equivalents from the following four areas:

- 1 The Arts (Fine Art, Archaeology, Drama and Music)
- 2 History
- 3 Language and Literature
- 4 Philosophy and Religion

Students are to select two full-course equivalents each from three of the four areas, and one from the remaining area. HISB06Y is required of all participants. One of the seven full-course equivalents must be a C or D level seminar or a C or D level reading course requiring a major research paper. Independent study in areas not otherwise covered, such as historical geography and linguistics, may be undertaken through reading courses. The curriculum can be supplemented according to the rules of the College by courses on the St. George campus. Course selection must be approved by the Supervisor.

## Music

*Discipline Representative:* J. Mayo (284-3163)

Music courses on the Scarborough Campus are designed for those who would like to pursue the study of music at the university level but who have no intention of entering the profession as performers or composers. Provision is made for students with no previous musical background to begin studies while students who have taken music as a subject at high school or elsewhere will find a selection of historical, theoretical and practical courses available. Most upper level music courses assume that the student has some ability in reading music of a simple nature. Students are encouraged and helped to acquire this skill as soon as possible in their programmes. A Major Programme in Music is offered and music is also a component of the Specialist Programme in the Arts and the Specialist Programme in Arts Administration.

The courses emphasize a humanistic approach to the subject and stress the relationship of Music to other subjects such as Fine Art, Drama, History, Languages and Literatures and Philosophy. Individual musical works are studied from two broad points of view, the critical and the historical. The first approach examines the single composition and attempts to understand, explain and illuminate our experience of it; the second approach sees the particular work as an example of larger stylistic tendencies and tries to explain these in a historical context. Both approaches rely on the sensitivity of the listener and his ability to communicate. Much of the course work, therefore, is directed towards improving the student's aural awareness and her ability to think and write clearly about all types of music.

All students are encouraged to take advantage of the various opportunities which exist in the College for practical music making.

### Major Programme in Music History and Literature

Supervisor: J. Mayo (284-3163)

Students are required to complete a total of six full-course equivalents in Music and related areas. The six courses will be made up as follows:

- 1 MUSA10F Introduction to Music  
MUSB17F Materials of Music I  
MUSB30S Introduction to Music History and Literature  
MUSC04S Materials of Music II
- 2 Three full-course equivalents chosen from MUS courses. At least one and one-half courses in this section should be at the C or D level.  
To satisfy the requirements of this section, students may substitute, in consultation with the Supervisor one or more of the MUS courses offered on the St. George campus (but see information on limitation of courses).
- 3 One additional full-course equivalent in Music or another relevant discipline. The following courses are recommended:  
PHLB03F Philosophy and Art  
JLIC33F/S Machiavelli and aspects of the Italian Renaissance  
DRAB03Y The History of Theatre I  
HUMB90Y Introduction to Arts Administration  
HUMC40Y Vienna and the Origins of Contemporary Culture

### MUSA10F Introduction to Music I

A study of the basic materials, principles of design, and cultural significance of representative works of Western music including popular music from the 17th to the early 19th centuries.

A survey of the style changes in Western music from the Baroque period to the early nineteenth century. The music is approached in terms of technical construction and style characteristics, and in relation to trends in art and society. The evolutionary aspects of the various period styles are emphasized as well as the individual characteristics of selected works. No previous musical training is required. There will be three hours per week lecture and class discussion.

Exclusion: MUSA01  
Session: Winter Day  
T. McGee

**MUSA20S Introduction to Music II**

A continuation of MUSA10F concentrating on music of the late 19th and the 20th centuries and introducing the music of the Middle Ages and the Renaissance.

This course is designed for those students who would like to complete the survey of styles begun in MUSA10F but who do not intend to continue with musical studies. Technical discussion will be kept to a minimum. There will be two hours of lecture per week.

Exclusions: MUSA01/MUSB30S

Prerequisite: MUSA10

Session: Winter Day

T. McGee

**MUSB30S Introduction to Music History and Literature**

A continuation of MUSA10F concentrating on music of the late 19th and 20th centuries and introducing the music of the Middle Ages and the Renaissance. An introduction to elementary theoretical and analytical concepts.

This course is designed for those students who intend to progress to higher level music courses. The repertoire section of the course (two hours per week) is taken in common with students in MUSA20S. The remaining two hours will be a seminar in which students will be introduced to elementary tonal harmony, and to basic analytical techniques. There will be two hours of lecture and two hours of seminar per week.

Exclusions: MUSA01/MUSA20

Prerequisite: MUSA10

Session: Winter Day

J. Mayo, T. McGee

**MUSB06F Music of the Romantic Period**

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.

There will be two lecture hours per week.

Prerequisite: MUSB30S (MUSA01)

Session: Winter Day

J. Mayo

**MUSB14S Jazz**

A history of jazz from its African and European roots to present day experiments.

The history of jazz styles approached through an examination of the work of representative performers. Social questions and the relationship between jazz and "classical" music will be discussed. Class participation may include performance by exceptionally well qualified students.

There will be two hours per week lecture and class discussion.

Session: Summer Evening

J. Mayo

**MUSC09S Canadian Music**

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: MUSB30S (MUSA01)

Session: Winter Day

T. McGee

**MUSC11F Beethoven**

A study of selected symphonies, quartets and sonatas by Ludwig van Beethoven. The course traces the changes in the composer's style and technique from his development under the influence of the Classic masters to his contribution to the new dramatic expression of the nineteenth century.

There will be two lecture hours per week.

Prerequisite: MUSB30S (MUSA01)

Session: Winter Day

T. McGee

**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. *Students may not take more than three half-course equivalents for credit in these courses.*

**MUSB20H Supervised Performance I - Chorus**

The practical study of a wide range of music from the choral repertoire. Students work as members of Scarborough College Chorus, a chamber choir which performs compositions drawn from the literature of the Renaissance to the present day. The choir gives public performances in each term.

In addition, credit students may be required to prepare works in conjunction with members of the instrumental performance programme. Previous experience desirable but not essential. The course meets 2 hours per week for rehearsal with MUSB21H and MUSB25H.

Exclusions: MUSB09 and MUSB10

Prerequisite or Corequisite: MUSA10 (MUSA01)

Session: Winter Day

J. Mayo

**MUSB21H Supervised Performance II - Chorus**

A continuation of MUSB20H.

Exclusion: MUSB10

Prerequisite: MUSB09 or MUSB20

Session: Winter Day

J. Mayo

**MUSB22H Supervised Performance I - Instrumental**

The practical study of ensemble performance.

Students work in small ensembles (duets, trios, quartets) arranged to suit the abilities of individual performers and prepare works for public performance within the College. The emphasis of the course is on the particular problems of ensemble performance and it assumes a basic competence on the chosen instrument.

Each group will meet for 2 hours per week, one hour with all students of MUSB22H and MUSB23H in a master class and one hour for group rehearsal and/or coaching.

See timetable for time of master class; group rehearsal times to be arranged in first week of term.

Exclusions: MUSB09/B10

Prerequisite or Corequisite: MUSA10 (MUSA01)

Session: Winter Day

J. Mayo

**MUSB23H Supervised Performance II - Instrumental**

A continuation of MUSB22H.

Exclusion: MUSB10

Prerequisite: MUSB22 or MUSB09

Session: Winter Day

J. Mayo

**MUSB25H Supervised Performance III - Chorus**

A continuation of MUSB21.

Prerequisite: MUSB21

Session: Winter Day

J. Mayo

**MUSB26H Supervised Performance III - Instrumental**

A continuation of MUSB23H.

Prerequisite: MUSB23

Session: Winter Day

J. Mayo

**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. Candidates must find a willing supervisor and must submit a written application before the dates given below. Students meet regularly with the supervisor for consultation and prepare a 7,500-10,000 word paper for a term course or a 15,000-20,000 word paper for a year course. Students who have demonstrated exceptional ability in MUSB17F and MUSC04S 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.

**Courses Not Offered in 1988-89****MUSB01F/S Music of the Twentieth Century**

Prerequisite: MUSB30S (MUSA01)

**MUSB02F/S Music of the Classic Period**

Prerequisite: MUSB30S (MUSA01)

**MUSB04F/S** Music of the Renaissance  
*Prerequisite:* MUSB30S (MUSA01)

**MUSB05F/S** Music of the Baroque Era  
*Prerequisite:* MUSB30S (MUSA01)

**MUSB17F** Materials of Music I  
*Prerequisite:* MUSB30S (MUSA01)

**MUSC04S** Materials of Music II  
*Prerequisite:* MUSB17F

**MUSC05F/S** The Symphony  
*Prerequisite:* MUSB30S (MUSA01)

**MUSC06F/S** Music for the Theatre  
*Prerequisite:* MUSB30S (MUSA01)  
permission of instructor

**MUSC07F/S** Bach  
*Prerequisite:* MUSB30S (MUSA01)

**MUSC08F/S** Music in Elizabethan England  
*Prerequisite:* MUSB30S (MUSA01)

**MUSC10F/S** Keyboard Music  
*Prerequisite:* MUSB30S (MUSA01)

5 One full-course equivalent from Group (A) and one full-course equivalent from Group (B)

**(A)**

HUMB20Y Primitive Christian Literature and Myth  
HUMB28Y Major Religious Traditions: East and West  
HUMC12Y Studies in Greek Mythology and its Influence  
CLAC23F/S Christianity in the Greco-Roman World  
PHLB61F/S Philosophy of Religion

**(B)**

ANTB23Y Comparative Mythology  
ANTC05Y Anthropological Study of Religion  
SOCB03Y History of Social Thought

6 HUMC10F/S\* Humanities Seminar  
7 and two and one-half further full-course equivalents drawn from (2), (4) and (5) above and from the following:  
ANTD21F/S\* Systems of Thought  
CLAC04Y Greek and Roman Tragedy

CLAC21Y Greek and Roman Religion  
HISB06Y Europe in the Middle Ages

HISD14Y\* The European Mentality in the Early Modern Period (1500-1700)

HISC61Y\* The Beginnings of France: Constantine to Charlemagne

HISC83Y\* Europe in the Reformation Era 1450-1650

HISC84F/S Popular Culture in Early Modern Europe

HISD62Y\* The Crusades  
HUMB26Y Women in the Major Western Religions

HUMB29F/S Religion and Western Culture  
LITB11F/S Science Fiction

Exclusion: (HUMB27)  
LITB31Y World Vision from the Late Middle Ages to the Renaissance  
Exclusion: (HUMB33)

LITB47F/S Fantasy in Narnia and Middle Earth  
Exclusion: (HUMB39)

LITB49F/S Atlantis  
Exclusion: (HUMB37)

PHLB44F/S Philosophers of the Middle Ages I

## Myth and Religion

This Programme combines an examination of human perception and experience of our religious and mythic heritage and institutions from the anthropological, historical, philosophical, sociological and literary points of view.

### College Programme in Myth and Religion

*Supervisor:* J. Warden (284-3171)

Nine full-course equivalents to be completed as follows:

1 HUMA01Y Prologue  
2 HUMA10Y Introduction to the Study of Religion

or

HUMA11Y Greek and Roman Mythology

3 PHLA01Y Fundamental Questions of Philosophy

4 ANTA01Y Introduction to Anthropology

or

SOCA01Y Introduction to Sociology

or

HISA01Y The European World: An Introduction to History

PHLB61F/S Philosophy of Religion  
PHLC44F/S\* Philosophers of the Middle Ages II  
SOCB21Y\* Sociology of Religion

\* Students should check these courses for prerequisites

## Neurosciences

The Neurosciences encompass aspects of a variety of disciplines that have a common goal of understanding how the nervous system works. Techniques borrowed from constituent disciplines like anatomy, physiology, biochemistry, psychology and pharmacology are being used to unravel some of the mysteries of the brain and its mechanisms of action. Investigators in the Neurosciences have also made fundamental contributions in the clinical aspects of medicine and behaviour.

The Specialist Programme in Neuroscience is administered jointly by Psychology and Biology and primarily includes courses from these disciplines. It has been designed for students who are interested in pursuing graduate training in the Neurosciences. The programme consequently has a heavy laboratory component and students are encouraged to become actively involved in ongoing research. The subdisciplines represented at Scarborough Campus include behavioural neuroscience, neuroanatomy, neurophysiology, neurochemistry and cell biology (applied to nervous system).

### Specialist Programme in Neurosciences

*Supervisor:* N.W. Milgram (284-3353)

Office: S-513

Note: Entry into this programme is limited to a maximum of 25 students each year and will be based on grades obtained in PSYA01Y, BIOA03Y, and CHMA02Y.

Balloting for acceptance into the programme will occur in the Spring term. Acceptance at the end of second year is possible depending on availability of space. Students should consult the Supervisor of Studies.

The Programme requires completion of 13 full-course equivalents. Relevant Neuroscience courses from the St. George or Erindale campuses may only be used to satisfy a requirement with the permission of the Supervisor of Studies.

#### 1 All of the following 8.5 FCEs:

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

PSYC61F/S Brain Mechanisms and Behaviour: II

PSYC63Y Physiological Psychology Laboratory

CHMB05Y Organic Chemistry I  
JBCC35Y Introductory Biochemistry

#### 2 At least 1.5 FCEs from the following with no more than 0.5 FCEs from the supervised study courses:

PSYD60F/S Current Topics in Physiological Psychology

PSYD62F/S Neuroplasticity: Mechanisms and Function

PSYD67F/S Psychobiology of Aging

PSYD68F/S Developmental Psychology

BIOC31F/S Invertebrate Neurobiology

NROC90/C93F/S/H Supervised Study in Neuroscience

NROD98Y Thesis in Neuroscience

#### 3 At least 1.0 FCE 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

- 4 At least 1.0 FCE from the following:
- |           |                                      |
|-----------|--------------------------------------|
| BIOB05Y   | Genetics                             |
| BIOB23Y   | Developmental Biology                |
| BIOB32F/S | Vertebrate Morphogenesis             |
| BIOC20Y   | Cell Biology                         |
| BIOC33F/S | General Biology of Vertebrates       |
| BJPC70F/S | Theoretical Foundations of Biology I |
- 5 At least 1.0 FCE from the following:
- |           |                                   |
|-----------|-----------------------------------|
| PSYB32F/S | Abnormal Psychology               |
| PSYB50F/S | Sensation and Perception          |
| PSYB51F/S | Perception and Cognition          |
| PSYB57F/S | Memory and Cognition              |
| PSYD40F/S | Current Topics in Animal Learning |
| PSYD41F/S | Research in Operant Conditioning  |
| PSYD85F/S | History of Psychology             |
| JLPD55F/S | Language and Speech Disorders     |
- 6 Students planning on graduate work in Neurosciences are advised that undergraduate courses in Physics and Calculus may be required for that graduate programme.

**Major Programme in Neuroscience**

Supervisor: N.W. Milgram (284-3353)

Office: S-513

This programme is no longer offered, but students currently enrolled will be able to complete it.

**NROC90F/S/H****NROC93F/S/H Supervised Study in Neuroscience**

A reading or research project.

These courses provide an opportunity to investigate an area in depth after completing basic coverage in regularly scheduled courses. They are not intended as substitutes for advanced courses in fields where these are available. The student must demonstrate that his or her background is adequate for the project proposed and should present a clear rationale to prospective supervisors. Frequent consultation with the supervisor is necessary and extensive library research and/or data collection will be required. Such a project will culminate in a written submission. These courses cannot be repeated for credit.

