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University of
Toronto

Scarborough College

1986 – 1987
Scarborough Calendar

Calendar 1986/87

University of Toronto

Scarborough College

Calendar

1986/87

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Academic Calendar/Summer Session 1986

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 9	Last day to register for Y, A, F and H courses.
May 12	Classes for Y, A, F and H courses begin.
May 14	English Proficiency Test.
May 15	English Proficiency Test.
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	Last day to add Y, A, F or H courses. (There will be no "day of grace".)
May 19	Victoria Day. University closed.
June 6	Last day to withdraw without academic penalty from A or F courses. (There will be no "day of grace".)
June 20	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	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	Last day to register for B and S courses.
July 1	Canada Day. University closed.
July 2	Classes for B and S courses begin.
July 8	Last day to add B or S courses. (There will be no "day of grace".)
July 15	Last day to request conferment of degree at the Fall Convocation.
July 18	Last day to withdraw without academic penalty from Y or H courses. (There will be no "day of grace".)
July 25	Last day to withdraw without academic penalty from B or S courses. (There will be no "day of grace").
August 4	Civic holiday. University closed.
August 8	Last day of classes for Y, B, H and S courses on the St. George and Erindale campuses.
August 11-August 15	Final examinations in Y, B, H and S courses on the St. George and Erindale campuses.
August 15	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.

Academic Calendar/Winter Session 1986-87

1986

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.
September 1	Labour Day. University closed.
September 4	English Proficiency Test.
September 5	English Proficiency Test.
September 8	Classes for Y, A, F and H courses begin.
September 19	Last day to add Y, A, F or H courses. (There will be no "day of grace".)
October 13	Thanksgiving Day. University closed.
October 31	Last day to withdraw without academic penalty from F or A courses. (There will be no "day of grace".)
November 15	Christmas Examination Schedule published.
December 5	Last day of classes in the first term. Last day for submission of term assignments in F and A courses.
December 8-December 19	Term test and final examination period.

1987

January 5	Classes for B and S courses begin.
January 14	English Proficiency Test.
January 15	English Proficiency Test.
January 16	Last day to add B or S courses. (There will be no "day of grace".)
February 13	Last day to withdraw without academic penalty from Y or H courses. (There will be no "day of grace".)
February 15	Last day to request conferment of degree at the June Convocation.
February 16-February 20	Reading Week – no classes held.
February 27	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.
April 10	Last day of classes; no tests or examinations may be held until the beginning of the examination period. Last day for submission of term assignments for Y, H, B or S courses.
April 17	Good Friday. University closed.
April 16-May 8	Final examination period. **No examinations** held on April 17, 20 and 21 because of religious holidays.
June 8	Spring Convocations begin.

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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*

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*

E.G. Andrew, B.A. (British Columbia), Ph.D. (London), *Associate 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. Esberey, B.Ed., B.A. (West. Australia), B.Sc. (London), M.A., Ph.D. (Toronto), *Associate Professor*

V. Falkenheim, B.A. (Princeton), M.A., Ph.D. (Columbia), *Associate Professor*

A. Rubinoff, A.B. (Allegheny), M.A., Ph.D. (Chicago), *Associate Professor*

S. Solomon, B.A. (McGill), M.A., Ph.D. (Columbia), *Associate 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. Drakich, B.A., M.A. (Windsor), Ph.D. (York, Canada), *Assistant Professor*

J. Tanner, B.Sc. (hons.) (University of London) PGCE, (Leiester 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

Ontario Grade 13

Grade 13 academic subjects have been arranged into the following groups for the purposes of admission:
Group A: English/anglais (see English facility requirement page 13)
Group B: Languages other than English
Group C: Mathematics
Group D: Sciences
Group E: Other Humanities and Social Sciences
Group F: Other subjects – Accounting and Family Studies

Regulations concerning Groups A through E:
The applicant will be expected to present at least six Grade 13 credits distributed as follows:
1 one credit from Group A;
2 additional Grade 13 credits chosen from at least two of B through E, and including at least one credit from either Group B or Group C. Students wishing to qualify under Group C must present at least one of Algebra or Calculus or Relations and Functions.
3 Applicants may not present more than:
- three credits in Mathematics
- two credits in any other subject

Provided the regulations concerning Groups A through E are met, a Grade 13 student may present one credit from Group F.
The following 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
Students should choose Grade 13 subjects which will fulfil the prerequisites for university courses they intend to take. Such prerequisites are listed after the description of each course later in the calendar. The average required for admission varies from year to year, but will be higher than 60%. In addition, a student's overall academic record may be taken into consideration. Applications will be considered from candidates whose qualifications do not meet the normal requirements, but such candidates will have to offer written evidence of exceptional ability, or of extenuating circumstances.

Note: Applicants who matriculated prior to 1982 are not required to meet the subject distribution outlined above.

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 – 1st year Memorial University
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

Other Canadian universities

Students who have completed work at other universities 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.

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.

Non – matriculants

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 Grade 13 subjects, one of which must be English.
Students should consult with the Office of Admissions before enroling in any of these courses.

*Pre-university courses are offered by Woodsworth College of the University of Toronto in English and History 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.

English facility requirement

All applicants to Scarborough College whose first language is not English and who have studied in an English language school system for four years or less must pass a recognized test of facility in English, i.e. the University of Michigan English Language Test, TOEFL administered by the Educational Testing Service, or the British Council English Language Testing Examination, whether or not they complete a Grade 13 English course. If Grade 13 English is not completed, the applicant is expected to present six Grade 13 credits, distributed over at least three subject groups from B to E, in addition to passing the test.

Application procedures

Current Ontario Grade 13 students

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

All applicants, other than current Ontario Grade 13 students, should request application forms from the Office of Admissions, giving full details of their educational background and standing.

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

2

Awards

Unless specified the following awards do not require an application; all students with excellent academic standing are considered. 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 S302).

Admission awards

A substantial number of admission scholarships are awarded each year on the basis of excellent academic standing as demonstrated by Grade 13 marks, Grade 12 marks, information in the student profile and other information submitted by the secondary schools. Grade 13 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 Grade 13 student 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 on the basis of exceptional academic achievement in Grade 13. The scholarships are awarded in honour of Professor Emeritus F.A. Urquhart, a distinguished entomologist.

University of Toronto, Scarborough College Admission Scholarships
Approximately 55 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.

In-course awards

The Hudson's Bay Company Scholarship
Awarded to the student who has demonstrated out-standing 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
Two awards are made to students who have at **least a B average or better**
and have contributed to the academic, social or cultural life of the College. One scholarship is awarded to an Arts student and one to a Science student. Students must have three nominators for this award; one must be a member of the faculty; one must be a member of the student body.

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 or C level course in Economics.

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.

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.

Award of Academic Merit in Neurosciences
Awarded to the student in the Specialist Programme in Neurosciences who has the highest aggregate standing at the end of the third year of study in the required courses of the programme.

Helen Evans Reid M.D. Prize for Excellence in Scientific Communication
Awarded to the student in the Neurosciences Specialist or Major Programme whose paper or project in PSYC90/C93/C98 or BIOC01/C02 is deemed to best exemplify excellence in the communication of scientific information.

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

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 and C 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 and C 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, BIOB48F, JBCB35Y, JBCB36H.

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 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 taken in a given year, provided that the average is at least 3.3 (B+).

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, JCEB72F/73S.

North Scarborough Rotary Club Scholarship in Commerce
Awarded to a student entering second, third or fourth year in a Commerce programme who (a) has achieved a cumulative grade point average of at least 3.3 (b) is a Canadian citizen or permanent resident who has graduated from a Scarborough secondary school, and (c) has demonstrated financial need. Obtain an application in Room S302 in April.

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

The Rotary Club of Scarborough International Service Scholarships
Two scholarships awarded to students enrolled in the Co-operative Programme in International Development Studies after completion of the work placement, on the basis of academic performance (a minimum B average) and performance during the work term.

The Rotary Club of Scarborough Charitable Foundation Scholarship for the Co-operative Programme in Administration
Awarded to a student enrolled in the programme who has demonstrated excellent academic achievement and has contributed to the social and cultural activities of Scarborough College and/or the co-operative programme.

The Rotary Club of Scarborough Charitable Foundation Scholarship for the Co-operative Programme in Arts Administration
Awarded to a student enrolled in the programme who has demonstrated excellent academic achievement and has contributed to the social and cultural activities of Scarborough College and/or the co-operative programme.

Andrew Tsang Memorial Scholarship in Sino-Canadian Studies
Awarded to the undergraduate, either full-time or part-time, 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 and full details on both APUS awards are available in the Student Services Office.

Other awards are available.
Students should check the Undergraduate Awards binder in the Student Services Office.

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.

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 for which a mark is entered on the transcript.

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

Graduation Prize in Biology
Awarded to the outstanding graduating student who has completed BIOC01Y and/or BIOC02Y and has demonstrated excellence in research and in the presentation of findings at a Research Day in Life Sciences.

Digital Equipment of Canada Limited Award of Merit
Awarded to the most outstanding student graduating either in Computer Science (Faculty of Arts and Science, Scarborough College) or in Engineering Science with Computer Science Option (Faculty of Applied Science and Engineering).

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 Student 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 Student 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 from the Student Services Office 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. Full information may be obtained from the Student Services Office.

*pending approval of College Council

3 Academic Regulations

Important Information

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. Counsellors in the Student 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 1986-87 academic year, including the 1986 Summer Session (May to August) and the 1986-87 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 1985 Summer Session or the 1985-86 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.
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; 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 1986-87 will be announced in the Registration Instructions. As a guideline, the following fees were charged for 1985-86; fees are expected to increase by about 5% for 1986-87. Full-time students taking the usual load of five courses incurred fees charges of about $1340 for Canadian citizens or permanent residents or about $4710 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
- academic incidental 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, 586-8060 (also TDD), but the Co-ordinator can arrange to meet with members of the University at the Scarborough campus, if requested to do so.

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; PHLC87S "PHL" indicates a course in Philosophy. The first letter of the course code of a course offered jointly by two disciplines is "J" followed by the first letter of the two disciplines concerned. For example:
JCEB73S 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.
A level courses are Introductory courses
B level courses are Intermediate courses
C level courses are Advanced courses
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	Sept. – May	May – August
F	Half Course	Sept. – Dec.	May – June
S	Half Course	Jan. – May	July – August
H	Half Course	Sept. – May	May – August
A	Full Course	Sept. – Dec.	May – June
B	Full Course	Jan. – May	July – August

Hence, ANTA01Y is an introductory course in Anthropology taught throughout the session and worth a full course credit. PHLC87S is an advanced course in Philosophy taught only in the second term and worth one-half a course credit.
NOTE: Courses marked F/S will be offered in either the first or second term.

Exclusions, Prerequisites and Corequisites

1 *Exclusions*
A student may not register in a course which lists, as an exclusion, one which the student is also taking or has already obtained standing in.
2 *Prerequisites*
A student must have standing in 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. Where the pre-requisite of a course is permission of its instructor, students are advised to obtain that permission before the end of classes in April of the preceding academic year.
3 *Corequisites*
Students must either already have standing in a corequisite course, or must enrol in the corequisite course 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 standing in 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.

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 and/or C-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, Physics, Psychology and Statistics.[5] (f)
2 The following courses in Anthropology: ANTB11, ANTB12, ANTB14, ANTB15, ANTB22, (ANTB25)[6] (f), ANTB26, (ANTB33), (ANTB36), ANTB39, ANTB40, ANTB43, ANTB44, ANTB47, ANTB48, ANTB52, ANTB53, (ANTC08), ANTC12, ANTC27, ANTC28, ANTC29, ANTC36, ANTC44, ANTC45, ANTC46. In addition, ANTC03, ANTC04, ANTC13 and ANTC14 may be used to fulfil the B.Sc. requirements for students researching in appropriate scientific areas of Anthropology.
3 The following courses in Geography: (GGRB02), GGRB03, (GGRB07), GGRB15, (GGRB18), GGRB19, (GGRB21), GGRB24, GGRB25, GGRB29, GGRB30, GGRB31, GGRC05, (GGRC15), (GGRC23), GGRC24, GGRC25, GGRC28, GGRC30, GGRC32, GGRC35, GGRC36, GGRC37. In addition, GGRC01 may be used to fulfil the B.Sc. requirements for students researching in appropriate scientific areas of Geography.
4 The following joint courses: JBC, JLP, JMC (JMP), JPA and JPM courses.
5 The following courses in Philosophy: PHLB50, PHLC51.
6 (QUAB02) and QUAC01.
7 Completion of the required courses in a Specialist or Major programme in Science disciplines may not, on their own, yield sufficient B and C level Science credits to meet the requirements of a Bachelor of Science degree since nine credits are required for a four year degree and six credits are required for a three year degree.

NOTES:

1 A course. The word course is used in two ways. In reference to a single course, (such as "standing in a course" or "the last day to withdraw from a course") the word refers to a full course or half course. In reference to a given number of courses (such as the requirement of passing fifteen courses for a three-year degree), the word refers to a number of full courses, or the equivalent in full and half courses.
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 (e.g. JBCB35 – a joint Biology and Chemistry course in Biochemistry), 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, ANTB43, GGRB31, PSYB07 and PSYB08 may be counted as science courses; ECOB11, ECOB12 and SOCB06 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 three Specialist Co-operative Programmes (see p.96).
(A list of Specialist Programmes may be found on p.51.)

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 p.52.)

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 p.52.)

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 Student 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 must discuss the proposed transfer with the supervisor in the new Programme, and obtain the supervisor's approval.
Students must submit to the Registrar's Office, a Registration change form, signed by the supervisor of the new Programme.

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 inclusion of their name on the graduation list.
When Programme requirements are changed, students may elect to satisfy the requirements in effect when the student first registered in the Programme 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 removed from the student's transcript and will be replaced by certification of the Specialist Programme. (The requirements of the Specialist Programme and the corresponding Major or College Programme have been designed to facilitate changes between the Programmes.)
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 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 requirements

1 All newly-admitted degree students are required to write an English Proficiency Test at the time of their first registration at the College. Those who fail on the first attempt will be given opportunities to re-write the test for a fee of $20 or to meet the requirement through successful completion of a non-credit course in English Writing Skills. Students who do not meet the requirement within twenty-four months of their first registration at the College will be refused further registration until such time as the requirement has been satisfied.
2 For degree students who transfer from the Faculty of Arts and Science, the twenty-four months within which the English Proficiency requirement must be satisfied begins at the time of their first registration in the University of Toronto's Faculty of Arts and Science. (Students are exempt from the English proficiency requirement if they were registered at the College or the University of Toronto's Faculty of Arts and Science in a session earlier than the 1980 Summer Session.)

Standing in a course

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

Grade	Grade Point Value	Percentage Equivalent	Definition
A+	4.3	90-100	
A	4.0	85-89	Excellent
A–	3.7	80-84	
B+	3.3	77-79	
B	3.0	73-76	Good
B–	2.7	70-72	
C–	2.3	67-69	
C	2.0	63-66	Adequate
C–	1.7	60-62	
D+	1.3	57-59	
D	1.0	53-56	Marginal
D–	0.7	50-52	
CR	No value		Credit in a Credit-No-credit course
E	0.3	35-49	Inadequate
F	0.0	0-34	Wholly Inadequate
NCR	0.0		No 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- 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 B– or better. Where a student is assigned Aegrotat standing, the course is counted as one of the courses at C– 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 22). 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 or in the determination of academic status.

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 4) 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 Suspended or refused further registration
Students who are on probation shall be liable for suspension or refusal of further registration if:
- they have attempted at least two full courses (or equivalent) since most recently having been placed on probation; and if:
- they still have a cumulative GPA of less than 1.50.

a A probationary GPA shall be calculated for such students, being the GPA of all courses taken since the student was most recently placed on probation.

b Where the probationary GPA is 2.00 or better, the student may continue on probation.

c Where the probationary GPA is less than 2.00, the student will incur suspension or refusal of further registration.

- 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 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

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. 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, Student 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 not take more than three courses on other campuses in any term of a given Summer Session (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.

Study at other universities: Letters of permission

Other than Arts and Science credits

Students are not permitted to register for courses in Faculties other than Arts and Science for credit towards their Arts and Science degrees 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 Admissions Office of the Faculty of Arts and Science to establish how they will be affected by transferring from one faculty of Arts and Science to another.

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/Liaison Officer, on a form available from the Student Services Office. *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 $20.00 per Letter of Permission will be charged effective in the 1986 Summer Session.

Minimum grade requirement

To receive credit for a course taken at another university *on a "Letter of permission"* the stu-dent must earn at least one full grade higher than the minimum passing grade (i.e. a grade of C– 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.

Study at other universities: Study elsewhere year

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 and/or C-level courses with a grade of at least C- 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 and/or C-level courses* with a grade of at least C- 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 letter of Permission	III Year	5	5	4	3	2	1	0	0	0	0
	IV Year	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 senior level course on a Letter of Permission is permitted.

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.

Fees and aid

Students taking courses for transfer credit (as in 1 above) pay the appropriate fees at the host university and a fee of $175.00 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 $35.00 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.)

Degrees

Application

Interested students may obtain an application for a Study Elsewhere year from the Admissions/ Liaison Officer. If a student intends to count courses in the Study Elsewhere Programme towards programme requirements at the College, approval of his or her Programme Supervisor must be obtained in advance. 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/Liaison Officer by April 1, for studies beginning in the Summer Session, and July 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.
6 Students are cautioned that they must also satisfy the requirements of the programme of host University and that these may be more stringent in terms of grade point average or courses completed.

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 15 July 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. (Diplomas indicate only completion of a "Bachelor of Arts" or "Bachelor of Science" degree. No distinction is made on diplomas between three- and four-year degrees.)
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.
Degrees are conferred at university convocations, held twice annually: the Spring Convocation held in June and the Fall Convocation held late in November. Students who have submitted the degree request form will be mailed complete information about the time and arrangements for the Convocation.

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 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 informa-tion and will be given freely to enquirers on request:
- whether a student is currently 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 978-4909).

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 (particularly the secondary school principal's recommendation); and medical information.

Students who wish to inspect their academic records (as provided in (a) above) must make their request in writing to the Assistant Registrar. The Assistant 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 Assistant Registrar (or another designated member of the Registrar's Office staff).

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 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.
2 A student may effect withdrawal from a course by completing appropriately 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 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.
4 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.
5 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 Student 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 including visiting students, i.e. students studying at the College on a letter of permission from another institution; 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 supercede the normal regulations governing academic status.

Grading practices policy

1 As early as possible in each course (and no later than the last date to add that course) the instructor will make available to the class the methods by which student performance will be evaluated and the relative weight of these methods. 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 two-thirds of the students registered in the course.

2 The final grade in a course will normally be based on more than one evaluation element, i.e. on more than one examination, essay, or other similar piece of work. Normally, no one evaluation element will be worth more than two-thirds of the final grade. Exempt from this requirement are advanced seminar courses or supervised research or supervised reading courses; in such courses, more than two-thirds of the final grade may be based on a thesis, a research essay or project, or a comprehensive examination.

Normally at least one-third of the final grade in a course will be based on supervised examinations.

- 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 and C-level courses, at least one-third of the final grade will normally be based upon a formal examination(s) (as in (a) above). 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 Chairman.
- The following courses may be exempted from the requirement for examinations, upon request of the instructor and approval of the appropriate Divisional Chairman: advanced seminar courses; supervised reading or research courses; and per-formance courses such as musical performance or art studio courses.

3 Instructors will make available to students commentary on assessed term work and will make available time for discussion of such term work. Grades, as an expression of the instructor's best judgement of each student's overall performance in a course, will not be determined by a system of quotas.

4 Grades submitted by the instructor are subject to review by the marks review committee of the appropriate division and by the Scarborough College Marks Review Sub-committee. For procedures for appeals concerning grades and grading practices, see below "Procedures for requesting special consideration, petitions, and appeals".

5 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.

Procedures for requesting special consideration, petitions and appeals

Petitions for exceptions to the academic regulations

1 Students may request that an exception to an academic regulation be made in their case. Such a request takes the form of a petition to the Scarborough College Sub-committee on Standing.

2 To enter a petition, the student prepares a written statement:

- stating clearly the special consideration requested;
- stating clearly the grounds upon which special consideration is requested, that is, the reason(s) why the student believes an exception to the rules is appropriate in this particular case; and
- appending documents to evidence special circumstances: medical certificates, etc.

3 Students who wish to submit medical certificates in support of their petitions must ask their physician:

- to verify that the student was examined at the time of the illness;
- to state briefly the nature of the illness;
- to indicate the duration of the debility caused by the illness; and
- to indicate the physician's professional opinion as to whether the student should receive special consideration with his or her academic work on medical grounds.

4 Students may seek advice from counsellors in Student Services before entering a petition.

5 Students are notified in writing of the Sub-committee's decision on their petition.

Requests for special consideration in a course

Term work

1 Students who are unable to write a term examination, or whose performance is adversely affected by illness or other extenuating circumstances, or who are unable (for these reasons) to submit term assignments by instructors' deadlines, must (except as noted below) speak with their instructor as soon as possible to request special consideration. Students who wish to appeal the decision of their instructor with respect to a request for special consideration, must, as soon as possible, speak with or write to the Chairman 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 be granted special consideration (see 5 below.).
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.
5 Where petitions are granted, students are normally permitted to write make-up examinations in the next appropriate 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.

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

Final examinations

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

Petitions concerning grading practices in a course

During the term
1 Students who believe an instructor has violated a rule of the College's grading practices during the term 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 Chairman 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.

After the end of term
Where students believe an instructor has violated a rule of the College's grading practices, and this alleged violation comes to light only after the end of term, students may submit a petition to the Sub-committee on Standing.

Academic appeals: the Scarborough College Sub-committee on Academic Appeals

Students may appeal a decision of the Sub-committee on Standing to the Scarborough College 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 by the Sub-committee on Standing. 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 Scarborough College Sub-committee on Academic Appeals to the University of Toronto Academic Appeals Board. Such appeals must be commenced no later than six months after the decision (to be appealed) has been communicated in writing to the student by the Sub-committee on Appeals. 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 M5S 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 program 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 program 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 program of study in the University or elsewhere;
- to submit for credit in any course or program 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 programs 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.

Discipline: non-academic matters*

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

Code of behaviour on non-academic matters
The Scarborough College Council has approved a code of behaviour regarding non-academic discipline. The code is not to be construed to prohibit peaceful assemblies and demonstrations, lawful picketing or to inhibit free speech. The 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:

Non-academic offences
It shall be an offence for any member of the University:
- knowingly 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;
- knowingly 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;
- knowingly 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;
- knowingly to possess stolen College effects or, on College premises, any property stolen from any other member of the College community;
- knowingly to use any College facility, equipment or service contrary to expressed instructions of an authorized person or without just cause;
- knowingly to violate the parking or traffic regulations of the College;
- knowingly to violate the Residence Code of Behaviour;

*subject to approval of the Governing Council.

- knowingly or maliciously 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;
- to commit any offence under Federal or Provincial laws and regulations on or with respect to College premises which is not specifically covered above.

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.

Civil Authorities
Nothing in the code shall prevent the College from referring an individual matter to the normal civil authorities should such action be considered necessary.

Non-credit courses in writing skills

Students who begin their studies at Scarborough College in the 1980 Summer Session or thereafter will be required to complete the College's English proficiency requirement (see page 27 of this Calendar). The following non-credit courses are intended primarily for students who fail or do poorly on the English Proficiency Test. They are open, however, to all students who wish to improve their writing skill.
ESLA01Y (Basic Writing Skills) is intended for students for whom English is a second language. It is offered through the University of Toronto School of Continuing Studies.
EWSA01F/S (Basic Writing Skills)
and
EWSA02F/S (The University Essay)
are intended for students whose first language is English.
A fee, to be announced, is required for enrolment in these courses.
These courses do not count for credit towards the degree requirements. Note, however, that students who fail the English Proficiency Test may meet the proficiency requirement by passing the appropriate course. Timetable information and registration forms may be obtained from the Registrar's Office (S-416B) or Student Services (S-302).
Further information about these courses may be obtained from the Writing Laboratory (S-303F: phone: 284-3369).

ESLA01Y Basic Writing Skills
Coordinator: M. Tyacke (School of Continuing Studies)
A non-credit course for students whose native language is not English.
This course is designed to increase facility in expository writing. It will concentrate on sentence structure, organization and logical development. Students will be expected to produce weekly written assignments, as well as pass a mid-term and final written examination. Students will also have the opportunity for individual help with paragraph and sentence structure.
Session: Winter Day, Winter Evening and Summer

EWSA01F/S Basic Writing Skills
Coordinator: A. Fisher
A non-credit course for students whose native language is English.
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 with clearly defined topic sentences. All written work will be done in class time.
Session: Summer Evening, Summer Day, Winter Day, Winter Evening

EWSA02F/S The University Essay
Coordinator: A. Fisher
A non-credit course for students whose native language is English.
The aim of this course is to help students learn to deal with the organization and rhetorical development of the university essay. The primary focus will be on the formulation of a thesis, the organization and presentation of ideas, and the development of paragraphs. Research methods, note-taking, incorporating quotes into essays, and so on will also be dealt with. All written work will be done in class time.
Session: Summer Evening, Summer Day, Winter Day, Winter Evening

4 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 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 Student Services (284-3292). On class nights, Student 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/Liaison 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 responsibile for reading through the section of the *Calendar* dealing with Academic Regulations. When in doubt, students should contact Student 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 Student 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, like other students, must satisfy the English Proficiency Requirement within 24 months of their first registration at the College. Students should take the English Proficiency Test at the earliest opportunity.

4 Part-time students are governed by the same regulations concerning the dropping of courses as all other students. In some cases the deadline for dropping courses will arrive before the student has received any feedback in a particular course. The fact does not in any way affect the deadline, and petitions to waive the deadline because of a lack of feedback generally have failed.

5 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 Student 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.

Evening Courses from 1987 to 1989

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. To facilitate planning, Divisional plans for all sessions from the 1987 Summer Session to the 1988-89 Winter Session are listed below. Evening courses in the 1986 Summer Session are listed in the Timetable section of the *Calendar*. A list of Winter Evening courses for the 1986/87 Winter Session will be available in early June. Since three-year commitments are difficult to make, the availability of all courses listed cannot be guaranteed. However, it is the College's intention to offer them all and none will be cancelled unless absolutely necessary. Students are encouraged to consult their programme supervisor in planning their course selection over the three years.

Summer 1987

Humanities

DRAB10A	Improvisational Theatre: The Commedia dell'Arte
DRAB12A	Medieval & Early Tudor Drama
ENGB10Y	Shakespeare
ENGB35F	British Fiction since 1960
ENGC20/29S	Selected Topics in National Literature
FARB84A/B	Introduction to Etching
FREB06B	Language Practice I
HISB06Y	Europe in the Middle Ages
HISB25Y	British Imperialism in India
PHLA01Y	Fundamental Questions of Philosophy
PHLB42F	Aristotle I
PHLB43S	Aristotle II

Social Sciences

ANTA01Y	Introduction to Anthropology
COMA01Y	Financial Accounting
COMB01Y	Management Accounting
COMC04F	Principles of Marketing
COMC05S	Introduction to Marketing Management
COMC30Y	The Legal Environment of Business
JCSB27Y	Organizational Behaviour
ECOA01Y	Introduction to Economics
ECOB03Y	Price Theory
ECOB11F	Quantitative Methods in Economics I
ECOB35F	Public Decision Making
GGRB05Y	Urban Geography
POLB60Y	Introduction to Public Administration and Policy Making
POLB80Y	International Relations
SOCB20Y	Ethnic and Race Relations
SOCC10F	Sex, Self and Society
SOCC16S	Sociology of Conflict

Life Sciences

PSYA01Y	Introduction to Psychology
PSYB20	Developmental Psychology
PSYB57	Memory and Cognition
PSYB65	Biological Foundation of Behaviour

Physical Sciences

CSCA56H	Computer Programming
MATA26Y	Calculus
PHYA03Y	Physics for the Physical and Life Sciences

Evening 1987-88

Humanities

DRAB03Y	The History of Theatre I
ENGA01Y	English Literature: Practical Criticism and Interpretation
ENGB17Y	Fiction Before 1832
ENGB95Y	English Literary Criticism
ENGC90/99Y	Selected Topic in Twentieth Century Literature
FARA12S	Renaissance & Baroque Art
FARA13S	Modern Art: 1750 to the Present
FARA70F	Two and Three Dimensional Design
FARA71S	Colour
FARA90Y	Foundation Studies in Studio
FARB02S	Wallpainting in Ancient Egypt
FARB43S	Impressionism
FARB46F	Gaugin, Seurat, van Gough, Cezanne
FARB75Y	Introduction to Painting
FARB80F	Drawing from the Figure I
FARB92Y	Introduction to Concepts of Sculpture
FARB94S	Supervised Studies in Studio: Intermediate Level
FREB02Y	Introduction to Literary Analysis
FREB16Y	Language Practice II
GRHB01Y	Greek History from the Bronze Age to the Death of Alexander
HISB03Y	History of the United States
HISB43Y	The Evolution of Ontario, 1850-1950
HISC41F	Old Huronia
HISC17Y	European Society and Culture in the Twentieth Century
HISC62Y	The Crusades
PHLA01Y	Fundamental Questions of Philosophy
PHLB10F	Political Philosophy
PHLB20F	Belief, Knowledge and Truth
PHLB30S	Existentialism
PHLC75S/C94S	Seminar in Philosophy

Social Sciences

ANTB20Y	Introduction to Social Organization
ANTB46Y	Childhood in Contemporary Cultures
COMA01Y	Financial Accounting
COMB01Y	Management Accounting
COMC01Y	Intermediate Financial Accounting
COMC04F	Principles of Marketing
COMC05S	Introduction to Marketing Management
COMC06	Product Management
or COMC07	Market Research
COMC10F	Management Control Systems
COMC15Y	Income Tax
COMC26F	Comparative Organizational Behaviour
COMC30Y	The Legal Environment of Business
COMC50F	Advanced Accounting
COMC55S	Current Issues in Accounting
COMC60S	Auditing
JCEB54S	Industrial Relations
JCEC02Y	Corporation Finance
JCSB27Y	Organizational Behaviour
ECOA01Y	Introduction to Economics
ECOB03Y	Price Theory
ECOB07Y	Macroeconomic Theory and Policy
ECOB66F	Economic Development
ECOC13	Advanced Microeconomic Theory
or ECOC14F/S	Advanced Macroeconomic Theory
ECOB62	International Economics: Trade Theory
GGRB03Y	Climatology
GGRB29Y	Soil Management and Conservation
POLB88Y	Urban Politics
POLB92Y	Politics and Society in Independent Africa
SOCB24F	Sociology of Education: Primary and Secondary Levels
SOCB25S	Sociology of Education: University and Adult Levels
SOCC24S	Changing Family Life in Canada
SOCC42F	Advanced Seminar in Sociological Theory
SOCC43S	Advanced Seminar in Research Methods

Life Scienc

PSYA01Y	gy
PSYB01	gical
PSYB08	
PSYB10	
PSYB32	
PSYB40	
PSYB45	Origins
PSYB51	
PSYC54	Perception
PSYC60	parative
	chology

Physical Sci

AST	
CSCA56F	ing

Summer 1

Humanities

DRAB10A	re: The
or DRAB13A	
ENGA01Y	ractical
	ation
ENGB34F	
ENGB25S	Story
ENGC80/	eteenth
FARB85A	
FREC06B	
HISB02Y	eenth
	nt
HISB17Y	eteenth &
PHLB01F	
PHLB05S	
PHLB61F	
PHLB70	

Life Sci

PSYA01Y	chology
PSYB07	Psychology
PSYB32	ology
PSYB40	

Physical Sciences

CSCA56H	Computer Programming
MATA26Y	Calculus

Evening 1988/89

Humanities

CLAB01Y	Greek ç Roman Epic
DRAB04Y	The History of Theatre 1l
ENGB15Y	English Poetry
ENGB35F	British Fiction Since 1960
ENGB36S	American Fiction Since 1960
ENGC80/89Y	Selected Topic in Nineteenth Century Literature
FARA10F	Ancient Art & Architecture
FARA11S	Medieval Art
FARB10F	Carolingian & Romanesque Art & Architecture
FARB19F	Michelangelo
FARB70F	Introductory Drawing
FARB72F	Introduction to Printmaking
FARB73Y	Photographic Issues in the Visual Arts
FARB74S	Intermediate Drawing
FARB82F	Introduction to Lithography
FARB83S	Intermediate Lithography
FARC15S	Cubism & Related Movements
FREB06Y	Language Practice I
FREC09Y	Problems in Translation
HISB04Y	Introduction to Canadian History
HISB11Y	Early Modern France 1560-1750
HISC78Y	The Russian Intelligentsia
PHLA01Y	Fundamental Questions of Philosophy
PHLB40F	Plato & His Predessors I
PHLB41S	Plato & His Predessors II
PHLB50F	Symbolic Logic
PHLC51S	Symbolic Logic II

Life Sciences

PSYA01Y	Introduction to Psychology
PSYB01	Introduction to Psychological Research
PSYB07	Data Analysis in Psychology
PSYB12	Advanced Social Psychology
PSYB32F/S	Abnormal Psychology
PSYB45	Behaviour Modifications: Origins & Applications
PSYB51	Perception & Cognition
PSYB65	Biological Foundations of Behaviour
PSYC32	Current Topics in Abnormal Psychology
PSYC85	History of Psychology

Physical Sciences

CSCA56F	Computer Programming

Certificate Programmes

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 following two programmes are available at the Scarborough Campus.

Certificate Programme in Business

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 ful-course equivalents from a list of optional courses. The programme can be a base of preparation for various professional designations.

Certificate Programme in Public Administration

Created for public servants and those intending to enter the public service, the programme is designed to give an understanding of the political, social and economic context in which government takes place as well as to introduce students to administrative theory and practice in the Canadian setting. It requires six full-course equivalents composed of four required courses (one course of which must be taken on the St. George Campus) and two full-course equivalents from a list of optional courses. The programme supplements rather than duplicates in-service or technical training and is particularly suitable for public servants who have professional and technical qualifications but who find themselves increasingly involved in general administration and in considering policy matters.

Applicants who through previous post-secondary studies have completed courses appropriate to the Certificate programme may request consideration for advanced standing credit of up to three full course equivalents. 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 Student Services 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 soon be available. (For further information contact Don Holman, 284-3370.)

5 Programmes of Study and Course Descriptions

Programmes

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

Specialist Programmes
Anthropology*
Arts
Biology
Chemical Physics
Chemistry
Chemistry & Biochemistry
Cognitive Science
Commerce
Commerce & Economics
Computer Science
Computer Science and Physics
Computer Science for Data Management
Co-operative Programme in Administration**
Co-operative Programme in Arts Administration**
Co-operative Programme in International Development Studies**
Drama
Economics
Economics and History
Economics & Mathematics
Economics & Political Science
Economics and Quantitative Methods
English*
Fine Art History*
Fine Art Studio
French
Geography
(Geology) Terrain and Environmental Earth Sciences
History*
Humanities
Language & Literature
Linguistics
Mathematics
Medieval Civilization
Microbiology & Biochemistry
Modern Languages
Neurosciences

Philosophy*
Physics
Political Science
Psychology*
Sociology*

Major Programmes
Anthropology*
Biochemistry
Biology
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
Microbiology & Biochemistry
Music History and Literature
Neurosciences
Philosophy*
Physics
Political Science*
Psychology*
Quaternary Studies
Society, Values & Medicine
Sociology*
Spanish Language
Statistics
Women's Studies

College Programmes
Canadian Studies
Development Studies
Humanities
Myth & Religion

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

** 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.

Anthropology

Assistant Chairman: F.D. Burton
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: L. Sawchuk
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 Introduction to Social Organization
  ANTB26Y Introduction to Prehistoric Archaeology
3 Six full-course equivalents from the remaining B- and C-level courses in Anthropology.
4 One full-course equivalent in supervised reading and research
  ANTC03F
  ANTC04S
  ANTC13F
  ANTC14S
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: L. Sawchuk
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 Introduction to Social Organization
  ANTB26Y Introduction to Prehistoric Archaeology
3 Four additional full-course equivalents from B- or C-level courses in Anthropology.

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 historic archaeology, 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
H. B. Schroeder, M. Lambek

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
M. Lambek, J. Boddy

ANTB06S African Cultures and Societies II: Case Studies
This course is designed to complement ANTB05 by giving closer examination to selected issues in African ethnography. Case studies from different parts of the continent will be used to highlight problems in a comparative framework, as well as to illustrate major developments in anthropological thought.
Prerequisite: ANTB05
Session: Winter Day
M. Lambek, J. Boddy

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 technolgical systems.
Prerequisite: ANTA01 (ANTB26 is recommended)
Session: Winter Day
H.B. Schroeder

ANTB14Y Human Origins
An analysis of the phylogeny of humans. The issues and controversies that form the theoretical framework to the understanding of fossil evidence. Readings substitute for a single text. Class discussion and presentation of assigned readings are expected. Laboratory sessions permit the student to examine fossil cast materials.

The course involves an analysis of the rise of evolutionary theory through natural selection, the development of genetic theory and the eventual rise of the synthetic theory of evolution. A brief survey of the evolutionary development of vertebrates, a survey of primate fossils and presumed evolutionary directions. Finally the major portion of the course deals with a survey of the discovery of hominid fossils and attempts to synthesize a meaningful interpretation out of what is presently known concerning human origins. The goals of the course are to introduce evolutionary theory in an historical context, to survey the history of the discovery and interpretation of our ancestors and to attempt to provide a meaningful understanding of the selective pressures which culminated in the phenomenon of modern linguistic, culture-bearing *Homo sapiens*.
Lectures with discussion and labs. Lab fee of $20.00.
Prerequisite: ANTA01; ANTB15 is recommended.
Session: Winter Evening
G. Heathcote

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. Lab fees $20.00.
Prerequisite: ANTA01 or ANTB14 or Permission of Instructor.
Session: Winter Day
L. Sawchuk

ANTB16Y Cultures of Modern Canada
This course has two objectives: on the one hand, it explores the regional and ethnic diversity of contemporary Canadian cultures, and on the other, it examines forces which operate, however successfully, to bind Canadians together and foster a coherent world-view. The first objective entails consideration of localized case studies, e.g. of agriculturally based religious communities, Newfoundland outports, indigenous groups (Native Canadians and Metis), and others. The second involves searching for shared cultural meanings in Canadian literature, myth and symbolism, mass media, and political culture. Issues of particular interest are Canada's place in a Western meta-culture, and the extent to which technology both reflects cultural assumptions and implicitly shapes relations to the physical and social environments.
Prerequisite: ANTA01 or Permission of instructor.
Session: Winter Day
J. Boddy

ANTB17S Complex Societies: Anthropological Perspective 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.
Prerequisite: ANTA01
Session: Winter Day
J. 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
J. Sawchuk

ANTB21Y North American Background to 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.
Session: Winter Day
J. Sawchuk

ANTB24Y Primary Group Cultures
Primary groups form the early and lasting environments that are common to humans and other primates. It is within groups that information is shared and stored; interpersonal relations become lasting bonds as group members learn and mature. But human primary groups elaborate their forms beyond the domestic and play groups of other primates transforming them into various shapes: teams, crews, task forces, households, clubs, ritual associations, narrative groups, etc. They also project interpersonal bonds into elaborate networks of kin, friends, partners, patrons and clients, rivals and sworn enemies; disputes and feuds are followed by attempts at ritual peacemaking in small but influential groups.

In primary groups language fashions models of behavior in stories, folk tales, myths, as well as in rumours and jokes, gossip and witchcraft.

Groups, networks and language in combination generate a human result which is cultural; beliefs that organize thinking and perception through time and across generations, consolidate or challenge views that originate in primary group cultures.
Session: Winter Evening
T. McFeat

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 in the New and Old Worlds.

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

ANTB43F 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: ECOB11; PSYB07
Prerequisites: ANTA01; ANTB15 and ANTB26 are recommended
Session: Winter Day
L. Sawchuk

ANTB47Y Human Skeletal Biology
Structure and function in the human skeleton. The histology, and the ontogenetic as well as the phylogenetic development of skeletal elements is treated holistically. Palaeopathology and forensic aspects are also considered.

The course is oriented around practical procedures and laboratory sessions, and is designed to acquaint students with the systematic and functional aspects of morphological structure. It will deal with phylogenetic and developmental aspects of the Primate dentition. Lectures will emphasize theoretical issues, while laboratories will stress practical aspects. One one-hour lecture session and one two-hour laboratory session per week. Lab fees $20.00.
Limited Enrolment: 30.
Prerequisite: ANTA01 or BIOA03; ANTB14 and ANTB15 are recommended.
Session: Winter Day
G. Heathcote

ANTB51Y Medical Anthropology
The examination of health and disease in socio-cultural and ecological perspective. Emphasis is placed on variability of populations in terms of both disease susceptibility and cultural means of definition and treatment.

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

ANTB56Y The Anthropology of Food
This lecture course focuses on food use and the development of human subsistence practices in light of human nutritional requirements. Human diet is examined from both evolutionary and cross-cultural perspectives.

In the Fall term the evolutionary perspective is emphasized. Specific topics will include methods of determining prehistoric diet, the effects of diet on disease patterns and the interaction of changing subsistence and demographic patterns.

In the Winter term the focus is on the present, specifically how different cultures use food with reference to biological and cultural process. Specific topics will include diet as a selective factor, adverse effects of particular foods, cultural proscriptions and tabus, problems of food deficiencies and deficiency diseases, the rituals and institutions surrounding food and the problem of world hunger.
Prerequisites: ANTA01 and 1 other B-level course in Anthropology.
Session: Winter Day
F.D. Burton

ANTC11Y The Anthropology of Women
A cross-cultural examination of sex roles and gender constructs and their implications for the position(s) of women in contemporary and traditional societies. The course explores how and why socio-cultural systems based on sexual inequality originate, how they maintain themselves, and how they change. Topics include: biological freedoms and constraints; cultural interpretations of femaleness and maleness seen in myth, ritual, metaphor and other imagery; economic and political aspects of gender relations, especially sexuality and reproduction; differences and similarities between small scale and complex societies.
Session: Winter Day
J. Boddy

ANTC17Y 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, Mailinowski, 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)
Prerequisites: ANTA01 and ANTB20 or Permission of Instructor.
Session: Winter Day
T. McFeat

ANTC28F The Prehistoric Archaeology of Canada
A survey of the varied concerns of Canadian archaeologists and the development of the science of Archaeology in Canada. An attempt to understand the significance of Canadian prehistory for modern Canadian social and cultural developments.
Exclusion: (ANTB28)
Prerequisite: ANTB38
Session: Winter Evening
M. Latta

ANTC30S Biological Anthropology of Past and Present Canadian Native Peoples
A seminar course on the origin, affinities, adaptations, health and disease of Canada's Native populations. Specific topics include: the osteological evidence for the antiquity of New World populations, the genetic and morphological affinities of New World populations (focusing on northern populations), the biological adaptations to Arctic and Subartic environments among Canada's Inuit, Algonquian and Athapaskan peoples, and the demographic, medical, and nutritional Anthropology of Canadian Native peoples, focusing on the biocultural dynamics of disease epidemiology.
Prerequisites: ANTBI5 or Permission of Instructor; ANTB21 is recommended preparation.
Corequisite: ANTC28 is highly recommended
Session: Winter Day
G. Heathcote

ANTC43Y The Concept of Race in Anthropology
An insight into and an appreciation of the concept of race.
This concept is central to human biology and raises major issues concerning the processes of diversity, evolutionary history and social relationship. Modern theories are never wholly modern, as they contain the elements and constructs of previous ideas. Often these older ideas are fallacious or unscientific but so much a part of general thought that newer ideas are overwhelmed. The course will concentrate on primary sources from 1700 to the present. Four major periods are delineated; 1700-1860; 1860-1925; 1925-1945; 1945-present. The periods demarcate the modes and moods concerning the concept of race, the antiquity of humankind and explanations for its diversity.
Limited enrolment: 20.
Prerequisite: ANTB15
Session: Winter Day
F.D. Burton

ANTC44S 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.
Prerequisite: Any B-level course in Archaeology or related disciplines.
Session: Winter Day
M. Latta

Courses Not Offered in 1986-87

ANTA03Y **Cultures in the Modern World**
Exclusion: ANTA01

ANTB01Y **Ecological Anthropology**
Exclusion: (ANTB10)
Prerequisite: ANTA01

ANTB02Y **Anthropological Study of Religion**
Prerequisite: ANTA01

ANTB03S **The Americas: An Anthropological Perspective**

ANTB07F **Comparative Slavery**

ANTB18Y **Cultural Evolution**
Prerequisite: ANTA01 or Permission of Instructor

ANTB19F **Economic Anthropology**
Prerequisite: ANTA01

ANTB22Y **Primate Behaviour**
Prerequisite: ANTA01 or PSYA01 or BIOA03

ANTB30Y **Language and Culture**
Corequisite ANTB26

ANTB37F **Prehistory of Mexico and Mesoamerica**
Prerequisite ANTA01

ANTB38S **Prehistory of North America North of Mexico**
Prerequisite ANTA01

ANTB39Y **Human Diversity**
Prerequisite ANTA01; ANTB15 is recommended

ANTB40Y **Anthropological Demography**
Prerequisite ANTA01; ANTB15 is recommended

ANTB41S **Pre-Industrial Technology**
Prerequisite ANTA01

ANTB44Y **Physiological Anthropology**
Prerequisite: ANTA01 or BIOA03

ANTB46Y **Childhood in Contemporary Cultures**
Prerequisite ANTA01 or Permission of Instructor

ANTB48S **Human Odontology**
Prerequisite ANTA01 or BIOA03; ANTB14 and ANTB15 are recommended

ANTB49S **Law and Society**
Prerequisite ANTA01 or Permission of Instructor

ANTB52A **Field Methods in Archaeology**
Prerequisite ANTA01, ANTB26; HISB04 recommended as well

ANTB53Y **Classification and Material Culture**
Prerequisite ANTB26

ANTB54Y **The Anthropology of Sex**
Prerequisite None, although an introductory course in Anthropology and/or Biology would be beneficial

ANTB55Y **Cultures of the Middle East and the Islamic World**
Prerequisite none – it is recommended that students have completed one A-level course in the Social Sciences or Humanities

ANTC02F **Systems of Thought**
Prerequisite At least one B-level course in Social Anthropology

ANTC09Y **The Anthropology of Humour**
Prerequisites Any two of the following courses: ANTB02; ANTB20; ANTB24

ANTC12F **Research on the Social Behaviour of Non-Human Primates**
Prerequisite ANTB22 or Permission of Instructor

ANTC15F **Fact and Fiction in Anthropology**
Prerequisites ANTA01 and one B-level course in Anthropology

ANTC27Y **Advanced Archaeological Methods: Data Description and Presentation**
Exclusion (ANTB27)
Prerequisite ANTB26

ANTC36Y **New Perspective on Human Origins**
Prerequisite ANTB14 or ANTB15

ANTC45F **Biomedical Anthropology**
Prerequisites ANTB51 and BIOA03; (ANTB39, and ANTB43 or STAB52 or PSYB07 are recommended)

ANTC46F/S **Ethnomedicine**
Prerequisite: ANTB51

Specialist Programme in the Arts
Supervisor:
M. Schonberg (284-3126)
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 Arts are as follows:

1 The Major Component:
The 6 courses to be chosen as the major component are the same as the major programme in each of the four areas. Consult the individual disciplines under major programmes for the specific courses.

2 The Minor Component:
Two of the following programmes must be chosen in areas other than the Major Component:
Minor Component in Drama:
DRAB01Y, DRAB03Y, DRAB04Y
Minor Component in Fine Art History:
FARA10F, FARA11S, FARA12F, FARA13S, plus one FCE at the B-level (supervisor's approval required).
Minor Component in Fine Art Studio:
either FARA90Y or FARA70F and FARA71S, plus any two FCE's in Fine Art Studio
Minor Component in Music:
MUSA01Y, MUSB17H, plus an additional 1.5 FCE's in Music

3 One FCE from:

HUMB60F	*Women Artists in Society*
HUMB70Y	*Introduction to Cinema*
LITB60Y	*Creative Writing I*
	Exclusion: (HUMB80)
*PSYB50F**	*Sensation and Perception*
*PSYB51F**	*Perceiving and knowing*
PHLB03F	*Philosophy and Art*

4 HUMC10H in ARTS*
to be taken after 10 courses.

NOTE: (*require a prerequisite course)

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 explosiv "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
M. Duncan

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
P.P. Kronberg

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 his 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 1986-87
ASTB02H Practical Astronomy
Prerequisite: ASTA02 or ASTA03; PHYA03; MATA26 or MATA55
ASTB04F Quantitative Cosmology
Prerequisite: ASTA03Y, or ASTB03S

Biological Sciences

Associate Chairman: T.B.A.
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.

Two Programmes in Biology are offered. (1) The Specialist Programme: For students wishing to concentrate in the biological sciences. This Programme covers core areas of Biology and a number of courses in cognate disciplines. (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.

Specialist Programme in Biology
Supervisor: C. K. Govind (284-3215)
Office: S558
This Programme must include the following fourteen full-course equivalents:
1 BIOAO3Y
2 At least one full-course equivalent from each of the following core areas:
(note: BIOB28F may be taken in partial fulfillment of the requirement for groups b, c or d below)
a Genetics and Evolution: BIOBO5Y, BIOB11Y, BIOB23Y
b Physiology and Biochemistry: BIOBO2Y, BIOB06Y, BIOB17Y, BIOB19S, BIOB31F, JBCB35Y, JBCB36H, BIOB48F, BIOB49S, BIOC12H
c Ecology and Environmental Studies: BIOB12Y, BIOB14F, (BIOB15Y), (BIOB43Y), BIOB47Y, (BIOC09F), BIOC11Y, BIOC14F, BIOC15F, BIOC16S, BIOC17F
d Morphology and Taxonomy: BIOBO8Y, BIOB13Y, BIOB20F, BIOB22Y, BIOB24Y, BIOB27Y
3 Five other full-course equivalents in Biology, unspecified. These must include at least one full-course equivalent at the C-level and at least one full course from the plant sciences, e.g., BIOBO6Y, BIOB13Y, BIOB24Y, BIOB47Y, BIOB49S, BIOC11Y, BIOC12H. These five courses may include courses offered on other campuses of the University of Toronto subject to the general regulations (cf. p. 00 of 1986/87 Calendar).
4 Three courses in cognate disciplines:
a CHMAO2Y
b PHYAO2Y or PHYAO3Y
c Any one of the following:
(MATA22Y), MATA26Y, or MATA27Y or MATA55Y
One course from each of the above groups must be taken.
5 One full-course equivalent from the following offerings in Humanities or Social Science: Courses which are offered as a choice for Group 5. Ensure that you have the necessary prerequisite for any of the courses named below.
ANT B15Y Biological Anthropology
ANT B22Y Primate Behaviour
ANT B44Y Physiological Anthropology
ANT B47Y Human Skeletal Biology
ANT B51Y Medical Anthropology
JMP B50F Symbolic Logic
JMP C51S Symbolic Logic II
PHL C05F Biomedical Ethics
SOC B19Y Sociobiology
SOC B17S Medical Sociology

Students are referred also to the following Programmes: Specialist Programme in Chemistry and Biochemistry (listed under Chemistry); Quaternary Studies, Microbiology and Biochemistry, and Neurosciences.

Major Programme in Biology
Supervisor: C. K. Govind (284-3215)
Office: S558
This Programme must include BIOAO3Y and any six full-course equivalents from the "B" level courses offered by the Biology section of Life Sciences at Scarborough College, with the following restrictions:
1 At least one full-course equivalent must be in the plant sciences and one in the animal sciences.
2 At least one full-course equivalent from each of groups 2(a), (b), (c), and (d) above.
(note: BIOB28F may be taken in partial fulfillment of the requirement for groups b,c or d)
3 Courses required as pre- and co-requisites for any of the above courses which are *not offered* as Biology courses may *not* be considered as one of the seven required for a Major Programme in Biology. This relates specifically to Biochemistry which has a Chemistry course as a prerequisite.

The requirements for the Specialist Programme in Biology include courses in Mathematics, Physics, Chemistry and a non-science course (see above). Thus a simple addition of several Biology courses will not satisfy the requirements for the Specialist Programme in Biology.

Students are referred also to the following Programmes listed under Chemistry: Major Programme in Biochemistry; Quaternary Studies; Microbiology and Biochemistry; and Neurosciences.

Specialist Programme in Microbiology-Biochemistry
Supervisors: J. Silver (Microbiology)(284-3211); J. Gurd (Biochemistry)(284-3221)
Note: Starting in 1986/87 entry into this programme will be limited to 15 students. Admission into the programme will require the completion of at least 4 full-course equivalents. Selection will be based on grades obtained in BIOA03Y, CHMA02Y and MATA26Y or MATA27Y or MATA55Y.
Recent advances in Microbiology and Biochemistry, such as recombinant DNA technology are being used to advance knowledge in a wide number of biological disciplines as well as in industry and in the biomedical sciences. The Specialist Programme in Microbiology-Biochemistry provides a core group of basic courses as well as a firm basis in several Microbiology and Biochemistry subdisciplines.

First year:
BIOA03Y Introductory Biology
CHMA02Y General Chemistry
MATA26Y Calculus
or
MATA27Y Techniques of Calculus
or
MATA55Y Calculus with Analysis
**If taking CHMB03Y as an option (see below)*
PHYA03Y should be taken in first or second year

Second year:
BIOBO2Y Basic Microbiology
CHMB05Y Organic Chemistry I
BIOBO5Y Genetics
and one additional credit from the following:
CHMBO2Y Analytical Chemistry
BIOB17Y General and Comparative Physiology
N.B. The course from the above which is not taken in second year may be taken in third or fourth year and applied to the 5 full-course credit requirement listed below.

Third year:
JBCB35Y Introductory Biochemistry
JBCB36H Laboratory in Biochemistry
BIOB48F Bacterial Physiology and Ecology

Third and Fourth year:
Five full-course credits from the following, which may be taken in either the third or fourth year and which must include at least one and one-half course credits in Microbiology (indicated by MPL or **) and one and one-half course credits in Biochemistry (indicated by BCH or †).

		year recommended
BIOB19S	Biology of Macromolecules	3 or 4
BIOB49S	Biology of Algae	3 or 4
BIOBO6Y	Plant Physiology	3 or 4
BIOCO1Y/ BIOCO2Y	Supervised Study in Biology/ Directed Research in Biology	4 4
CHMB03Y	Physical Chemistry I	4
CHMCO3Y	Organic Chemistry II	3
**JBM351Y/ JBM353Y	Virology	3 or 4
MPL334Y	Introductory Immunology	3
MPL32OY	General Bacteriology	3
**MGB310Y	Principles of Microbial and Molecular Genetics	4
BOT3O1Y	Introduction to Fungi	4
†NRO441Y	*Neuroscience*	4
any MPL 400 series course		4 or 3
any BCH400 series course		4

Major Programme in Microbiology-Biochemistry
Supervisors: J. Silver (Microbiology)(284-3211); J. Gurd (Biochemistry) (284-3221)
Note: Starting in 1986/87 entry into this programme will be limited to 30 students. Admission into the programme will require the completion of at least 4 full-course equivalents. Selection will be based on grades obtained in BIOA03Y, CHMA02Y and MATA26Y or MATA27Y or MATA55Y.
Recent advances in Microbiology and Biochemistry, such as recombinant DNA technology, are being used to advance knowledge in a wide number of biological disciplines as well as in industry and in the biomedical sciences. The Major Programme in Microbiology-Biochemistry provides a core group of basic courses for students wishing to combine these disciplines with other areas of interest.

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

Second year:
BIOB02Y Basic Microbiology
CHMB05Y Organic Chemistry I

Third year:
JBCB35Y Introductory Biochemistry
JBCB36H Laboratory in Biochemistry
BIOB48F Bacterial Physiology and Ecology
and one full-course equivalent from the following which may be taken in either the second or third year:
BIOB05Y Genetics
BIOB19S Biology of Macromolecules
BIOB49S Biology of Algae

Students are encouraged to include the following in the course of their studies:
BIOB06Y Plant Physiology
BIOB17Y General and Comparative Physiology

BIOAO3Y Introductory Biology
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, plant hormones, evolution. Two one-hour lectures and one three-hour laboratory per week.

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 and the origin and evolution of life: Laboratory and discussion periods will supplement the lecture material. Although this course has no prerequisites, some background in Biology and Chemistry is recommended. Lab fee $20.00.
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 ecology. To obtain proficiency in the handling and growing of microorganisms in the laboratory. One two-hour lecture and three hours of laboratory each week. Lab fee $20.00.
Prerequisite: BIOA03
Session: Winter Day
J. C. Silver

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.

Mendel's principles, linkage, mapping, assignment of genes to chromosomes, structure of gene, genetic control of protein synthesis, regulation of gene activity, chromosome structure, mutation, cytoplasmic inheritance. Lectures, laboratory, work problems, discussion. Lab fee $20.00.
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. Lab fee: $20.00.
Prerequisite: BIOA03
Session: Winter Day
G. F. Israelstam

BIOB08Y Invertebrate Zoology
General survey of the invertebrate animals with emphasis on those groups of numerical, economic and medical importance.

The first term will deal with the non-arthropod phyla (Protozoa-Urochordata) and will involve classification and study of diversity within groups, with emphasis on functional morphology and evolution. The second term will be devoted to the Arthropoda and will include the ecology and behaviour of interesting groups. Living specimens and technical films will form an important part of laboratories. Two one-hour lectures and three hours of laboratory work per week. Two field trips. Lab fee $20.00.
Prerequisite: BIOA03
Session: Winter Day
D. D. Williams

BIOB11Y Animal Population 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
Session: Winter Day
I. M. Campbell

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.