Prerequisite: Three full-course equivalents

in Psychology or Biology; permission of instructor.

Exclusions for NROC90: PSYC90, BIOD01 (BIOC01)

Exclusions for NROC93: PSYC93, BIOD01 (BIOC01)

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: (NROC98), PSYD98 (PSYC98), BIOD02 (BIOC02)  
Session: Winter Day  
Coordinator: TBA

**Philosophy**

*Discipline Representative:* W. C. Graham (284-3279)

Philosophy consists of a critical analysis of the ideas and concepts fundamental to such major areas of human concern as science, society, religion, morality and art. Its aim is to scrutinize the basic notions in these areas, to clarify the principles on which they are founded, to evaluate such beliefs for their soundness, and to explore their implications for a comprehensive understanding of the world in which we live. Philosophy originates in the desire to know, and its value consists of the systematic development of a questioning attitude and critical awareness.

Course offerings in Philosophy form a two or three year cycle: courses not offered in one academic year will normally be available in one of the following years.

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 course 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 1988-89 are likely to be offered the following year, and some of this year's offerings will be dropped to make room for them. You should try to plan your programme a year or two ahead to be sure of getting the courses you want. See the Discipline Representative for further information. Friday 2-4 p.m. is reserved for the Philosophy Club. Interested Students and staff should try to leave these hours free.

**Specialist Programme in Philosophy**

Supervisor: W.C. Graham (284-3279)

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.

**Major Programme in Philosophy**

Supervisor: W.C. Graham (284-3279)

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 foreign language, especially French, German, Greek or Latin. Two full-course equivalents in a foreign language will give students access to much philosophical thought in its original language and to many secondary sources not available in English.

There is a variety of courses in Classics, English, Fine Art, History and Humanities which will help to supplement the Programmes of many students. In particular, students should consider the following courses: HUMA01Y, Prologue; HISA01Y, European World; ASTA03Y, Introduction to Astronomy; JBHB01Y, Introduction to the Biological Sciences; as courses which provide important intellectual and historical background for the study of Philosophy.

**PHLA01Y: Fundamental Questions of Philosophy**

A discussion of some of the fundamental questions of philosophy. What is good reasoning? What is morality and can it be justified? Is it reasonable to adhere to a religion? What is knowledge? Are social practices justifiable? Is materialism true? Are humans free?

**L01**

Our main concern will be with the nature of human 'becoming'. To this end we will raise questions about the relation of reason to thought, desire, action, truth, and art. We will take an historical approach to these questions, beginning with Plato and Aristotle, and ending with Marcuse's theory of the aesthetic. In addition to Plato's *Republic*, Aristotle's *Ethics*, and

Marcuse's *Eros and Civilization*, we will study Descartes' *Meditations*, Kant's *Prolegomena to any Future Metaphysic*, and Nietzsche's *Beyond Good and Evil*.  
Session: Winter Day  
L. Pineau

**L02**

In the fall, the student will be introduced to some mainstream issues in the fields of ethics and the theory of knowledge. We shall begin by asking the questions: What makes an action morally right? What makes an agent morally good? We shall study selections from Mill's *Utilitarianism* and Kant's *Groundwork of the Metaphysics of Morals* and discuss Mill's and Kant's answers to these questions and others. We shall then explore some proposed answers to questions, such as, What is knowledge? What kinds of beliefs can be known? Can we know whether or not God exists? Readings in the theory of knowledge will include Plato's *Meno* and Descartes' *Meditations*.

In the spring, we will focus on some central questions in philosophy concerning "The Good", "The True", and "The Beautiful" as issues in personal, moral and social life, the relation between thought and action, and the role of imagination in human existence. We will study such philosophers as Plato (*The Last Days of Socrates* and *The Symposium*), Descartes (*Discourse on Method*), Thoreau (*On Civil Disobedience*), James (*The Will to Believe*, *The Moral Philosopher*, *The Moral Equivalent of War*), Nietzsche (*Beyond Good and Evil*), and selected examples of imaginative literature.

Session: Winter Day  
J. Kornegay (fall), P.J. Mills (spring)

**L03**

An historical approach will be taken to these questions. We will begin with the philosophers of ancient Greece, then consider their influence on Christianity in the medieval period. We will then study the philosophers of the early modern period, and conclude with a look at contemporary philosophy. Study and lectures will be about evenly divided between descriptions of the history of philosophy and first-hand acquaintance with the philosopher's own writings. The text will be Samuel Stumpf, *Philosophy: History and Problems*.  
Session: Winter Day  
G. Nagel

**L04**

Through the study of philosophical classics and recent papers, this course introduces the student to a number of issues in the fields of ethics, theory of knowledge and metaphysics. Some of the questions we shall ask are: What makes an action morally right? What makes an agent morally good? What is knowledge? What kinds of beliefs can be known? Can we know whether or not God exists? What kind of thing is a mind? How is one's mind related to one's body? What is the nature of free action? Do human beings ever act freely? Readings will include Plato's *Meno*, Descartes' *Meditations* and selections from Mill's *Utilitarianism*. The course's primary objectives are to help students: (1) learn how to read philosophical texts with critical understanding, (2) understand some philosophical questions and the range of answers that can be given to them, (3) learn how to refine and defend their own answers to some of these questions and (4) learn how to write well-argued, thoughtful essays. Classes will be a mixture of lecture and discussion.  
Session: Winter Day  
J. Kornegay

**L30**

An introduction to philosophy consisting of topics from its major divisions: metaphysics, theory of knowledge, philosophy of religion, ethics, and logic. Reading material is evenly divided between works of great philosophers of the past and of contemporary philosophers.  
Session: Winter Evening  
J.H. Sobel

**PHLB01F Ethics I**

A study of philosophical problems and postures in ethics, such as the relativity of values, the justification of morality, moral scepticism, ethical egoism, utilitarianism, deontologism.

In the Winter Session, this course begins by examining various attempts to develop theories of virtue and justice. A critical assessment of these theories will be provided from the standpoint of the broader context of political practice. Questions about the relation between theory and practice will be raised in connection with the capacity of theory to deal with some current ethical issues. Throughout, the solution to the problem of unifying theory and practice will be sought. Selections from Plato, Aristotle,

Hobbes, Locke, Mill, Nietzsche, Marx, and Rawls will be studied.

In the Summer Session, the central question will be the origin of values. Readings from Solomon's *Morality and the Good Life*.

Session: Winter Day/Summer Evening  
L. Pineau (winter) / G. Nagel (summer)

**PHLB04F Philosophy of Literature**

An examination of philosophical theories and claims about literary works.

This course will inquire into literature as a form of imaginative human expression. We will study the aesthetics of literature and pose the question, what is the relation of literature to life? Texts will include Nietzsche's *The Birth of Tragedy*, Aeschylus' *Oresteia*, Christa Wolf's *Cassandra*, as well as selections from Hegel, Schopenhauer, Heidegger, Barthes, Derrida, Marcuse and Canetti.

Session: Winter Evening  
W. C. Graham

**PHLB05S Social Issues**

An examination of the moral questions surrounding some of the following: abortion, capital punishment, human sexual relations (homosexuality, adultery, etc.), eugenics, ecology, civil disobedience, policies towards the Third World and towards the poor.

This course will focus primarily on questions of human sexuality. It will be concerned with the question of what human sexuality is, its relation to gender development, and the relation between the sexual and the erotic. We will study the ways in which our sexuality is organized socially, politically, and legally, and the way in which it is expressed at the level of culture. This background will enable us to raise questions about the relation between sex and power, the nature of sexual domination and repression, and to assess claims about the importance of changing these relations if aesthetic, feminist, and other social goals are to be achieved. In addition to Plato's *Symposium*, Freud's *On Sexuality* and *Civilization and Its Discontents*, Sobel's *Pornography*, Foucault's *The History of Sexuality* and Bell's *Good Girls, Bad Girls*, xeroxes of selected philosophical writings and excerpts from journal articles will either be sold to students at cost or put on reserve in the library.  
Session: Winter Day  
L. Pineau

**PHLB10F Political Philosophy**

A study of the philosophical problems of the state and society such as the individual in society, the coercive state, the stateless society.  
Session: Winter Day  
T.B.A.

**PHLB11F Philosophy of Law**

A study of some fundamental legal conceptions.

This course raises the fundamental questions of what law is, how it is created, and how culturally specific legal codes or practices can be justified. To this end, it raises questions about the function of law in maintaining justice, enforcing morality, dispensing punishment, protecting sexual and racial equality, and regulating social order. Theoretical frameworks developed during the course will be used as critical tools for examining some Canadian constitutional and criminal legal issues.

We will begin with an examination of ancient Icelandic law, read some excerpts from Plato, take a brief look at some examples of Roman Law and Old English Common Law, consider Mill's and Marx's position on the function of law and then Foucault's. Finally we will examine the Canadian Constitution, the Criminal Code, and some selected case studies.  
Session: Winter Day  
L. Pineau

**PHLB15F Philosophy of Education**

A study of the nature of education.

We will consider rival theories in three main areas: cognition, moral development and socialization. Should education instill new behaviour or assist the development of thought-processes already underway? Is the discussion of moral issues an effective method of teaching morality? Does schooling give everyone a fair chance to succeed? Or does it legitimize existing inequalities? Text: *Conflict and Continuity*, eds. Snarey, et. al.  
Session: Winter Day  
G. Nagel

**PHLB16S Philosophy of History**

The philosophy of history studies general theories about the nature of the human past and basic problems in the methods of historical research and writing.

We will consider a number of different kinds of historical writing with an eye to determining whether they reveal patterns in the past or we impose them on the past. Issues of truth and representation, of interpretation and explanation, and of the

value of narrative will be considered. In addition we will consider the connections between historical writing and the purposes for which it is intended. Texts will be announced.

Session: Summer Evening  
T. Mathien

### PHLB17S Anarchism

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 Day  
W.C. Graham

### PHLB20S Belief, Knowledge and Truth

An examination of such questions as certainty, the problem of scepticism, the scope and limits of human knowledge, the subjectivity of perception, rationality, and theories of truth.

The course will begin with a survey of the issues as presented in a standard text, Roderick Chisholm's *Theory of Knowledge* with particular concern for the questions about the evidential foundations for knowledge. Then we will turn to a naturalistic approach to the issues, as presented in Fred Dretske's *Knowledge and the Flow of Information* to determine the extent to which such issues can be settled or avoided. We shall conclude by considering either the relation of practice and representation in knowledge or the way in which a naturalist theory of knowledge can itself be judged reasonable or not.

Session: Winter Day  
T. Mathien

### PHLB40F Plato and his

**Predecessors I** A study of the origins of philosophy in Greece and the views of the earliest philosophers regarding the nature of the world. A consideration of the main aspects of the philosophy of Plato.

Texts: Wheelwright, *The Presocratics* and Plato's *Gorgias*, *Apology*, *Crito* and *Meno*.

Session: Winter Evening  
G. Nagel

### PHLB44S Philosophers of the Middle Ages I

A study of central themes in the philosophy of Christian, Islamic and Jewish thinkers such as Augustine, Boethius, Avicenna, Alfarabi, Maimonides, Anselm, Aquinas, Ockham.

Text: Hyman and Walsh, *Philosophy in the Middle Ages*.

Session: Winter Day  
G. Nagel

### PHLB48F Philosophy in the Late Modern Age I

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.

This course will begin with an analysis of the problem of desire in Hegel and Freud as it concerns the constitution of subjectivity and the social world. We will then consider the critique of modernity found in the works of Nietzsche and Marx. Texts to be read include: selections from Hegel's *Phenomenology of Spirit*; Freud's *Civilization and Its Discontents* and his essays on sexuality; Nietzsche's *Genealogy of Morals*; and *The Marx-Engels Reader* (ed. by Tucker).

Session: Winter Day  
P.J. Mills

### PHLB50F Symbolic Logic I

An introduction to formal techniques of reasoning, sentential logic, and quantification theory or predicate logic.

An introduction to formal techniques of reasoning, deductive and inductive, the course covers sentential logic, and quantification theory. The emphasis is on appreciation of and practice in techniques, for example, for formal analysis of English statements and arguments, and for construction of clear and rigorous proofs.

Topics of more theoretical interest are however presented in lectures. D. Kalish, R. Montague and G. Mar, *Logic: Techniques of Formal Reasoning*.

Exclusion: JMPB50  
Session: Winter Day  
J.H. Sobel

### PHLB61S Philosophy of Religion

A study of such topics as the nature and existence of God, immortality, God and morality, and religious language and symbolism.

The theme around which the course is organized is the problem posed by evil: if God is all good and all powerful, why is there pain and suffering? A discussion of

the issue in the Jewish and Christian traditions takes us through topics such as the relationship between religion and ethics; the possibility of miracle; immortality; and the reasonableness of theistic belief.

Session: Summer Evening  
T. Mathien

### PHLB70F Philosophy of Science

A study of philosophical questions raised by the natural sciences.

We shall discuss: alternative conceptions of theory structure; the role of scientific methodology in exploring and predicting phenomena; and the rationality and progress of science.

Exclusion: BJPC70F(PHLB71)

Prerequisite: One course or half-course in Philosophy or in the Division of Science.

Session: Summer Evening  
P. Thompson

### PHLC11S Topics in the Philosophy of Law

A discussion of right and rights, justice, legality, and related concepts.

The main purpose of this course is to examine the capacity of present Canadian law to protect the interests of women, or to protect the interests of anyone who plays the role that women typically play. We will engage in a rigorous examination of the way in which the law is structured, the principles on which it is based, and the concepts in terms of which those principles are expressed. Case studies of the law on sexual assault, marriage, sexual discrimination, immigration, child custody, prostitution and pornography will be made. Readings will consist primarily of journal articles which will be kept on reserve in the library. In addition we will read McKinnon's *Feminism Unmodified*.

Session: Winter Day  
L. Pineau

### PHLC40S Plato and His Predecessors II

A continuation of PHLB40.

A study of Plato's mature philosophy with an emphasis on the *Republic*. We will also use Nicholas White's commentary, *A Companion to Plato's Republic*.

Session: Winter Evening  
G. Nagel

### PHLC48S Philosophy in the Later Modern Age II

A continuation of PHLB48.

We will continue the discussion of Hegel, Nietzsche and Freud, and include Schopenhauer and Wittgenstein. Beginning with their thought about art, religion and philosophy, we go on to such topics as life, death, suffering and joy. Readings will include excerpts from Hegel's writings on *Absolute Spirit*, from Schopenhauer's *World as Will and Representation*, from various of Nietzsche's writing, including *Thus Spoke Zarathustra*, from Freud's work on *The Death Instinct*, and from Wittgenstein's *Tractatus*.

Session: Winter Day  
W.C. Graham

### PHLC50S Symbolic Logic II

A continuation of PHLB50.

The natural deduction system studied in Symbolic Logic I is extended to cover identity and definite descriptions. Special attention is paid to the restriction of the identity calculus to "extensional" terms and formulas. Alternative treatments of definite descriptions, one that follows Frege, the other that follows Russell, are developed and compared. The text is D. Kalish, R. Montague and G. Mar, *Logic: Techniques of Formal Reasoning*.

Exclusion: JMPCS1  
Prerequisite: JMPB50/PHLB50  
Session: Winter Day  
J.H. Sobel

### PHLC52S Modal Logic and Probability

An introduction to theories of possibility and necessity, probability, and rational decisions.

The logic of possibility and necessity will be studied: both axiomatic and natural deduction treatments will be developed. A theory of probability as a measure of a person's confidence in propositions will be taken up and theories that relate a person's rational decisions to his preferences and probable beliefs will be studied.

Prerequisite: PHLB50  
Session: Winter Day  
J.H. Sobel

### BJPC70F Theoretical Foundations of Biology I

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

The following topics will be covered: the concept of cause and its role in law and causal explanation in biology, the logical structure of the modern synthetic theory



of evolution, tempo and mode in evolution (punctuated equilibria and phyletic gradualism), and the rationality of science.

Exclusion: PHLB70 (PHLB71)

Prerequisite: BIOA03

Session: Winter Day

P. Thompson

### **PHLC75F/S-C94F/S Seminar in Philosophy**

A study in depth of a philosopher or philosophers or of a philosophical problem.

Limited enrolment: 15.

### **PHLC84S Silence**

Silence is not merely the absence of language but is, rather, a vital part of all human activity. In this course various accounts of silence will be examined to determine if they refer to a single phenomenon and to put the question of silence within the context of a philosophy of language, broadly conceived. We will focus on the creative and disabling dimensions of silence in political, artistic, and moral discourses in order to understand the experience of silence. Texts to be read include: *Indirect Language and the Voices of Silence* by Meleau-Ponty; *The Aesthetics of Silence* by Susan Sontag; *Silence: The Phenomenon and Its Ontological Significance* by B.P. Dauenhauer; and selections from Wittgenstein, Marcuse, John Cage, and Tillie Olson.

Session: Winter Day

P.J. Mills

### **PHLC92F Ways of Interpreting the World**

We will study theories of interpretation proposed by such thinkers as Friedrich Nietzsche, Martin Heidegger, Hans Georg Gadamer, Jacques Derrida, Roland Barthes, Michael Foucault, etc. We will examine the relationship between text, interpretation, myth, icon and metaphor, as they apply to nature, art, and human experience.

Session: Winter Day

W.C. Graham

### **PHLD10Y Senior Thesis**

An opportunity for you to engage in philosophical research and to write a major philosophical essay on a topic approved by the faculty in Philosophy.

It is your responsibility to choose a topic and to submit it, together with a proposed working outline and preliminary bibliography, to the Programme Supervisor before the end of the second week of the fall term (ideally, before the end of the previous spring term). If the topic is approved you will consult with relevant

faculty members during your work on the thesis.

In the spring term, and before submitting the completed thesis for evaluation, you will present a seminar report on your work to fellow students and staff. The seminar must be held prior to the final two weeks of classes, and you are responsible for setting a date for it in consultation with the Programme Supervisor.

The thesis will be evaluated by at 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 1988/89**

#### **PHLB03F/S Philosophy and Art**

#### **PHLB06F/S Moral Theory and Nuclear Deterrence**

#### **PHLB12F/S Marx and Marxism**

#### **PHLB14F/S Philosophy of Social Science** Prerequisite: One course in Philosophy or in the Division of Social Sciences.

#### **PHLB20F/S Belief, Knowledge and Truth**

#### **PHLB30F/S Existentialism**

#### **PHLB42F/S Aristotle I**

#### **PHLB46F/S Philosophy of the Early Modern Age I**

#### **PHLB53F/S The Art of Thinking**

#### **PHLB60F/S Existence and Reality**

#### **PHLB80F/S Philosophy of Language**

#### **PHLB81F/S Theories of Mind**

#### **PHLC05F/S Biomedical Ethics**

Prerequisites: PHLB05 or PHLB01

#### **PHLC11F/S Topics in the Philosophy of Law**

#### **PHLC42F/S Aristotle II**

Exclusion: (PHLB43)

Prerequisite: One course or half course in Philosophy

#### **PHLC44F/S Philosophers of the Middle Ages II**

Exclusion: (PHLB45)

Prerequisite: One course or half course in Philosophy

#### **PHLC46F/S Philosophy of the Early Modern Age II**

Exclusion: (PHLB47)

Prerequisite: One course or half course in Philosophy

#### **PHLC53F/S Games and Decision**

Prerequisite: One full-course equivalent (not necessarily in Philosophy).

#### **PHLC54F/S Metalogic**

Prerequisite: PHLB50

#### **PHLC61F/S Studies in Philosophy of Religion**

Prerequisite: PHLB61

#### **BJPC71F/S Theoretical Foundations of Biology II**

Exclusion: (PHLC71)

Prerequisite: BJPC70

## **Physics**

*Discipline Representative:* Prof. J. King, (284-3318)

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 Major Physics Programme or the Specialist Physics Programme. (The latter programme is given jointly with the Department of Physics on the St. George Campus). In addition, there is a Joint Specialist Programme in Computer Science and Physics (see Computer Science), and a Specialist (Co-operative) Programme in Computer Science and Physics (see Co-operative Programmes).



The listed prerequisites and corequisites imply others not explicitly listed; details are available from the Supervisor and the Registrar's Office.

Students interested in physics should also refer to:  
ASTC10Y Relativity and Cosmology

### Specialist Programme in Physics

Supervisor: J. King (284-3318)

In conjunction with the Physics Department on the St. George campus, Scarborough College offers a Specialist Programme in Physics. This consists of 15 full-course equivalents as listed below. The first two years are given on the Scarborough campus but the majority of the required courses in the third and fourth years must be taken on the St. George campus. A special arrangement allows Scarborough students who are registered in the Physics Specialist Programme to do so. This Programme is very demanding and only students with considerable ability and interest in physics and mathematics should register in this programme. It is essential that students choose the appropriate set of Mathematics courses from the beginning since transfers between the sets are restricted. Students are strongly recommended to take at least one half-course in Computer Science.

All Scarborough Physics Professors teach and do research in the Physics Department on the St. George Campus. This makes it easy to keep in contact with Scarborough students in the Physics Specialist Programme when they are in their third and fourth year.

All students registered in this programme should see Prof. King during their second year of studies.

#### First year:

PHYA03Y	Physics for the Physical and Life Sciences
MATA26Y	Calculus
or	
MATA55Y	Calculus with Analysis
MATA04Y	Linear Algebra I

#### Second year:

PHYB01S	Electricity and Magnetism
PHYB03F	Introductory Electronics
PHYB04F	Waves and Vibrations
PHYB08H	Intermediate Physics Laboratory
PHYB17S	Quantum Physics A
PHYB19S	Thermal Physics A
MATB41F	Techniques of the Calculus of Several Variables I

MATB42S	Techniques of the Calculus of Several Variables II
MATC51F	Differential Equations I

#### Third year:

PHY326H/325Y	Quantum Physics Laboratory
or	
(PHYC05H)	Advanced Physics Laboratory
PHY351F	Advanced Classical Mechanics
PHY352S	Electromagnetic Fields and Waves
PHY354S	Macroscopic Physics
PHY355F	Quantum Mechanics I
PHY356S	Quantum Mechanics II
APM346H	Differential Equations
MAT334H	Complex Variables
or	
(MATC60F)	Complex Analysis I)

#### Fourth year:

Three and one-half full-course equivalents from 400-level PHY courses on the St. George campus, with the same restrictions as apply to students in the Faculty of Arts and Science.

NOTE: Provided that students in this Programme are registered in at least one of the required St. George campus courses, students who have at least 9.0 credits at the beginning of the session are exempt from the rule on equivalent courses on other campuses and students who have at least 14.0 credits at the beginning of the session are exempt from the rule on overall limits on courses on other campuses.

### Major Programme in Physics

Supervisor: J. King (284-3318)

In this programme, students must complete eight full-course equivalents in Physics and Mathematics as specified below. After completing this programme, the student will have a good education in the basic principles and applications of modern physics. It is ideal for physics students who do not plan on doing graduate studies after their B.Sc. All the courses listed are given at the Scarborough Campus.

It is strongly recommended that students in this programme also take at least one half-course in Computer Science.

#### First year:

PHYA03Y	Physics for the Physical and Life Sciences
MATA26Y	Calculus
or	
(MATA55Y)	Calculus with Analysis)

#### Second year:

PHYB01S	Electricity and Magnetism
PHYB03F	Introductory Electronics
PHYB04F	Waves and Vibrations
PHYB08H	Intermediate Physics Laboratory
PHYB17S	Quantum Physics A
PHYB19S	Thermal Physics A
MATB41F	Techniques of the Calculus of Several Variables I
MATB42S	Techniques of the Calculus of Several Variables II

#### Third year:

MATC51F	Differential Equations
One and one-half additional full-course equivalents from PHYC04F, PHYC05H, PHYC07F, PHYC08S and PHYC09S.	

For Specialist Programme in Computer Science and Physics see Computer Science.

For Specialist (Co-operative) Programme in Computer Science and Physics see Co-operative Programmes.

### PHYA03Y Physics for the Physical and Life Sciences

Topics include: classical mechanics, motion under a uniform acceleration, planetary orbits, collisions, rotational motion, potential energy and work; wave motion. Einstein's special theory of relativity,  $E = mc^2$ . Electricity and magnetism, Maxwell's theory of electromagnetic waves. Quantum theory, a particle in a box, applications to nuclei, atoms and solids, nuclear fission and radiation.

Two lectures and one tutorial per week, and a three-hour laboratory every second week.

Corequisite: MATA26 or MATA27 or MATA55  
Session: Winter Day

### PHYB01S Electricity and Magnetism

Coulomb's law, electric fields, Gauss' law, electric potential, capacitance, dielectrics, magnetic forces and fields, inductance, magnetization.

Prerequisite: PHYA03  
Corequisite: MATB41  
Other recommended courses: PHYB03; PHYB08; MATB42  
Session: Winter Day

### PHYB03F Introductory Electronics

Linear circuit theory (DC, AC and transients), simple filters. Non-linear elements, including diodes and transistors; rectifier, amplifier, and pulse circuits. Logic gates, Boolean algebra, and digital electronics. Prerequisite: PHYA03  
Session: Winter Day

### PHYB04F Waves and Vibrations

Damped simple harmonic oscillator; power absorption and resonance; normal modes in coupled oscillators; standing waves in continuous systems (strings, membranes and bars); running waves and pulses; polarization; reflection and transmission at boundaries; interference and diffraction of waves. Prerequisite: PHYA03, MATA26 or MATA55  
Session: Winter Day

### PHYB08H Intermediate Physics Laboratory

Experiments in basic electricity and magnetism, electronics, solid state physics, and atomic and nuclear physics (illustrating material covered in lecture courses PHYB01 and PHYB03). Optional concentration in electronic circuits in the second term is available. Limited enrolment: 20.

A six-hour laboratory period once every two weeks. A single experiment may extend over more than one period. Students are expected to plan their experiments thoroughly beforehand, discussing their approach with one of the instructors or demonstrators. Observations including numerical data must be recorded carefully and thoroughly. The *Intermediate Physics Laboratory Manual*, available in the laboratory, contains references to other sources, a number of which are available for consultation in the laboratory. Prerequisite: PHYA03  
Corequisite: PHYB03  
Session: Winter Day

### PHYB17S Quantum Physics A

An introductory course in quantum physics; simple models of the atom; 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**

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

**PHYC05H Advanced Physics Laboratory**

A selection of a number of advanced and detailed experiments illustrating fundamental principles and techniques in physics. Limited enrolment: 20.

This course is designed to involve students in more complex experiments, introducing them to vacuum techniques, X-rays, nuclear instrumentation, etc. Students will work with a minimum of supervision and will be expected to take the initiative in overcoming experimental difficulties. One six-hour laboratory period every second week. A single experiment may extend over more than one period.

Prerequisite: PHYB01; PHYB08; PHYB17  
Corequisite: Any C-level Physics course  
Session: Winter Day

**PHYC07F Quantum Physics B**

A continuation of PHYB17S. One dimensional scattering and barrier penetration problems; quantum mechanics of angular momentum and spin; the hydrogen atom; diatomic molecules; the periodic table; simple models of nuclear structure. Prerequisites: PHYB01; PHYB17  
Exclusion: (PHYC01)  
Session: Winter Day

**PHYC08S Thermal Physics B**

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: PHYB19S  
Session: Winter Day

**PHYC09S Laser Optics**

Modern optics with emphasis on developments made possible by lasers; wave motion, Fourier analysis, Maxwell's equations. Incoherent and coherent sources of electromagnetic waves, propagation in infinite media (free space, non-conductors, conductors).

Lasers. Poynting vector. Dispersion. Reflection and refraction, mirrors and lenses, illumination in optical systems, polarized light. Interference, diffraction, image formation and image processing, partial coherence, holography.

Prerequisite: PHYB01; PHYB04; MATB41

Corequisite: MATC51

Exclusion: (PHYC03)

Session: Winter Day

**Courses Not Offered in 1988/89**

**PHYC04F** Physics of Solid State Devices

**Political Science**

*Assistant Chairman:* A. Rubinoff

Political Science consists of a variety of approaches to the study of politics. Politics loosely refers to the process of trying to resolve conflicting interests and points of view in the public realm. One might say the subject of Political Science is the state while that of Economics is the economy and that of Sociology is society. But the discipline includes not only the study of policies and arrangements created as a means to preclude 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, their ability to have their 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 government (subdivided into the politics of industrialized and non-industrialized countries), public administration, and public policy, international relations, and political theory. In the study of *Canadian Government* students will become familiar with constitutional arrangements and policies at various levels of government in Canada. *Public Administration* deals with the institutions or organizational structures through which public policies are implemented.

*Comparative Government*, a comparison of practices and policies of a wide variety of other nations, will broaden the student's awareness of foreign political systems and further facilitate an understanding of Canadian political culture. *International Relations* is devoted to the analysis of the foreign policy of various nation states and of the relations obtaining 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 varying conceptions of the "quality of life".

Courses may be taken in varying sequences and combinations, leading to a Specialist Programme for those completing an approved programme of ten full-course equivalents, or to a Major Programme for the completion of a sequence of at least six courses. The levels of courses, from A to D, correspond to increasing degrees of concentration and difficulty of subject matter. 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.

None the less, especially in the case of D-level courses, students are reminded that these 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 advanced courses or the supervisor of studies prior to enrolment in them.

**Specialist Programme in Political Science**

*Supervisor:* G. Skogstad

Students who intend to pursue a Specialist Programme in Political Science should, as early as possible, draw up a preliminary programme of study in consultation with a member of the Political Science staff. An orientation meeting will be scheduled in the Fall to help familiarize students with the aims of the Political Science Programmes as well as to introduce faculty responsible for teaching, and career and graduate study guidance. The recommended sequence of courses begins with an introductory course at the A level. Students who wish to pursue advanced courses in Canadian Government should also include POLB50 early in their Programme.

Students must complete ten full-course equivalents in Political Science approved by the Supervisor and including

the following:

- 1 POLA01 Introduction to Political Studies
- 2 POLB50 Introduction to Canadian Politics
- 3 Two courses in political theory from: POLB70, POLC70, POLC74, POLC75, POLD71
- 4 One course from each of any three of
  - A Canadian Government POLC52-C55, POLD51, POLD65
  - B Public Administration and Public Policy POLB53, POLB61, POLB62, POLC60, POLC61, POLC63, POLC64, POLD62.
  - C International Relations: POLB80, POLC81, POLC82, POLC83, POLC84
  - D Comparative Politics, Industrial Countries: POLB86, POLB87, POLC85, POLC87, POLC89, POLC90
  - E Comparative Politics, Developing Countries: POLB91, POLC95, POLC96, POLC97, 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.