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; ecological genetics and evolution; 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. Lab fee $20.00.
Prerequisite: BIOA03
Session: Winter Day
R. Boonstra

BIOB13Y Plant Structure and Development
A course dealing with the structural variation and development of cells, tissues and organs in seed plants with emphasis on vegetative plant parts – roots, stems and leaves. Most laboratory periods offer the opportunity to gain first hand experience with plant material discussed in the lectures and text. A few laboratories are devoted to developing skills in plant microtechnique, and time is made available for each student to do an individual microtechnique project.

Specific topics include: embryo development, seedling vascularization, plant cell wall variation, protoplasmic constituents of plant cells; cell types of the epidermis, parenchyma, collenchyma, xylem and phloem tissues; the vascular cambium and cork cambium and their derivatives; initiation and development of roots, stems, and leaves. Lecture and laboratory work. Lab fee $20.00.
Prerequisite: BIOA03
Session: Winter Day
R. Dengler

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, andtial 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, and the human population problem. Two one-hour lectures per week, plus tutorials every 2nd or 3rd week. Limited enrolment: 80.
Prerequisite: BIOA03
Session: Winter Day
R. Boonstra

BIOB17Y General and Comparative 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. Lab fee $20.00.
Prerequisite: BIOA03
Session: Winter Day
TBA

BIOB19S Biology of Macromolecules
The basic concepts of the molecular biology of the gene – key experimental observations. Main topics will be mechanisms of gene replication and regulation of gene activity in higher and lower organisms. Students will receive laboratory experience in the use of a range of molecular biology techniques.

This course is divided into two sections. The first deals with the structure and replication of DNA and current applications of recombinant DNA technology, i.e., gene cloning. The second concentrates on RNA and protein synthesis. Laboratory exercises include (i) isolation and quantitation of DNA and RNA; (ii) RNA template activity of isolated nuclei; (iii) protein synthesis in a cell-free system; (iv) purification and gel electrophoresis of chromosomal proteins. Lectures and laboratory work. Lab sections will meet once every three weeks. Lab fee $10.00
Prerequisite: BIOA03
Session: Winter Day
I. R. Brown

BIOB20F Cell Ultrastructure
A course dealing with current concepts of animal and plant cell ultrastructure and specifically with the basic structure, development, and function of cell organelles. Laboratory work emphasizes the interpretation of cell components as they appear in electron micrographs.

Topics include: (i) methods used in the biological application of electron microscopy; (ii) cell membranes and cell surfaces; (iii) cell organelles, e.g., endoplasmic reticulum, mitochondria, plastids, etc. Lectures and laboratories. Lab fee $10.00.
Prerequisite: BIOB13 or BIOB24 or BIOB27
Session: Winter Day
R. Dengler; J. Youson

BIOB22Y Morphogenesis and General Biology of Vertebrates
A lecture and laboratory course on comparative vertebrate biology. Approximately half of the course will consider evolution, and anatomical and functional specializations as expressions of response to environmental selection pressures and challenges. Beginning with the ancestral vertebrates, the evolutionary pathways leading to the more highly evolved and extant vertebrates will be examined.

In its other half, the course will consider 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, utilization and conservation. Practical work will include dissection of representative vertebrates and study of prepared material. Lab fee $20.00
Prerequisite: BIOA03
Session: Winter Day
A. H. Weatherley

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 wide variety of organisms ranging from the unicellular to the multicellular. 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. Lectures and laboratory work. Lab fee $20.00.
Prerequisite: BIOA03
Session: Winter Day
I. R. Brown

BIOB27Y Comparative Vertebrate Histology
The structure of the cells, tissues, and organs making up the major body systems of a variety of vertebrates as revealed through the light and electron microscopes. Differences and similarities of body systems will be discussed in relation to development, evolution, and function. Each student will be required to do an individual microtechnique project.

First term: methods used in the preparation of tissue for examination in the light microscope and a description of the various tissues of the body (epithelium, connective tissue, muscle, nervous tissue, etc.). Second term: the relationship of the above tissues in the organ systems (sense, digestive, respiratory, excretory, reproductive, and endocrine systems). Two one-hour lectures and three hours of laboratory per week. Lab fee $20.00.
Session: Winter Day
J. Youson

BIOB28F 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, PSYB08, GGRB30, GGRB31, SOCB01, ECOB11, ECOB12
Session: Winter Day
I. Campbell

BIOB31F Invertebrate Neurobiology
An examination in lectures, seminars and laboratory work, 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; seminars and laboratory work to be arranged with class. Lab fee $10.00.
Prerequisite: BIOA03
Session: Winter Day
TBA

JBCB35Y 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.
Prerequisite: BIOA03; CHMB05
Session: Winter Day
J. Gurd

JBCB36H 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. Lab fee $10.00.
Prerequisite: BIOAO3; CHMBO5
Corequisite: JBCB35
Session: Winter Day
J. Gurd

BIOB47Y Plant Ecology
A lecture course with laboratory and field work on the ecology of plants. This course is designed for students with some previous experience in ecology courses, and who are majoring in science with primary interests in environmental fields. It will have relevancy to such applied fields as management, impact assessment, forestry and resource ecology – in addition to its basic orientation. The primary emphasis is on plant community structure, distribution, environmental relations, dynamics and energetics. Some attention will be given to historical factors.

The nature of the plant community and its relation to eco-systems; a conspectus (brief) of plant community distributions and their general relations to the physical environment; the structure and analysis of plant communities, illustrated particularly by fieldwork in the local area to apply methods of description and analysis; quantitative methods of analysis and classification of plant communities; historical perspectives, energy flow in the plant community; nutrient and water cycles; applied aspects of plant communities – disturbance factors in technological development. Autecology – the nature of adaptations; ecotypic differentiation, ecological factors in species-level evolution. Lectures, fieldwork, laboratories.
Prerequisite: BIOB12
Session: Winter Day
J. C. Ritchie

BIOB48F Bacterial Physiology
A lecture and laboratory course dealing with bacterial physiology. Emphasis is placed on molecular mechanisms of regulation and of adaptation to environmental factors such as temperature, and availability of nutrients. The biochemical bases of active transport and chemotaxis are discussed. Laboratory exercises are research-oriented experiments involving the use of radioisotopes, antibiotics and gel electrophoresis. Lab fee $10.00. Limited enrolment: 32.
Prerequisite: BIOB02
Session: Winter Day
J. C. Silver

BIOC01Y 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-level courses
Session: Winter
Members of Faculty

BIOC02Y Directed Research in Biology
Identical to 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-level courses
Session: Winter
Members of Faculty

BIOC12H 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.
Limited enrolment: 12

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.
Prerequisite: BIOB06
Corequisite: JBCB35 recommended
Session: Winter Day
G. F. Israelstam

BIOC13S 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
Session: Winter Day
A. Weatherley

BIOC15F River Ecology
The course will begin with an introduction to stream hydrology ad 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. Lab fee: $10.00
Prerequisites: BIOB08; BIOB12
Limited enrolment: 15
Sesion: Winter Day
D. D. Williams

Courses Not Offered In 1986-87

JBHB09S History of Biology
Prerequisite: BIOA03

BIOB24Y Plant Kingdom
Prerequisite: BIOA03

BIOB49S Biology of Algae
Prerequisite: BIOA03

BIOC05S Advanced Genetics
Prerequisite: BIOB05

BIOC11Y Quaternary Plant Ecology
Prerequisite: BIOB12; QUAA03 (NSCA03)

BIOC14F Ecological Methods
Prerequisite: BIOB12 and an introductory statistics course such as PSYB07, STAB52, GGRB02, ANTB43, ECOB11, or the permission of the instructor.

BIOC16S Marine Biology: Habitats and Communities
Prerequisite: BIOBO8

BIOC17F Marine Biology: Nutrients and Productivity
Prequisite: (BIOB15) or BIOB12.

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 FREB06Y (or FREA06Y followed by FREB06Y)

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:

ANTB16S	Cultures of Modern Canada
POLB50Y	Canadian Government and Politics
ENGB07Y	Canadian Literature in English
SOCB13Y*	Canadian Society

5 Five and one-half further full-course equivalents (or six if ANTB16S is chosen from the preceding group) 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-level and C-level courses are offered each year.

Group A

DRAB06Y	Canadian Drama
ENGB07Y	Canadian Literature in English
ENGB25F/S*	The Canadian Short Story
ENGB26Y*	Canadian Poetry in English
ENGB27Y*	Canadian Fiction in English
ENGC28S	Drama in English Canada 1920-1970
ENGC29Y	Contemporary Canadian Literature
FARB60Y	The Arts in Canada: 1670 to 1960
FARB61Y	The Canadian Landscape
FARB62F/S	Recent Canadian Art
FREB16Y*	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
MUSB16F/S*	Canadian Music

Group B

ANTB16F/S	Cultures of Modern Canada
ANTB21Y*	North American Background to Canadian Native Peoples
ANTB38F*	Prehistory of North America North of Mexico
ANTC28F*	Prehistoric Archaeology of Canada
ANTC30S	Anthropology of Canadian Native Peoples
ANTC42Y	Native People of Canada
HISB42Y*	French Canada: Origins to the Present
HISB43Y*	The Evolution of Ontario 1850-1950
HISB46Y*	Atlantic Canada
HISB47Y*	The Canadian Left, 1867-present
HISC41F/S*	Old Huronia
HISC45Y*	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
POLB54F/S*	*Intergovernmental Relations*
POLB60Y	Introduction to Public Administration and Policy Making
POLB81F/S*	Canadian Foreign Policy
POLB88Y	Urban Politics
POLC50Y	Canadian Problems in Comparative Perspective
POLC51F/S*	Topics in Canadian Government
POLC61F/S*	Policy Development
POLC71Y*	Canadian Political Ideas
SOCB13Y*	Canadian Society
SOCB15Y*	Sociology of Mass Media and Communications
SOCB20Y*	Ethnic and Race Relations
SOCB23Y*	Population
SOCC24F/S*	Changing Family Life in Canada
SOCC25F	Comparative Race Relations
SOCC27F/S*	Social Class in Canadian Society

Group C

ECOA01Y	Introduction to Economics
ECOB07Y*	Macroeconomic Theory and Policy
ECOB31F/S*	Economics of the Public Sector: Taxation
ECOB32F/S*	Economics of the Public Sector: Expenditure
ECOB35F/S*	Public Decision Making
ECOB37F/S*	Law and Economics
ECOB45F/S*	Poverty and Income Distribution
ECOB62F/S*	International Economics: Trade Theory
ECOB81Y*	*North American Economic History*
JCEB51S	Industrial Relations
COMC15Y*	Income Tax
GGRB01Y*	Geography of Resources
GGRB05Y*	Urban Geography
GGRB17Y*	Rural Geography
GGRC04F/S*	Urban Residential Geography
GGRC31F/S*	Development and Planning of Metropolitan Regions
GGRC34F*	Landscape Interpretation
QUAA03Y	Ice Ages and Human Ecology
BIOB12Y*	Fundamentals of Ecology
BIOB15Y*	Aquatic Systems
BIOB47Y*	Plant Ecology
BIOC14F/S*	Ecological Methods

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

Chemistry

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 JBCB35 (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 St. George Series	*Complete 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 fifteen required courses:

First year:

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	
MATB50F*	Analysis I
MATB55S	Analysis II

* Students should note that if they are going to elect MATB50F and MATB55S they must take MATA40F and MATA55Y among their first five courses and MATA45S among their first ten courses.

In addition, four more full-course equivalents in Chemistry, including at least three full-course equivalents selected from the CHMC40 – 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, CHM313H (Crystal Chemistry) and CHM325H (Macromolecular Chemistry) or CHM314Y (Instrumental Analytical Chemistry).

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:

First year:

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
JBCB35Y	Introductory Biochemistry
JBCB36H	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	
MATB50F	Analysis I
MATB55S	Analysis II

In addition, CHM447S (St. George) or BCH424S (St. George), one additional BCH400 series half-course (St. George) one and one-half additional CHM full-course equivalents selected from the C-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. BIOB19S, BIOB17Y, BIOB02Y, BIOB06Y are particularly appropriate for this programme.

Specialist Programme in Chemical Physics
Supervisor: TBA
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 MATA40F and MATA45S at some stage in their programme.

First year:

CHMA02Y	General Chemistry
PHYA03Y	Physics for the Physical and Life Sciences
MATA26Y	Calculus
or	
MATA55Y	Calculus 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	
MATB50F	Analysis I
and	
MATB55S	Analysis II
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/fourth year Chemistry or third/fourth year Physics/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:

First year:

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 MATB50F and MATB55S 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 eight 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
JBCB35Y Introductory Biochemistry
JBCB36H Laboratory in Biochemistry
BIOB19S Biology of Macromolecules 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 a prerequisite.

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, Lab Fee: $20.00
Corequisite: MATA26 or MATA27 or MATA55
Session: Winter Day

CHMB01Y Inorganic Chemistry I
Atomic and molecular structue, 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. Lab Fee: $20.00.
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 cntemporary 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 echanical principles which govern the internal structure of atoms and molecules. The term ends with a treatment of chemical kinetics.

Three lectures a week and occasional tutorials.
Prerequisite: CHMA02; MATA26 or MATA55; PHYA03
Corequisite: MATB41 and MATB42 are strongly recommended but not required. See CHMC02 Physical Chemstry II, however.
Session: Winter Day

CHMB05Y Organic Chemistry I
The chemistry of the principal functional group 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. Lab Fee: $20.00
Prerequisite: CHMA02
Session: Winter Day

JBCB35Y 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

JBCB36H 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. Lab Fee: $10.00
Prerequisite: BIOA03; CHMB05
Corequisite: JBCB35
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.
Lab Fee: $20.00
Prerequisite: CHMB01, CHMB02 (These prerequisites will not be waived.)
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.
Lab Fee: $20.00
Prerequisite: CHMB03; MATB41 and MATB42, or MATB50 and MATB55
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. Lab Fee: $20.00
Prerequisite: CHMB05
Session: Winter Day

CHMC45Y 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: CHMC47
Prerequisite: Permission of instructor
Other Recommended Courses: 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

CHMC46Y 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).
Other Recommended Courses: Normally only for students following one of the Chemistry Programmes.
Session: Summer Day, Winter Day
Members of the Chemistry Faculty

CHMC47F/S/H Library Thesis
Similar to CHMC45 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: CHMC45
Prerequisite: Permission of instructor
Other Recommended Courses: 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

CHMC51S Special Topics in Synthetic Organic Chemistry
A selection of topics in synthetic organic chemistry. A survey of modern synthetic methods will be emphasized, and some application to the synthesis of particular systems of interest will be included.

Two lectures per week.
Corequisite: CHMC03
Session: Winter Day
R.A. McClelland

CHMC52S 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 CHMC48S. 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 1986-87**

CHMC48S Special Topics in Inorganic Chemistry
CHMC49S Special Topics in Physical Organic Chemistry
Prerequisite: CHMC03
CHMC50S Special Topics in Physical Chemistry
Corequisite: CHMC02

Classical Studies

Discipline Representative: I. McDonald (284-3175)
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 and Greek and Roman History 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. 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 CLAB01Y Greek and Roman Epic
or
CLAB02Y Greek and Roman Tragedy
Exclusion: DRAB14
4 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
5 One of GRHC25-29 or CLAC01: Seminar in Classical literature
6 Three additional full-course equivalents from: CLA, GRH, GRK, LAT, HUMB11Y, B22F/S, B23F/S, B24F/S, B25F/S, B61F/S, PHLB40F, PHLB41S, PHLB42F, PHLB43S; FARA10F/S, FARB02F/S, FARB04F/S, FARB05F/S, FARB06F/S. The selection of these must be approved by the Supervisor.

II CLASSICAL STUDIES – with LATIN

1 CLAA01Y Classical Civilization
2 Three full-course equivalents in Latin
3 GRHB03Y Roman History from the Gracchi to Nero
4 Three further full-course equivalents to be selected in consultation with the Supervisor from:
LAT;
GRHB02Y, C24F/S, C28Y, C29Y;
HISB61Y;
CLAB01Y, B02Y, B21Y, B23F/S; C01Y
HUMA11Y, B11Y, B23F/S, B24F/S

III CLASSICAL STUDIES – with GREEK

1 CLAA01Y Classical Civilization
2 Three full-course equivalents in Greek*
3 GRHB01Y Greek History from the Bronze Age to the Death of Alexander
4 Three further full-course equivalents to be selected in consultation with the Supervisor from:
GRK;
CLAB01Y, B02Y, B21Y; C01Y
FARA10F/S, B02F/S, B04F, B05S;
GRHC24F/S, C25Y, C26Y;
HUMA11Y, B11Y, B21Y, B22F/S, B25F/S, B61F/S
PHLB40F, B41S, B42F, B43S
* Excluding GRKB10Y (and B22Y), except with permission of Programme Supervisor

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 also the Specialist Programme in *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
M. E. Irwin and Staff

CLAB02Y 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.
Exclusion: DRAB14
Session: Winter Evening
J. Warden

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: CLAB11F/S
Session: Winter Day
I. McDonald

CLAB21Y 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.

One two-hour lecture a week, with opportunities for discussion.
Prerequisite: HUMA11 or CLAA01 strongly recommended.
Session: Winter Day

Greek and Roman History

GRHB02Y Greek and Roman History from the Death of Alexander to the Gracchi
A study of the emergence and evolution of the Hellenistic Monarchies after the death of Alexander, the development of Rome as a "World Power", and the interaction of the Greek and Roman Worlds.

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

GRHC27Y Studies in Roman History: Pompeii
A study of Pompeii as a typical Greco-Roman city, on the basis of primary source materials, literary and archaeological.

The city is central to western society; our urban institutions have their origins in the European past. This course should introduce the student of urban society not only to the city in the Greco-Roman world but also to the comparative study of urban institutions in pre-industrial societies the world over, both past and present. It is intended for students who have some background (not necessarily formal) in urban studies. Pompeii is a typical small Greco-Roman city; but it is also uniquely well preserved for our examination. The structure of the course will be determined by the students. A considerable degree of personal initiative will be expected.
Exclusion: (GRHB27)
Prerequisite: GRHB03 or any related GRH, CLA or HUM course.
Session: Winter Day
J. Corbett

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
Session: Winter Day

GRKA10F Introduction to Greek Authors
A rapid reading of simple Greek texts with a consolidation of grammar.

This course is intended to help students review classical Greek grammar in preparation for reading texts.
Prerequisite: Grade 13 Greek or GRKA01
Session: Winter Day

GRKB01S Plato: Apology
A study of the *Apology*,
Plato's version of Socrates' defense 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.

Three one-hour meetings weekly in which students will be expected to translate and discuss passages of the text.
Prerequisite: GRKA10
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: GRK150 (St. George) unless the student is a native speaker of the language
Session: Winter Day
G. Kirikopoulos

GRKB30-34F
GRKB35S-B39S
GRKB40Y **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.
Prerequisite: GRKB01 or demonstrated competnce in reading classical Greek
Session: Winter Day
Co-ordinator: M.E. Irwin

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
Session: Winter Day
I.R. McDonald

LATA10F 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.
Prerequisite: LATA01 or Grade 13 Latin
Session: Winter Day

LATB01S 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).
Prerequisite: LATA10
Session: Winter Day

LATB20F Latin Authors II
Reading and analysis of Latin Texts, prose or verse, with emphasis on appreciation of language and style, and the writer's contribution to the development of the genre.

Texts to be used will be selected annually in consultation with class members.
Prerequisite: LATB01S
Session: Winter Day
I. McDonald

LATB30F-34F
LATB35S-39S
LATB40Y **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 own, and to meet with his 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.
Prerequisite: LATB01
Session: Winter Day
I.R. McDonald

LATC01F-C02S 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 C01F and C02S may be permitted to present a major essay, on a topic approved by the faculty in Classics, as the work required for C02S. 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.
Prerequisite: At least two of LATB30-31, LATB35-39; permission of instructor.
Section: Winter Day
Co-ordinator: I.R. McDonald
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Cognitive Science

Courses Not Offered in 1986-87

CLAB01Y Greek and Roman Epic
CLAB11F/S The Classical Element in English
Exclusion:
CLAB10
CLAB23F Christianity in the Greco-Roman World
CLAC01F Selected Topics in Classical Literature
Prerequisite: One course equivalent in CLA or another literature
GRHB01Y Greek History from the Bronze Age to the Death of Alexander
GRHB03Y Roman History from the Gracchi to Nero
GRHC24F/S Ancient Historiography
Exclusion: (GRHB24)
Prerequisite: CLAA01, or one GRH or HIS course.
GRHC25Y Studies in Greek History I
Prerequisite: GRHB01, or any related GRH, CLA or HUM course
GRHC26Y Studies in Greek History II
Exclusion: (GRHB26)
Prerequisite: GRHB01, or any related GRH, CLA or HUM course.
GRHC29Y Studies in Roman History: Roman Britain
Exclusion: (GRHB29)
Prerequisite: GRHB03, or any related GRH, CLA or HUM course.
GRKA05Y Introduction to Modern Greek
GRKB22Y Images of Modern Greece: 1936 to the Present
Prerequisite: GRKB10 or permission of instructor

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 knowl-edge, 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 Specialist Programme requires 12 courses; the Major Programme requires 7 courses.

Specialist Programme in Cognitive Science
Supervisor:
A. Gopnik (284-3339)
* Students should check these courses for prerequisites/corequisites/exclusions.
Required Courses
6.5 full course equivalents from the following:
1 PSYA01Y Introduction to Psychology
2 LINA01Y General Linguistics
3 PHLA01Y Fundamental Questions of Philosophy
4 CSCA56F/S Computer Programming
or
CSCA58F Introduction to Programming
5 PSYB07F/S Data Analysis in Psychology
6 PSYB51S* Perception and Cognition
7 PSYB57S* Memory and Cognition
8 JLPB55F* Psycholinguistics
9 PHLB50F Symbolic Logic I
10 PHLB80F **Philosophy of Language**
or
PHLB81F/S **Theories of Mind**
Optional Courses - 2 full course equivalents chosen from the following:
Psychology
1 *PSYB01F* *Introduction to Psychological Research*
2 *PSYB08S** *Experimental Design in Psychology*
3 *PSYB10F/S** *Introduction to Social Psychology*
4 *PSYB20F** *Developmental Psychology*
5 *PSYB34F** *Psychometric Methods*
6 *PSYB50F** *Sensation and Perception*
7 *PSYB53S* *Microcomputers in Experimental Psychology*
8 *PSYB65F** *Biological Foundations of Behaviour*
9 *PSYC53S** *Current Topics in Human Information Processing*
10 *PSYC54F** *Art and Psychology of Perception*
11 *PSYC80F* *Philosophy and Psychology*
12 *PSYC85F** *History of Psychology*

Linguistics
1.5 full course equivalents chosen from the following:
1 LINB02S* Phonology
2 LINB09F* Phonetics
3 LINB11Y* Syntax
4 LINB12S* Semantics
5 JLPC55F* Disorders of Speech and Language
6 JLPB24S* Developmental Psycholinguistics

Philosophy
1 full course equivalent chosen from the following:
1 PHLB14F* Philosophy of Social Science
2 PHLB20S Belief, Knowledge and Truth
3 PHLB53S The Art of Thinking
4 PHLB70S* Philosopy of Science
5 PHLC51S Symbolic Logic II
6 PHLC54F/S Metalogic

Cognate Courses
1 full course equivalent chosen from the following:
1 ANTB30Y* Language and Culture
2 ANTC17Y* Theory and Methodology in Social/Cultural Anthropology
3 ANTC02H* Systems of Thought
4 CSCA66S* Programming Applications
or
CSCA68S* Computer Applications
5 CSCB38F* Discrete Mathematics for Computer Science
6 CSCB58F* Computer Organization

Major Programme in Cognitive Science
Supervisor:
A. Gopnik (284-3385)
* Students should check these courses prerequisites/corequisites/exclusions.
Required Courses
3.5 full course equivalents
1 PSYA01Y Introduction to Psychology
2 LINA01Y General Linguistics
3 PSYB51S* Perception and Cognition
4 PSYB57S* Memory and Cognition
5 JLPB55F* Psycholinguistics

Optional Courses
- 1.5 full course equivalents chosen from the following:
Psychology
1 PSYB01F Introduction to Psychological Research
2 PSYB08S Experimental Design in Psychology
3 PSYB10F/S* Introduction to Social Psychology
4 PSYB20F* Developmental Psychology
5 PSYB34F* Psychometric Methods
6 PSYB50F* Sensation and Perception
7 PSYB53S Microcomputers in Experimental Psychology
8 PSYC54F* Art and the Psychology of Perception
9 PSYC80F Philosophy and Psychology
10 PSYC85F* History of Psychology

Linguistics
1 full course equivalent chosen from the following:
1 LINB02S* Phonology
2 LINB09F* Phonetics
3 LINB11Y* Syntax
4 LINB12S* Semantics
5 JLPB24S* Developmental Psycholinguistics
6 JLPC55F* Disorders of Speech and Language

Cognate Courses
1 full course equivalent chosen from the following:
1 PHLB50F Symbolic Logic I
2 PHLB70S* Philosophy of Science
3 PHLB80F Philosophy of Language
4 PHLB81F/S Theories of Mind
5 PHLC51S* Symbolic Logic II
6 CSCA56F/S Computer Programming
7 CSCA66S* Programming Applications

Commerce

Assistant Chairman:
H. Babiak (284-3115)
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, JCEB72, JCEB73, JCEC02. (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 and JCE.

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, COMC50, COMC55, COMC60
Marketing: COMC04, COMC05, COMC07, COMC08, ECOB41, JCEC40.
A course in research methods (SOCB01 or PSYB01).
Other related courses: PSYB10, PSYB11, PSYB12, PSYB50, PSYC15, PSYC16, SOCB13, SOCB15, SOCB23, ANTB16, ANTB17, ANTB19, ANTB32.
Finance: JCEC70, JCEC75, COMC01.
Other related courses: ECOB31, ECOB32, ECOB61, ECOC08, ECOC13, ECOC14.
Organizational Behaviour: COMC10, COMC22, COMC25, COMC26, JCEB54.
A course in research methods (SOCB01, or PSYB01).
Other related courses: SOCA01, SOCB02, SOCB04, SOCB07, SOCB10, SOCB13, SOCB16, SOCC07, SOCC13, SOCC22, PSYB10, PSYB12, PSYC15, PSYC16, POLB60, POLC60, ANTB16, ANTB17, ANTB19, ANTB20, ANTB24, ANTB32.

Specialist Programme in Commerce and Economics
Supervisor: A. Stawinoga (284-3115)
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, JCEB72, JCEB73, JCEC02. (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 MATB50).
4 One full-course equivalent in Computer Science (CSCA56 and CSCA66) or (CSCA58 and CSCA68).
5 Four *additional* full-course equivalents from courses other than COM, ECO and JCE.

Major Programme in Commerce
Supervisor: A. Stawinoga (284-3115)
The Programme requires completion of eight full courses including:
1 Five full-course equivalents in COM or JCE courses including COMA01 and COMB01. (See Note A under Specialist Programme in Commerce.)
2 Two full-course equivalents in Economics including ECOA01.
3 JCSB27.
4 Five *additional* full-course equivalents from courses other than COM, ECO or JCE, one of which must be at the B or C level.

Careers in Accountancy
The College offers a significant number of courses which have been recognised 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 recognised Scarborough College courses is available from the Student Services Office (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
T. Litovitz

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
M. Purbhoo

JCEB54F/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.
Prerequisite: Completion of at least ten courses including ECOA01.
Session: Winter Evening

JCEB72F 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.
Prerequisites: CSCA56 or CSCA58, MATA40 or MATA22 or MATA26 or MATA27 or MATA55, ECOB03
Corequisite: ECOB11 or GGRB31 or STAB57
Session: Winter Day
R. Wolfe

JCEB73S Analysis for Decision Making II
A continuation of JCEB72F 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.
Prerequisite: JCEB72
Session: Winter Day
R. Wolfe

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
H. Babiak, T. Litovitz

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

COMC07S Market Research
A decision oriented course, designed to introduce students to the market research process. Alternative data collection, sampling, anaysis, and evaluation procedures are discussed, exploratory, descriptive and causal research approaches are reviewed. Both theoretical and technical considerations in designing and execution of market research are stressed. Instruction involves lectures and class projects including computer analysis. Limited enrolment: 40.
Prerequisites: COMC05, ECOB11 or equivalent. Computer background recommended.
Session: Winter Evening

COMC08F/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. Limited enrolment: 40.
Prerequisite: COMC05
Session: Winter Day
R. Serpkenci

COMC10F Management Control Systems
The course objective is to develop a thorough understanding of planning and control systems in organizations, with an emphasis on behavioural implications of various accounting systems. Limited enrolment: 60.
Prerequisites: 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/S 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
M. Purbhoo

COMC25S 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

COMC26F 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

COMC50F 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. Limited enrolment: 60.
Prerequisites: COMC01 and permission of instructor.
Session: Winter Evening
H. Babiak

COMC55S 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. Limited enrolment: 60.
Prerequisite: COMC01
Session: Winter Evening
A. Stawinoga

COMC60S 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.
Limited enrolment: 60
Prerequisite: COMC01
Session: Winter Evening

COMC80F/S/H 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 the course 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.
Prerequisite: Permission of Instructor
Session: Summer Day, Summer Evening, Winter Day,
Winter Evening

Courses Not Offered 1986-87

COMC20F/S Business Policy
Prerequisites: COMB01, JCSB27, COMC04
Corequisite: JCEC02
JCEC40S Public Policy Towards Business
Prerequisite: ECOB41
JCEC70S Advanced Corporation Finance
Prerequisite: JCEC02
JCEC75F/S Investments
Prerequisite: JCEC02

Computer Science

Discipline Representative: W. Enright 284-3340.
Computer Science is the study of the use of computer to process information. The form of this information may vary widely, from the businessman'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, 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 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.