It is recommended, though not required, that students take POLA01Y, POLB50Y as early in their programme as possible.

**Major Programme in Political Science**

*Supervisor:* G. Skogstad

Students must complete at least six full-course equivalents in Political Science including:

- 1 POLA01 Introduction to Political Studies
- 2 POLB50 Introduction to Canadian Politics
- 3 A course in political theory (POLB70 or C74)
- 4 One course from each of any three of
  - A Canadian Government POLC51, POLC52, POLC54, POLC55, POLD65
  - B Public Administration and Public Policy POLB53, POLB61, POLB62, POLC60, POLC61, POLC63, POLC64, POLD62
  - C International Relations: POLB80, POLC81, POLC82, POLC83, POLC84
  - D Comparative Politics, Industrial Countries: POLB86, POLB87, POLC85, POLC87, POLC90
  - E Comparative Politics, Developing Countries: POLB91, POLC95, POLC96, POLC97, POLD93, POLD94

It is recommended, though not required, that students take POLA01Y, POLB50Y as early as possible in their programme.

**Specialist Programme in Economics and Political Science**  
(see under Economics)

**POLA01Y Introduction to Political Studies**

This course seeks to introduce students to political inquiry by a focus on the applicability of theories and notions respecting the liberal-democratic state to the Canadian situation. Comparisons will be made with the way these issues have been dealt with in other industrialized nations. Session: Summer Evening, Winter Day  
*J. Esbrey, L. Johnston*

**IDSB01Y Political Economy of International Development**

Introduces students to major development problems, the principal social, economic and political factors that condition these and the impact on them of various development strategies pursued in a sample of Third World countries. Prerequisite: One course in either Economics or Political Science. Session: Winter Day  
*R. Sandbrook, S. Horton*

**POLB50Y Introduction to Canadian Politics**

A study of Canadian political institutions and processes. Specific topics include: the constitution, federalism, civil liberties, federal-provincial relations, political regionalism, French Canada, the West, social class and politics, public opinion and political culture, elections, political parties, interest groups, Cabinet and Prime Minister, Parliament, the public service. Two lectures a week and a tutorial once every two weeks. Session: Winter Day  
*G. Skogstad*

**POLB53F Public Policies in Canada**

A study of the patterns of growth in federal and provincial policies for economic progress, social order, and human development; of the relationship between changing public policies and Canadian political development; and of the contributions made by instruments of government toward the achievement of basic political values. Exclusion: (POLB35) Prerequisite: POLA01 or POLB50 Session: Winter Day  
*R. Manzer*

**POLB61F Canadian Public Administration: Institutions and Processes**

The growth of public bureaucracy in the Canadian federal and Ontario provincial governments. Descriptive analysis of the basic types of administrative organizations - ministerial departments, central agencies, regulatory tribunals, public corporations, and advisory bodies - of selected administrative processes - financial and personnel administration, administrative co-ordination, reorganization, and intergovernmental administration. Problems of administrative power and accountability. Exclusion: (POLB60) Session: Winter Day  
*R. Manzer*

**POLB62S Public Policy-Making**

Analysis of the process of formulating and implementing public policy in modern democratic states with particular attention to Canadian policy-making but with some reference to American and European experience. Topics include agenda-building, planning priorities, governing instruments, program implementation, and policy analysis. Exclusion: (POLB60) Prerequisite: POLA01 or POLB50 Session: Winter Day  
*R. Manzer*

**POLB70Y Political Thought from Plato to Locke**

An examination of the central political texts from Plato to the early modern period. Students will be expected to read Plato's *Republic*, Aristotle's *Politics*, Machiavelli's *The Prince*, Hobbes' *Leviathan* (Parts one and two) and Locke's *Second Treatise of Government*. The political writings of St. Augustine and St. Thomas Aquinas will also be studied. Session: Winter Day  
*E. Andrew*

**POLB80Y International Relations**

A study of the nature of the international system, the factors that motivate foreign policies, and the institutions for the conduct of international relations. Prerequisite: Not open to first year students without permission of instructor. Session: Winter Day  
*A. Rubinoff*

**POLB86Y Soviet Government and Politics**

The development of Soviet political and social institutions since 1917, with emphasis upon the process of modernization and its effects.

The course examines the formation and consolidation of the Soviet political order and the urgent problems confronting Soviet society today. Exclusion: (POLB23) *D. Schwartz* Session: Winter Day

**POLB87Y U.S. Government and Politics**

This course explores politics in the United States by analyzing the American federal system, examining the institutions and processes of government, and by focusing on selected policy issues. Session: Winter Day  
*M. Donnelly*

**POLB91Y Politics of the Third World**

The effects which various Western, especially North American, policies and practices have had upon development in the Third World. The policies and practices to be surveyed include those relating to foreign aid, the multi-national corporation, and Western security. Case material will be drawn from four countries in Latin America and Africa which illustrate a diversity of approaches to development: Cuba, Chile, Ghana, Kenya. Session: Winter Day  
*J. Teichman*

**POLC52Y Canadian Constitution**

Historical origins of the Canadian constitution and its evolution since 1867; the law and customs of the constitution; judicial interpretation of the Constitution Act 1867 and its effect on federalism and civil liberties; constitutional change and the Constitution Act 1982; contemporary constitutional issues. Exclusion: (POLB52) Prerequisite: POLB50 Session: Winter Day

**POLC54S Intergovernmental Relations**

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. Exclusion: (POLB54) Prerequisite: POLB50 Session: Winter Day  
*G. Skogstad*

**POLC55Y Comparative Provincial Government**

A comparative analysis of the political systems of the ten provinces. Topics will include: - constitutions; party systems; elections; interest groups; legislatures; cabinet systems; public administration; policy making. Exclusion: (POLB51) (POLB55) Prerequisite: POLB50 Session: Winter Day

**POLC61S Policy Development and Political Evaluation**

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. Prerequisite: POLB53 or POLB62 or POLB61 Session: Winter Day  
*R. Manzer*

**POLC64S Comparative Public Administration**

The growth of public bureaucracies in selected industrial countries; comparisons of administrative institutions and processes; variations in the relationship of administration and politics and in the contribution of public bureaucracies to public policy development. Exclusion: (POLB63) Session: Winter Evening  
*J. Esbrey*

**POLC74Y Political Thought of the Eighteenth and Nineteenth Centuries**  
A study of the major political philosophers of the eighteenth and nineteenth centuries.

Particular emphasis will be placed on Rousseau's *Discourse on Inequality and Social Contract*; Burke's *Reflections on the Revolution in France*; de Tocqueville's *Democracy in America*; and selected writings of J.S. Mill and Marx.  
Exclusion: (POLB71)  
Prerequisite: POLB70  
Session: Winter Day  
E. Andrew

**POLC75Y Political Analysis**  
An examination of the methods of analysis used in the empirical study of politics. The purpose of the course is to enable the student who read political literature to identify underlying values and assumptions, to differentiate good from poor logic of argument, to distinguish between adequate and inadequate use of evidence and between warranted and unwarranted conclusions drawn from that evidence. Special attention will be paid to the questions surrounding the "science of politics".  
Exclusion: POLB65 (1985-86) (POLB72)  
Session: Winter Day  
S. Solomon

**POLC81S The Psychology of International Relations**  
This course will explore the contribution that psychological knowledge can make to an understanding of international relations. Problems to be considered include problems of war and peace, the influence of perception on foreign policy decisions, the influence of personality on decision making.

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 discussions.  
Exclusion: (POLC11H/S)  
Prerequisite: POLB66 or POLB80  
Session: Winter Day  
J. Esbrey

**POLC84Y Canadian Foreign Policy**  
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.  
Exclusion: (POLB81)  
Prerequisite: POLB50 or POLB80Y  
Session: Winter Day

**POLC87Y Comparative Politics of Industrial Societies**  
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.  
Exclusion: (POLB85)  
Prerequisite: One course in Political Science or Permission of Instructor  
Session: Winter Day  
M. Donnelly

**POLC95Y Politics and Society in Tropical Africa**  
The three major questions with which the course grapples are the following. To what extent is the fate of poor African countries determined by such external factors as the colonial legacy and what is often referred to as "neo-colonialism" or "neo-imperialism"? To what extent are progressive developmental policies blocked by the power of new vested interest groups created by rapid political and economic change in African countries? What are some of the major political institutions and development strategies through which governments seek to direct change, and how effective are their efforts, given the constraints upon their freedom of action?  
Exclusion: (POLB92)  
Prerequisite: none, but a course in introductory political science would be helpful  
Session: Winter Day

**POLC98Y Politics and Society in Latin America/South-East Asia**  
This lecture/seminar course will survey the evolution and current traits of political institutions in either Latin America or South-East Asia, with particular emphasis upon the role of domestic and international forces in shaping them.  
Prerequisite: IDS801Y or POLB91Y  
Session: Winter Day  
J. Teichman

**POLD51S Topics in Canadian Government**  
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.  
Exclusion: (POLC51)  
Prerequisite: POLB50  
Session: Winter Day

**POLD62F Organized Interests and the State**  
The course examines the growth functioning and changing role of organized interests in the modern capitalist state. The central theme is that the organization and role of the state and interest groups is interdependent, each importantly affects the other. Various theoretical frameworks, including liberal pluralism and corporatism are examined for their ability to explain the emergence, effectiveness, and impact of interest groups, and reference is made to specific examples in industrial democracies to test the adequacy of these general frameworks.  
Exclusion: (POLC62)  
Prerequisite: POLA01 or POLB50 (now B60) or POLC87(POLB85)  
Session: Winter day  
G. Skogstad

**POLD65F Topics in Political Leadership**  
A study of political leadership in parliamentary systems, with special reference to Canada. Emphasis will be placed upon the importance of specific institutional arrangements in determining the character and effectiveness of political leadership.  
Students will be required to engage in a detailed study of a specific leader in a parliamentary system.  
Exclusion: (POLC65F)  
Prerequisite: POLA01 or POLB50  
Session: Winter Evening  
J. Esbrey

**POLD71Y Canadian Political Ideas**  
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.  
Exclusion: (POLC71)  
Prerequisite: One of POLB50, POLB70, POLC74(POLB71), HISB04  
Session: Winter Day

**POLD72F Selected Topics in Political Philosophy**  
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.  
Prerequisite: POLB70, POLC74(POLB71Y), or permission of instructor.  
Session: Winter Day

**POLD73S Selected Topics in Political Philosophy**  
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.  
Exclusion: (POLC73)  
Prerequisite: POLB70, POLC74(POLB71Y) or Permission of Instructor  
Session: Winter Day

**POLD93F Selected Topics on Developing Areas**  
A detailed examination of particular problems in the study of developing areas. The topics will be announced annually in the Spring.  
Prerequisite: POLB91 or permission of instructor.  
Session: Winter Day  
R. Sandbrook

**POLD94S Selected Topics on Developing Areas**  
The topic to be examined this year is the role of the state in facilitating economic development in the Third World. Both capitalist and socialist patterns receive attention. Comparisons to Western and Japanese experience are drawn.  
Exclusion: (POLC94)  
Prerequisite: A social science course on the Third World or development  
Session: Winter Day  
R. Sandbrook

**POLD98F Supervised Reading**

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.

Exclusion: (POLC98)

Prerequisite: One B-level course in Political Science; Permission of Instructor.

Session: Summer Evening, Winter Day, Winter Evening

Staff

**POLD99S Supervised Reading**

Advanced reading programme in special 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.

Exclusion: (POLC99)

Prerequisite: One B-level course in Political Science; Permission of Instructor.

Session: Summer Evening, Winter Day, Winter Evening

Staff

**Courses Not Offered in 1988-89**

**POLB51F** Government and Politics in Ontario  
Exclusion: (POLB37)  
Prerequisite: POLB50 (or POLB01)

**POLB66Y** Psychology and Politics  
**POLC50Y** Canadian Problems in Comparative Perspective  
Exclusion: (POLC15)  
Prerequisite: One of POLB50 (or POLB01), (POLA03), POLB87 (or POLB26), (POLB34).

**POLC60F** Administrative Politics  
Prerequisite: POLB61 or POLB62

**POLC63S** Administrative Theories and Policy-Making  
Prerequisite: POLB71 or POLB62 or POLB63

**POLC70Y** Twentieth Century Political Thought

**POLC82Y** American Foreign Policy  
Exclusion: (POLB82)  
Prerequisite: POLB80 or POLB87

**POLC83Y** Soviet Foreign Policy  
Exclusion: (POLB83)  
Prerequisite: POLB80 or POLB86 or HISB07

**POLC85Y** Comparative Communism  
Prerequisite: One B-level course in Political Science

**POLC89Y** Politics and Society of Japan  
Exclusion: (POLB89)

**POLC97Y** Government and Politics in India  
Exclusion: (POLB94)

**Psychology**

Psychology is that branch of science which seeks to understand behaviour and mind. Why organisms - human and infrahuman - act as they do is one of the most compelling and longstanding questions in the history of human thought. Philosophers, artists, novelists, theologians and others have sought the answer through reason and intuition. Psychology uses the methods of scientific enquiry to address the question.

The areas of interest encompassed by the discipline of psychology include: how organisms perceive their environments; how they learn, adapt, and remember; how they change over their lifetimes; how they choose among alternate courses of action; how they respond to motivating forces; how they are affected by the presence of other organisms in social settings; how their behaviour relates to their physiological functions; and how individuals and species differ from one another. Our course offerings in Psychology include all of these topics, covering how psychologists go about answering the important questions in each, and what we have learned about each.

The Specialist Programme in Psychology includes courses from each of the main sub-areas within the discipline. This programme is intended both for students with a strong interest in the field and for those who wish to pursue graduate work in psychology after the first degree. Students considering graduate study should plan to include the thesis course (PSYD98Y) in their undergraduate programme.

The Major Programme in Psychology also is designed to introduce students to the main areas within the discipline. Students opting for this programme generally do so because they are interested in a less intensive exposure to the field. Often,

students desire to concentrate their studies in two areas, in which case a double major programme combining psychology with another discipline is ideal.

Students particularly interested in the relation of brain to behaviour should consider the Specialist Programme in Neurosciences described earlier in this Calendar. Those particularly interested in the study of knowledge - language, communication and thought - may wish to consider the Major and Specialist Programmes in Cognitive Science described earlier.

**Planning your Programme in Psychology**

Students should be aware that the A, B, C, D course structure in Psychology dictates the sequence in which courses should be taken, but not the year of study in which a given course must be taken. That is, A, B, C, and D do not correspond to first, second, third and fourth year. As two examples, it is recommended that PSYB07F/S and PSYC08F/S be taken consecutively in the two terms of second year and that the same be done with PSYB60F/S and PSYC61F/S. Students are encouraged to plan carefully so that they will meet their educational objectives over the years of their degree. Discussions with the Supervisor of Studies can be very valuable in this regard.

**Specialist Programme in Psychology**

Supervisor: G. B. Biederman, 284-3211

The programme requires completion of 11.5 full-course equivalents (FCEs), 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 FCE) in a science (including psychology) at the B-, C- or D-level.