Specialist Programme in Computer Science
Supervisor: E.C. Peek (284-3340)
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 Mathematics.

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

First year:
CSCA58F, CSCA68S, MATA55Y, MATA40F, MATA45S

NOTE: Students whose first registration at the University is prior to 1985 may use MATA26Y or MATA27Y instead of MATA55Y.

Second year:
CSCB28S, CSCB38F, CSCB58F, (MATB41F and MATB42S) or (MATB50F and MATB55S)

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. Any two of: CSCC64S, 438, 448, 465, 478
Any one of: CSCC50S, 446.
Any two of: CSCC54F, C85S, 340, 372, 418, 434, 444, 458, 468, 484, 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.

In completing the Programme a student is strongly encouraged not to include any Computer Science courses other than those required above. 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: E.C. Peek (284-3340)
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 Mathematics. 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, MATA40F, COMA01Y, ECOA01Y

Second year:
CSCB28S, CSCB38F, CSCB58F, ECOB03Y or ECOB07Y, (MATB41F and MATB42S) or (MATB50F and MATB55S), MATA45S

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, 444, 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: E.C. Peek (284-3340), A. Griffin (284-3227)
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, Mathematics and Physics.
There are 15.5 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 alternate ordering is adopted, care must be taken to ensure that prerequisites are satisfied and other conflicts avoided.

First Year:
CSCA58F, CSCA68S
MATA55Y, MATA40F, MATA45S
PHYA03Y

Second Year:
CSCB38F, CSCB58F, CSCC24S
(MATB41F and MATA42S), or (MATB50F and MATB55S)
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, 438, 448, 458, 465, 468, 484, 488.

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

Major Programme in Computer Science
Supervisor: E.C. Peek (284-3340)
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 Mathematics.
Seven and one-half 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, MATA40F

Second year:
CSCB28S, CSCB58F, CSCB38F, (MATB41F and MATB42S) or (MATB50F and MATB55S)

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, 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.

CSCA56F/S Computer Programming
Introduction to algorithms, computer organization and computer programming. Emphasis is on learning to programme 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.)
The purpose of the course is to introduce students to algorithms and to acquaint 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, programme 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.) 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.
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, games, 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
Corequisite: MATA26 or MATA55 or MATA27
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, (eg. COBOL, TURING). 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 incoding; 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 programme correctness, formal programme verification, algorithms from graph theory, and elementary set theory.
Corequisite: 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, assembler 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. Lab Fee: $10.00
Enrolment limit: 100.
Prerequisite: CSCA68
Session: Winter Day

CSCC24S Principles of Programming Languages
An introduction to the major classes of programming languages and their associated models of programming. Operational programming (Euclid, Ada, Turing and their relationship to Fortran, Algol 60 and Pascal.) Modules and interfaces, exception handling and concurrency. Functional programming (Lisp). Recursion as a control structure, programming environments, implementation issues. Logic programming (Prolog). Horn clauses, unification and backtracking. Object-oriented programming (Smalltalk). Messages and methods, class hierarchies and inheritance.
Enrolment limit: 100.
Exclusion: (CSCB68)
Prerequisite: CSCB38
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

CSCC50S Numerical Linear Algebra
The efficiency and stability of various computations in linear algebra: techniques for standard eigenproblems and linear least squares problems, with emphasis on QR-based algorithms and singular value decompositions. Survey of available software.
Prerequisite: CSCA68, MATB42 or MATB55, MATA45

CSCC51F Numerical Methods
Numerical methods and their implementation on a computer. Solution of linear and non-linear equations. Ill conditioned problems and error estimates. Numerical integration and solution of initial value problems for ordinary differential equations.

This course is an introduction to the numerical solution of several types of mathematical problems. The emphasis will be on the analysis of a few reliable methods and on their comparison, for each class of problem. All the algorithms that will be used are available in a software library, so that programming will be restricted to the writing of short driving and linking programmes.

Eight or nine assignments will be given.

The language of the packaged programmes is FORTRAN, for which a brief review will be given.
Exclusion: (JMCC51)
Prerequisite: MATA40, MATB42 or MATB55, CSCA68
Session: Winter Day

CSCC54F Computer-Based Simulation Models
Constructing and using models of complex systems. Representing models as simulation programmes 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

CSCC64S Effective and Efficient Computing
Introduction to the theory of computation: computable functions, Turing machines, recursive and primitive recursive functions, unsolvable problems, and Church's thesis. Introduction to Logic: propositional calculus and predicate calculus. Introduction to complexity theory: models of computation, classes P and NP, techniques for efficient algorithms, NP-complete problems, heuristic and approximative algorithms.
Prerequisite: CSCB38 or MATB44
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 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. Lab Fee: $10.00. Enrolment limit: 45.
Prerequisite: CSCB58 and Permission of instructor.
Session: Winter Day

Courses Not Offered in 1986-87

JMCC31F Combinatorics

Co-operative Programme in Administration

Director of Co-operative Programmes: A.N. Sheps
Assistant to the Director: Joan Bunyan
Co-ordinator: Beverley Abramson
Supervisor: A.N. Sheps

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
- urban, regional and social planning
- governmental decision-making
- the allocation of resources in government and business
- the management of policies and programmes dealing with complex social, economic, political and business problems

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 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.

Admissons 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 an additional fee 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, public agencies and business enterprises.

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 placement, and to receive specialist certification upon graduation, a student must

- complete a full-time course of studies 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

Eligibility for work placements.
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
- for the second work term: nine full-course equivalents including the above courses and COMB01, JCSB27, ECOB03, POLB60 or POLB61 and POLB62
- for the third work term: eleven full-course equivalents including the above courses and a statistics half-course from section A, IV, below.
- 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: Policy Analysis, Economic Policy, Evaluation of Social Issues, Urban and Regional Policy Analysis, and Programme Management. The choice should be made on the basis of the student's career goals and personal interests and skills.

Each student's curriculum requires the annual approval of the Supervisor. Advanced courses in Commerce, Computer Science, Economics, Geograph, Mathematics, and Psychology have prerequisites so students must plan their studies with care.

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, are advised to take MATA27 (Calculus) as early in their studies as possible. Such students may delay JCSB27 no later than the second year. A Statistics course, ECOB32F/S or ECOB35F/S, and a Computer Science course should also be included as early as possible in a student's studies.

The curriculum requirements are as follows:

A *Core Courses:* eleven full-course equivalents, to be selected as follows:

I *Behavioural Foundations*
(two full-course equivalents)
Required:
*JCSB27Y Organizational Behaviour
one full-course equivalent from:
POLB66Y Psychology and Politics
POLC65F/S Topics in Political Leadership
PSYB10F/S Introduction to Social Psychology
PSYB11F/S Social Psychology Laboratory
SOCB04Y Political Sociology
SOCC13F/S Industrial Sociology
SOCC07F/S Sociology of Occupations and Professions
*Prerequisite waived for Administration students

II *Public Policy Development and Evaluation*
(four and one-half full-course equivalents)
Required:
ECOA01Y Introduction to Economics
ECOB03Y Price Theory
POLB50Y Introduction to Canadian Politics
POLB61F Canadian Public Administration
POLB62S Public Policy-Making
one of:
ECOB32F/S Economics of the Public Sector: Expenditures
or
ECOB35F/S Public Decision Making

III *Historical and Cultural Foundations*
(two full-course equivalents)
To be selected from the curricular offerings of the Humanities Division at least one of which must be:
HISB02Y Britain from the 18th Century to the Present
HISB03Y History of the United States
HISB04Y Introduction to Canadian History

IV *Programme Management*
(two and one-half full-course equivalents)
Required:
COMA01Y Financial Accounting
COMB01Y Management Accounting
one half full-course equivalent from:
ECOB11F/S Quantitative Methods in Economics
GGRB31F/S Data Analysis in Geography
STAB52F/S Probability and Statistics I
STAB57F/S Probability and Statistics II
PSYB07F/S Data Analysis in Psychology
SOCB06F/S Social Statistics

B *Advanced Options:* Students must choose one of the following categories:

I *Policy Analysis* (four full-course equivalents)
a three full-course equivalents from:
POLB51F/S Government and Politics in Ontario
POLB53F/S Public Policies in Canada
POLB54F/S Integovernmental Relations
POLB55Y Comparative Provincial Government
POLB63F/S Comparative Public Administration
POLB85F/S Comparative Politics of Industrial Countries
POLC51F/S Topics in Canadian Government
POLC60F/S Administrative Politics
POLC61F/S Policy Development and Political Evaluation
POLC62F/S Organized Interests and the State
POLC63F/S Administrative Theories and Policy-Making
POLC65F/S Topics in Political Leadership
b one full-course equivalent from:
ECOB07Y Macroeconomic Theory and Policy
ECOB12F/S Quantitative Methods in Economics: Applications
ECOB31F/S Economics of the Public Sector: Taxation
ECOB35F/S Public Decision Making
ECOB37F/S Law and Economics
ECOB41F/S Industrial Organization
JGEB27F/S Location and Spatial Development

II *Economic Policy* (four full-course equivalents)
a Required:
ECOB07Y Macroeconomic Theory and Policy
ECOB12F/S Quantitative Methods in Economics: Applications
b one and one-half full-course equivalents from:
ECOB31F/S Economics of the Public Sector: Taxation
ECOB32F/S Economics of the Public Sector: Expenditures
ECOB41F/S Industrial Organization
ECOC08F/S Econometrics
JCEC40F/S Public Policy Towards Business

c one full-course equivalent from:
POLB51F/S Government and Politics in Ontario
POLB53F/S Public Policies in Canada
POLB54F/S Intergovernmental Relations
POLB55Y Comparative Provincial Government
POLB63F/S Comparative Public Administration
POLC60F/S Administrative Politics
POLC61F/S Policy Development
POLC62F/S Organized Interests and the State
POLC63F/S Administrative Theories and Policy-Making

III *Social Policy* (four and one-half full-course equivalents)
a Required:
SOCB01Y Methods in Social Research
SOCB05Y Urban Sociology
SOCC06F/S Applied Sociology
PSYB08F/S Experimental Design in Psychology
b one half full-course equivalent from:
COMC04F/S Principles of Marketing
COMC05F/S Introduction to Marketing Management
SOCB23Y Population
SOCC07F/S Sociology of Occupations and Professions
SOCC11F/S Sociology of Law and Law Enforcement
SOCC13F/S Industrial Sociology
c one full-course equivalent from:
ECOB37F/S Law and Economics
POLB53F/S Public Policies in Canada
POLB54F/S Intergovernmental Relations
POLB63F/S Comparative Public Administration
POLC61F/S Policy Development and Political Evaluation
POLC62F/S Organized Interests and the State
POLC63F/S Administrative Theories and Policy-Making

IV *Urban and Regional Policy* (four and one-half full-course equivalents)
a Required:
GGRA04Y The Nature of Human Geography
GGRB05Y Urban Geography
JGEB27F/S Location and Spatial Development
GGRB28F/S Geography and Development
b one and one-half full-course equivalents from:
ECOB47F/S Urban Economics
GGRC04F/S Urban Residential Geography
GGRC18F/S Urban Transportation Policy Analysis
GGRC31F/S Development and Planning of Metropolitan Regions
POLB88Y Urban Politics
POLC60F/S Administrative Politics
POLC61F/S Policy Development and Political Evaluation
POLC63F/S Administrative Theories and Policy-Making
SOCC26F/S Sociology of Urban Growth

V *Programme Management* (four and one-half full-course equivalents)
a two full-course equivalents from:
COMC04F/S Principles of Marketing
COMC05F/S Introduction to Marketing Management
COMC08F/S Retail Management and Strategy
JCEC02Y Corporation Finance
JCEB72F/S Analysis for Decision Making I
JCEB73F/S Analysis for Decision Making II
b Required: one of:
ECOB12F/S Quantitative Methods in Economics: Applications
PSYB08F/S Experimental Design in Psychology
c one half full-course equivalent from:
POLB53F/S Public Policies in Canada
POLC60F/S Administrative Politics
POLC61F/S Policy Development
POLC62F/S Organized Interests and the State
POLC63F/S Administrative Theories and Policy-Making
d one and one-half full-course equivalents from:
CSCA56F/S Computer Programming
CSCA58F/S Introduction to Computing
CSCA66F/S Programming Applications
CSCA68F/S Problem Solving with Computers
CSCB28F/S Programming Techniques for Data Processing
COMC20F/S Business Policy
COMC22F/S Personnel Administration
ECOB41F/S Industrial Organization
JCEC40F/S Public Policy Towards Business
SOCC07F/S Sociology of Occupations and Professions
SOCC13F/S Industrial Sociology
including at least one half-course from Computer Science.

Co-operative Programme in Arts Administration

Director of Co-operative Programmes: A.N. Sheps
Assistant to the Director: Joan Bunyan
Co-ordinator: D. Paul Schafer
Supervisor: A.N. Sheps

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 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. Enrollment is limited and only a small number of applicants can be accepted each year. Admissions are considered annually in May.

Fees Every student in a co-operative programme is required to pay an additional fee 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-time course of studies during study terms

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 HUMC30Y (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 students study French or a foreign language.

Each student's curriculum requires the annual approval of the Supervisor. Careful attention should be paid to the pre-requisites for various advanced courses in the Arts Fields.

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
Required

COMA01Y	Financial Accounting
ECOA01Y	Introduction to Economics
JCSB27Y*	Organizational Behaviour
ECOB35S	Public Decision Making
POLB61F	Canadian Public Administration
POLB62S	Public Policy-Making
HUMB90Y	Introduction to Arts **Administration**
HUMC30Y	Senior Seminar in Arts **Administration**

plus
1.5 full course equivalents from any of ECOB03, ECOB07, CSCA56*, COM, JCE, POLB53, POLB61-64, POLC60-63.
* 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 110)
and
one full-course equivalent from the courses listed under the Major Programme in Drama, Group B (page 110)
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 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 page 134).

IV Music
Required

MUSA01Y	Introduction to Music
MUSB17F	Materials of Music I
MUSB24S	Materials of Music II

and
4 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	Ancient Art and Architecture
FARA11S	Medieval Art
FARA12F	Renaissance and Baroque Art
FARA13S	Modern Art: 1750 to the Present

and
1 additional full course equivalent in Fine Art History at the B-level. (see page 131)

III Fine Art Studio
Required

FARA90Y	Foundation Studies in Studio

or

FARA70F	Two and Three Dimensional Design

and

FARA71S	Colour

plus
2 additional full course equivalents in Fine Art Studio. (see page 134)

IV Music
Required

MUSA01Y	Introduction to Music
MUSB17H	Materials of Music I
MUSB24S	Materials of Music II

plus
1 additional full course equivalents in Music. (see page 195)

* 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

HUMC30Y 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 negotiatons; 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.
Session: Winter Day
P. Schafer

Cooperative Programme in International Development Studies

Director of Co-operative Programmes:
A.N. Sheps
Assistant to the Director:
Joan Bunyan
Co-ordinator:
D. Paul Schafer
Supervisor:
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. The distinctive feature 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 with knowledge and experience of both resource management and developmental economics, politics and administration for permanent 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 receives a four-year B.A. or B.Sc. with specialist certification in International Development Studies.

Admission to the Programme
a. From Grade 13 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 Supplmentary 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.

Admissons are granted on the basis of applicants' academic performance, background in relevant subjects, quantitative and 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. 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 an additional fee 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 travel expenses associated with placements. The location of placements will vary according to a student's disciplinary and regional preferences and abilities. Generally, students will serve with the administration or management of research, development and aid projects of Canadian 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 Supervisor of Studies, develop a clearly defined intellectual or theoretical goal for the work placement. Performance on work terms will be evaluated by the employer, the Co-ordinator and the Supervisor. After the work term students must submit to the Supervisor, for evaluation, a work term report which will take the form of a critical analysis, dissertation or research report which integrates knowledge and experience gained on the placement with academic studies already completed.

Eligibility for Work Placements

To compete for work placements a student must
- be in good standing in the Programme
- have completed at least fifteen full-course equivalents

After the work term students return to their studies and enroll in IDSC01Y (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 term performance and the work term report
- complete a full-time course of study 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)
- IDSC01Y, an advanced seminar in which they report on their work placement experience, and other elective courses (Section D, below)

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 106) and IDSB02Y; International Development Studies, Physical and Ecological and Resource Management (page 106). 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 pre-requisites for higher level courses. Some courses in the Programme are offered on other campuses of the University. Each student's curriculum 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

I Required:

IDSB01Y	International Development Studies: Political Economy
IDSB02Y	International Development Studies: Physical and Ecological Resource Management
ECOA01Y	Introduction to Economics
POLB80Y	International Relations
POLB91Y	Politics of the Third World
BIOA03Y	Introductory Biology
*FOR217F	Resource Ecology
*FOR252F	Principles of Hydrology
GGRB29Y	Soil Management and Conservation

and

II One of:

ECOB66F/S	Economic Development

or

GGRB28F/S	Geography and Development

and

III One of:

ECOB11F/S	Quantitative Methods in Economics

or

GGRB31F/S	Data Analysis in Geography

or

STAB52F/S	Probability and Statistics I

Note: Students planning to enter the Political Economy advanced option should choose, from II above, ECOB66F/S, and, from III above, ECOB11F/S. ECOB03Y is a prerequisite for ECOB66F/S. It is required in the Political Economy option and should be taken within the first two years.

(Courses marked with asterisk denote St. George Campus courses)

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

ECOB07Y	Macroeconomic Theory and Policy
ECOB67F/S	Development Policy
POLC93F/S	Selected Topics on Developing Areas
POLC94F/S	Selected Topics on Developing Areas
SOCC17F/S	Social Change in the Third World
ANTB19F/S	Economic Anthropology
GGRB01Y	Geography of Resources

II Ecological Management

At least three full-course equivalents chosen from

*FOR455S	Advanced Forest Ecology
*FOR456H	Forest Soils II
GGRB03Y	Climatology
GGRB24Y	Environmental Pollution
GGRC28Y	The Hydrology of Surface and Subsurface Waters
ANTB01Y	Ecological Anthropology

C *Regional and Language Options:*

At least two full-course equivalents chosen from courses dealing with a designated development region. At least one of the courses must be in a language of the region. Selection of a region and of courses is subject to approval by the Supervisor of Studies. Below are approved courses for two regions

I Latin America

a at least one full-course equivalent from

HUMB14Y	Topics in Latin American Culture and Literature
ANTB03F/S	The Americas: an Anthropological Perspective
ANTB07F/S	Comparative Slavery
*ANT443Y	Social Anthropology of Latin America and the Caribbean
*GGR249H	Contemporary Latin America
*GGR244H	Historical Geography of 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
*POL305Y	Politics and Society in Latin America
*POL442H	Topics in Latin American Politics I and II
*SOC323Y	Social Change in Latin America
*PRT280H	Aspects of Brazilian Culture

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 Portugese
*PRT222Y	Language Practice

II Africa

a at least one full-course equivalent from

GGRC33F/S	Africa: Perspectives in Geography
POLB92Y	Politics and Society in Independent Africa
ANTB05F	African Cultures and Socities I: Survey
ANTB06S	African Cultures and Societies II: Case Studies
*ANT345Y	Social Anthropology of West Africa

*GGR345H	Africa: Geographical Aspects of Economic Change
*POL430Y	Topics in African Politics
*HIS395Y	Black Africa in the 20th Century
*HIS495Y	Black Africa: Social and Economic History

and
b at least one full-course equivalent from

*NEW280Y	Introductory Swahili
*NEW380Y	Intermediate Swahili
FREB06Y	Language Practice I
FREB07H	Intermediate Conversation I
FREB09Y	Practical French I
FREB16Y	Language Practice II
FREB17H	Intermediate Conversation II
FREB19Y	Practical French II

D *Required:*

IDSC01Y	International Development Studies: Advanced Seminar

and
any *five* other full-course equivalents which satisfy the degree requirements.

In addition to the courses listed above, the following courses are recommended:

ANTB17S	Complex Societies: Anthropo logical Perspectives on Development
COMA01Y	Financial Accounting
GGRC20F	Rural Planning and Develop ment
GGRC29S	Problems in Modern Agricultural Land Use
*FOR466Y	Wildlife Ecology and Manage ment
*JPE400Y	The Political Economy of International Development
*GGR393F	Methods of Environmental Impact Assessment
*GGR416S	Field Studies in Environmental Assessment
*GGR355H	Environmental Change
*GGR356H	Energy-Environment Interaction
*GGR334H	Water Resource Management

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.
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

IDSC01Y International Development Studies: Advanced Seminar (not offered)

FOR252F Principles of Hydrology
Through student seminars the major elements of the hydrological cycle are investigated. Limited enrolment.
Session: Winter Day
F.M. Buckingham
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 FOR217F are BIOA03Y and IDSB02Y, and the prerequisite for FOR456H are IDSB02Y, FOR217F, FOR252F and GGRB29Y. FOR252F and FOR455S have no prerequisites but enrolment is limited and students should apply early. FOR455S is offered in alternate years only.

GGR courses: The normal prerequisites are waived in B-level GGR courses for students registered in International Development Studies who are following an approved course of studies in the Programme.

Development Studies

College Programme in Development Studies
Supervisor:
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 in the Division of Social Sciences 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	Development Studies: Political Economy
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.)

*ECOB66F	Economic Development
*ECOB67S	Development Policy
*GGRB28S	Geography and Development
POLB80Y	International Relations
POLB91Y	Politics of the Third World
*SOCC17F	Social Change in the Third World
*GGRB29Y	Soil Management and Conservation
*ANTB19F	Economic Anthropology

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	The Americas: an Anthropological Perspective
*ANTB05S	African Cultures and Societies I: Survey
*ANTB06S	African Cultures and Societies II: Case Studies
*ANTB07S	Comparative Slavery
*ANTB16Y	Cultures of Modern Canada
*ANTB17S	Complex Societies: Anthropological Perspective on Development
ANTB21Y	North American Background to Canadian Native Peoples
*ANTB51Y	Medical Anthropology
*ANTB56Y	The Anthropology of Food
ANTC11Y	The Anthropology of Women
*ANTC30S	Biological Anthropology of Past and Present Canadian Native Peoples
BIOA03Y	Introductory Biology
ECOA01Y	Introduction to Economics
*ECOB03Y	Price Theory
*ECOB07Y	Macroeconomic Theory and Policy
*ECOB11F	Quantitative Methods in Economics
*GGRB01Y	Geography of Resources
*GGRB03Y	Climatology
GGRB24Y	Environmental Pollution
*GGRB31S	Analytical Methods in Geography

*GGRC28Y	The Hydrology of Surface and Sub-Surface Waters
*GGRC33F	Africa: Perspectives in Geography and Development
HUMB14Y	Topics in Latin American Culture and Literature
POLB92Y	Politics and Society in Independent Africa
POLC93F	Selected Topics on Developing Areas
POLC94S	Selected Topics on Developing Areas

Students should also be aware of the following courses at the St. George Campus

FOR217F	Resource Ecology
FOR252F	Principles of Hydrology
FOR455S	Advanced Forest Ecology
FOR456H	Forest Soils II

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. However, students are strongly advised to register in a four-year degree which requires a combination of a disciplinary Major Programme with the College Programme in Development Studies. This provides the opportunity to select a wider range of development courses as well as a stronger disciplinary background.

Example 1 (three-year degree)
First Year:
IDSB01Y, IDSB02Y, ECOA01Y, GGRA05Y, SOCA01Y
Second Year:
ECOB03Y, GGRB29Y, SOCB16Y, POLB80Y, POLB91Y
Third Year:
ECOB66F, ECOB67S, SOCC17F, GGRB24Y, GGRB28S, POLB92Y, POLC93F, POLC94S

Example 2 (four-year degree)
First Year:
ECOA01Y, POLA01Y, SOCA01Y, ANTA01Y, GGRA05Y
Second Year:
ECOB03Y, POLB50Y, SOCB16Y, POLB91Y, IDSB02Y
Third Year:
ECOB66F, ECOB67S, SOCC17F, POLB80Y, GGRB28S
Fourth Year:
POLB70Y, ANTB17F, POLB92Y, POLC93F, POLC94S, GGRB31S, IDSB01Y

Discipline Representative:
M.Q. Schonberg

The Drama courses at Scarborough College have been devised to serve both students who intend to specialize in Drama and Theatre studies and those who have a casual interest in the subject. At present we offer two types of courses which complement each other: theoretical and practical. The theoretical courses are in the History of Theatre, in which the student becomes familiar with the development of the theatre from a non-literary point of view from its classical beginnings to the present day. These courses are augmented by courses in the dramatic literatures of several countries which are offered by members of the faculty who specialize in these areas.

Advanced students may choose an Independent Studies course or Directed Reading course, where they work individually under the supervision of their own tutors.

In the practical courses, the students become acquainted with all aspects of theatre production in studio situations, both as actors and technicians. The students study with faculty members and with professional artists and teachers. Participation in public productions at the College is encouraged.

Drama students may like to refer to the following:
Specialist Programme in the Arts: Page 60
Specialist in Co-operative Programme in the Arts: Page 100

Specialist Programme in Drama
Supervisor: M.Q. Schonberg (284-3126)
A student is required to complete twelve full-course equivalents, ten 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	ENGB31Y	Modern Drama

6 Two full-course equivalents chosen from the following:

CLAB02Y	Greek and Roman Tragedy
DRAB06Y	Canadian Drama
ENGB10Y	Shakespeare
ENGB12Y*	English Drama to 1642
ENGC28F/S*	Drama in English Canada 1920-1970
FREB29F/S*	French Drama of the Eighteenth Century
FREB30F*	French Theatre of the Early Modern Period
FREB31S*	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
JHGB50Y	The Development of German Drama (in translation)
HUMB70Y	Introduction to Cinema
ITAB27F*	Modern Italian Theatre from Pirandello to the Present
ITAB35F/S*	Italian Sixteenth Century Theatre
ITAB41F/S*	Italian Eighteenth Century Theatre

* Students should check these courses for prerequisites

7 Three full-course equivalents chosen from the following (of which *two* must be at the C-level, and no more than *two* may be chosen from DRAC10-C28).

DRAB02Y	The Directors' Theatre
DRAB05Y	The Art and Nature of Comedy
DRAB06Y	Canadian Drama
DRAB10B	Improvisional 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
DRAC01Y	Advanced Practical Work shop and Elements of Directing
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

DRAC20Y*/DRAC21Y*/DRAC22Y*/DRAC23Y*/DRAC24Y*/DRAC25F*/DRAC26S*/DRAC27F*/

DRAC28S*	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
ANTA03Y	Cultures in the Modern World
ANTB02Y*	Anthropological Study of Religion
ANTB23Y	Comparative Mythology
CLAB01Y	Greek and Roman Epic
ENGA01Y	(ENGA04Y) 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
LINA01Y	General Linguistics
LINA04F/S	Introduction to Language
MUSA01Y	Introduction to Music
PHLB03F	Philosophy and Art
PSYA01Y	Introduction to Psychology
SOCA01Y	Introduction to Sociology

* Students should check these courses for prerequisites
** Prerequisite ten full-course equivalents
NOTE: No more than ten full-course equivalents in DRA are permitted in the four-year degree.

Major Programme in Drama
Supervisor:
M.Q. Schonberg (284-3126)

A student is required to complete six 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 two full-course equivalents, one from group A and one from group B, but no more than two courses from DRAC10-C28 may be taken within the three-year degree.