A. 9.5 FCEs in Psychology, as follows:

- 1 PSYA01Y Introduction to Psychology (1 FCE)
- 2 Statistical Methods (1 FCE)
  - (a) PSYB07F/S Data Analysis in Psychology and
  - (b) PSYC08F/S Experimental Design in Psychology
- 3 Laboratory Methods (1 FCE)
  - (a) PSYB01F/S Psychological Research Laboratory and
  - (b) one half-course (.5 FCE) 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 4b or 6 below.)

4 Courses at the B-level and/or C-level (3 FCE)

Students are required to take one FCE 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).

5 Courses at the D-level (2 FCE)

In selecting two FCEs at the D-level, students may not include more than 1.5 FCEs from any one of the content groups listed under 4a, 4b, or 4c. NOTE: STUDENTS MUST BALLOT FOR D-LEVEL COURSES; PLEASE READ THE INSTRUCTIONS BELOW.

6 Additional courses in Psychology (1.5 FCE)

Students must choose 1.5 further FCEs 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 FCE)

Students must select at least two FCEs at the B-level or higher in a discipline or disciplines other than Psychology.

**Major Programme in Psychology**

Supervisor: G. B. Biederman, 284-3211

The programme requires completion of 6.0 FCEs 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 FCE at the B-level or above in any science (including psychology).

- 1 PSYA01Y Introduction to Psychology (1 FCE)
- 2 PSYB01F/S Psychological Research Laboratory (.5 FCE)

- 3 PSYB07F/S Data Analysis in Psychology (.5 FCE)
- 4 Courses at the B-level and/or C-level (1.5 FCE)  
Students are required to select one half-course (.5 FCE) 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 FCE)  
Students must choose one half-course (.5 FCE) 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 FCE)  
Students must choose 2 further FCEs from any of the remaining courses in Psychology. At least one FCE 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 29, and must be accompanied by a stamped, self-addressed envelope. Students will be notified via a ballot confirmation form in June of D-level courses in which they are permitted to register. No student may register in any D-level course without this confirmation form. (NOTE: For this confirmation to be valid, the student must register through the Registrar's Office by the 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

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

The intent is to present the principles of the scientific method as they apply to experimental psychology. Using examples from both animal and human experiments, 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 include classical and operant conditioning, motivation, learning, perception, and memory. Research methods will be introduced in lectures and illustrated in laboratory exercises. This course is required by 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, Winter Evening  
*G. Biederman and T.B.A.*

### PSYB07F Data Analysis in Psychology

Data reduction techniques: frequency distributions, measures of central tendency and variability, linear transformations, correlation and regression; and hypothesis testing procedures based on the binomial, chi-square, normal, and *t* distributions.

The course examines the role of statistical decision-making procedures in

drawing reasonable inferences from research findings. It details the mechanics of a variety of commonly used data analysis procedures and explores their underlying logic. A working knowledge of elementary algebra (to the solution of simple linear equations in one unknown) is assumed. Four hours of lecture and one hour of tutorial per week.

Exclusions: ANTC35 (ANTB43), BIOB28, ECOB11, GGRB31 (GGRB02), STAB57 (MATB57), SOCB06

Session: Summer Evening, Winter Day  
*B. Forrin*

### PSYB10F Introduction to Social Psychology

Surveys social influence (conformity and obedience), prejudice, sexism, attitude change, group behaviour (crowding, crowd behaviour, panics), aggression, cooperation and competition, nonverbal communication, person perception, attraction and emotions.

Social Psychology focuses on the problem of how human behaviour is influenced by others. The course is designed to demonstrate phenomena of social behaviour and to present theories and research evidence relating to these phenomena.

Prerequisite: PSYA01  
Session: Winter Day  
*J. Bassili*

### PSYB20F Introduction to Developmental Psychology

Developmental processes during infancy and childhood.

This course is divided into two parts. The first examines broad frameworks which have been offered to explain human development; e.g., psychoanalytic theory, Piaget's cognitive developmental theory, social learning view. The second part focuses on selected research areas which deal with different aspects of social and cognitive development in the infant and child; e.g., social attachment, intelligence, sex-roles and achievement.

Three lecture hours per week.  
Prerequisite: PSYA01  
Session: Winter Day  
*T.B.A.*

### PSYB30S Personality

An introduction to some of the influential theories of personality and the research which they have guided. Specific theories covered vary from year to year. A typical selection might include behavioural psychology, cognitive psychology and artificial intelligence, psychoanalysis, and transpersonal psychology.

The aim of this course is to acquaint the student with the diversity of theoretical assumptions and research methods with which basic questions about human nature have been approached. Readings are from primary sources.

Prerequisite: PSYA01  
Session: Winter Day  
*A. Kukla*

### PSYB32F/S Abnormal Psychology

Definition and identification of abnormality, historical-cultural influences on attitudes, practices, theories, and research; a variety of past and current viewpoints in the development of hypotheses, model and theory, including genetic, physiological, stress, 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: Summer Evening, Winter Evening  
*J. Pauker*

### PSYB45S Behaviour Modification: Origins and Applications

A survey of attempts to understand and regulate human behaviour in non-laboratory settings founded on principles derived from the learning and conditioning laboratory. A critical analysis of current applications and systems of behaviour modification and control.

Philosophical underpinnings; basic concepts and models of behavioural change; research strategies; operant procedures; reinforcement schedules,



extinction, shaping, self-reinforcement, fading, chaining, instructions, the token economy, behavioural contracting, biofeedback, punishment and its side effects; cognition and behaviour therapy, attribution, placebo effects, cognitive therapy, rational-emotive therapy, thought stopping, problem-solving, modeling; establishment of new behaviours, fear extinction, assertive training; treatment of depression; systematic desensitization; treatment of anxiety; aversive counterconditioning; treatment of alcohol and drug abuse.

Prerequisite: PSYA01  
Session: Winter Evening  
*F. Klajner*

#### **PSYB50F Sensation and Perception**

An investigation into the processes by which we gain information about the world around us, and the principles which govern the way in which that information gives rise to our perceptions.

Stimuli for the human senses, especially light and sound; receptors and sensory pathways with emphasis on vision; sensitivity; colour and tone; 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 Evening  
*J. Kennedy*

#### **PSYB51S Perception and Cognition**

Theory and empirical research on visual and tactile perception, representation, and communication.

Topics include perception and depiction in the handicapped and normal perceiver, perceptual information and projection, illusion, stability and instability in perception, possible and impossible scenes, human and computer 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**

Theories and experiments that address the question: How is language comprehended and produced and how is the ability to use language related to other psychological abilities?

Lectures and discussion.  
Prerequisite: PSYA01 or LINA01  
Session: Winter Day  
*A. Gopnik*

#### **PSYB57S Memory and Cognition**

Discussion of experiments and theories in human memory and cognition. This course provides an analysis of the research on encoding, storage and retrieval of information in human memory. Also surveyed are the related topics of attention, thinking, and problem solving, and their role in a general model of information processing.

Three lecture hours per week.  
Prerequisite: PSYB01  
Corequisite: PSYB07  
Session: Winter Day  
*C. MacLeod*

#### **PSYB60F Brain Mechanisms and Behaviour: I**

The relation between behaviour and the structure and function of the nervous system. Topics covered include: neuroanatomy, structure and function of neurons, neurochemistry, neural mechanisms and movement, and the physiological basis of perception. Students with prior credits for PSYB65 may take PSYB60 for credit.

The objective is to give the student a firm grasp of the structure and function of the nervous system and its role in the behaviour of an organism. Neuroanatomy, structure and function of neurons, neuropharmacology, and neural mechanisms of sensation and movement.

Three hours lecture and one hour lab or tutorial per week.  
Prerequisite: PSYA01; PSYB65 is recommended for students with no Biology background.  
Session: Winter Day  
*N. Milgram*

#### **PSYB65F Biological Foundations of Behaviour**

An examination of the structural and physiological basis of behaviour. The course is geared toward non-biologically oriented students.

The structure and function of the nervous system are covered sufficiently to allow the student an understanding of the basis of human behaviour. Once these fundamentals are covered, the course then

focuses on the following: higher brain function in humans; hemispheric specialization, disorders of the central nervous system (multiple sclerosis, epilepsy, organic brain damage, strokes, senility, and speech disorders); psychopharmacology and drugs of use and abuse; and the biological basis of psychiatric disorders.

Three hours of lecture per week.  
Prerequisite: PSYA01  
Exclusion: Students with prior credit for PSYB60 may not take PSYB65 for credit.  
Session: Winter Evening  
*T.B.A.*

#### **PSYC08S Experimental Design in Psychology**

The analysis of variance as a research tool and the rationale and mechanics of its application to a variety of experimental designs: simple randomized, repeated measures, factorial. Additional topics discussed include: homogeneity of variance, multiple comparisons, trend analysis.

The course extends the range of techniques examined in PSYB07. Procedures are considered which permit the analysis and interpretation of data from complex experiments involving the simultaneous manipulation of several independent variables. The course is highly recommended for all students contemplating supervised individual research in Psychology. Three hours of lecture and one hour of tutorial per week.

Prerequisite: PSYB07, BIOB28, or STAB57 (MATB57) plus one additional B-level half-course in PSY.  
Exclusion: STAC52 (MATC52), (PSYB08)  
Session: Winter Day  
*B. Forrin*

#### **PSYC11S Social Psychology Laboratory**

Introduces conceptual and practical issues concerning research in social psychology, and provides experience with several different types of research.

This course is designed to consider in depth various research approaches used in social psychology (such as attitude questionnaires, observational methods for studying ongoing social interaction). Discussion and laboratory work. Limited enrolment: 25.

Prerequisite: PSYB01, PSYB07, PSYB10  
Exclusion: (PSYB11)  
Session: Winter Day  
*J. Bassili*

#### **PSYC12S Advanced Social Psychology**

A detailed examination of selected social psychological topics introduced in PSYB10.

Attitudes play a central role in our social lives. This course examines the nature of attitudes, their development, organization and change. Practical issues such as the measurement of attitudes and the relation between attitudes and behaviour will be covered. In addition, the course examines belief systems and their manifestation in political and moral ideologies.

Teaching method: lectures.  
Prerequisite: PSYB10 plus one additional B-level half-course in PSY  
Exclusion: (PSYB12)  
Session: Winter Day  
*J. Bassili*

#### **PSYC21F Advanced Developmental Psychology**

An examination of selected issues pertaining to adult development, particularly during early and middle adulthood.

Examples of topics which will 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  
Exclusion: (PSYB21)  
Session: Winter Day  
*K. K. Dion*

#### **JLPC24S Developmental Psycholinguistics**

This course investigates the development of language in children. How do children acquire phonological, syntactic, semantic and pragmatic rules? How is language development related to other kinds of cognitive developments?

There will be lectures and discussions.  
Prerequisite: One full-course equivalent at the B-level in LIN and/or PSY  
Exclusion: LINC15 (LINB15), (JLPB24)  
Session: Winter Day  
*A. Gopnik*

#### **PSYC34S Psychometric Methods Laboratory**

An intensive exploration by means of lectures and workshops of the principles and methods underlying the construction of psychological tests, the interpretation of the scores they yield, and the assessment of their worth as diagnostic and predictive devices in educational, industrial and clinical settings, illustrated by reference to a wide variety of measures of talent,

interest, and 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)

Exclusion: (PSYB34)

Session: Winter Day

B. Forrin

#### **PSYC425 Learning Laboratory**

Critical review of basic theories and issues in the psychology of learning, with selected laboratory exercises in animal learning. An introduction to problems and techniques in the study of the acquisition of behaviour. Topics include: reinforcement, motivation, classical and instrumental conditioning principles, theory construction.

The course provides theoretical and empirical experience relevant to basic concepts and current problems in learning and motivation.

Prerequisite: PSYB01, PSYB07 (or equivalent)

Exclusion: (PSYB40)

Session: Winter Day

G. Biederman

#### **PSYC58F Experimental Psychology Microcomputer Laboratory**

Examination of the widespread impact of computers in experimental psychology. This laboratory course emphasizes the use of microcomputers in preparing, controlling, and analyzing experiments. Students will use a simple programming language, and will have considerable "hands-on" experience with laboratory microcomputers. The aim is to develop the skills necessary to program experiments in psychology, with particular emphasis on research in cognition.

The teaching method will consist of lectures on using the computer as a tool for psychological research, and lectures on the programming language. No previous computer experience is expected or required. Limited enrolment: 20.

Prerequisite: PSYB01, PSYB07 (or equivalent)

Exclusions: (PSYB53), any course in Computer Science

Session: Winter Day

C. MacLeod

#### **PSYC61S Brain Mechanisms and Behaviour: II**

A continuation of PSYB60, emphasizing motivation and learning. Topics covered under the category of motivation include: physiological basis of eating, drinking and sexual behaviour, sleep, and the neural correlates of reward. Topics covered under learning include: physiological processes and memory, structural basis of learning and memory, biochemistry and memory.

The course is designed to provide students with an understanding of the physiological substrates underlying behaviour. Discussions will centre around current topics in physiological psychology and will draw on recent research to support or challenge current theories in motivation and learning. In motivation, the general areas of feeding, sexual behaviour, and reinforcement will be discussed from neurological and neuropharmacological perspectives. The neurophysiological basis of learning and memory will be examined and then integrated with motivational models to provide a basis for understanding brain function in behaviour.

Three hours of lecture per week.

Prerequisite: PSYB60, plus one other B-level half-course in PSY

Exclusion: (PSYB61)

Session: Winter Day

T.B.A.

#### **PSYC63Y Physiological Psychology Laboratory**

Instruction in a variety of techniques used in investigations of nervous system function. The course is mainly intended for students who are pursuing a Specialist Programme in the Neurosciences.

The course starts out with a dissection of a sheep brain. Subsequently, the procedures covered include: (i) histology (preparing, cutting and staining neural tissue); (ii) lesioning specific regions of the central nervous system; (iii) chemical stimulation of the brain; (iv) electrical stimulation of the brain; (v) programming relay circuitry; (vi) electrophysiological recording techniques.

Two hours of lecture and three hours of scheduled laboratory work per week. Students will also be required to spend additional hours working in the student laboratory. The course involves a series of

three to five laboratory projects.

Prerequisite: PSYA01 and permission of instructor

Corequisite: PSYB60, PSYC61 (PSYB61); PSYB07 and PSYC08 (PSYB08) are recommended

Exclusion: (PSYB62)

Session: Winter Day

G. Ivy and N. Milgram

#### **PSYC82F Theoretical Psychology**

An introduction to the problems and methods of theoretical analysis in psychology.

The emphasis of the course is on developing sophistication in the techniques of theoretical analysis. The aim is to enable the student to read and evaluate the current literature in theoretical psychology.

Prerequisite: two B-level half-courses in PSY

Exclusion: (PSYC80)

Session: Winter Day

A. Kukla

#### **PSYC90F/S/H**

#### **PSYC93F/S/H Supervised Study in Psychology**

A reading or research project.

These courses provide an opportunity to investigate an area in depth after completing basic coverage in regularly scheduled courses. They are not intended as substitutes for advanced courses in fields where these are available. The student must demonstrate a background adequate for the project proposed and should present a clear rationale to prospective supervisors. Frequent consultation with the supervisor is necessary and extensive library research and/or data collection will be required. Such a project will culminate in a written submission.

Prerequisite: Three FCEs in Psychology; permission of instructor

Exclusions for PSYC90: NROC90

Exclusions for PSYC93: NROC93

Session: Summer Day, Summer Evening,

Winter Day, Winter Evening

Supervision by a faculty member

#### **PSYD16F Critical Analysis in Social Psychology**

Progress in psychology is predicated on developments in both theory and methodology. The primary goal of the course is to enhance skills for critically analyzing both domains in Social Psychology. European and North American approaches to

criticism are compared. Evolutionary and revolutionary models of development are contrasted. Disciplinary and professional aspects of social psychology are discussed in relation to scientific progress. Special emphasis is placed on social and personality factors which shape theory construction and validation. Examples are drawn from both cognitive and motivational approaches to social phenomena. Finally, the analogy between Piaget's account of intellectual development in the child and developments in social psychology is considered.

Prerequisite: PSYC11 (PSYB11) or PSYC12 (PSYB12) or PSYB10 plus one C-level half-course in PSY

Exclusion: (PSYC16)

Session: Winter Day

G. Cupchik

#### **PSYD18S Psychology of Gender**

This course focuses on theory and research pertaining to gender and gender roles. The social psychological and social-developmental research literature concerning gender differences will be critically examined. Other topics also will be considered, such as gender-role socialization. Teaching method: seminar. Limited enrolment: 25.

Prerequisite: PSYB10 plus two C-level half-courses in PSY

Exclusion: (PSYC18)

Session: Winter Day

K. Dion

#### **PSYD20S Current Topics in Developmental Psychology**

An intensive examination of selected issues and research problems in developmental psychology.

The specific content will vary from year to year with the interests of both instructor and students. Lectures, discussions, and oral presentations by students. Limited enrolment: 25.

Prerequisite: PSYC21 (PSYB21) or JLPC24 (JLPB24) or PSYB20 plus one C-level half-course in PSY

Exclusion: (PSYC20)

Session: Summer Evening, Winter Day

TBA

**PSYD22F Socialization Processes**

The processes by which an individual becomes a member of a particular social system (or systems). The course examines both the content of socialization (e.g., development of specific social behaviours) and the context in which it occurs (e.g., family, peer group, etc.). Material will be drawn from both social and developmental psychology. Limited enrolment: 25. Prerequisite: PSYB10 and PSYB20 plus one C-level half-course in PSY. Exclusion: (PSYC22). Session: Winter Day. *K. Dion*

**PSYD32S Abnormal Child Psychology**

Topics will be selected from within the broad area of abnormal child psychology, and will include descriptions of child and adolescent behaviour problems, classification systems and methods, biological and socio-cultural contributors to abnormality, treatment and management approaches and follow-up studies. Lectures, class discussion, and student presentations. Limited enrolment: 25. Prerequisites: PSYB32; PSYC21 (PSYB21) or PSYB20 plus one C-level half-course in PSY. Exclusion: (PSYC32). Session: Winter Day. *J. Pauker*

**PSYD40S Current Topics in Animal Learning**

Current developments in learning research with emphasis on animal-subject literature.

Recent research findings in selected areas of animal learning (such as discrimination learning, aversive control, observing behaviours, dietary control, and addictive behaviour) are presented in seminar form. Research problems are selected for intensive study with the goal of producing experimental resolutions. Students work in teams to facilitate a literature search and the development of a specific experimental proposal to be carried out by the team. Limited enrolment: 25. Prerequisite: PSYB01, PSYC42 (PSYB40). Exclusion: (PSYC40). Session: Winter Day. *G.B. Biederman*

**PSYD53F Psychology and the Law**

The course will focus on the application of psychology to the law, particularly the perceptual and memorial processes which influence the giving of testimony. Limited enrolment: 25. Prerequisite: a B50-series half-course plus one C-level half-course in PSY. Exclusion: (PSYC53). Session: Winter Evening. *T.B.A.*

**PSYD62S Neuroplasticity: Mechanisms and Function**

Neuroplasticity refers to the modification of neural tissue in response to experience which provides the foundation for learning, memory, and other complex mental processes. This course will explore the mechanisms underlying neuroplastic change and its functional significance. There are two major goals: (1) to survey and critically discuss the most important contemporary research on neuroplastic processes; (2) to provide the necessary background so that students are capable of giving a sophisticated answer to the question of what changes occur in the nervous system during learning and memory and what mechanisms underlie these changes. Limited enrolment: 25. Prerequisite: PSYB60. Corequisites: PSYC61 (PSYB61), and PSYC63 (PSYB62). Exclusion: (PSYC62). Session: Winter Day. *N. Milgram*

**PSYD67S Psychobiology of Aging**

Aging is a complex biological phenomenon which is a universal and inevitable fact of life. This course will characterize various anatomical, biochemical and physiological changes that occur in the nervous system with age and will explore the association between these changes and cognitive deterioration. We will examine the characteristics of several age-related disease states and evaluate the validity of current theories and experimental models.

Two hours of lecture per week. Limited enrolment: 25. Prerequisite: PSYB60. Corequisites: PSYC61 (PSYB61), and PSYC63 (PSYB62). Exclusion: PSYC60 in 1986/87. Session: Winter Evening. *G. Ivy*

**PSYD80S Current Topics in Theoretical Psychology**

An intensive examination of selected issues in theoretical psychology. The specific content will vary from year to year. Limited enrolment: 25. Prerequisite: PSYC82 and permission of instructor. Exclusion: (PSYC80). Session: Winter Day. *A. Kukla*

**PSYD85F History of Psychology**

A survey of developments in Western philosophy and science which influenced the emergence of modern psychology in the second half of the Nineteenth Century. Twentieth Century schools of psychology are discussed, including functionalism, structuralism, Gestaltism, Phenomenology, Behaviourism and Cognitivism. The course is designed for students who want to integrate their knowledge of the different areas of psychology and offers good preparation for graduate school.

This course examines changes in the treatment of three basic problems: mind-body, epistemology (the science of knowledge) and behaviour ethics. We begin with the ancient Greek philosophers who established the foundations of Western thought and science. The contributions of European philosophers and scientists (both physical and natural) from the Fifteenth through Nineteenth Centuries are then discussed. Topics also considered include: the process of paradigm or theory change in science and the relative contribution of individual genius and Zeitgeist or intellectual climate to scientific developments. Limited enrolment: 25. Prerequisite: One C-level half-course in PSY. Exclusion: (PSYC85). Session: Winter Day. *G. Cupchik*

**PSYD98Y Thesis in Psychology**

This course offers the opportunity to engage in a year-long research project under the supervision of an interested member of the faculty in Psychology. The project will culminate in a written report in the form of a thesis and a defense of that report. During the course of the year, at appropriate times, students will meet to present their own research proposals, to appraise the proposals of others, and to discuss the results of their investigation.

Students will meet as a group with the coordinator as well as individually with the supervisor. This course is restricted to qualified Specialists in Psychology. Students planning to pursue graduate studies are especially encouraged to enroll in the course.

Prerequisites: PSYB01, PSYB07, PSYC08 (PSYB08), Psychology Specialist. Exclusion: (PSYC98), NROD98 (NROC98). Session: Winter Day. Coordinator: *B. Forrin/C. MacLeod*

**Courses Not Offered in 1988-89**

- PSYC54F** Cognition and Representation  
Prerequisites: a PSYB20-series and a PSYB50-series half-course
- PSYD15F** Current Topics in Social Psychology  
Prerequisites: PSYC11 (PSYB11), PSYC12 (PSYB12) or PSYB10 plus one C-level half course in PSY. Exclusion: (PSYC15)
- PSYD30F** Current Topics in Personality and Motivation  
Prerequisite: PSYB30 plus one C-level half-course in PSY. Exclusion: (PSYC30)
- PSYD41S** Research in Operant Conditioning  
Prerequisite: PSYB01, PSYC42 (PSYB40). Exclusion: (PSYC41)
- JLPD55F** Disorders of Speech and Language  
Prerequisite: Either JLPB55, PSYB60 or PSYB65, and one C-level half-course in PSY or one B-level FCE in LIN. Exclusion: LINB29; (JLPC55)
- PSYD60F** Current Topics in Physiological Psychology  
Prerequisite: PSYC61 (PSYB61). Exclusion: (PSYC60)
- PSYD68F** Developmental Psychobiology  
Prerequisite: PSYC61 (PSYB61). Exclusion: (PSYC68)

## Quaternary Studies

### Major Programme in Quaternary Studies

*Supervisor:* J.C. Ritchie (284-3155)

This programme is no longer offered, but students currently enrolled will be allowed to complete it.

## Russian

*Discipline Representative:* C.V. Ponomareff  
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.

HUMB07S	Russian Culture
HUMB13Y	The Russian Revolution of 1917: Promise and Fulfilment
LITA01Y	Introduction to Literature
LITB07Y	The Nineteenth-Century Russian Novel, 1830-1880
LITB13Y	Russian and English Nineteenth-Century Fiction
LITB17F/S	Russian Shorter Fiction of the 19th and 20th Centuries
LITB22Y	The Modernist Adventure
LITB36F/S	Soviet Russian Literature 1917-1980: The Official Writing
LITB37F/S	Soviet Russian Literature 1917-1980: The Unofficial Writing
LITB40F/S	Disaster and the Literary Imagination
LITB51S	Beyond Nihilism: Three Ways to Salvation
LITC12F/S	Dostoevsky's Fiction

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

## Society, Values and Medicine

The Programme provides a focus for the study of social, political and ethical aspects of medicine in North America and cross culturally.

There has in the last decade been an increasing awareness of the large extent to which social, political and ethical judgements and concepts are involved in the theory and practice of medicine. There has also been a growing awareness that, while an increased ability on the part of physicians to deal with these aspects of medicine is desirable and clearly needed - an excellent reason for those contemplating a medical career to consider seriously this programme - these are matters about which society and not medicine alone should deliberate and make judgements. However, this requires that individuals be exposed to the issues and be provided with the analytic skills that enable them to think as clearly as possible about the issues. This Programme is designed to meet these requirements.

### Major Programme in Society, Values and Medicine

*Supervisors:* M. Hammond (Sociology 284-3193);

P. Thompson (Philosophy 284-3309)

The Programme requires completion of six full-course equivalents as described below.

- 1 ANT051Y; ANT016F/S or ANT023F/S; PHLB05F/S; PHLC05F/S; PSYB32F/S; PSYB65F/S; SOCB17F/S
- 2 Two full-course equivalents from the following group: ANT041Y; ANT047Y; BJPC70F/S; BJPC71F/S; (PSYC66F/S); SOCC28F/S; SOCC32Y; SOCC36F; and whichever course of ANT016F/S or ANT023F/S was not selected in 1

*Note:* ANTA01Y and PSYA01Y are normally prerequisites for ANT and PSY courses in this Programme.

## Sociology

*Assistant Chair:* J. Hannigan

Sociology is the scientific study of interaction among people, the social relations which they establish, and the social groups which they form. Sociology attempts to explain how society is ordered and how it functions, what accounts for social cohesion, social stratification, social mobility, and social change. It studies the consequences of co-operation, competition, and conflict.

Students may wish to take Sociology courses as a part of a general education, in anticipation of the usefulness of certain courses in future occupations or professions, or as part of a Specialist or Major Programme.

The introductory course, SOCA01, is intended to familiarize students with the special theories, methods and questions of sociology as a part of a liberal education. In addition, the SOCA01 course provides a minimum background of knowledge about sociology, and hence is a prerequisite to many of the more 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* - Prof. R.L. James

*Urban Studies* - Prof. J. Hannigan

*Science and Medicine* - Prof. M. Hammond

*Education* - Prof. J.A. Lee

### Specialist Programme in Sociology

*Supervisor:* J. Tanner

The Programme requires completion of ten full-course equivalents as described below. No more than fourteen full-course equivalents in Sociology may be included in a four-year degree.

- 1 SOCA01Y Introduction to Sociology
- 2 SOCB01Y Methods in Social Research
- 3 SOCB06F/S Social Statistics
- 4 SOCB03Y History of Social Thought
- 5 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 full-course equivalent at C-level from courses C01-C29.
- 8 One and one-half 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:* J. Tanner

The Programme requires completion of seven full-course equivalents in Sociology including:

- 1 SOCA01Y Introduction to Sociology
- 2 SOCB01Y or SOCB03Y Methods in Social Research or History of Social Thought
- 3 One B-level macrostructure course from the following (full-course equivalents): SOCB04Y, SOCB05Y, SOCB10Y, SOCB13Y, SOCB20Y, SOCC33Y, SOCC34Y, SOCC35Y, or 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.
- 6 One other B- or C-level full-course equivalent in Sociology following the usual prerequisite rules applying to chosen courses.

### SOCA01Y Introduction to Sociology

An introduction to the basic concepts, principles and methods of sociology as a discipline for the study of society. Major topics studied include: the nature of social groups, social processes, culture, socialization, deviant behaviour, population, community, stratification, social institutions and social change.

*Session:* Winter Day, Winter Evening  
*J. Tanner, R. James*

### SOCB01Y Methods in Social Research

The course will be divided into three basic units. It will start with a critical overview of the logic and methods of social scientific research. Topics will include the logic of research, research design and causal analysis, and methods of data collection. Once the fundamentals have been covered, an effort will be made to teach students

how to "read" and critically evaluate research reports. Several studies will be examined in detail, and then students will be given the opportunity to do their own evaluations. The final goal will be to provide some practical experience in doing research. Using data sets provided by the instructor, students will be taught how to interpret tables and to employ data to test hypotheses.

Prerequisite: One full-course equivalent in Sociology

Session: Winter Day

A. Tuzlak

### **SOCB02Y Structure of Interpersonal Relations**

Patterns of interaction and influence in interpersonal relations. The course begins with a consideration of the problem of social order; i.e., how do we constrain individual desires and induce people to act morally. We will also examine the problem of the "absurd", using Camus' *Outsider*. This will be followed by an examination of impression management and exchange theories. Special attention will be given to the role of other persons in "altercasting" our behaviour, with examples drawn from research on mental illness and stereotyping. Other topics include status and power relations in small groups, social influence processes, and the social psychology of class, sex and race relations.

Prerequisite: One full-course equivalent in Sociology

Session: Winter Day

S. Ungar

### **SOCB03Y History of Social Thought**

A study of the development of social thought from the ancient periods to contemporary sociology. The focus will be on the ideas of those thinkers who have historical significance and contemporary relevance. The course begins with a basic discussion of the nature and types of social thought. It will then look at the ideas on society in Ancient China, Greece and Rome, and the Medieval times. It will then analyze the beginnings of modern social thought with special emphasis on the emergence of sociology and the work of such theorists as Comte, Marx, Durkheim, Spencer, Simmel and Weber. Finally, contemporary schools of sociological theory will be considered.

Prerequisite: One full-course equivalent in Sociology

Session: Winter Evening

J.-L. deLannoy

### **SOCB04Y Political Sociology**

Political Sociology is concerned with power in its social context. The course will examine Liberal-pluralist and Marxist conceptions of power; the rise of democracy and social classes; political ideologies; political parties and social movements; war and warfare; race and politics.

Prerequisite: One course in Sociology

Session: Winter Day

J. Tanner

### **SOCB05Y Urban Sociology**

A review of theories of urban genesis and urban form, interrelationship of urbanization, industrialization and modernization, issues in urban living (housing, transportation, urban-renewal, poverty, unemployment, etc.), urban social networks (ethnic and cultural heterogeneity, neighbourhood, community and other voluntary associations).