Group A

DRAC01Y Advanced Practical Workshop and Elements of Directing
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
DRAC20Y*/DRAC21Y*/DRAC22Y*/DRAC23Y*/DRAC24Y*/DRAC25F*/DRAC26S*/DRAC27F*/DRAC28S* Supervised Reading Courses

Group B

CLAB02Y Greek and Roman Tragedy
DRAB02Y The Directors' Theatre
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
ENGB10Y Shakespeare
ENGB12Y* English Drama to 1642
ENGC28F/S* Drama in English Canada 1920-1970
ENGB31Y* Modern Drama
FREB29F/S* French Drama of the Eighteenth Century
FREB30F* French Theatre of the Early Modern Period
FREB31S* Contemporary French Theatre: the Theatre and the Absurd
FREB38F/S* The Theatre of French Canada
FREB39S* Workshop in Modern French Theatre
FREB41F/S* French Classicism: The Theatre
JHGB50Y The Development of German Drama (in translation)
HUMB70Y Introduction to Cinema
ITAB27F* Modern Italian Theatre from Pirandello to the Present Day
ITAB35F/S* Italian Sixteenth Century Theatre
ITAB41F/S* Italian Eighteenth Century Theatre

* 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. Lab fee $30.00
Session: Winter Day
L.L. Browne

DRAB03Y The History of Theatre I
A study of the non-literary aspects of theatre from the Classical Greek Theatre to the end of the eighteenth century.
Areas of concentration will include classical Greek and Roman theatre, Western European Medieval dramatic traditions; the impact of the *commedia dell'arte* on European theatre; Elizabethan and Jacobean drama; the theatre of the Baroque; Neo-classicism. Acquaintance with representative plays of the various periods will be required. Attention will also be paid to the social and political milieu from which the plays arise.
Lectures and tutorials. The text for the course will be *History of the Theatre* by Oscar Brockett. Representative plays will be announced.
Session: Winter Day
M.Q. Schonberg / L.L. Browne

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 Evening
L.L. Browne / M.Q. Schonberg

DRAB05Y The Art and Nature of Comedy
A study of the archetypal patterns of comedy as manifested in different periods and cultures. The students will read representative theoretical works and a survey of comic plays from Aristophanes to the present. These will be looked at with reference to the theory and practice of comedy and to the social aspects of this dramatic form. The types of comedy explored will include political and literary satire, the comedy of ideas, farce and burlesque, the drama of melancholy, and the comedy of the absurd. Seminars.
Session: Winter Day
M.Q. Schonberg

DRAB15A A History of Musical Theatre
A study of the history of musical theatre in the Western world, culminating in a production by the class of one such entertainment.
Particular attention will be paid to Greek drama; Renaissance masques and intermezzi; the rise of opera and its offshoots, ballad opera and comic opera; English pantomime; music hall, cabaret, vaudeville and variety; and the rise and development of the modern musical comedy. As well, the study will consider incidental music, music-drama (e.g. the plays of Brecht, Ryga's *Ecstasy of Rita Joe*, John Grey's *Billy Bishop Goes to War)*, and music in otherwise **straight** drama. The four components of a musical (book, music, lyrics and elements of staging) will be looked at individually to see what each contributes to the whole and how selected writers have manipulated the four to create different kinds of musicals in different eras. Lab fee $40. Limited enrolment 50.
Session: Summer Evening
L.L. Browne

DRAC01Y Advanced Practical Workshop and Elements of Directing
This course is designed to enable advanced students to concentrate on problems related to the staging and direction 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, scenework, and work on productions.
The text for the course will be Curtis Canfield's *The Craft of Play Directing*. Lab fee $30.00.
Prerequisite: DRAB01
Session: Winter Day
L.L. Browne/M.Q. Schonberg

DRAC10Y Individual Studies in French Theatre and Drama in Translation

DRAC11Y Individual Studies in German Theatre and Drama in Translation

DRAC12Y Individual Studies in Italian Theatre and Drama in Translation

DRAC13Y Individual Studies in Russian Theatre and Drama in Translation

DRAC14Y Individual Studies in Spanish Theatre in Translation
Individuals will study under the supervision of members of the appropriate language discipline, and details of course content and evaluation will be arranged in consultation between the student, a member of the language discipline, and the Drama supervisor.
In these courses the emphasis will be on the student's individual initiative, with the faculty member acting as tutor rather than lecturer.
Prerequisite: At least ten full course equivalents, two of which must be DRAB03 and DRAB04.
These courses are intended for students specializing in Drama who are not sufficiently fluent in French/German/Italian/Russian/Spanish to read the works in the original language. Permission of Supervisor required.
Session: Winter Day
M.Q. Schonberg

DRAC20-24Y
DRAC25F, C26S
DRAC27F, C28S Supervised Reading Courses
This is an advanced reading course for drama students. The student wishing to take this course should consult with M.Q. Schonberg, the Programme Supervisor, who will arrange in co-operation with the student a reading list and set the specific requirement for the course.
The emphasis in this course will be on advanced individual projects exploring specific areas of the history of theatre, and/or dramatic literature.
Proposals by students for specific projects will be assessed by the Supervisor in consultation with other members of faculty.
Prerequisite: One B-level full-course equivalent in Drama, and permission of instructor.
Session: Winter Day
M.Q. Schonberg, L.L. Browne

Courses Not Offered in 1986-87

DRAB02Y The Directors' Theatre
DRAB06Y Canadian Drama
DRAB10A Improvisational Theatre: The Commedia dell'Arte
DRAB12B Medieval and Early Tudor Drama: Texts and their Production
DRAB13A The Victorian Theatre
DRAB14A Greek Tragedy in Performance

Economics

Assistant Chairman: S. Howson
The Economics curriculum offers a wide variety of both 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 which are central to the curriculum: the introductory course (ECOA01); the initial B-level courses – Price Theory (ECOB03) and Macroeconomic Theory and Policy (ECOB07); at least one course that provides a different perspective either on contemporary economic theory, or on ways of organizing economic activity – Economic History (ECOB81, ECOB82, ECOB83), the Literature of Economics (ECOB20, ECOB21), 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 which are desirable for decision-making in business and government.
Students must complete at least nine 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 nine course minimum:
ECOA01Y
MATA27Y or MATB41F or MATB50F
ECOB03Y (formerly ECOB01F and BO2S)
ECOB07Y (formerly ECOB05F and B06S)
ECOB11F/S or (STAB52F and STAB57S)
ECOB12F/S
ECOB20F/S or ECOB21F/S or ECOC05F/S or ECOC07F/S
ECOC08F
ECOB66F/S or ECOB68F/S or ECOB81Y or ECOB82Y or ECOB83Y
ECOC13F
ECOC14S
A Workshop in Economics
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, MATB41F or MATB50F).
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 ECOA01 and COMA01).
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 ECOA0l). 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 – ECOB20F, ECOB21S, ECOB81Y, ECOB82Y, ECOB83Y, ECOC05S, ECOC07F
One additional full course equivalent in economics. Required courses in history:
HISA01Y and six other full-course equivalents in history (HIS or GRH). Of these six, three must be upper-level courses (these are to be chosen from: HISB11Y – HISC99Y, GRHB24F/S – 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 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 for students considering the possibility of graduate work in mathematical economic theory. Students must complete at least fourteen full-course equivalents in Economics, Mathematics, Statistics, and Computer Science. The specific requirements are as follows:
ECOA01Y
MATA26Y or MATA27Y or MATA55Y
MATA40F and MATA45S
CSCA56F/S or CSCA58F
ECOB03Y
ECOB07Y
ECOB13F
(MATB41F and MATB42S and MATB43S) or (MATB50F and
MATB55S)
MATB44F and MATB49S
STAB52F and STAB57S
ECOC13F and ECOC14S
MATC51F
MATC53Y
JCEB72F
JCEB73S
One and one-half other full-course equivalents in ECO or JCE.
It is recommended but not required that students include in their programme an additional half-course in computer science and ECOC08.

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
ECOB31S, ECOB32F
ECOB20F or ECOB21S or ECOC05S or ECOC07F
ECOB35S or ECOB66F
ECOB11F/S or (STAB52F and STAB57S)
Required courses in Political Science:
POLA01Y
POLB50Y
POLB70Y or POLB71Y
Three additional full-course equivalents from at least two of the five sub-fields listed below:
A Canadian Government, Public Administration -POLB51F/S, POLB52Y, POLB53F/S, POLB54F/S, POLB55Y
B Public Administration and Public Policy -POLB53F/S, POLB61F/S, POLB62F/S, POLB63F/S, POLB64F/S, POLC60F/S, POLC61F/S, POLC63F/S
C International Relations – POLB80Y, POLB81F/S, POLB82Y, POLC81F/S
D Comparative Politics, Industrialized Countries -POLB85Y, POLB86Y, POLB87Y, POLB88Y, POLB89Y, POLC85Y
E Comparative Politics, Developing Countries -POLB91Y, POLB92Y, POLB93Y, POLC93F and POLC94S
Related (but not required) courses in other disciplines:
MATA22Y or MATA26Y or MATA27Y, CSCA56F, COMA01Y
*The maximum number of Economics and Political Science full-course equivalents which 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 twelve full-course equivalents in Economics, Mathematics, Statistics and Computer Science. The specific requirements are as follows:
ECOA01Y
CSCA58F
CSCA68S
MATA26Y or MATA27Y or MATA55Y
ECOB03Y
ECOB07Y
ECOB13S
MATA40F and MATA45S
STAB52F and STAB57S
(MATB41F and MATB42S) or (MATB50F and MATB55S)
CSCB28S or CSCB68F
ECOC08F
ECOC13F
ECOC14S
JCEB72F
One half-course from: CSCC34F, CSCC51S, CSCC78F, MATB43S, MATC53Y, STAC42F, STAC52F
One half-course from the Workshops in Economics.

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. These must include: ECOA01Y, ECOB03Y, ECOB07Y, ECOB11F/S and ECOB12F and one C-level course. It is recommended, but not required, that a student also include one course chosen from ECOB66F/S, ECOB68F/S, ECOB81Y, ECOB82Y, ECOB83Y.
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 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.
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.
Exclusions: (ECOB01 and ECOB02)
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.
Exclusions: (ECOB05 and ECOB06)
Prerequisite: ECOA01
Session: Summer Evening, 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: ANTB43; GGRB02; PSYB07; SOCB06; STAB52
Prerequisite: ECOA01
Session: Summer Evening, Winter Day, Winter Evening

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 students familiarity with practical problems in regression analysis. Limited Enrolment: 80 per section.
Prerequisite: ECOB11 or GGRB02 or STAB52 and STAB57
Session: Winter Day, Winter Evening

ECOB20F 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. Limited enrolment: 60.
Prerequisite: ECOB03 or ECOB07
Corequisite: ECOB03 or ECOB07 (whichever is not used to satisfy the prerequisite).
Session: Winter Day

ECOB21S History of Economics II: Origins of Modern Economic Theory
A study of classical literature of Political Economy between 1870 and the 1930's, especially the work of Jevons, Walras, Marshall, Wicksell and the early Keynes. Limited Enrolment: 60.
Prerequisite: ECOB03 or ECOB07
Corequisite: ECOB03 or ECOB07 (whichever is not used to satisfy the prerequisite).
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.
Exclusion: GGRB27F
Prerequisite: ECOA01
Corequisite: GGRA04 or GGRB05
Session: Winter Day
J. Miron

ECOB31S 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. Limited Enrolment: 60.
Prerequisite: ECOB03
Session: Winter Day
M. Bucovetsky

ECOB32F 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. Limited Enrolment: 60.
Prerequisite: ECOB03
Session: Winter Day
M. Bucovetsky

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

ECOB37S 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.
Prerequisite: ECOB03 (ECOB03 will be accepted as a corequisite when ECOB37 is taught in the second term of the winter session)
Session: Winter Evening
M. Krashinsky

ECOB41F/S Industrial Organization
The economics of the firm in a market environment. The aim is to study business behaviour and market performanceas influenced by concentration, entry barriers, product differentiation and diversification. Limited Enrolment: 60.
Prerequisite: ECOB03
ession: Winter Day

ECOB45F Poverty and Income Distribution
A study of alternative theories of income distribution with application to poverty and income distribution in Canada. Includes an analysis of the impact of alternative income maintenance schemes such as welfare, negative income taxes, wage subsidies, unemployment insurance, minimum wages, human resource development and public expenditures, taxes and subsidies, as well as the impact of aggregate demand policies on the distribution of income. Limited Enrolment: 60.
Prerequisite: ECOB03
Session: Winter Day

ECOB51S 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 tradeoffs; the impact of institutional constraints such as unions, feather-bedding, minimum wages, wage parity, sex discrimination, occupational licensing, unemployment insurance, wage subsidies and negative income tax plans. Limited Enrolment: 60.
Prerequisite: ECOB03
Session: Winter Day

JCEB54F/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.*
Prerequisite: Completion of at least ten courses including ECOA01.
Session: Winter Evening

ECOB61S 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. Limited Enrolment: 60 per section
Prerequisite: ECOB07
Session: Winter Day
S. Howson

ECOB62F 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. Limited Enrolment: 60.
Prerequisite: ECOB03
Session: Summer Evening, Winter Day
S. Howson

ECOB66F 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.
Prerequisite: ECOB03
Session: Winter Day
S. Horton

ECOB67S 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.
Prerequisite: ECOB66
Session: Winter Day

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. Limited Enrolment: 60.*
Prerequisite: ECOA01
Corequisite: ECOB03
Session: Winter Day

JCEB72F 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.
Prerequisite: CSCA56 or CSCA58, MATA40 or MATA22 or MATA26 or MATA27 or MATA55, ECOB03
Corequisite: ECOB11 or GGRB31 or STAB57
Session: Winter Day
R. Wolfe

JCEB73S Analysis for Decision Making II
A continuation of JCEB72F 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.
Prerequisite: JCEB72
Session: Winter Day
R. Wolfe

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. Limited Enrolment: 60.
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. Limited Enrolment:* 60.
Prerequisite: ECOA01
Session: Winter Day
J. Cohen

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
Session: Winter Day, Winter Evening
K. Ho

ECOC07S 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.
Prerequisites: ECOB03, ECOB07, ECOB20 or ECOB21
Session: Winter Day

ECOC08F/S Econometrics
A formal development of multiple regression analysis using matrix algebra. Topics include the properties of least squares estimators, hypothesis testing, and techniques for diagnosing and correctin mispecified models. A research paper will be required.
Exclusion: ECO327
Prerequisites: ECOB03, ECOB07, ECOB12, MATA40 or MATB41 or permission of instructor
Session: Winter Day

ECOC11F and ECOC12S Supervised Reading
For upper-level students whose interests are not covered in one of the other courses normally offered. Students are expected to design the course with the guidance of a staff member interested in the area of study being proposed. The courses will normally be made available only to students whose performance in Economics courses has been well above average. Students interested in supervised reading courses are urged to contact faculty members well in advance, as not all faculty will be available for these courses in any single term.
Prerequisite: Permission of instructor
Session: Summer Day, Summer Evening, Winter Day, Winter Evening

ECOC13S 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

ECOC14F Advanced Macroeconomic Theory
Post-Keynesian developments in macroeconomic (including monetary) theory; empirical testing of Keynesian and post-Keynesian macroeconomic theories and the uses of macroeconometric models.
Prerequisites: ECOB03; ECOB07; ECOB11; MATA27 or MATA55
Session: Winter Day
M. Devereux

ECOC15F and ECOC16S 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 from the late spring onwards.
Prerequisite: ECOC13 or ECOC14 and permission of instructor. Session: Winter Day

ECOC21F
ECOC22S
ECOC23F
ECOC24S Workshops in Economics
The workshops deal with detailed problem areas in Economics. In past years these have included such subjects as natural resources, technical change, international investment, multinational firms, economic discrimination, or extensions of applied topics covered at the B-level.
A detailed list of the courses and instructors will be available to students from the late spring onwards.
Prerequisites: ECOB03; ECOB07; MATA26 or MATA27 or MATA55. For ECOC23 and ECOC24, ECOC13 or ECOC14 will be a prerequisite.
Session: Winter Day

English

Courses Not Offered In 1986-87

ECOB13S Application of Mathematics to Economics
Prerequisites: ECOA01; MATA27 or MATA55 or MATB41 or MATB50

ECOB47S Urban Economics
Prerequisite: ECOB03

ECOB83Y Economic History 1914-1971
Prerequisites: ECOA01 and 3 B-level courses in Economics or History

ECOC05S The Economics of J.M. Keynes
Prerequisites: ECOB03, ECOB07; ECOB20 or ECOB21

ECOC17F
ECOC18S
ECOC19F
ECOC20S Workshops in Economics
Prerequisites: ECOB03; ECOB07; MATA26 or MATA27 or MATA55. For ECOC23 and ECOC24, ECOC13 or ECOC14 will be a prerequisite

JCEC40S Public Policy Towards Business
Prerequisite: ECOB41

JCEC70S Advanced Corporate Finance
Prerequisite: JCEC02

JCEC75S Investments
Prerequisite: JCEC02

Discipline Representative: M. Cuddy-Keane
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 courses. 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, several courses are offered which require no prerequisite and are therefore available both to beginning and to more advanced students: see B01, B07, B10, B11, B14 and B15. Other 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.

C-level courses (which are equivalent to 400-level courses on the St. George Campus) provide opportunity for more sophisticated study and require some independent work on the part of the student. These courses are generally restricted in enrolment and often involve the presentation of seminars. Students are advised to consult the prerequisites for these courses when planning their individual programmes, and to check with the Discipline Representative before taking courses intended to fulfil C-level requirements 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 ENGB95Y English Literary Criticism
4 Five additional full-course equivalents in English at the A- or B-level, including at least two courses in periods before 1800 and two courses in periods after 1800 (see list)
5 Two full-course equivalents in English at the C-level
6 Two full-course equivalents in other Humanities disciplines. The following are particularly recommended:
   CLAB01Y Greek and Roman Epic
   CLAB02Y Greek and Roman Tragedy
   HISB02Y Britain from the Eighteenth Century to the Present
   HISB23Y Tudor and Stuart England (Prerequisite: One B-level history course)
   HUMA01Y Prologue
   HUMA11Y Greek and Roman Mythology
   LINA01Y General Linguistics
   LITA01Y Introduction to Literature

Major Programme in English
Supervisor: M. Cuddy-Keane (284-3175)
Seven full-course equivalents in English are required. They should be selected as follows:

1 ENGA01Y English Literature: Practical Criticism and Interpretation
2 ENGA02Y English Literature: Historical Survey
3 Four additional full-course equivalents in English at the A- or B-level, including at least one course in a period before 1800 and one course in a period after 1800 (see list)
4 One additional full-course equivalent in English at the C-level

See also the Specialist Programme in **Language and Literature.**

Creative Writing courses are offered at the College under a Literature rubric.

Students should not take Creative Writing on the St. George Campus without consulting the Scarborough Discipline Representative.

List of courses before or after 1800
Pre-1800 courses:

ENGB01Y Old English Language and Literature
ENGB02Y Chaucer
ENGB09Y Prose and Poetry of the English Renaissance
ENGB10Y Shakespeare
ENGB12Y English Drama to 1642
ENGB17Y Fiction before 1832
ENGB71F Dryden and the Restoration
ENGB72F/S *English Literature of the Early 18th Century*
ENGB73S English Literature of the Later 18th Century

Post-1800 courses:

ENGA08Y Twentieth Century Literature
ENGB06Y Victorian Poetry
ENGB07Y Canadian Literature
ENGB16Y Fiction 1832-1900
ENGB20F Contemporary Literature in English: Africa
ENGB21S Contemporary Literature in English: India and Australia
ENGB24Y Major American Authors
ENGB25F/S The Canadian Short Story
ENGB26F/S Canadian Poetry
ENGB27Y Canadian Fiction in English
ENGB31Y Modern Drama
ENGB32Y Modern Poetry
ENGB33Y Modern Fiction 1900-1960
ENGB34F/S The Short Story
ENGB35F/S British Fiction since 1960
ENGB36F/S *American Fiction since 1960*
ENGB40F/S Drama since 1960
(Note: ENGB14Y may count as a post-1800 course; consult the Discipline Representative.)

English

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, and additional 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,
Course Co-ordinator: *K. Theil*

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;* 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, Winter Evening
A. Patenall, J. Kay, W.J. Howard

ENGA08Y Twentieth-Century Literature
An introduction to critical reading and writing through a selection of modern literature from the English-speaking world.

This course will explore literature of the modern period, a time of change and experiment, through the study of short stories and novels by such writers as Joyce, Faulkner, Hemingway, and Margaret Atwood; plays by dramatists such as O'Neill, Beckett, and Stoppard; and a selection of modern 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
R. Brown

ENGB05Y 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: ENGA01Y, ENGA02Y; or ENGB15Y
Session: Winter Day
J. Kay

ENGB07Y Canadian Literature in English: An Introduction
A study of a wide range of Canadian literature, including works by fiction writers, poets, playwrights, and critics, including Callaghan, MacLennan, Laurence, Grove, Davies, Lampman, D.C. Scott, Klein, Pratt, Birney, Avison, Atwood, and Frye.

This study of Canadian literature in English will be historical, following the development of writing in Canada from early times to the present, though most attention will be paid to literature of the twentieth century. Close and critical reading of individual works will also be emphasized.

Texts will include .I An Anthology Of Canadian Literature
(2 vols.) and two to four novels.
Session: Winter Day

ENGB09B 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
Session: Summer Evening
M. Gadpaille

ENGB10Y Shakespeare
A study of at least eleven plays by Shakespeare, both as unique works of art and in the larger contexts of his work as a Renaissance dramatist. A list of texts will be available in H525A.
Session: Winter Day
A. Patenall

ENGB12Y English Drama to 1642
A historical study of English drama from its beginning in medieval religious plays through the full flowering of Elizabethan and Jacobean tragedy and comedy to the closing of the theatres in 1642.

In addition to selected medieval and Tudor plays, there will be special emphasis on Marlowe, Shakespeare, Ben Jonson, Webster, Middleton, Tourneur, and Ford. Some attention will also be paid to staging techniques and theatres. The texts are: Shakespeare, *Comedy of Errors, Love's Labour's Lost, Much Ado about Nothing, Measure for Measure, Othello, The Winter's Tale;* Brooke and Paradise, *English Drama 1580-1642.*
Prerequisites: ENGA01, ENGA02; or ENGB11
Session: Winter Day
A. Patenall

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
M. Gadpaille, H. Jackson

ENGB17Y Fiction before 1832
At least twelve works, including one or more by Richardson, Fielding, Sterne, Austen and Scott.

Further information will be available in Room H525A.
Prerequisites: ENGA01, ENGA02; or ENGB14
Session: Winter Day
W.J. Howard

ENGB26F Canadian Poetry in English
A study of representative Canadian poets.

In addition to intensive reading of the poets studied, some consideration may be given to the relationship of these writers to their cultural context.
Prerequisite: One full-course equivalent in English
Session: Winter Day
S. Namjoshi

ENGB27Y 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 then examines 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;* Kroetsch, *The Studhorse Man;* Laurence, *A Bird in the House;* Atwood, *Surfacing;* Engel, *Bear;* Hodgins, *The Invention of the World;* and selections from Vol. 1 of *An Anthology of Canadian Literature*
Prerequisite: One full-course equivalent in English
Session: Winter Evening
M. Gadpaille

ENGB31Y 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 Cherry Orchard*; Strindberg, *Miss Julie*; Brecht, *Galileo*; plays by Pirandello, Shaw, Beckett, Pinter, T. Williams.
Prerequisites: ENGA01, ENGA02; or ENGA08; or ENGB11
Session: Winter Day
A. Thomas

ENGB32Y Modern Poetry
An analytical study of poetry from the advent of the modern period.

The course will explore the modern tradition in twentieth century poetry, from its beginnings with Yeats, Eliot, Stevens, and Williams to the Present. The course will consider the change in poetic theory and practice that took place in the first two decades of this century, and the development of the poets studied. In addition, individual poems will be studied in detail.
Prerequisites: ENGA01, ENGA02; or ENGA08; or ENGB15
Session: Winter Day
S. Glickman

ENGB33Y 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 the various "post-modernist" trends of both retrenchment and development. Texts will include novels by James, Conrad, Lawrence, Joyce, and Woolf. A reading list will be available in H525A. Students are urged to do some reading in advance and to use the editions specified.
Prerequisites: ENGA01, ENGA02; or ENGA08; or ENGB14
Session: Winter Day
M. Cuddy-Keane

ENGB34F 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
R. Brown

ENGB36F 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, Dubus, Elkin, Gass, Gardner, Hawkes, Mailer, Maxwell, Nabokov, Oates, Percy, Pynchon, Updike, Roth, Theroux, Welty, Woiwode.
Session: Summer Evening
J. Kay

ENGB95Y English Literary Criticism
A study of English literary criticism from the Renaissance to the twentieth century.
This course aims to develop a systematic understanding of criticism. Important critical texts in the English tradition will be studied in detail. Reading will include works by Sidney, Johnson, Dryden, Coleridge, Shelley, Arnold, Leavis, Richards, Frye, and Burke, among others. Important Classical texts will also be read, and English criticism will be placed in the context of the European critical tradition. Central issues of literary theory raised by these works will be discussed.
Prerequisites: ENGA01, ENGA02, and two further full-course equivalents in English.
Session: Winter Day
J. Kay

Note: C-level Courses: Unless otherwise indicated, enrolment in these courses is limited to 20.

ENGC14Y 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 B-level
Session: Winter Day

ENGC40S Women Poets
A study of the more important women poets in English, American, and Canadian literature.
In addition to a close analysis of individual poets, we shall study how recurrent themes in poetry, poetic techniques, and literary stereotypes have been modified by some women writers. Texts will include anthologies of women poets and the selected poems of authors such as Elizabeth Barrett Browning, Christina Rossetti, Emily Dickinson, Edna St. Vincent Millay, Marianne Moore, Adrienne Rich, and Margaret Atwood.
Prerequisites: ENGA01, ENGA02, and three further full-course equivalents in English; or one of ENGB32, LITB42, LITB45
Session: Winter Day
S. Namjoshi

ENGC45S Realism and the Novel
A study of stories and novels of the late nineteenth and twentieth century written in the realist tradition.
The course will cover some major English and American "realistic" writers. Texts will be selected from a list of writers including G. Moore, D.H. Lawrence, Orwell, Norris, Dos Passos, and Hemingway.
This is a seminar course.
Prerequisites: ENGA01, ENGA02, and three further full-course equivalents in English; or one of ENGB16, ENGB24, or ENGB33.
Session: Winter Day
A. Thomas

ENGC60-69F/S Selected Topics in Renaissance Literature
A detailed study of an individual author or a literary movement in the period of the Renaissance.

ENGC67S Renaissance Love Poetry
A consideration of the love poetry of Wyatt, Surrey, Sidney, Spenser, Marlowe, and Donne.
This course will emphasize intensive reading of the poets studied, and will also locate their work in the European tradition in order to see the birth of modern attitudes toward love and the struggle of the individual writer with inherited conventions.
Prerequisites: ENGA01, ENGA02, and three further full-course equivalents in English; or one of ENGB09, ENGB10, ENGB12
Session: Winter Day
R. Brown

ENGC80-89F/S Selected Topics in Nineteenth Century Literature

ENGC80F Dickens
A study of some of the major novels and a short work by Dickens. Texts will include *A Christmas Carol*, *David Copperfield*, *Bleak House*, and *Our Mutual Friend*.
Prerequisites: ENGA01, ENGA02, and three further full-course equivalents in English; or ENGB16
Exclusion: ENGC41
Session: Winter Day
A. Thomas

ENGC82F Nineteenth-Century Women Writers
A study of selected fiction from nineteenth century women writers.
Approximately six works, by writers such as Jane Austen, Elizabeth Gaskell, Charlotte Bronte, George Eliot, Kate Chopin, and Edith Wharton, will be studied. The course will pose questions about the kind of heroine each work presents, the concept of "identity" it embodies, the nature of the authorial voice, and the reader's relationship to the text. 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 Eliot, *The Mill on the Floss*.
Prerequisites: ENGA01, ENGA02, and three further full-course equivalents in English; or one of ENGB05, ENGB06, ENGB16, LITB45
Session: Winter Evening
M. Cuddy-Keane

ENGC84F Thomas Hardy
A study of Hardy's development as an artist, through close analysis of five or six novels and selected poetry.
Some attention will be given to Hardy as representative of the transition from the Victorian to the Modern. Texts will include *Under the Greenwood Tree*, *Far from the Madding Crowd*, and *Jude the Obscure*.
Prerequisites: ENGA01, ENGA02, and three further full-course equivalents in English; or ENGB16
Session: Winter Day
K. Theil

ENGC90-99F/S Selected Topics in Twentieth Century Literature.
A detailed study of an individual author or a literary movement in the literature of the twentieth century.