Prerequisite: One full-course equivalent in Sociology

Session: Winter Day

J. Hannigan

### **SOCB06F Social Statistics**

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: PSYB07, ECOB11

Prerequisite: One full-course equivalent in Sociology

Session: Winter Evening

S. Ungar

### **SOCB07Y Small Groups\***

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.

Prerequisite: Two courses in Sociology, one of which must be a B-level course.

Session: Winter Day

W.W. Isajiw

### **SOCB10Y Social Class and Social Stratification**

Description and analysis of the nature of social stratification with emphasis on the basis of stratification; different theoretical views concerning stratification; the structure and function of stratification systems, social classes and associated behaviour; social mobility; and class conflict.

Prerequisite: SOCA01Y

Session: Winter Day

M. Hammond

### **SOCB12Y Sociology of the Family**

The sociological study of the family in contemporary Western society. At a micro level, the focus is on 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

R. James

### **SOCB13Y Canadian Society**

An examination of the context, structure, and development of Canadian society. Special consideration will be given to current issues such as control of energy resources, the future of Quebec and the question of a distinctive national identity.

Prerequisite: SOCA01Y

Session: Winter Evening

### **SOCB18Y Sociology of Deviant Behaviour**

The analysis of the social processes by which behaviour is defined and treated as criminal, immoral, disgusting, sick, or merely eccentric; the establishment and administration of sanctions, treatment and other controls; deviant subcultures;

specific categories of deviance, such as, crimes against persons, "victimless crimes"; mental illness, sexual deviation and alcoholism.

Prerequisite: SOCA01Y

Session: Winter Day

R. Beals

### **SOCB21Y Sociology of Religion**

A sociological analysis of religion as a social institution. Consideration of the problem of a definition of the phenomenon; analysis of major theoretical and empirical contributions to the field; and investigation of forms of religion in historical and contemporary contexts.

Prerequisite: SOCA01 and one B-level full course in Sociology.

Session: Winter Day

R. O'Toole

### **SOCB26Y Sociology of Education: Primary and Secondary Levels**

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: SOCA01

Session: Winter Day

J.A. Lee

### **JCSB27Y Organizational Behaviour**

Social factors in administration, the structuring of intra-organizational and inter-organizational relationships, and the distribution of power and dependency in society. Empirical studies used in the first term will focus on single organizations. Those used in the second term will focus on industries and other inter-dependent organizations.

Prerequisite: One previous course in Sociology, Commerce, Economics, or Political Science

Session: Winter Day, Winter Evening

**SOCC01F Sociology of Revolution**

The phenomenon of revolution as defined, described and analyzed from comparative and historical perspectives. Specific case-studies are utilized in order to explain the causes and courses of revolutionary leadership, mobilization, and strategy.

Particular attention is paid to revolution as both cause and effect of major social change.

Prerequisite: SOCA01 and one B-level full

course in Sociology

Session: Winter Day

J-L. deLannoy

**SOCC02S Research on Small Groups**

A laboratory course consisting of a design of research for the study of the process of social interaction in small groups in relation to the stages of group development and the emergent internal structures of social relationships.

Prerequisites: SOCB01 and SOCB07 or permission of the instructor

Session: Winter Day

A. Tuzlak

**SOCC03F Collective Behaviour**

The study of uninstitutionalized group behaviour - crowds, panics, crazes, riots and the genesis of social movements.

Prerequisite: SOCA01Y and one B-level full

course in Sociology

Session: Winter Day

J. Hannigan

**SOCC04S Social Movements**

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 one B-level

course in Sociology

Session: Winter Day

J. Hannigan

**SOCC05Y Contemporary Social Theory**

A consideration of basic questions underlying sociological thinking as they arise in the work of contemporary theorists and theoretical schools. Students will be expected to develop an informed, critical perspective on current debates within the

discipline. Though not formally required, a previous course in social and/or political theory (e.g. SOCB03Y) would be a distinct asset.

Prerequisite: SOCA01 and one B-level full

course in Sociology

Session: Winter Day

M. Hammond

**SOCC07S Sociology of Occupations and Professions**

This course examines the relationship of people to their work and occupations in contemporary capitalist society. Topics will include: the structure and organization of work; the nature and meaning of work; women and the workplace; technology and the labour process; alienation and job dissatisfaction; theories of work behaviour; industrial democracy; unemployment.

Prerequisite: SOCA01 and one B-level full

course in Sociology

Session: Winter Day

J. Tanner

**SOCC10F Sex, Self and Society**

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 one B-level full

course in Sociology

Session: Winter Day

A. Tuzlak

**SOCC13F Industrial Sociology**

Comparative studies of industrial organization, considering scale, division of labour, organization of work teams, levels and forms of organization.

Prerequisite: SOCA01 and one B-level full

course in Sociology (JCSB27 recommended)

Session: Winter Day

**SOCC16F Sociology of Conflict**

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: SOCA01 and one B-level full

course in Sociology

Session: Winter Day

S. Ungar

**SOCC17S Social Change in the Third World**

Sociological studies of stratification, politics, religion, education, and kinship organization in countries of Africa, Asia, Latin America.

Prerequisite: Two courses in Sociology,

one of which must be a B-level.

SOCC33(SOCB14Y) and SOCC35(SOCB16Y)

recommended

Session: Winter Day

J-L. deLannoy

**SOCC18F Sociology of Art and Culture**

A seminar on the organization, production and appreciation of art and culture in various societies. Lectures and discussions will focus on literature, film and painting, but students may choose from any form of "high culture" for special research.

Exclusion: (SOCC18Y)

Prerequisite: SOCA01 and one B-level full

course in Sociology

Session: Winter Day

J-L. deLannoy

**SOCC22F Qualitative Methods in Social Research**

The use of non-statistical methods for systematic analysis of social behaviour. Each student will develop craftsmanship in participant observation, ethnography, and sociohistorical methods by completing first-hand observation and analysis.

Prerequisite: SOCA01 and one B-level

course in Sociology

Session: Winter Day

J. Lee

**SOCC24S Changing Family Life in Canada**

Examination of the major changes in the structure of the family in Canada, and its consequences for family life.

Prerequisite: SOCA01 and one B-level

course in Sociology

Session: Winter Day

R. James

**SOCC25S Comparative Race Relations**

The purpose of this course is to obtain a critical understanding of *race* as a form of social inequality governing intergroup relations in different societies. Special emphasis will be placed on Canada, the United States, South Africa and Latin America.

Prerequisite: Two courses in Sociology,

one of which must be a B-level course.

Session: Winter Day

W.W. Isajiw

**SOCC26F Sociology of Urban Growth**

An in-depth examination of the conditions, patterns and consequences of urban growth and development. Major topics will include the emergence of new urban institutions (legal, political, economic) and the formation and operation of urban social networks.

Prerequisite: SOCA01 and one B-level full

course in Sociology

Session: Winter Day

J. Hannigan

**SOCC28F Sociology of Aging**

An examination of the latter stages of the family life cycle, with special reference to the period following middle age, and including social and psychological dimensions of aging, changing roles, departure of children, the significance of retirement, problems of adjustment to aging, the place of the aged person in the modern family, and bereavement.

Prerequisite: SOCA01Y & one B-Level

course in Sociology

Session: Winter Evening

J.A. Lee

**SOCC29S Variant Family Forms**

A review and sociological analysis of non-traditional family forms and innovative life styles representing departures from conventional marriage and family patterns in the 1970's. Included will be "single-ness", "living together", androgyny as a life style, non-monogamous forms, voluntary childlessness, communes and co-operatives, and "swinging". Special reference to structural and functional dimensions, role changes, special problems and community response.

Prerequisite: SOCB12 (SOCB08F and

SOCB09S)

Session: Winter Day

A. Tuzlak



**SOCC35Y Social Change**

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.

Exclusion: (SOCB16Y)

Prerequisite: SOCA01 and one B-level full course equivalent in Sociology

Session: Winter Day

R. O'Toole

**SOCC37S Environment and Society**

This course links studies in the classical sociology of resources and territory (as in the works of Harold Innis, S.D. Clark, and the Chicago School), with modern topics in ecology and environmentalism. The course will include empirical research, and theoretical issues, in the relationship of various social systems to their natural environments.

Prerequisite: Two previous courses in sociology.

Session: Winter Day

J.A. Lee

**SOCC40F/S Supervised Independent Research**

Student research by field methods, survey analysis or library or archival research. Regular supervision of data collection and analysis, culminating in a research report. Prerequisite: Completion of at least fifteen full-course equivalents and permission of instructor.

Session: Summer Evening, Winter Day,

Winter Evening

Staff

**SOCD41F/S Supervised Independent Research**

Student research by field methods, survey analysis or library or archival research. Regular supervision of data collection and analysis, culminating in a research report. Exclusion: (SOCC41)

Prerequisite: SOCA01 and one B-level full course equivalent in Sociology

Session: Summer Evening, Winter Day, Winter Evening

Staff

**SOCD42F Advanced Seminar in Sociological Theory**

Special topics in contemporary social theory, designed as a final year course for students taking a Specialist Programme in Sociology.

Exclusion: (SOCC42F)

Prerequisites: SOCB01, SOCB03, and SOCB06

Session: Winter Day

W. W. Isajiw

**SOCD43S Advanced Seminar in Research Methods**

Special topics in methodologies used in contemporary sociological research. Designed as a final year course for students taking a Specialist Programme in Sociology.

Exclusion: (SOCC43S)

Prerequisites: SOCB01, SOCB03 and SOCB06

Session: Winter Day

S. Ungar

**Courses Not Offered in 1988-89**

**SOCB17S** Medical Sociology

**SOCB20Y** Ethnic and Race Relations

Prerequisite: One full-course equivalent in Sociology

**SOCB23Y** Population

Prerequisite: One full-course equivalent in Sociology or JCSB27

**SOCC06F/S** Applied Sociology

Prerequisite: SOCA01Y and one B-level course in Sociology

**SOCC11F/S** Sociology of Law and Law Enforcement

Prerequisite: SOCA01 and one B-level full course in Sociology

**SOCC19F/S** Sociology of Knowledge

Prerequisite: SOCB03

**SOCC27F/S** Social Class in Canadian Society

Prerequisite: SOCA01 and one B-level full course in Sociology

**SOCC30S** Criminal Behaviour

Prerequisite: SOCB18

**SOCC32Y** Sociology of Science

Exclusion: (SOCB11Y)

**SOCC33Y** Comparative Social Structure

Exclusion: (SOCB14Y)

Prerequisite: SOCA01 and one B-level full course in sociology

**SOCC34Y** Sociology of Mass Media and Communications

Exclusion: (SOCB15Y)

Prerequisite: SOCA01

**SOCC36F/S** Sociobiology

Exclusion: (SOCB19Y)

Prerequisite: Two full-course equivalents in Sociology

**SOCD44F** Advanced Topics in Sociology: I

Prerequisite: 15 courses in Sociology and permission of instructor

**SOCD45S** Advanced Topics in Sociology: II

Prerequisite: 15 courses in Sociology and permission of instructor

**Spanish**

**Discipline Representative:** R. Skyrme  
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, or the summer courses offered by the University of Windsor, in Madrid.

**Major Programme in Spanish Language**

**Supervisor:** U. Lesser-Sherman (284-3151)  
Seven full-course equivalents are required as follows:

**SPAA01Y**

Introductory Spanish (Note: Students who have Grade 13 Spanish must complete, in place of SPAA01 and A02, one and one-half full course equivalents from SPA, HUM or LIT courses which concentrate on Spanish language, culture, or literature, to be arranged with the Supervisor.)

**SPAA02H**

Language Practice I

**SPAB01Y**

Intermediate Spanish

**SPAB02H**

Language Practice II

**SPAB04F**

Phonetics

**SPAB12S**

History of the Spanish Language I

**SPAC01Y**

Advanced Spanish

**HUMC09F**

The Civilization of Spain I

**HUMC13S**

The Civilization of Spain II

or

**HUMC14Y**

Topics in Latin American Culture and Literature

**SPAC21F**

Stylistics and Translation

**SPAC22S**

History of the Spanish Language II

Language requirements will be waived by permission of the Supervisor in the case of students judged to have highly advanced knowledge of Spanish. Equivalent courses will be substituted in consultation with the Supervisor.

**SPAA01Y Introductory Spanish**

A course in basic grammar and syntax, with instruction in spoken and written Spanish.

Stress is placed on oral practice and conversation. Regular class attendance and participation are essential. Three hours per week: 1 hour grammar; 2 hours oral practice.

Exclusion: Grade 13 Spanish

Corequisite: SPAA02

Session: Winter Day

K. Godde and Staff

**SPAA02H Language Practice I**

A companion course to SPAA01Y.

Through the gradual introduction of reading material, composition, and sketches, this course forms an essential complement to the predominantly oral approach of SPAA01Y. Two hours per week in tutorial format.

Exclusion: Grade 13 Spanish

Corequisite: SPAA01

Session: Winter Day

K. Godde and Staff

**SPAB01Y Intermediate Spanish**

A continuation of SPAA01Y.

The same format and methodology will be followed at a more advanced level. Three hours per week: one hour grammar; two hours oral practice.

Prerequisites: Grade 13 Spanish or SPAA01 and SPAA02

Corequisite: SPAB02

Session: Winter Day

K. Godde

**SPAB02H Language Practice II**

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: Grade 13 Spanish or SPAA01 and SPAA02

Corequisite: SPAB01

Session: Winter Day

K. Godde

**SPAB04F Phonetics**

Articulatory phonetics; Spanish speech sounds; intensive practice in their production and transcription.

The objectives of the course are to develop good pronunciation of Castilian (with attention to variations in other dialects) and to provide an introduction to further linguistic work. The weekly lecture concentrates on the description and distribution of Castilian speech sounds and emphasizes basic intonation patterns. In the tutorial hour students practise exercises in articulation, transcription, and dictation. There is one laboratory hour per week of intensive oral practice.

Corequisite: SPAA01

Session: Winter Day

R. Skyrme

**SPAB12S History of the Spanish Language I**

The languages of Spain, from pre-Roman times to the Medieval period.

The objective of the course is to develop a basic understanding of how the Spanish language evolved from Latin, within the context of other Romance languages. A survey of the pre-Roman, Visigothic, and Moorish civilizations in the Peninsula will be followed by an analysis of the non-Classical texts (inscriptions, glosses, etc.). The main segment of the course deals with the evolution of the sound- and form-systems of Latin into Peninsular Romance, focusing on the growth of the Castilian dialect. Class participation and discussion are encouraged.

Prerequisite: SPAB04

Session: Winter Day

R. Skyrme

**SPAC01Y Advanced Spanish**

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

**SPAD01F-D05F  
D06S-D10S****D11Y-15Y Supervised Reading**

Students who wish to enter the Spanish Supervised Reading programme should enrol in any of the above courses (Y, F or S as appropriate). They should then contact a particular instructor in the discipline to discuss a proposed topic. Students should have sufficient background in the area they want to study more closely, and they should provide a rationale for choosing a specific topic. They will be expected to read much of the material on their own, and to meet with their tutor once a week. The exact arrangements will depend on the nature of the texts and the level of ability of the students.

Specific topics in Peninsular Spanish and Latin American literature, linguistics and culture.

Exclusions: (SPAC02-C06), (C07-C10), (C11-C15)

Prerequisite: SPAB01

Session: Winter Day

K. Godde, R. Skyrme

See also the following courses offered under Humanities and in the Literature Programme:

HUMC09F The Civilization of Spain I  
HUMC13S The Civilization of Spain II  
HUMC14Y Topics in Latin American Culture and Literature

LITB22Y The Modernist Adventure  
LITB32S The Spanish Civil War: Fact to Fiction

**Courses Not Offered in 1988-89**

SPAC21F Stylistics and Translation  
Prerequisite: SPAB01  
Exclusion: SPAB21

SPAC22S History of the Spanish Language II  
Prerequisite: SPAB12  
Exclusion: SPAB22

**First Year**

MATA26Y or A27Y or A55Y

MATA04Y\* (MATA40, A45)

CSCA58F

CSCA68S

**Second Year**

STAB52F

STAB57S

MATB41F, MATB42S

or

MATB05Y (MATB50, B55)

**Third Year**

STAC67F or STAC62F

STAC42S or STAC52S

In addition four half courses are required. Eligible courses are any C-level Statistics courses or Statistic courses on the St. George Campus numbered 300 or higher or CSCC54F.\*\*

\* MATA04Y (MATA40, A45) may be taken in the second year.

\*\* In fulfilling the optional course requirements it is preferable that students consult with the supervisor of studies before making their selections.

**STAB52F Probability and Statistics I**

An introduction to probability theory. The probability model. Presentations of probability. Marginal probability. Statistical independence. Conditional probability. Mean value. Weak Law of Large Numbers and the Central Limit Theorem. Theory and applications.

Exclusion: ECOB11

Prerequisite: MATA26, MATA27 or

MATA55

Session: Winter Day

**STAB57S Probability and Statistics II**

An introduction to statistics. The statistical model. Large sample methods. Distribution-free methods. The likelihood function. Estimation. Testing hypotheses. Linear models. Design of experiments. Theory and applications.

Exclusion: PSYB07, ECOB11

Prerequisite: STAB52

Session: Winter Day

**Statistics**

*Staff Member responsible for curriculum:* M. Evans (284-3360)

Probability and statistics have developed over a period of several hundred years as attempts to quantify uncertainty. With its origins in modelling games of chance, probability theory has become a sophisticated mathematical discipline with applications in such fields as demography, genetics and physics.

Statistics is concerned with the proper collection and analysis of data, both to reduce uncertainty and to provide for its assessment via probability. Applications range from pre-election polling to the design and analysis of experiments to determine the relative efficacies of different vaccines.

STAB52F and STAB57S serve as an introduction to the discipline. These courses are also part of the Mathematics Specialist and Major Programmes and the Computer Science Specialist Programme. The C-Level Courses build upon the introductory material to provide a deeper understanding of statistical methodology and of its practical implementation.

**Major Programme In Statistics**

*Supervisor:* M. Evans (284-3360)

The major Programme in Statistics is designed for students who want a good basic understanding of statistical theory and methodology. The emphasis is on providing students with the opportunity to learn the skills most commonly required in statistical applications.

**STAC52S Experimental Design**

The statistical aspects of collecting and analyzing experimental data. Complete randomization and restricted randomization schemes.

Exclusion: PSYC08 (PSYB08S)

Prerequisite: STAB57

**STAC62F Stochastic Processes**

This course continues the development of probability theory begun in STAB52F.

Topics covered include Poisson processes, Gaussian processes, Markov processes, renewal theory, queuing theory, martingales and stochastic differential equations.

Prerequisite: STAB52F

**Courses Not Offered in 1988-89**

**STAC42S** Multivariate Analysis

**STAC67F** Regression Analysis

**Women's Studies****Major Programme in Women's Studies**

Supervisor: P.J. Mills (284-3288)

The Major Programme in Women's Studies provides an interdisciplinary perspective on women's roles, women's work, and women's contributions past and present to society. It is designed to acquaint students with the substantial body of scholarship on women and the critical concepts and methodologies used to examine women in the major academic disciplines. The interdisciplinary nature of the Programme is supported through the course offerings in Humanities, Life Sciences and Social Sciences listed below. To obtain a Major in Women's Studies students are required to take six full-course equivalents and choose a concentration of study in Humanities or Social Sciences. In many cases students will be able to combine a major in Women's Studies with a Major in one of the College's disciplines. Students are encouraged to consider this option if preparing for a career in research, teaching, administration or social work. These careers involve consideration of women and women's issues and a Major in Women's Studies would be a definite asset. The Women's Studies Programme offers two core courses supervised by Women's Studies Faculty, a wide variety of Programme courses, and a number of courses that can be taken with the approval of the Women's Studies Supervisor and the course instructor. Students are urged to

consult with the Supervisor of Studies regarding course selections and to consult the calendar for the availability of courses and the necessary course prerequisites.

**The Major Programme in Women's Studies with an emphasis in Humanities**

Students must select six full-course equivalents as follows:

- 1 JHSA01Y 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 JHSD01H Senior Project in Women's Studies

**The Major Programme in Women's Studies with an emphasis in Social Sciences**

Students must select six full-course equivalents as follows:

- 1 JHSA01Y 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 JHSD01H Senior Project in Women's Studies

**List A: Humanities**

- ENGD32F/S George Eliot  
 ENGD44F Virginia Woolf  
 ENGD71F/S\* Women Poets  
 ENGD72F\* 19th Century Women Writers  
 FREB80F\* Representations of Women in French Literature  
 FREB81F/S\* Women's Consciousness in French Literature  
 HISC10Y\* The Sexes since 1350  
 HUMB26Y Women in the Major Religions  
 HUMB60F/S Women Artists in Society  
 HUMC61F/S Women in Ancient Greece  
 LINC28F/S\* Language and the Sexes  
 LITB42Y\* Women and Literature  
 LITB45Y\* Literary Considerations and Feminism  
 PHLB05F/S Social Issues  
 PHLC85F/S Seminar in Philosophy: Feminism

**List B: Social Sciences**

- ANTB15Y\* Biological Anthropology  
 ANTC11Y\* Anthropology of Women  
 ANTB20Y\* Introduction to Social Organization

- ANTC40Y\* Anthropological Demography  
 ANTC54Y Anthropology of Sex  
 ANTC55Y Women in Development  
 ANTD12F\* Social Behaviour of Non-Human Primates  
 GGRC06S Gender and the City  
 PSYB10H/S\* Introduction to Social Psychology  
 PSYD22F/S\* Socialization Processes  
 PSYD18F/S\* Psychology of Gender  
 SOCB12Y Sociology of the Family  
 SOCC10F/S\* Sex, Self and Society  
 SOCC24F/S\* Changing Family Life in Canada  
 SOCC28F/S\* Sociology of Aging  
 SOCC29F/S\* Variant Family Forms

**Optional Courses** (with permission of Supervisor and course instructor)

- ANTC48Y Childhood in Contemporary Culture  
 COMC22S Personnel Administration

Supervised reading courses focused on women may be included.

\* Students should check these courses for prerequisites.

**JHSA01Y Introduction to Women's Studies**

This is an interdisciplinary course which brings the perspectives of philosophy, psychology, political theory, sociology, anthropology, history, language, literature and the arts to the study of the position of women in western civilization.

The goal 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; contemporary feminist issues including reproductive freedom, sexual politics, and the relationship between a politics of sisterhood and the dynamics of mothering.

Session: Winter Day

Co-ordinator: P.J. Mills

**JHSD01H Senior Project in Women's Studies**

This course is designed for students completing the Major Programme in Women's Studies and is normally taken after completion of ten full course equivalents. Women's Studies students choose a topic of special interest to them and undertake an in-depth investigation of the topic under the supervision of a Women's Studies Faculty member. Arrangements with the supervising faculty member must be made by the student before the end of the spring pre-registration period.

Students are strongly urged to choose an area in which they have done some concentrated study and, where possible, to build upon work taken in previous courses. A substantial essay, research project, or major presentation on the approved topic will be given to the supervising faculty member and a second evaluator will be appointed.

Session: Winter Day

## Stratford Summer Seminars

Every August, in Stratford, Ontario, the Division of Humanities organizes week-long Shakespeare Seminars. These seminars accommodate 80 members in each week, who are of all ages and who come from all over Canada and the United States. The seminars do not carry degree credit, but are designed as adjuncts to undergraduate and graduate academic study of Drama and Theatre.

Each week members are provided with tickets to seven productions in Stratford, participate in house seminars which provide an academic background to the plays, and attend seminars conducted by the leading actors, directors and designers of the Stratford Festival. In 1987 these seminars counted among their guests such people as William Needles, Edward Atienza and Robin Phillips.

The seminar program maintains a large mailing list by which prospective members are given full details of the program for each summer. Students at Scarborough College are invited to contact either Professor Andrew Patenall or Mrs. Lois Pickup (284-3185), who will be pleased to provide them with further details of the program. For inclusion on the mailing list students should contact Mrs. Pickup (H525A), who will provide them with current newsletters, and ensure that they receive future newsletters. Full-time students to the age of 25 are provided with generous bursaries to defray the cost of theatre tickets.

The Seminar Program also organizes theatre outings during the academic year, and occasionally brings distinguished actors into the college for seminars and master classes during the term.

In 1988, two seminars will be conducted in Stratford in the weeks of 8 August and 15 August.

Following its successful inception in 1987, a second London Theatre Seminar for 40 members is being conducted in Reading Week (13-21 February, 1988). It is anticipated that a third seminar in London will be conducted in February 1989. Return airfare, transportation, hotel and breakfast, six theatre tickets, tours to such places as Bristol or Stratford-upon-Avon, and seminars are included in the cost of each session.

## Telephone Directory: frequently called numbers

<b>Associate Dean</b>	284-3124
<b>Athletic Association (S.C.A.A.)</b>	284-3395
<b>Bookstore</b>	284-3251
<b>Cafeteria</b>	284-3110
<b>Career Counselling &amp; Placement</b>	284-3292
<b>Cashier's Office</b>	284-3103
<b>Community Relations Office (Events enquiries)</b>	284-3243
<b>Computer Centre</b>	284-3122
<b>Counselling Services</b>	284-3292
<b>Fees Office</b>	978-2142
<b>Health Service</b>	284-3253
<b>Humanities Division</b>	
Classics, History, Philosophy	284-3185
Drama, Music	284-3126
Fine Art, English,	
Humanities, Linguistics	284-3146
Languages	284-3151
Chair's Office	284-3304
<b>Library</b>	
Inquiry, Circulation Desk	284-3246
Reference Desk	284-3183
<b>Life Sciences Division</b>	
Biological Sciences,	
Psychology	284-3237
Chair's Office	284-3291
<b>Physical Sciences Division</b>	
R-Wing Office	284-3342
S-Wing Office	284-3227
Chair's Office	284-3289

<b>Physical Plant Services</b> (Parking enquiries)	284-3203
<b>Post Office</b>	284-3271
<b>Principal's Office</b>	284-3111
<b>Pub</b>	284-3177
<b>Recreation Centre</b> Counter (reservations, etc.)	284-3392
Office (athletic programme information)	284-3393
<b>Registrar's Office</b> Records (registration, transcripts, etc.)	284-3127
Admissions/Awards Officer	284-3359
Timetable, examinations	284-3300
Registrar	284-3266
<b>Residences</b> Office	284-3174
Dean of Students in Residence	284-3210
<b>Security Desk</b> (including lost & found)	284-3398
<b>Social Sciences Division</b> Receptionist	284-3137
Chair's Office	284-3149
<b>Student Councils</b> Scarborough College	
Student Council (S.C.S.C.)	284-3135
U of T SAC Desk	284-3219
<b>Writing Laboratory</b>	284-3369
APUS	978-3993

Scarborough Campus  
University of Toronto  
1265 Military Trail  
Scarborough, Ontario M1C 1A4

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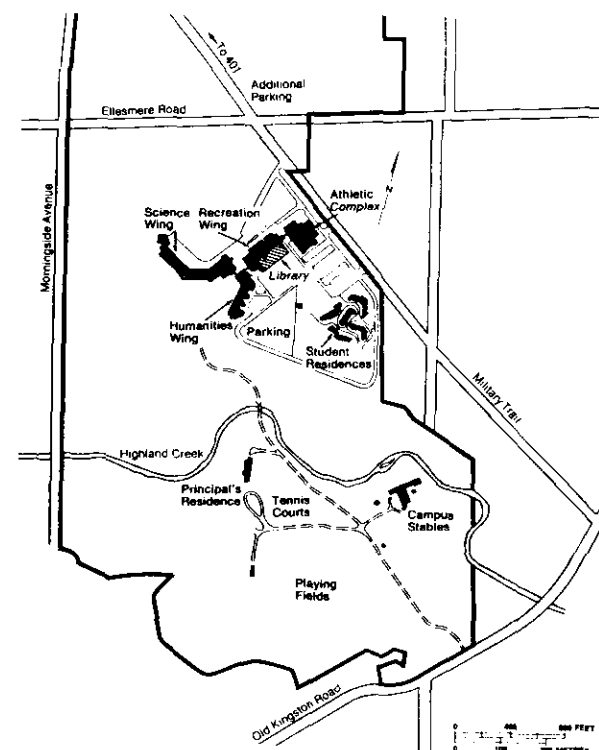
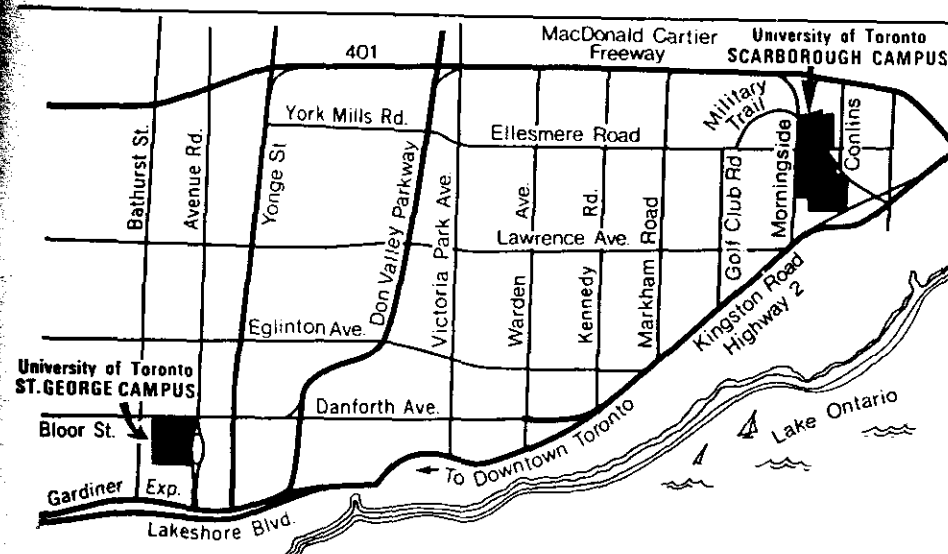
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## CAMPUS LOCATION IN METRO TORONTO



**Scarborough  
College  
Campus**



# Calendars

1988

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

May	June	July	August
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September	October	November	December
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1989

January	February	March	April
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"Time and Space" 1987, lithograph on satin, 63cm × 53cm  
by Clarissa M. Lewis, senior student in