ENGC90S D.H. Lawrence
A study of Lawrence as artist and prophet.
The primary focus will be on a close analysis of novels, shorter fiction, and poetry; reading will also include selections from his non-fiction work (critical and psychological essays). Texts will include *The Rainbow* and *Women in Love*.
Prerequisites: ENGA01, ENGA02 and three further full-course equivalents in English; or ENGB33
Session: Winter Day
K. Theil

ENGC92F Postmodernism
A study of postmodernism as a recent literary movement.
Through the study of contemporary short stories and novels from America, Canada, and England (as well as of some non-English influences) and of some manifestoes by recent fiction writers, this course will trace the emergence of a new literary movement that seeks to go beyond modernism. Topics considered will include investigations of alternatives to the novel, the use of self-reflexive forms, and the abandonment of realism. Works studied will be by authors such as Nabokov, Lessing, Borges, Bellow, Roth, Barth, Pynchon, Kroetsch, Atwood, D.M. Thomas, Fowles, Renata Adler, and Julian Barnes. Students are urged to begin reading early when possible. (Reading lists available in H525A.)
Session: Summer Evening
R. Brown

ENGC98F The 20th-Century Novella
A study of the medium-length fiction of the twentieth century, with emphasis on the novella as a genre, and close reading of texts by British, American, and Canadian authors. Reading will begin with Conrad and James, and will include novellas by writers such as Wharton, Hemingway, Faulkner, D.H. Lawrence, Porter, Bellow, Lowry and Gallant.
Prerequisites: ENGA01, ENGA02, and three further full-course equivalents in English; or ENGA08 and one of ENGB14, ENGB24, or ENGB33; or ENGB34
Session: Winter Day
M. Gadpaille

ENGC99S The Twentieth-Century Short Story Sequence
A study of unified collections of short stories.
The subject of this course is an unusual but significant modern genre – the group of closely linked short stories that together make a unified work. Some questions to be considered are what kinds of interrelationships serve to connect the stories? Can these works be considered episodic novels? What are some of the factors which account for the increasing popularity of this form, particularly in Canada? Six to eight works will be chosen for intensive study, including: Joyce, *Dubliners*; Hemingway, *In Our Time*; Faulkner, *Go Down, Moses*; Barth, *Lost in the Funhouse*. At least two Canadian works will be added.
Prerequisites: ENGA01, ENGA02, and three further full-course equivalents in English; or ENGA08 and one of ENGB14, ENGB34; or ENGB33.
Session: Winter Evening
M. Cuddy-Keane

Courses Not Offered in 1986-87

ENGB01Y **Old English Language and Literature**

ENGB02Y Chaucer
Prerequisites: ENGA01, ENGA02

ENGB06Y Victorian Poetry
Prerequisites: ENGA01, ENGA02

ENGB07Y Canadian Literature in English: An Introduction

ENGB08Y American Literature: An Introduction

ENGB11Y Varieties of Drama

ENGB15Y English poetry

ENGB16Y Fiction 1832-1900
Prerequisites: ENGA01, ENGA02; or ENGB14; or HISC21

ENGB20F/S Contemporary Literature in English: Africa
Exclusion: ENGB28; ENGB29

ENGB21F/S Contemporary Literature in English: India and Australia
Exclusion: ENGB28

ENGB24Y Major American Authors
Prerequisites: One full-course equivalent in English

ENGB25F The Canadian Short Story

ENGB40F/S Drama since 1960
Prerequisites: ENGB11 or ENGB31

ENGB71F Dryden and the Restoration
Exclusion: ENGB04
Prerequisites: ENGA01, ENGA02; or ENGB15

ENGB72F/S English Literature of the Early Eighteenth Century
Prerequisites: ENGA01, ENGA02

ENGB73S English Literature of the Late Eighteenth Century
Prerequisites: ENGA01, ENGA02

ENGC01Y Studies in Beowulf and other Old English Poetry
Prerequisite: ENGB01

ENGC03Y Studies in Medieval Literature
Prerequisites: ENGA01, ENGA02, and three further full-course equivalents in English; or ENGB02

ENGC05Y *Studies in Restoration and* Eighteenth Century Literature
Prerequisites: ENGA01, ENGA02, and three further full-course equivalents in English; or ENGB17; or two of ENGB71, ENGB72, ENGB73

Fine Art

ENGC06Y Studies in Nineteenth Century Literature
Prerequisites: ENGA01, ENGA02, and three further full-course equivalents in English; or one of ENGB05, ENGB06, ENGB16

ENGC08Y Studies in Twentieth Century Literature
Prerequisites: ENGA01, ENGA02, and three full-course equivalents in English; or one of ENGB31, ENGB32, ENGB33

ENG C29F/S/Y Studies in Canadian Literature
Prerequisites: ENGA01, ENGA02, and three full-course equivalents in English at the B-level; or one full-course equivalent in English and ENGB07 or ENGB26; or ENGB27

ENGC70-79F/S/Y Selected Topics in Restoration and 18th Century Literature

Discipline Representative:
Fall Term: G. Scavizzi (284-3288)
Spring Term: D. Holman (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 pp. 00 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

Specialist Programme in the Arts: Page 60
Specialist in Co-operative Programme in Arts Administration: Page 100

Specialist Programme in Fine Art History
Supervisor: R. Siebelhoff (284-3179)
Students must complete twelve full course equivalents as follows:
1 FARA10F; FARA11S; FARA12F; FARA13S
2 One B-level full-course equivalent from each of the following areas:
Classical
Medieval
Renaissance
Baroque
Modern (1750 to the present)
3 Three full-course equivalents in art history at the C-level or at the 300 or 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 (284-3179)
Students must complete seven full-course equivalents as follows:
1 FARA10F; FARA11S; FARA12F; FARA13S
2 One B- or C-level full-course equivalent from each of *four of the following areas:*
Classical
Medieval
Renaissance
Baroque
Modern
3 One additional full-course equivalent in art history at the C-level.

Specialist Programme in Fine Art Studio
Supervisor: D. Holman (284-3370)
Students must complete fourteen full-course equivalents: ten in studio; any two full-course equivalents in art history; and two additional courses in cognate disciplines
The courses in studio must include:
1 FARA90Y
2 FARB70F/S; FARB72F/S; FARB75Y; FARB82F/S; FARB84Y
3 Three and one-half B-level full course equivalents chosen from the following: FARB73Y; FARB74F/S; FARB76Y; FARB77Y; FARB83F/S; FARB85Y; FARB90F/S; FARB91F/S; FARB92Y
4 Two C-level full-course equivalents.

Students wishing to specialize in either painting or printmaking are advised to select three and one half B level full-course equivalents in one of these areas, and then to complete two C-level courses in the chosen area.
Two additional full-course equivalents are to be chosen in consultation with the Supervisor.

Major Programme in Fine Art Studio
Supervisor: D. Holman (284-3370)
Students must complete six full-course equivalents as follows:
1 FARA90Y
2 FARB70F/S*
3 FARB72F/S*
4 FARB74F/S*
5 FARB75Y*
6 Two and one half additional studio courses, one of which must be at the C-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 Evening

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.
Session: Winter Day
M. Gervers

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
R. Siebelhoff

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 Day

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

FARB11F Gothic Architecture
A development of Gothic architecture from the beginning of the twelfth century to the middle of the thirteenth century.

Emphasis will be placed on Notre-Dame in Paris, the cathedrals of Chartres, Reims and Amiens, and a select number of monuments in England. A discussion of the sculptural programs of the said churches will be included. One two-hour lecture per week. Course texts include: O. von Simson, *The Gothic Cathedral*, Princeton 1962.
Session: Winter Day
M. Gervers

FARB19F Michelangelo
A survey of his activity in architecture, sculpture and painting.

Study will focus on large decorative works and projects like the Sistine ceiling, the tomb of Julius II and the Medici Chapel. The course will emphasize special aspects of Michelangelo's ideas, above all the relationship of the artist with neo-platonism and with the religious trends of his time. Some time will also be spent on Michelangelo's theory of art and on his poetry.

Text: C. de Tolnay, *The Art and Thought of Michelangelo*, New York, 1964.
Session: Winter Day
G. Scavizzi

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 Caravaggisti. The approach towards the material will be problem oriented. Attributions will be evaluated on documentary, stylistic and iconographic grounds, while artists works 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 Day
R. Siebelhoff

FARB37F From David to Delacroix
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-Classicists 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 Evening
R. Siebelhoff

FARB47S Nineteenth Century Realism
A study of the most important artistic movement between Romanticism and Impressionism.

The aim of the Realist artist was to represent the real world in an objective and impartial way. Realism had major representatives in England and Germany, but its greatest flowering occurred in France between ca. 1840 and 1880. The course will trace the careers of Millet and Courbet in France, the Pre-Raphaelites in England, and several German artists. Bibliography includes Linda Nochlin, *Realism* (Penguin, 1971) and Linda Nochlin, *Realism and Tradition in Art 1848-1900* (Prentice-Hall, 1966).

Two hours of lectures per week with class participation encouraged. Slides and films will be used, and visits paid to the A.G.O. and, if possible, to the Albright-Knox gallery in Buffalo.
Session: Winter Evening
R. Siebelhoff

FARB48F 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 Evening

FARB54S New York in the Twentieth Century
A study emphasizing major New York painters and sculptors of the first half of this century.

The course surveys art in New York as the city moved from a somewhat provincial position to a vivid awareness of modern European art at the time of the Armory Show in 1913, and eventually became an international art centre after the Second World War.

The class will make a day trip to the Albright-Knox Gallery in Buffalo. Students interested in this course are encouraged to participate in the College's fall art trip to New York City, which is planned for October 30 to November 2.
Prerequisite: recommended preparation or companion courses: FARA13 or FARB48
Session: Winter Evening
L. Carney

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

FARC02F
FARC03S
FARC04Y Supervised Reading
Prerequisite: At least one B-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
Art History Faculty

FARC05F/S-FARC20F/S Advanced Studies in Art History
Detailed studies of specific topics in art history.

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

FARC17F Leonardo da Vinci
Leonardo's art from the apprenticeship in *Verrocchio's workshop to the Mona Lisa.*

The study will include Leonardo's drawings as well as his theoretical work on painting; it will also deal with his extensive interest in the field of the natural sciences. Text: K. Clark, *Leonardo Da Vinci*, Cambridge University Press, 1939 (and later editions).
Prerequisite: One full-course equivalent at the B-level in Art History.
Session: Winter Evening
G. Scavizzi

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
A. Brannen

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. Lab fee $20.00
Prerequisite: FARA90 or permission of instructor
Session: Winter Day
A. Brannen

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. Lab fee $45.00. Limited Enrolment: 15.
Prerequisite: FARA90 or permission of instructor Corequisite: FARB70
Session: Winter Day
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. Lab fee $45.00. Enrolment limited according to space available and permission of instructor.
Prerequisite/Corequisite: FARA90 or permission of instructor
Session: Winter Day
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. Lab fee $20.00
Prerequisite: FARA90 or permission of instructor
Session: Winter Day
D. Holman

FARB75Y Introduction to Painting
An introduction to principles and techniques of painting. Emphasis will be placed on experimentation and the investigation of the possibilities of painting.

There will be both group and individual critiques held at appropriate intervals during the course. Enrolment limited according to space available and permission of Instructor.
Prerequisite: FARA90 or permission of instructor
Session: Winter Day

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. Lab fee $45.00. 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 FARB82F. Lab fee $45.00. Limited enrolment: 10
Prerequisite: FARB82 and permission of instructor
Corequisite: FARB74
Session: Winter Evening
D. Holman

FARB85A Intermediate Etching
A studio course designed to expand the student's knowledge of etching and relief printing. Lab Fee $90.00. Limited Enrolment: 15.
Prerequisite: FARB84 or permission of instructor
Session: Summer Day
A. Brannen

FARB90F/S
FARB91F/S
FARB93F/S
FARB94F/S
FARB95F/S
FARB96F/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. There is a lab fee of $45.00 per term for students studying in Printmaking.
Prerequisite: FARA90, and permission of instructor which is based on the evaluation of the proposal and/or portfolio
Session: Winter Day
D. Holman

FARC21Y 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.
Session: Winter Day
D. Holman

FARC22Y 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. There is a lab fee of $45.00 per term for students studying in Printmaking.
Prerequisite: Permission of instructor must be obtained by the first week of classes.
Session: Winter Day
D. Holman

FARC24F
FARC25S Independent Studies in Studio: Advanced Level
These courses may be in any one of the fields of drawing, painting and printmaking. Limited enrolment: 3
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. There is a lab fee of $45.00 per term for students studying in Printmaking.
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.
Session: Winter Day
D. Holman

FARC90F
FARC91S 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. There is a lab fee of $45.00 per term for students studying in Printmaking.
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.
Session: Winter Day
D. Holman

Courses Not Offered In 1986-87

FARA70F	Two and Three Dimensional Design
FARA71S	Colour
FARB02S	Wallpainting in Ancient Egypt and the Bronze Age Aegean (ca. 3200 B.C. – ca. 1200 B.C.) *Exclusion:* (FARB42)
FARB06F	Ancient Rome
FARB07F	Later Greek Architecture
FARB10F	Carolingian and Romanesque Art and Architecture *Prerequisites:* FARA11 highly recommended
FARB15F	Renaissance in Italy *Exclusion:* (FARB03), (FARB23)
FARB16Y	The Arts in Northern Europe ca. 1400-1500
FARB27F	Baroque Painting in Southern Europe 1600-1650
FARB41S	Architecture in the Western World Since 1750
FARB43F	Impressionism
FARB46F	Gauguin, Seurat, van Gogh, Cézanne
FARB61Y	The Canadian Landscape
FARB76B	Intermediate Painting I *Prerequisite:* FARB75 or permission of instructor
FARB77B	Intermediate Painting II
FARB80S	Drawing from the Figure I *Prerequisite:* FARB74 or permission of instructor
FARB81S	Drawing from the Figure II *Prerequisite* FARB74 or permission of instructor
FARB84B	Introduction to Etching *Prerequisite:* FARB72 or permission of instructor
FARB92Y	Introduction to Concepts of Sculpture *Prerequisite:* FARA90 or permission of instructor
FARC05F/S	Classical Art
FARC06F/S	Early Medieval Art
FARC07F/S	Medieval Art
FARC08F/S	The Renaissance
FARC09F	Advanced Studies in the High Renaissance *Prerequisite:* one full-course equivalent at the B-level in art history.

FARC10F/S **Italian Renaissance Architecture**

FARC11S **Frans Hals, Rembrandt and Vermeer**
Prerequisite: One full-course equivalent at the B-level in Fine Art History, *preferably* FARB29

FARC12F/S **Southern Baroque Art: GianLorenzo Bernini**

FARC13F/S **Eighteenth and Nineteenth Century**

FARC15S **Cubism & Related Movements**
Prerequisites: FARB46 or FARB48 and at least one additional half course in art history

FARC16S **Expressionist Trends**
Pre-or Corequisite: FARB46 or FARB48 and at least one additional half-course in art history

Discipline Representative: J. Bancroft
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 B06, 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.

However, students without Grade 13 who wish to qualify for B06 and subsequent courses or who simply wish to begin their formal study of French, have an opportunity to do so by registering in our FRE A-level language courses, A06 and A16.

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 FREB06 and 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 advanced language;
4 language practice 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* "civilization" course for credit in the three programmes named below; they may thus take for *programme credit* EITHER FREB20 OR FREB21 AND/OR 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.
A student may take both FREB16Y: Language Practice II and FREB19Y: Practical French II for degree credit but may not count FREB19Y: Practical French II, towards the Specialist Programme in French and the Major Programme in French Language and Literature.

Specialist Programme in French
Supervisor: G. Trembley (284-3315)
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 FREB06Y, FREB16Y, FREC06Y, (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-level (or from the 300 and 400 series courses on the St. George Campus). Both FREC06Y, 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 FREC02-C07, FREC90 (Supervised Reading) involving individual research in a specific area. (Such a course may also count toward satisfying require ments 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.

The following may not count toward a Specialist Programme:

1 any A-level French course.
2 more than two courses from the series FRE425 to FRE469, (specialized seminars) offered on the St. George Campus.
3 FREB18 (Commercial French), FREB07, FREB09, FREB17, FREB19 (Practical French)

Major Programme in French Language
Supervisor: G. Trembley (284-3315)
Students should complete seven full-course equivalents, including:

1 FREB06Y, FREB16Y, FREC06Y (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: FREB18Y, FREB25Y, FREB43S, FREB42Y, FREB48Y, FREC09Y, FREC16Y.
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.
2 FREB09.

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: G. Trembley (284-3315)
Students should complete seven full-course equivalents, including:

1 FREB06Y, FREB16Y, (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, FREC06Y, FREC09Y, FREC16Y
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.

The following may not count toward a Major Programme in French Language and Literature:

1 any A-level French course.
2 FREB18Y, FREB09Y, and FREB19Y.

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* and *Language and Literature.*

FREA06Y Introductory French I
A basic course in spoken and written French for students who have little or no previous formal training in French.

Four class hours and one language laboratory hour per week.
Exclusion: Grade 12 French or equivalent
Prerequisite: None
Session: Winter Day
TBA

FREA16Y Introductory French II
Spoken and written French studies for students who have completed Grade 11 French or equivalent.

Four class hours per week are devoted to the study of written and spoken French. There is also at least one laboratory period a week for oral-aural practice. This course prepares students to enter FREB06. Regular class attendance and participation are essential.
Exclusion: Grade 13 French or equivalent
Prerequisite: FREA06 or Grade 11 French or equivalent
Session: Winter Day
TBA

FREB02Y Introduction to Literary Analysis
An introduction to methods of critical analysis through the study of selected works from the fields of French drama, fiction and poetry of the nineteenth and twentieth centuries.

FREB02 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.
Prerequisite: Grade 13 French or equivalent or FREA16
Co-requisite: FREB06
Session: Winter Day
P. Moes/F. Mugnier-Manfredi

FREB06Y 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.

Each student will be enrolled in a lecture section *and* a tutorial section. The lectures (2 hours weekly) focus on grammar and on listening comprehension. The small group tutorials (2 hours bi-weekly) offer opportunities for the development of reading and writing skills.

FREB06 students are encouraged to take B07S concurrently.

For students planning to specialize in French, FREB02 is recommended as a companion course.
Exclusion: native or near-native proficiency in French
Prerequisite: Grade 13 French or FREA16 or equivalent
Session: Winter Day
F. Mugnier-Manfredi and staff

FREB07S Intermediate Conversation I
Intensive practice in the spoken language through controlled situational oral work and discussion groups.

Students are encouraged to take B06Y concurrently.
Prerequisite: FREA16 or Grade 13 French
Exclusion: Not open to native speakers
Session: Winter Day
L. Mignault and staff

FREB16Y/B Language Practice II
A continuation of FREB06 work, including grammar, composition, oral practice, readings and language laboratory work. Not normally open to native speakers of French.

Each student will be enrolled in a lecture section *and* a tutorial section. The lectures (2 hours weekly) focus on grammar and on listening comprehension. The small group tutorials (2 hours bi-weekly) offer opportunities for the development of reading and writing skills.

FREB16 students are encouraged to take B17S concurrently in order to develop their speaking skills.
Exclusion: Native proficiency in French.
Prerequisite: FREB06 or equivalent
Session: Winter Day, Summer Evening
C. Evans and staff

FREB17S Intermediate Conversation II
Intensive practice in the spoken language through controlled situational oral work and discussion groups. Attention will be given to the comprehension of such major regional variants as that found in the Province of Quebec.

As many opportunities as possible will be provided to practise the language and develop a mastery of relevant vocabulary so that students may acquire a reasonable degree of confidence when speaking about everyday life and contemporary topics.

Students are encouraged to take B17S and B16Y concurrently.
Prerequisite: FREB06 or equivalent
Corequisite: FREB19
Session: Winter Day
L. Mignault and staff

FREB18Y Commercial French
The French language in a commercial or economic context.

This course is of interest to students in French, to Business and Economics Majors, and to all who wish to improve their skills in preparation for entry into a specialized area of the job market. In order to provide the student with the basic elements of commercial techniques as practised in the business communities of Quebec and France, the programme will consist of theoretical and practical sessions. Class meetings will also be devoted to correspondence writing and to exercises that include the vocabulary and structures involved in the language of business.

Note: This course may not count towards a Specialist Programme in French, or the Major Programme in French Language and Literature.
Prerequisite: FREB06, or permission of the *instructor*
Session: Winter Day
W.J.Bancroft

FREB21F 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 FREC33S).
Prerequisite: FREB06
Session: Winter Day
F. Mugnier-Manfredi

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: FREB06
Session: Winter Evening
J. Kirkness

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 Jarry, Claudel, Cocteau, Giraudoux, Anouilh and Montherlant.
Prerequisite: FREB06
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 include Camus, Sartre, Ionesco, Beckett, Genet and Duras.
Prerequisite: FREB06
Session: Winter Day
C. Bertrand-Jennings

FREB34Y 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 Stendhal, Balzac, Sand, Flaubert, Maupassant and Zola.

The course will be conducted as a seminar, with active participation of the students highly encouraged.
Exclusion: (FREB32); (FREB33)
Prerequisite: FREB06
Session: Winter Day
C. Bertrand-Jennings

FREB40F 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 Bruy!*'ere and Mme de Lafayette.

Classes will be conducted as seminars in French. FREB41 is the recommended companion course.
Prerequisite: FREB06
Session: Winter Day
J. Kirkness

FREB41S 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, Moli!*'ere 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: 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 not only to phonology and morphology but also to lexical features. 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: FREB06
Session: Winter Day
J. Kirkness

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: FREB06. Students specializing in French language or literature are urged to take FREB42Y also.
Session: Summer Evening
J. Kirkness

FREB48Y Theoretical and Practical Phonetics
A study of modern French pronunciation.

This course will comprise the following: general principles of French phonetics, phonetic readings, phonetic transcription, corrective pronunciation, the study of the relationship between spelling and pronunciation, and recordings by students themselves.

Basic textbook required: P. León, *Prononciation du français standard.*
Limited enrolment per section: 25
Prerequisite: FREB06
Session: Winter Day
G. Trembley

FREB70Y The Twentieth Century: In Search of the Novel
A study of writers primarily concerned with aesthetic and psychological questions in narrative fiction.

The course studies at 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: FREB06
Session: Winter Day
W.J. Bancroft

FREB80F Representation of Women in French Literature
A study of women characters in French Literature.

This course consists of an analysis of the portrayal of women and of the concept of femininity as presented by prominent male authors from the seventeenth century to the present. On the one hand stereotyped roles assigned to female characters (wife, mother, sexual object, etc.) will be traced, examined and discussed; on the other hand an effort will be made to discover and investigate the dominant myths women have come to embody and the functions these myths serve (the shrew, the *femme fatale*, etc.).

Readings will include plays, novels and short stories by such authors as Molière, Flaubert, Maupassant, Claudel, Mauriac and Genet.
Prerequisite: FREB06
Session: Winter Day
C. Bertrand-Jennings

FREC06Y Language Practice III
A continuation of FREB16 (FREB01), 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. The two required textbooks (J. Darbelnet, *Pensée et Structure*; *Contes modernes* 3rd edition), being used in conjunction, are intended to reinforce the students' proficiency in the language.
Prerequisite: FREB16
Session: Winter Day; Winter Evening
G. Trembley; F. Mugnier-Manfredi

FREC02F
FREC03S
FREC04F
FREC05S
FREC07S
FREC90Y 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. G. Trembley.
Prerequisite: One B-level course in the group FREB16 – FREB81, excluding FREB17, FREB18, FREB19.
Session: Winter Day

FREC09Y Problems in Translation
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: FREB16
Session: Winter Day
C. Besnard

FREC22Y Introduction to Medieval French Language and Literature
An introduction to old French language and the study of representative works in epic, *courtois* and *bourgeois* literature.

The first third of this course will concentrate heavily on the language aspect of the period. Thereafter we shall move rapidly towards a more participatory format, with more and more attention paid to content, as opposed to form. Texts include the *Chanson de Roland*, *Tristan et Yseut*, Chrétien de Troyes' *Erec et Enide*, Marie de France's *Lays*, *Maistre Pierre Pathelin*, Villon's *Poesies choisies*, and a general text.
Prerequisite: One B-level course in the group FREB16 – FREB81, excluding FREB17, FREB18, FREB19.
Session: Winter Day
C. Evans

FREC23S The French Novel in the Seventeenth Century
The evolution in the seventeenth century of the novel as a literary form and as a social phenomenon.

After an outline of the historical and literary background of the seventeenth century novel, theories (and theoreticians) of the novel in the classical period will be discussed. In the study of the forms of the seventeenth century novel, the following works will be dealt with in some detail: Sorel, *Histoire comique de Francion*, Scarron, *Le Roman comique*, Furetière, *Le Roman Bourgeois*, Mme de La Fayette, *La Princess de Clèves*.

The teaching method will involve lectures and discussion.
Prerequisite: One B-level course in the group FREB16 – B81, excluding FREB17, FREB18, FREB19, FREB40 and/or FREB41 are strongly recommended as background courses.
Session: Winter Day
W.J. Bancroft

FREC24F 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 fictional output of such authors as Lesage, Laclos, Marivaux, Prévost, Voltaire, Rousseau and Diderot.

The course will be conducted as a seminar, with active participation of the students highly encouraged.
Exclusion: (FREB32); (FREB33)
Prerequisite: One B-level course in the group FREB16-B81, excluding FREB17, FREB18, FREB19.
Session: Winter Day
P. Moes

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, alternatively 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 FREB16 – 81, excluding FREB17, FREB18, FREB19; or permission of instructor.
Session: Winter Day
S.E. Mittler

FREC34F Cross-currents in Contemporary French Fiction
An examination of the varied thematic and technical perspectives open to contemporary novelists.

French writers of the second half of the twentieth century, heir to key innovations in their treatment of reality, literary symbolism, or 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 crisis and solidarity with a foreign people in A. Pieyre de Mandiargues, *La marge*, the trial of a father and his entire culture in P. Modiano, *Les boulevards de ceinture*, the loves and labyrinths of a Corsican town in A. Rinaldi, *Les dames de France*, and three crossed destinies in Didier Decoin, *John L'enfer*.

Lectures and discussion.
Prerequisite: One B-level course in the group FREB16 – FREB81, excluding FREB17, FREB18, FREB19.
Session: Winter Day
S. Mittler

Courses Not Offered in 1985-86

FREA07S **Elementary Conversation I**
Corequisite: FREA06

FREA17S **Elementary Conversation II**
Corequisite: FREA16Y

FREA18Y **Introductory Business French**
Exclusion: FREB06 or equivalent
Prerequisite: Grade 12 French or equivalent

FREB09Y **Practical French I**
Exclusion: FREB06. Not open to native speakers of French.
Prerequisite: FREA16 or Grade 13 French or equivalent
Corequisite: FREB07

FREB19Y **Practical French II**
Exclusion: Not open to native speakers of French
Prerequisite: FREB06 or equivalent
Corequisite: FREB17H

FREB20Y **History of French Civilization**
Prerequisite: FREB06

FREB24Y **French Thought and Literature in the Age of Enlightenment**
Prerequisite: FREB06

FREB26Y **The Romantic Current in French Literature**
Prerequisite: FREB06

FREB29F **French Drama of the Eighteenth Century**
Prerequisite: FREB06

FREB36F **French-Canadian Novel to 1945**
Prerequisite: FREB06

FREB37S **French-Canadian Novel since 1945**
Prerequisite: FREB06

FREB38F **The Theatre of French Canada**
Prerequisite: FREB06 or equivalent

FREB39S **Workshop in Modern French Theatre**
Prerequisite: FREB16 or equivalent language ability.

FREB49Y **The Twentieth Century: The Search for Identity**
Prerequisite: FREB06

FREB81S **Women's Consciousness in French Literature**
Prerequisite: FREB06

FREC10S **Textual Analysis**
Prerequisite: One B-level course in the group FREB16-FREB81, excluding FREB17, FREB18, FREB19.

FREC25Y **Literature of the Renaissance**
Prerequisite: One B-level course in the group FREB16-FREB81, excluding FREB17, FREB18, FREB19.

FREC39S **French-Canadian Poetry**
Prerequisite: One B-level course in the group FREB16-FREB81, excluding FREB17, FREB18, FREB19.

FREC40Y **Modern French Poetry from Baudelaire to Valéry**
Prerequisite: One B-level course in the group FREB16-FREB81, excluding FREB17, FREB18, FREB19.

Geography

Assistant Chairman: J. Miron

The Geography curriculum includes courses on diverse topics having to do with the development of landforms, the evolution and experience of urban and rural landscapes, the management of natural resources, and the spatial expression of economic processes. It therefore offers students a variety of potential themes which can be followed either separately or in combination towards a B.A. or B.Sc. degree.

The Specialist and Major Programmes in Geography are designed to give students the flexibility to choose courses that relate to their own interests while providing coherence and direction in course sequences and combinations. These Programmes are intended to develop not only geographical concepts but also skills such as cartography and statistical analysis. They provide students with a sound knowledge of the discipline and with a good basis for a career, whether in planning, business, teaching or various government agencies.

Specialist Programme in Geography

Supervisor: A. Sawchuk

The Specialist Programme in Geography offers the opportunity to explore some aspect of the discipline in considerable depth without sacrificing the breadth that characterises the discipline.

It is possible to complete a Specialist Programme in Geography by following one of two options.

The Human Settlements option comprises courses that have to do especially with urban and rural development and planning, while the Environmental Geography option is concerned with environmental management issues and the physical systems which underlie them. These two options are by no means mutually exclusive; several courses are listed in both of them and students will be encouraged to take courses from the option other than the one they have selected. However, students who wish to take a B.Sc. must follow the Environmental Geography option. Geography contributes to the Terrain and Environmental Earth Sciences Programme and other courses in the TEES Programme are relevant to the Environmental Geography option.

OPTION A
Human Settlements

The requirements for this Programme are twelve full-course equivalents, which must include:

1. GGRA04Y and either GGRA05Y or GLGA01Y
2. One full-course equivalent from GGRB30F, GGRB31S and GGRC24F/S
3. GGRC12F/S
4. At least three full-course equivalents from GGRB01Y, GGRB05Y, GGRB13Y, GGRB17Y, GGRB24Y, JEGB27F, GGRB28S and GGRB29Y
5. At least two and one-half full-course equivalents from GGRC01Y, GGRC04F/S, GGRC13F/S, GGRC18F/S, GGRC20F/S, GGRC24F/S, GGRC29F/S, GGRC31F/S, GGRC33Y, and GGRC34F/S. *Note:* GGRC01Y is strongly recommended.
6. Two full-course equivalents in disciplines other than Geography agreed upon in consultation with the Supervisor.

OPTION B
Environmental Geography

The requirements for this Programme are twelve full-course equivalents which must include:

1. GGRA04Y and either GGRA05Y or GLGA01Y
2. One full-course equivalent from GGRB30F, GGRB31S and GGRC24F/S
3. GGRC12F/S
4. At least three full-course equivalents from GGRB01Y, GGRB03Y, GGRB15Y, GGRB19Y, GGRB24Y and GGRB29Y
5. At least two and one-half full-course equivalents from GGRC01Y, GGRC05F/S, GGRC24F/S, GGRC25F/S, GGRC28Y, GGRC29F/S, GGRC30F/S, GGRC32F/S, GGRC35F/S, GGRC37S and GLGC06S. *Note:* GGRC01Y is strongly recommended
6. Two full-course equivalents in disciplines other than Geography agreed upon in consultation with the Supervisor.

Major Programme in Geography
Supervisor: A. Sawchuk
The Major Programme aims to introduce students to the fundamentals of the discipline, and to provide the opportunity to explore some of the wide range of specialized aspects of the field. The Programme may be taken as a single concentration within a three-year degree or in combination with another Major Programme in a related subject area such as Economics, Biology or History. It is also an appropriate supplement to Specialist Programmes in these areas.

The requirements for this Programme are seven full-course equivalents, which must include:

1. GGRA04Y or GGRA05Y or GLGA01Y Whichever of these courses is not taken under requirement 1 can be taken as part of requirement 3
2. Either GGRB30F or GGRB31S
3. At least three full-course equivalents from Geography B-level courses, other than GGRB30F, GGRB31S
4. At least two full-course equivalents from GGRC04F/S, GGRC13F/S, GGRC18F/S, GGRC20F/S, GGRC28Y, GGRC29F/S, GGRC31F/S, GGRC33F/S, GGRC34F/S

GGRA04Y The Nature of Human Geography
Comparison of the major approaches to human geography – historical process, spatial organization, resources and environment, landscape and culture.

The course aims to identify and discuss some of the fundamental concepts of human geography, and to demonstrate the nature of the major approaches to the subject. The course consists of four main sections: (i) human settlements and urbanization, (ii) spatial patterns and disparities, (iii) environmental and resource use and abuse, (iv) modern landscapes and urban design.
Session: Summer Evening, Winter Day
E.C. Relph, R. Harris

GGRA05Y Introduction to Physical Geography
An introduction to principles of physical geography. The course is designed for specialists in geography but is also suitable for non-specialists interested in obtaining some introduction to physical geography. The course is designed to introduce students to the basic physical environmental systems operating at the surface of the earth, the interrelationships between systems and the impact of man upon such systems.

The content should be of general interest to students in both the physical and life sciences.
Exclusion: GLGA01
Session: Summer Evening, Winter Day
A. Sawchuk

GGRB01Y Geography of Resources
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 Evening

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

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. Lab fee $20.00.
Prerequisite: GGRA05 or GLGA01
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.
Session: Winter Day
R. Harris

GGRB13Y Modern Urban Landscapes
The architectural and planning history of twentieth century urban landscapes, and the ways in which places and landscapes can be appreciated and designed. In the Fall term the development of modern architecture and planning from 1880 to the present will be examined. In the Spring term emphasis is on the critical evaluation of modern built-environments. Field trips in the Fall Term. Assignments wll be based on field investigations.
Prerequisite: GGRA04; students with suitable backgrounds in Social Sciences or Humanities admitted with permission of instructor.
Session: Winter Evening
E.C. Relph

GGRB15Y Coastal Geomorphology
The coastal zone as a physical environment is immensely variable, complex and extremely fragile. Man's use of the coastal zone is accelerating at a greater pace than our understanding of the physical processes which occur naturally in the environment. This course is designed to make students aware of the physical nature of the coastal environment, its historical development and the problems which arise from man's use and abuse of it. The mechanics of coastal processes will be applied to a study of coastal erosion, siltation, pollution, etc. Field trips during the Fall Term. Lab Fee $20.00.
Corequisite: GGRB19; GGRB31 is strongly recommended
Session: Winter Day
B. Greenwood

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: GGRA04; students with suitable backgrounds in Social Sciences or Humanities admitted with permission of instructor.
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. Lab fee $20.00
Prerequisite: GGRA05 or GLGA01
Session: Winter Day
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: ECOA01
Corequisites: GGRA04 or GGRB05
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: GGRA04 or another A-level course in Social Sciences
Session: Winter Day

GGRB29Y 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. Lab fee $20.00.
Prerequisite: GGRA05 or GLGA01; Students with GGRA04 admitted with permission of instructor.
Session: Winter Day

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. Lab fee $10.00.
Exclusion: GGRB25
Prerequisite: GGRA04 or GGRA05
Session: Winter Day

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: GGRA04 or GGRA05 or GLGA01 or GGRB05 or GGRB24
Session: Winter Day
J. Miron

GGRC01Y Supervised Research
A research project under the supervision of a member of faculty. Students must identify a topic and obtain the approval of their intended supervisor before registering in this course. Frequent subsequent discussion with the supervisor is expected. The research may be based upon the results of library or archival investigations, field studies, data analysis or other appropriate methods. It will culminate in a written report or dissertation of a professional quality in its presentation, submitted on or before March 31. This will be evaluated by at least two members of faculty, and the student may be asked to defend the dissertation at an oral examination.
Prerequisites: Any fifteen full-courses equivalents; at least five geography full courses including one full-course equivalent from GGRB30, GGRB31, GGRC24
Session: Winter Day

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: GGRB05 and GGRB30
Session: Winter Day
R. Harris

GGRC05S Theoretical Geomorphology
Theoretical models of landscape evolution in relation to recent experimental and field studies on geomorphological processes. Seminar and project work with considerable reading assignments. Limited enrolment: 20.
Prerequisite: GGRB07 or GGRB15, GGRB3I is strongly recommended.
Session: Winter Day
B. Greenwood

GGRC12S Philosophy and Geography: Contemporary Issues
An examination of the different philosophical approaches adopted either explicitly or implicitly in geography – the philosophy of science and scientific method, pragmatism, marxism, phenomenology. Divisions and connections between physical and human geography. Concerns about the misuse of geographical knowledge, environmental ethics, the limits to technical thinking, uncertainty, holistic knowledge, social and environmental knowledge.

The aim of this course is to disclose the implications of the various ways of thinking geographically, and, in the context of the geography programmes, to discuss the relationships between these.
Prerequisites: 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. Relph

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.
R. Harris

GGRC18F Urban Transportation Policy Analysis
This course examines current problems in urban transporation 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
J. Miron

GGRC20F Rural Planning and Development
The special problems of rural settlement and land use in the modern world and of associated planning and development policies. Emphasis will be placed upon the role of government policy in the shaping of rural landscapes and societies.

The main topics will include agricultural and rural development programmes, policies for marginal and remote areas, agricultural land preservation, rural landscape conservation, rural settlement strategies. Examples of particular policies and programmes will be used as case studies in workshop sessions.
Prerequisite: GGRB17 or one B-level course in Economics or Political Science
Session: Winter Day
M.F. Bunce

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
J. Miron

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 the unforeseen consequence of other activities. It is hoped that this course will result in a better understanding of those controls, 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.
Prerequisite: GGRB03 or GGRB19 or GGRB24; GGRB31
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 upon 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 GGRB01, GGRB13, GGRB17, GGRB29
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: GGRB03
Session: Winter Day
A. Sawchuk

GGRC37F/S Climatic Change
The course will focus on the myriad nature of climatic change. Climatic change will be considered from instrumental and proxy data points of view and from various theories that have been involved to explain it. The last part of the course will examine several numerical models (e.g. radiative, energy balance models) that have been applied to simulate climatic change.
Prerequisite: GGRC30
Session: Winter Day

Courses Not Offered in 1986-87

GGRC25S Sedimentary Models
Prerequisites: GGRB15; GGRB19

GGRC31S Development and Planning of Metropolitan Regions
Prerequisite: GGRB05 or GGRB27 or JEGB27

GGRC32S Research Seminar in Soil Management
Prerequisite: GGRB29 (or GGRC15)

GGRC33F Africa: A Geographical Perspective
Prerequisite: GGRB01 or GGRB28, or one B-level course in Economics or Political Science

GGRC34F Landscape Interpretation
Exclusion: (GGRC17)
Prerequisites: GGRB13 and GGRB30

GGRC35F Hillslope Geomorphology
Prerequisite: GGRB19; GGRB03 is strongly recommended.

Specialist Programme in Terrain and Environmental Earth Sciences
Supervisor: K. Howard 284-3336
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	Introduction to Geology
or	
GGRA05Y	Introduction to Physical Geography
MATA26Y	Calculus
or	
MATA55Y	Calculus with Analysis
CHMA02Y	General Chemistry
PHYA03Y	Physics for the Physical and Life Sciences must be taken within the first 10 courses of the programme.
BIOA03Y	Introductory Biology must be taken within the first 15 courses of the Programme.

Second year:

GLGB02S	Principles of Stratigraphy and Sedimentology
GLGB05F	Introductory Mineralogy
GLGB06S	Optical Mineralogy
GGRB19Y	General Geomorphology
MATB41F	Techniques of the Calculus of Several Variables I
STAB52F	Probability and Statistics I
or	
GGRB31S	Data Analysis in Geography
CSCA56F	Computer Programming
or	
CSCA58F	Introduction to Computing
GLGB03S	Field Camp I: The Appalachian Mobile Belt

Third year:

GLG318F	Introductory Petrology I
GLG319S	Introductory Petrology II
GLGC06S	Glacial and Periglacial Geology
GGRC28Y	Hydrology of Surface and Sub surface Waters
CHMB03Y	Physical Chemistry I
or	
CHMB02Y	Analytical Chemistry
GLGB04F	Exploration Techniques in Hydrogeology
GLGC05S	Field Camp II

Fourth year:

GLGC09S	Contaminent Hydrogeology
GLG400H	Environmental Geochemistry
GGRC25S	Sedimentary Models
or	
GLG429F	Sedimentology of Clastic Rocks
GLG332F	Geometry and Kinematics of Tectonic Structures

Discipline Representative: J. Westgate (284-3336)

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. Lab Fee: $20.00
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.A. 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
C. Eyles

GLGB03S Field Camp I: The Appalachian Mobile Belt
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 during the first half of May, after the final Spring examinations.
Prerequisites: GLGB05F and GLGB02S
Session: Winter Day
J. Westgate

GLGB04F 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. Lab fee: $10
Session: Winter Day
Prerequisites: GLGA01Y or GGRA05Y, MATA26Y or MATA55Y
K.W.F. Howard

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

GLGC03H or Y Research Project
This course is designed to give students experience in the design, implementation, and reporting of a substantial research project involving laboratory and/or fieldwork. Existing faculty research allows a broad range of possible topics. The project may be designed as a half or full course and should be undertaken *after the end of the 3rd Year, subject to faculty* availability. Faculty permission and supervision is required and the course is only open to those students who have either completed or are undertaking specialist courses in the area of intended study.
Session: Winter Day
Staff

GLGC05S 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 Tyrell Museum of Palaeontology at Drumheller.
Prerequisites: GLGB03S and GLGC06S and GLGB04F
Session: Winter Day
N. Eyles and K. Howard

GLGC06S Glacial and Periglacial Geology
The course builds on fundamentals of physical glaciology and thermal regime as a basis for understanding sedimentation by ice masses. Glacial sedimentation in seas and lakes is stressed; cold climate processes are reviewed. Field and project work includes a site visit to Athabasca and Saskatchewan Glaciers in Alberta combined with local Ontario field trips.
Prerequisite: GLGB02S or GGRB19Y
Session: Winter Day
N. Eyles

GLGC08S Quaternary Stratigraphy
Quaternary geological history of North America in the light of terrestrial and deep-sea sediments. Definition and stratigraphic classification of the Quaternary Period, physical and biological methods of crrelation, chronometric techniques, contributions of tephrochronology and palaeomagnetism to Quaternary geochronology, late Cenozoic palao-temperature record derived from studies of glacier ice, continental, and marine sediments.
Prerequisites: GLGB02S or by permission of Instructor.
Corequisite: GLGC06S
Exclusion: GLGC04S
Session: Winter Day
J. Westgate

GLGC09S Contaminant Hydrogeology
The first part of the course deals with natural hydrochemical processes and investigates the use of major ions, minor ions, trace metals and environmental isotopes in studying the occurrence and nature of groundwater flow. The second part concerns point and non-point sources of groundwater contamination and the mechanisms of contaminant transport. Lab fee: $10
Session: Winter Day
Prerequisites: GLGB04F and CHMA02Y, or MATB41F and CHMB03Y or CHMB02Y
K.W.F. Howard

Discipline Representative: H. Wittmann
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 Humanities and Literature.

Major Programme in German Language
Supervisor: H. Wittmann (284-3197)
The Programme consists of the following courses:

GERA09H	Language Practice I
GERA10Y	Introductory German
GERB19Y	Language Practice II
GERB20Y	Intermediate German
GERB24F/S	The Last Hundred Years
GERB33F/S	Practicum in the History and Structure of the German Language
GERB50F/S	Methods of Interpreting Literature
GERC10Y	Advanced Conversation and Composition
LINA05Y	Practical Language Study
or	
LINA01Y	General Linguistics (a more theory-oriented course)

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 from the discipline's offerings will be substituted. Students are strongly advised to discuss their Programme as soon as possible with the Supervisor.

The Specialist Programme in German Area Studies and the **Major Programme in German Language and Literature** have been deleted. Students presently enrolled in these programmes will be able to complete their studies according to the old rules. 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:

HUMB51F	Nineteenth Century Prose
HUMB56S	Twentieth Century Prose
HUMB57F	Features of Post-war German Literature
HUMC40Y	Vienna and the Origins of Contemporary Culture
LITA01Y	Introduction to Literature
LITB10Y	Masterpieces of the German Novel
LITB15Y	Dramatic Literature and Political Revolution
LITB21Y	Romanticism
LITB23Y	Expressionism
LITB33Y	Post-War Europe
LITB44F/S	The Holocaust in Modern Literature

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
U. Lesser-Sherman

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. Ohlendorf

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

GERB24F 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.
Session: Winter Day
U. Lesser-Sherman

GERB50S 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
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.
U. Lesser-Sherman

GERC50Y 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.
Prerequisite: GERC10Y
Session: Winter Day
H. Wittmann

GERC30, 33, 43F
GERC36, 40, 46S
GERC48Y **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
Session: Winter Day
Staff

Courses Not Offered In 1986-87

GERB33S Practicum in the History and Structure of the German Language

Greek

Courses are offered in Introductory Classical Greek, (GRKA01 and GRKA10), Greek literature of the classical period (GRKB01, GRKB30, etc.), and modern Greek (B10Y, B22Y).

GRKA01Y	Introductory Greek
GRKA10F	Introduction to Greek Authors
GRKB01S	Plato: Apology
GRKB10Y	Intermediate Modern Greek
GRKB22Y	Images of Modern Greece: 1936 to the Present GRKB30F-B34F
GRKB35S-B39S	
GRKB40Y	Supervised Reading

For further information see under Classical Studies.

Greek and Roman History

GRHB02Y	Greek and Roman History from the Death of Alexander to the Gracchi
GRHB27Y	Studies in Roman History: Pompeii

For further information see under Classical Studies.

History

Discipline Representative J.L. Pearl
The study of history is intended to enhance our understanding of man in 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. C-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 (284-3185)
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 HISB11Y-HISC99Y, 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.

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
HISB13Y*	Europe in the Reformation Era, 1500-1650
HISB18Y*	Europe under the Enlightened Despots
HISB23Y*	Tudor and Stuart England
HISB61Y*	The Beginnings of France: Constantine to Charlemagne
HISC12Y*	The Renaissance in Europe
HISC14Y*	The European Mentality in the Early Modern Period
HISC32Y*	The American Colonies and the British Empire
HISC62Y*	The Crusades

LIST B
Half-year courses exclusively within a period before 1815

GRHC24F/S	Ancient Historiography
HISB14F/S*	Popular Culture in Early Modern Europe
HISC34F/S*	Revolutionary America 1760-1790
HISC41F/S*	Old Huronia

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
HISB46Y*	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 (284-3185)
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 HISB11Y-HISC99Y, 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, Medieveal European, Modern European, British, Canadian, United States, Russian), and to take at least two upper-level courses in one of these two areas.

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
HISB13Y*	Europe in the Reformation Era, 1500-1650
HISB18Y*	Europe under the Enlightened Despots
HISB23Y*	Tudor and Stuart England
HISB61Y*	The Beginnings of France: Constantine to Charlemagne
HISC12Y*	The Renaissance in Europe
HISC14Y*	The European Mentality in the Early Modern Period
HISC32Y*	The American Colonies and the British Empire
HISC62Y*	The Crusades

LIST B
Half-year courses exclusively within a period before 1815

GRHC24F/S	Ancient Historiography
HISB14F/S	Popular Culture in Early Modern Europe
HISC34F/S*	Revolutionary America 1760-1790
HISC41F/S*	Old Huronia

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
HISB46Y*	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, Winter Evening
J. Pearl, M. Eksteins

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. 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: Winter Day

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: Summer Evening, Winter Day
J.S. Moir, I.R. Robertson

HISB06Y Europe in the Middle Ages
A chronological survey of economic, political, religious and social developments in Western Europe (including Britain) from the late Roman period to the fifteenth century.

The object of this course is to familiarize students with the foundations of Western society as they evolved in conjunction with the early settlement, colonization and subsequent expansion of Europe. Particular attention is paid: (i) to the peculiar circumstances which determined national boundaries and which led to the divisions and conflicts of the modern world, and (ii) to the origin and development of our own religious, legal, educational and political institutions. Readings are from P. Brown, *The World of Late Antiquity;* G. Duby, *Rural Economy and Country Life in the Medieval West;* D. Hay, *The Medieval Centuries;* R.W. Southern, *Western Society and the Church in the Middle Ages;* and others. Two hours of lectures and one tutorial per week.
Session: Winter Day *M. Gervers*

HISB11Y Early Modern France 1560-1750
The development of French politics and society from the wars of religion to the reign of Louis XV.

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. A reading knowledge of French is a definite asset.
Prerequisite: HISA01Y
Session: Winter Day
J.L. Pearl

HISB14F 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.
Exclusion: HISC14
Prerequisite: HISA01
Session: Winter Day
J.L. Pearl

HISB16Y Modern France 1750 to the Present
An exploration of the transition from agricultural monarchy to industrial republic.

Topics will include the revolutionary tradition, the persistence of social conflict, the French sense of world mission, cultural history, the present stalemate between Left and Right, parallels and contrasts to the Canadian experiences of nationalism, regionalism, and modernization. Two lecture hours plus tutorial per week.
Prerequisite: HISA01 or permission of instructor.
Session: Summer Evening

HISB17Y Germany in the Nineteenth and Twentieth Centuries
A thematic treatment of German history from the end of the Holy Roman Empire to the present.

The course will concentrate on social, economic, and cultural interpretations of Germany's political experience.

Two consecutive hours of lectures and one hour of tutorial per week. A set of readings from primary and secondary sources will be assigned, but extensive further reading is essential.
Prerequisite: HISA01
Session: Winter Day
M. Eksteins

HISB35Y 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.
Prerequisite: HISB03
Session: Winter Day
W.M. Dick

HISB43Y The Evolution of Ontario, 1850-1950
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.

There will be two lectures per week.
Prerequisite: HISB04
Session: Winter Day
J.S. Moir

HISB46Y 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.
Prerequisite: HISB04
Session: Winter Evening
I.R. Robertson

HISC01F
HISC02S
HISC03Y 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 HISC01 and HISC03 and by 1 December for HISC02.
See History Supervisor for detailed application procedures.
Session: Winter Day
The History Faculty

HISC13S The Scientific Revolution
A study of scientists, philosophers and societies in post-Renaissance Europe.

The scientific revolution fundamentally changed the way Europe's elites looked at the world around them. This course will examine those changes in the context of wider intellectual currents. Close attention will be paid to the work of Copernicus, Kepler, Galileo and Newton, as well as to the formation of scientific institutions. A two-hour weekly seminar. Limited enrolment: 20.
Exclusion: HISC14
Prerequisite: HISA01 and one B-level course in history.
Session: Winter Day
J.L. Pearl

HISC15Y Social History
A seminar in international social history tracing different patterns in the growth of mass societies in Europe and North America from the late 18th century to the present.

The course examines how political ideas, population pressures and industrialization altered the structure of society; studies how early forms of social protest changed into mass organization; discusses how governments responded to changing pressure from below. In the first term the course will examine the subject theoretically and establish a broad historical outline. During the second term each student will pursue a particular topic and present a paper on it. Two hour seminars; tutorial to be arranged. Limited enrolment: 15.
Exclusion: (HISB15)
Prerequisites: HISA01Y and two full course equivalents in post-1815 history, either European or North American.
Session: Winter Day
W. Dick

HISC19S Weimar Culture
An examination of the social and political foundations of "modernism", using the cultural ferment of Germany between 1918 and 1933 as model.

Individual artists and thinkers will be considered, but the emphasis will nevertheless be on culture as a social manifestation. Seminar. Limited enrolment: 15.
Prerequisite: HISA01 and one B-level course in History
Session: Winter Day
M. Eksteins

HISC20H 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.
Prerequisite: One B-level course in History or English.
Session: Winter Evening
J.S. Moir

HISC34F Revolutionary America, 1760-1790
A seminar investigating the origins, cause and effect of the American Revolution.

Attention will be paid to the social and political organization of America, the political ideas of the Revolution, "revolutionary" changes in the new states, the significance of the Constitution, and the effect of the Revolution on Canada and Britain.
Prerequisite: Any one of HISB02 or HISB03 or HISB04
Session: Winter Day
A.N. Sheps

HISC62Y The Crusades
An examination of the Crusades of the eleventh through fourteenth centuries.

This seminar will consider the Crusades as a continution of Christianity's centuries-old struggle with paganism, as a form of colonial expansion, and as a papal weapon against heresy and political dissension within christendom. The movement will be compared and contrasted with the foundation and activities of the military orders, particularly the Hospitallers, Templars, Teutonic Knights, and associated orders in Spain and northeastern Europe. During the first semester students will read severally from the most significant scholars in the field and, in class, compare and contrast the wide variety of viewpoints and interpretations which have arisen since the completion of Gibbon's *Decline and Fall of the Roman Empire* in 1781. The second semester will be devoted to a similar reading (in translation) and critical analysis of original Western European, Byzantine, Arabic, and Jewish chronicles of the crusading movement. Term papers will concentrate on the careful study of a secondary work and a source not covered in class. Bibliography available from Prof. Michael Gervers.
Prerequisite: HISB06
Session: Winter Day
M. Gervers

Courses Not Offered In 1986-87

HISB07Y Russia From the Thirteenth Century to the Present

JBHB09S History of Biology

HISB10S Women in the Western World from the Renaissance to the Present
Prerequisite: One of HISA01, HISB02, HISB03, HISB04 or JHSA01

HISB13Y Europe in the Reformation Era to the Present
Prerequisite: HISA01

HISB18Y Europe Under the Enlightened Despots, 1700-1789
Prerequisite: HISA01

HISB23Y Tudor and Stuart England
Prerequisite: Any B-level course.

HISB24Y Frontier Communities in the British Empire-Commonwealth The South African Model
Exclusion: (HISB21)
Prerequisite: HISB02 or permission of instructor.

HISB25Y British Imperialism in India
Exclusion: (HISB22)
Prerequisite: HISB02 or permission of instructor.

HISB31F/S Slavery in the American South
Prerequisite: HISB03

HISB33F/S Society and Politics in the United States 1790-1850
Prerequisite: HISB03

HISB42Y French Canada: Origins to the Present
Prerequisite: HISB04

HISB47Y The Canadian Left, 1867 to Present
Prerequisite: HISB04 (HISB09)

HISB61Y The Beginnings of France Constantine to Charlemagne
Prerequisite: Any B-level course in History or Greek and Roman History

HISC14Y The European Mentality in Early Modern Period 1500-1700
Prerequisite: One B-level History course

HISC17Y European Society and Culture in the Twentieth Century
Prerequisite: HISA01 and one B-level course in History

HISC21Y Urbanization and Social Change in Ninteenth Century England
Prerequisite: HISB02

HISC32Y The American Colonies and the British Empire
Prerequisite: Any one of HISB02, HISB03, HISB04 or HISB18

HISC41F Old Huronia
Prerequisite: HISB04
Corequisite: Field Trip to be arranged.

HISC45Y History of Canadian, Social, Political and Historical Thought
Prerequisite: HISB04

HISC78Y The Russian Intelligentsia
Prerequisite: HISB07 or RUSA01

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 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-level in consultation with the Supervisor*
7 *1 Full course equivalents at the C-level in the area of concentration chosen by the student in consultation with the Supervisor.*

Humanities

Discipline Representative: C. Ponomareff
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 new *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/H	Russian Culture
HUMB09F	The Civilization of Spain I
HUMB10S	The Civilization of Spain II
HUMB12F/S	The Paris Commune, 1871 to the Present
HUMB13Y	The Russian Revolution of 1917: Promise and Fulfilment, Ideals and Realities
HUMB14Y	Topics in Latin American Culture and Literature
HUMB16F/S	The Image of the Self in Liberal Society
HUMB19F	Beyond Consciousness
HUMB22F	The Age of Pericles
HUMB23S	The Age of Augustus
HUMB24S	The Age of Nero
HUMB25F	The Age of Homer
HUMC11Y	The Darwinian Revolution
HUMC40Y	Vienna and the Origins of Contemporary Culture see also:
CLAA01Y	Classical Civilization
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
HUMB11Y	Studies in Greek Mythology and its Influence
HUMB20Y	Primitive Christian Literature and Myth
HUMB26Y	Women in the Major Western Religions
HUMB28Y	Major Religious Traditions, East and West
HUMB29S	Religion and Western Culture
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

Interliterary Studies

LITB02F/S	Lyric Poetry of the Middle Ages
LITB05F/S	The Emergence of Modern Prose
LITB06F/S	Contemporary Fiction and its Background
LITB13Y	Russian and English Nineteenth Century Fiction
LITB22Y	The Modernist Adventure
LITB32S	The Spanish Civil War: Fact to Fiction
LITB40F/S	Disaster and Literary Imagination

Literature in Translation

CLAB01Y	Greek and Roman Epic
CLAB02Y	Greek and Roman Tragedy
HUMB50S	Machiavelli and Aspects of the Italian Renaissance
HUMB51F	Nineteenth Century German Prose
HUMB56S	Twentieth Century German Prose
HUMB57F	Features of Post-War German Literature
LITB06F	Comparative Study of Contemporary Fiction
LITB07Y	The Nineteenth Century Russian Novel, 1830-1880
LITB10Y	Masterpieces of the German Novel from Eighteenth Century to the Present
LITB12Y	Dostoevsky's Major Fiction
LITB15Y	The Development of German Drama
LITB16F	The Crisis of Contemporary Society in Modern Italian Drama
LITB17F/S	Russian Short Fiction of the 19th and 20th Centuries
LITB34Y	Soviet Russian Literature, 1917-1980
LITB44Y	The Holocaust in Modern Literature

Women's Studies

JHSA01Y	Introduction to Women's Studies
HUMB61S	Women in Ancient Greece
LITB45Y	Literary Considerations and Feminism

Science and Humanities

JBHB01Y	Introduction to Biological Sciences
JBHB09S	History of Biology

Film Studies

HUMB70Y	Introduction to Cinema
JHIB71F/S	Italian Cinema

Arts Studies

HUMB90Y	Introduction to Arts Administration
HUMC30F/S	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 studnt 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 (12) 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 two of which must be at the C-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 (HUMC95-99Y). 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 (9) 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, ANT323Y, ASTA03Y, NSCA01Y, JBHB01Y, POLB70Y, POLB71Y, SOCB03Y. Other courses offered by the Division of Science and the Division 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 one of which must be at the C-level focusing on one area or theme. (Note: 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;* Plato,*The Last Days of Socrates;* Herodotus, *Histories;* Virgil, *Aeneid;* Augustine, *Confessions;* Dante, *Inferno; Beowulf;* Boccaccio, *Decameron*. Spring Term: Machiavelli, *The Prince;* Montaigne, *Essays;* Voltaire, *Candide;* Vasari, *Lives of the Artists;* Goethe, *Faust;* Marx, *Communist Manifesto;* Darwin, *Origin of the Species;* Pushkin, *Little Tragedies;* Nietzsche, *Thus Spoke Zarathustra* Freud, *Interpretation of Dreams*.
NOTE: 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,* 11, i.
Session: Winter Day
Co-ordinator: W.C. Graham

JHSA01Y Introduction to Women's Studies
Women and their roles and relationships in various societies. Taught by members of the disciplines of Anthropology, Classics, English, French, History, Linguisitics and Sociology. The course provides an overview of the problems investigated by specialists in women's studies and teaches how to use the methodologies of a rnge of disciplines to explore these problems.

Areas for discussion include women and mythology, women and power, women's roles in the family, and women and literature. Among the particular topics are: the origins of misogyny; sexual stereotyping; poetry and propaganda; and the family – myth and reality.
Session: Winter Day
Co-ordinator: J. Drakich

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
J. Warden

HUMB03Y Celtic Mythology and Mediaeval Celtic Civilization
The history of celtic civilization from c.800 B.C to the end of the mediaeval period.

Emphasis is placed on the religious political and mythological structure of the Celtic worldview with particular attention to the cultural connections with neighboring civilizations.
Session: Winter Day
Claude Evans

HUMB09F The Civilization of Spain I
Examination through readings and discussion of main aspects of civilization of Spain. Social, intellectual and artistic components of the civilization of Spain from pre-Roman times to the end of the Seventeenth Century will be studied, and illustrated by slides and other reference materials. Two hours per week in a lecture/tutorial format.
Exclusion: HUMB15Y
Session: Winter Day
K. Gödde

HUMB19F Beyond Consciousness
An examination of the limits of consciousness from the point of view of various disciplines in the Humanities. The specific content will vary but will focus on one of the following: communication, religion and philosophy, myth-making and poetry.

In 1985-86, suggestion and the unconscious will be studied insofar as they relate to the educational process and emphasis will be placed on yoga, music therapy, East-European and Western work in memory training and communication theory.

Bibliography: A detailed bibliography for this course will be provided on the first day of class. Students interested in taking HUMB19 might wish to consult the following: Brown, *New Mind, New Body*, Eliade, *Yoga: Immortality and Freedom*, and Schroeder, *Psychic Discoveries Behind the Iron Curtain* and *Superlearning, Problems of Suggestology*.
Prerequisite: At least one full-course equivalent in either Psychology or Philosophy or English or another literature.
Session: Winter Day
W.J. Bancroft

HUMB22F The Age of Pericles
A study of the history, literature and art of Athens in the fifth century B.C.

The course will concentrate on the second half of the fifth century. The topics studied will include the leadership of Pericles; the development of democracy; Athens as an imperial power; the confrontation with Sparta; the rise of the sophists; the architecture, sculpture and vase painting of the period. A selection of the literary and dramatic works will also be studied in translation. Most of the classes will consist of lectures, some of which will be given by guest speakers.
Session: Winter Day
I.R. McDonald

HUMB24S 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.
Session: Winter Day
I.R. McDonald

HUMB26Y Women in the Major Western Religions
A comparative study of the social and legal status of women in Christianity, Judaism and Islam.
Session: Winter Day

HUMB56F Twentieth Century 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, Boll). 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: (GERB19 and 20 for students studying in the original)
Exclusion: GERB66
Session: Winter Day
H. Ohlendorf

HUMB70Y Introduction to Cinema
An introduction to the vocabulary of film criticism, major aesthetic approaches and general history (silent and sound). Tutorials start the first week of classes.

NOTE: There is a screening fee of $20.00 for this course.
Session: Winter Day
M.Q. Schonberg

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

JHSC01H 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.
Prerequisite: Open to students majoring in Women's Studies who have already completed ten full course equivalents.
Session: Winter Day
Co-ordinator: J. Drakich

HUMC10H Humanities Seminar
A special half-credit seminar course, taken normally after the completion of ten credits. Each member of the seminar gives a report of individual projects undertaken by him.

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. It is available to students registered in the Programmes in Renaissance Studies. 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.
Prerequisite: Any ten courses.
Session: Winter Day
Co-ordinator: W.C. Graham

HUMC30Y 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 negotiatons; 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.
P. Schafer

HUMC91F
HUMC92S
HUMC93Y **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 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, the Board of Studies will ensure that two faculty members from relevant disciplines will supervise and evaluate the work.
Prerequisite: Three B-level full course equivalents in the Division of Humanities.
Session: Winter Day

HUMC95-C99Y **Individual Study Year**
An opportunity for advanced students to spend a year following their own studies under the supervision of a committee 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 an appropriate board of faculty. Those interested in enrolling should contact the Divisional Chairman by the end of May 1984. (For a year of individual study, students must enrol in all five courses. Those who wish to take Individual Studies should consult disciplinary listings.) Prerequisite: Permission of the Division of Humanities Committee on Individual Study.
Session: Winter Day
Staff

Courses Not Offered in 1986-87

HUMA10Y **Introduction to the Study of Religion**

JBHB01Y **Introduction to Biological Sciences**
Exclusion:(NSCA02Y) Not open to students who have taken BIOA03

HUMB07S **Russian Culture**
Exclusion: RUSA01

HUMB10S **The Civilization of Spain II**
Exclusion: HUMB15Y

HUMB11Y **Studies in Greek Mythology and Its Influence**
Recommended Preparation: HUMA11
Exclusions: HUMB34, HUMB35, HUMB36

HUMB12F/S **The Paris Commune, 1871 to the Present**

HUMB13Y **The Russian Revolution of 1917: Promise and Fulfillment, Ideals and Realities**

HUMB14Y **Topics in Latin American Culture and Literature**
Exclusion: (SPAB38)

HUMB16S **The Image of the Self in Liberal Society**

HUMB20Y **Primitive Christian Literature and Myth**
Prerequisite: No formal prerequisites, but some knowledge of the biblical literature will be presupposed. Greek is desirable but not required.

HUMB23S **The Age of Augustus**

HUMB25F **The Age of Homer**

HUMB28Y **Major Religious Traditions, East and West**

HUMB29S **Religion and Western Culture**

HUMB51F **Nineteenth Century Prose**
Exclusion: GERB60
Prerequisite: (GERB19 and 20 for students studying in the original)

HUMB57F **Features of Post-war German Literature**
Exclusion: GERB76
Prerequisite: (GERB19 and 20 for students studying in the original)

HUMB60F **Women Artists in Society**

HUMB61S **Women in Ancient Greece**

JHIB71S **Italian Cinema**
Exclusion: (HUMB71†), (JHIB90)

HUMC11Y **The Darwinian Revolution**
Prerequisite: BIOB05, or BIOB11 or PHLB70 or PHLB71 and permission of the instructor

HUMC40Y **Vienna and the Origins of Contemporary Culture**

Italian

Discipline Representative:
A. Franceschetti (284-3307)
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 co-requisite 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 the student in Italian as adjuncts to his plan of study or as an enrichment of his 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.

Major Programme in Italian Language
Supervisor: A. Franceschetti (284-3307)
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
3	ITAB01Y	Intermediate Italian I 1/2 full course equivalents from among the following: ITAB03F, ITAB04H, ITAB05F/S, ITAB06S, ITAB20F/S, ITAB23S, JHIB71F/S
5	ITAB22F	Introduction to Modern and Contemporary Italian Literature
6	ITAC01Y	Language Practice
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		2 full course equivalents from among the following: ITAB03F, ITAB04H, ITAB05F/S, ITAB06S, ITAB20F/S, ITAB23S, JHIB71F/S
5	ITAB22F	Introduction to Modern and Contemporary Italian Literature
6	ITAC01Y	Language Practice
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: A. Franceschetti (284-3307)

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 ITAB22F and ITAB23S and ITAB31Y, 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* and *Languages 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
TBA

ITAA02H Introductory Italian Language Practice
Practical application of the language structures introduced in ITAA01.

As with the corequisite A01Y, our aim is to provide a relaxed, friendly atmosphere in which to learn basic standard Italian. Classtime is devoted entirely to conversing in Italian. At the beginning students are given set dialogues which they practise with one another. As they gain confidence and knowledge of the language they are encouraged to prepare their own dialogues and conversations based on situations and topics of interest.
Corequisite: ITAA01
Session: Winter Day
S. Mittler

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 tpics 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 ITAA03S 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
A. Franceschetti

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

ITAB05F 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.
Corequisite: ITAB01 or ITAB11
Session: Winter Day
S. Mittler

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
J. Campana

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

ITAB13S Modern Italian Poetry
An examination of the major Italian poets from Pascoli to the present.
This course is designed to provide insight into the works of the major poets of our century. Students will read and discuss selected poems from Pascoli, the Crepuscolari and Futurist poets, Ungaretti, Quasimodo, Montale and other modern poets.
The teaching method will involve lectures and discussion in Italian.
Prerequisite: ITAB01 or ITAB11; a course in Italian Literature such as B22F and B23S is recommended but not required.
Session: Winter Day
J. Campana

ITAB20F Modern Italy
An introduction to the events and ideas which have contributed to the making of modern Italy.
This course aims to help the student understand the complex social and cultural milieu in which life is conducted in present-day Italy. Readings from a variety of literary and historical texts form the basis for the three weekly hours of discussion of topics outlined by the instructor. These will be complemented by audio-visual material such as slides, tapes and films. The student is expected to contribute to the classroom discussion and make at least one oral presentation and write at least one essay on a topic agreed upon with the instructor.
Exclusion: HUMB18
Prerequisite: ITAB01 or ITAB11
Session: Winter Day
J. Campana

ITAB22S Introduction to Modern and Contemporary Literature
An introduction to the reading of literary texts designed to aid the student in the comprehension, analysis, and enjoyment of Italian literature. Selections from the works of influential novelists, poets and dramatists of the eighteenth, nineteenth and twentieth centuries 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. Prerequisite: ITAB01 or ITAB11
Session: Winter Day
A. Franceschetti

ITAB23F 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.
Prerequisite: ITAB01 or ITAB11
Session: Winter Day
A. Franceschetti

ITAB45S 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 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, *I Vecchi e i giovani*, and I. Svevo, *La coscienza di Zeno*. Prerequisite: ITAB01 or ITAB11; a course in Italian Literature, such as ITAB22 and ITAB23, is recommended but not required.
Session: Winter Day

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
A. Franceschetti

ITAC50F-54F
ITAC55S-59S
ITAC60Y 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 by themselves 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.
Session: Winter Day
Staff

Courses Not Offered in 1986-87

ITAB04H **Advanced Composition**
Corequisite: ITAB01 or ITAB11

ITAB12F/S **The Twentieth Century Novel**
Prerequisite ITAB01 or ITAB11; a course in Italian Literature such as ITAB22 and and ITAB23 is recommended but not required.

ITAB13F **Modern Italian Poetry**
Prerequisite: ITAB01 or ITAB10 or ITAB11; a course in Italian Literature such as B22F and B23S is recommended but not required.

ITAB27F/S **Modern Italian Theatre from Pirandello to the Present Day**
Exclusion: (HUMB54), (LITB16)
Prerequisite: ITAB01 or ITAB10 or ITAB11

ITAB31Y **Dante and Medieval Culture**
Prerequisite ITAB01 or ITAB11; a course in Italian Literature such as ITAB22 and ITAB23 is recommended but not required.

ITAB32F/S **Petrarch and Boccaccio**
Prerequisite: ITAB01 or ITAB10 or ITAB11; a course in Italian Literature; such as ITAB22

ITAB33F/S **Machiavelli and Renaissance Thought**
Exclusion: (HUMB50), (LITB35)
Prerequisite: ITAB01 or ITAB10 or ITAB11; a course in Italian Literature, such as ITAB22 and ITAB23 is recommended but not required.

ITAB34F/S **Chivalric Poetry of the Renaissance**
Prerequisite: ITAB02 or ITAB10; ITAB11; a course in Italian Literature, such as ITAB22 and ITAB23 is recommended but not required.

ITAB35F/S **Italian Sixteenth Century Theatre**
Prerequisite: ITAB01 or ITAB10 or ITAB11; a course in Italian Literature, such as ITAB22 and ITAB23, is recommended

ITAB36F/S **Lyric Poetry of the Renaissance (from Politziano to Michelangelo)**
Prerequisite: ITAB02 or ITAB10 or ITAB11; a course in Italian Literature, such as ITAB22 and ITAB23, is recommended but not required.

ITAB40F/S Reformation and Baroque Literature
Prerequisite: ITAB01 or ITAB10; or ITAB11; a course in Italian Literature, such as ITAB22 and ITAB23, is recommended but not required.

ITAB41F/S **Italian Eighteenth Century Theatre**
Prerequisite: ITAB02 or ITAB10 ITAB11; a course in Italian Literature such as ITAB22 and ITAB23 is recommended but not required.

ITAB43F/S **Foscolo and Leopardi**
Prerequisite: ITAB01 or ITAB10 or ITAB11; a course in Italian Literature such as ITAB22 and ITAB23 is recommended but not required.

ITAB44F/S **Manzoni**
Prerequisite: ITAB01 or ITAB10 or ITAB11; a course in Italian Literature such as ITAB22 and ITAB23 is recommended but not required.

JHIB71F/S **Italian Cinema**

For a description of these courses please refer to the disciplines concerned:

Biology and Chemistry
JBCB35Y Introductory Biochemistry
JBCB36H Laboratory in Biochemistry

Biology and Humanities
JBHB01Y Introduction to Biological Sciences
JBHB09S History of Biology

Commerce and Economics
JCEB54S Industrial Relations
JCEB72F Analysis for Decision Making I
JCEB73S Analysis for Decision Making II
JCEC02Y Corporation Finance
JCEC40S Public Policy Towards Business
JCEC70F Advanced Corporate Finance
JCEC75S Investments

Commerce and Sociology
JCSB27Y Organizational Behaviour

Geography and Economics
JEGB27F Location and Spatial Development

History and Philosophy
JHPC44Y Canadian Social Issues

Humanities and German
JHGB50Y The Development of German Drama
JHGB51Y Masterpieces of the German Novel from the Eighteenth Century to the Present
JHGB52F The Holocaust in German Literature

Humanities and Italian
JHIB71F/S Italian Cinema

Humanities and Social Science
JHSA01Y Introduction to Women's Studies
JHSC01H Senior Project in Women's Studies

Linguistics and Psychology
JLPB24S Developmental Psycholinguistics
JLPB55F Psycholinguistics
JLPC55S Disorders of Speech and Language

Mathematics and Computer Science
JMCC31F Combinatorics
JMCC32F Graph Theory and Algorithms for its Applications
JMCC51S Numerical Methods

Physics and Mathematics
JPMC42S Advanced Classical Mechanics

pecialist Programme
pervisor: P. León (284-3186)
udents wishing to follow this Specialist Pro-amme should complete the *Major* in *Lan-age and Literature* in two of the following ciplines:
English,
French,
Classical Studies (Greek or Latin),
German,
Italian,
Russian,
Spanish.
addition, one full-course equivalent should chosen from the following, the choice to approved by the Supervisor:
GB95Y English Literary Criticism
RA10F Ancient Art and Architecture
RA11S Medieval Art
RA12F Renaissance and Baroque Art
RA13S Modern Art 1750 to the Present
MA01Y Prologue
MA11Y Greek and Roman Mythology
MB11Y Studies in Greek Mythology and its Influence
LB03F/S Philosophy and Art
LB04F/S Philosophy of Literature

Courses are offered in Introductory Latin (LATA01, LATA10) and Latin literature (LATB01, LATB30, etc.).

LATA01Y Introductory Latin
LATA10F Introduction to Latin Authors
LATB01S Catullus
LATB20F Latin Authors II
LATB30F-34F
LATB35S-39S Supervised Reading
LATB40Y
LATC01F-C02S Independent Studies
For further information see under *Classical Studies*

Linguistics

Discipline Representative:
D. James (284-3205)
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 LINB04). Linguists draw on the findings of Philosophy, Psychology, Sociology, and Biology to create new frontiers of research. This new science is reflected in LINB14, LINB15, 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, LINB26 and LINB27.

Students of foreign languages may find LINA05 and LINB05 of use.

Specialist Programme in Linguistics
Supervisor: D. James (284-3205)
The Specialist Programme in Linguistics involves a core of four basic full-course equivalents, as follows:

1 LINA01Y General Linguistics
2 LINB11Y Syntax
3 Two of:
LINB09F Phonetics
LINB02S Phonology
LINB04F/S Historical and Comparative Linguistics
4 One full-course equivalent on the C-level in LIN or related discipline, as approved by the Supervisor of Studies.

In addition, students must complete nine additional full-course equivalents, to be selected in consultation with the Supervisor of Studies.

5 One full-course equivalent from:
LINB12F/S Semantics
LINB14F Interpersonal Communication
LINB15S Varieties of Language
LINB16F/S Morphology
JLPB24S Developmental Psycholinguistics
JLPB55F Psycholinguistics
JLPC55F/S Disorders of Speech and Language
6 Four further full-course equivalents in Linguistics (LIN or JLP), not to include LINA04F/S or LINA05Y or LINB05Y
7 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
FREB43S* The French Language in Canada
FREB48Y* Theoretical and Practical Phonetics
GERB33S* Practicum in the History and Structure of the German Language
PHLB80F/S Philosophy of Language
SPAB04F* Phonetics
SPAB12S* History of the Spanish Language
* Students should check these courses for prerequisites.
8 Two full-course equivalents in a language which is not the student's native language.
9 In addition to his native language and the language taken under (8), 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: D. James (284-3205)
Students must complete seven full-course equivalents, as follows:

1 LINA01Y General Linguistics
2 LINB11Y Syntax
3 Two of:
LINB09F Phonetics
LINB02S Phonology
LINB04F/S Historical and Comparative Linguistics

dents must also complete *either* four other -course equivalents in LIN *or* three other -course equivalents in LIN plus one C-level -course equivalent in a language. (Only first option is permitted when this pro-mme is taken as part of the Modern Lan-ges Specialist Programme.) JLP courses n be included as LIN courses. LINA04F/S, NA05Y and LINB05Y cannot be counted to-rds the Major.

NA01Y General Linguistics
Introduction to various methods of linguistic alysis, as well as to the form and content tems which comprise language.
Topics such as the following will be included: sound systems amd syntactic systems anguages, language universals, how guages change, how children acquire guage.
ssion: Winter Day
. Binnick

A04S Introduction to Language
eneral introduction to the nature of lan-ge. This is a non-technical introduction d cannot serve as a prerequisite for further guistics courses (unless specified).
Topics such as the following will be covered: relationship between human and animal tems of communication, and between lan-ge and culture; language change; how ldren learn language; bilingualism in nada. There will be lectures, discussions, ns. Exclusion: LINA04 may not be taken students who have credit for LINA01. LINA01 d LINA04 may not be taken in the same ssion.
ssion: Winter Evening
James

B04F Historical and Comparative guistics
guage change and language relationships.
Topics such as the following will be included: ways in which language changes; social otivations for language change; language nilies; language contact; language uni-rsals.
This course is offered in alternate years.
erequisite: LINA01
ssion: Winter Day
.J. Binnick

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. This course is offered in alternate years.
Prerequisite: LINA01
Session: Winter Day
D. James

LINB14F Interpersonal Communication
Aspects of interpersonal communication, including face to face interaction. The focus will be on: strategies that govern a speaker's choice of linguistic forms appropriate to specific social situations; concepts imposed by linguistic rules and prevailing social norms on the acceptability of speech acts; the interrelation of all aspects of the participants' behaviour in communication, both verbal and non-verbal; the influence of the setting of the interaction. This course is offered in alternate years.
Prerequisite: LINA01 or SOCA01; or LINA04 with permission of instructor.
Exclusion: (LINB07)
Session: Winter Day
S. Whalen

LINB15S Varieties of Language
Speech varieties: national language, regional or social dialect, jargon, argot, register and style.

Speech varieties available to a member of a speech community in relation to the roles in that community. Speech varieties as indices of social identity and representative symbols of group affiliation. Monolingual and multilingual speech communities, the diverse linguistic, social and political factors resulting in language maintenance, language shift, and language spread, and the creation of new languages such as pidgins, creoles and lingua francas. This course is offered in alternate years.
Prerequisite: LINA01 or SOCA01; or LINA04 permission of instructor.
Exclusion: (LINB07)
Session: Winter Day
S. Whalen

LINB16S Morphology
The study of word-formation in language. Morphemes, the minimal units of meaning; types of morphemes; the derivation of words through affixation, compounding, etc.; similarities and differences in morphological phenomena across languages; and the relationship of morphology to other components of grammar: phonology, syntax, and semantics. This course is offered in alternate years.
Prerequisite: LINA01 or LINA05.
Session: Winter Day
R.I. Binnick

JLPB24S Developmental Psycholinguistics
The development of language in children. How do children acquire phonological, syntatic, semantic and pragmatic rules– How is language development related to other kinds of cognitive developments–

There will be lectures, discussions and analyses of tapes of children's language.
Exclusion: (LINB15 Developmental Psycholinguistics)
Prerequisite: One full-course equivalent in LIN or PSY.
Session: Winter Day
A. Gopnik

JLPB55F Psycholinguistics
Theories and experiments that address the question: how is language comprehended and produced? Linguistic theories that form the basis of psychological theories and the experimental evidence for and against each theory are reviewed. An overview of current work in the field is offered.

Lectures and discussion.
Prerequisite: One full-course equivalent in LIN or PSY.
Session: Winter Day
A. Gopnik

LINC28F Language and the Sexes
What languages can tell us about how males and females are viewed by their speakers, and ways in which males and females differ in how they use language.

The first part of the course deals with such matters as expressions used to describe human beings and entities of unknown or no sex; the proposition is considered that English and at least some other languages reflect a specifically male perspective on the world. The second part of the course addresses such questions as: Who talks more? Interrupts more? Uses more forceful language and gestures? Speaks more "correctly"? Particular attention is paid to the significance for behaviour of differences in the relative status of males and females. A further topic of discussion is the implications of all this for Canadians of both genders today.
Limited enrolment: 25
Prerequisite: One full course or equivalent on the B-level in LIN, SOC, ANT, or PSY.
Exclusion: LINB28
Session: Winter Day
D. James

JLPC55F Disorders of Speech
The study of abnormalities in the processes of language use and language development discussed in JLPB24 and JLPB55.

In the course we will discuss various types of aphasias and their relationship to brain injury, developmental disorders such as stuttering, dysphasias, and dyslexia, and disorders of language that are related to general disorders such as deafness, blindness or schizophrenia. We will discuss these disorders in relationship to normal language processing and development. Lecture and discussion. Enrolment limited: Overall maximum 45, including no more than 25 Psychology majors or specialists.
Prerequisite: One full course equivalent at B-level in Linguistics or PSYB60 or PSYB65.
Exclusion: (LINB29)
Session: Winter Day
A. Gopnik

NC01F
NC02S
NC03F
NC04S
NC05Y Supervised Reading
erested students should contact Professor D. mes, Supervisor of Studies. The aim of ese courses is to allow the advanced student Linguistics to engage in research; this earch is normally at a level which is more anced than other Linguistic courses which student has already taken, and in an a which is of the student's own choosing. thods of research and of evaluation are varied as the possible areas of research. requisite: At least one B-level full-course ivalent in Linguistics; permission of ructor.
sion: Winter Day
ff

urses Not Offered In 1986-87

A05Y Practical Language Study
B02S Phonology
Prerequisite: LINA01
B05Y Romance Languages
Exclusion: HUMC14Y
B08F Scripts
Prerequisite: LINA01 or LINA04
B09F Phonetics
Prerequisite: LINA01
B12F Semantics
Pre- or Corequisite: LINB11
B25F Second Language Learning
Prerequisite: One linguistics course or language course involving the study of grammar. One Psychology course recommended
B26S Languages of the World
Prerequisite: LINA01 or LINA04 or one course in Psychology or Anthropology.
B27F Animal Communication and the Nature of Language
Prequisite: One course in LIN, or PSY, or SOC or ANT.
C21Y Investigation of a Language
Pre- or Corequisite: LINB02, LINB11

Co-ordinator H. Wittmann (284-3197)
The courses in this programme offer an interdisciplinary 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 a 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 *new programme*.

Major Programme In Literature
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	LITC20F/S	Colloquium in Literature (Essay)

After LITA01 and LITB01 students are encouraged to develop areas of concentration within the sub-sections of No. 3 above.

Students wishing to study literature in the original language will have the opportunity to do so.

For details consult programme supervisor.

FIRST YEAR

LITA01Y Introduction to Literature

SECOND YEAR

LITB01Y* Formation and Transformation of Literary Tradition Prerequisites: LITA01, or ENGA01, or FREB02, or one course in literature

Genre

CLAB01Y Greek and Roman Epic
CLAB02Y 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
ENGB31Y Modern Drama
ENGB34S The Short Story
LITB02F/S* Lyric Poetry of the Middle Ages
Exclusion: (HUMC01)
LITB04Y Fairytales and Folktales
LITB05F/S Emergence of Modern Prose
Exclusion: (HUMB43)
LITB06F/S Comparative Study of Contemporary Fiction
Exclusion: (HUMC19)
LITB07Y* 19th Century Russian Novel
Exclusion: (HUMB58)
LITB08Y The European Experience: Man and Society in the 20th Century French and Italian Novel
Exclusion: (HUMB17)
LITB10Y Masterpieces of the German Novel from 18th Century to the Present
Exclusion: (JHGB51)
LITB11F/S Science Fiction
Exclusion: (HUMB27)
LITB12Y Dostoevsky's Major Fiction
Exclusion: (RUSB17)
LITB15Y Dramatic Literature and Political Revolution
Exclusion: (JHGB50)
LITB16F The Crisis of Contemporary Society in Modern Italian Drama
Exclusions: ITAB27, (HUMB54)
LITB17F/S Russian Short Fiction of the 19th & 20th Centuries

Movement

LITB21Y* Romanticism
LITB22Y* Modernism
Exclusions: (RUSB24, SPAB33, HUMB42)
LITB23Y* Expressionism

Period

CLAA01Y Classical Civilization
HUMB33Y* World Visions from the Late Middle Ages to the Renaissance
HUMC40Y* Vienna and the Origins of Contemporary Culture
LITB32S The Spanish Civil War
Exclusion: (HUMB45)
LITB33Y* Post-War Europe
LITB34Y* Soviet Russian Literature 1917-1980
Exclusions: (RUSB21, RUSB23, HUMB59)
LITB35S Machiavelli and Aspects of the Italian Renaissance
Exclusion: (HUMB50)

Theme

HUMB11Y Studies in Mythology
HUMB14Y Topics in Latin American Culture and Literature
LITB40F/S Disaster and Literary Imagination
Exclusion: HUMB44
LITB41Y* Time and Literature
LITB42Y* Women and Literature
Exclusion: (HUMB64), LITB45
LITB44F/S The Holocaust in Modern Literature Exclusion: (JHGB52)
LITB45Y* Literary Considerations and Feminism
Exclusion: (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
Prerequisite: LITA01 or ENGA0l or FREB02 or one course in literature

Creative Writing

LITB60Y Creative Writing I
Exclusion: (HUMB80)
LITB61F) Creative Writing II
LITB62S)
LITB63Y)
LITC64F) Independent Studies Creative Writing
LITC65S)
LITC66Y)

THIRD YEAR

Literary Criticism

LITC01-LITC09F/S* Studies in Critical Theory
PHLB03F/S Philosophy and Art (Aesthetics)
PHLB04F/S Philosophy of Literature

Colloquium

LITC20F/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 such disciplines as German, Italian, Russian and Spanish, and will feature guest lecturers from such disciplines as Classics, English, French, Fine Arts, Music, History and Philosophy.

Session: Winter Day
Co-ordinator: H. Wittmann/P. Leön

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. An accompanying series of lectures will describe the development of literature and the other arts within an historical framework. Various members of the Division of Humanities will be involved in the preparation of the lecture series.

Prerequisites: LITA01 or ENGA01 or FREB02 (or one course in literature.
Session: Winter Day
J. Kirkness, J. Warden, H. Wittmann

LITB06F Comparative Study of Contemporary Fiction

A study of twentieth century works of fiction from several continents with emphasis on convergent developments in narrative content, form, theory.

The course will examine common themes such as individual and group responsibility, the formative role of national or local culture and the subjectivity of truth, indeed of perception. It will also study similarities in authorial treatment of reader, narrator, character, action and setting. Among the books studied are: A Gide, *The Immoralist*, M. Bulgakov, *The Master and Margarita*, Gunter Grass, *Cat and Mouse*, J.L. Borges, *Labyrinths* (selections), and I. Calvino, *The Watcher* and other stories.

The course will meet for two hours of lectures and discussion per week.
Prerequisite: LITA01 or ENGA01 or FREB02 or one course in literature
Exclusion: (HUMC19)
Session: Winter Day
S. Mittler

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, Zamiatin, Solzhenitsyn and others.
Prerequisites: LITA01 or ENGA01 or FREB02 or one course in literature
Session: Winter Day
C. Ponomareff

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 FREB02 or one course in literature
Exclusion: (RUSB24), (SPAB33), (HUMB42)
Session: Winter Day
C.V. Ponomareff, R. Skyrme

LITB34Y Soviet Russian Literature, 1917-1980
The two realities of Soviet Russian literature: official and underground writing.

The course will focus on the rich variety of fictional writing to come out of Soviet Russia: the Proletarian writers and the Fellow Travellers of the 1920s, the Socialist Realists of the Stalinist Terror and the literature of the post-Stalin period. This study will be combined and contrasted with the stream of underground Russian writing which began in the 1920s and grew into the dissident movement of the 1960s and after.

A number of problem areas will be discussed: the difference between official and underground writing and why the latter is unacceptable to the Communist state. Ten representative authors will be examined.
Prerequisite: LITA01 or ENGA01 or FREB02 or one course in literature
Exclusion: (RUSB21), (RUSB23), (HUMB59)
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 FREB02 or one course in literature
Exclusion: (HUMB44)
Session: Winter Day
C.V. Ponomareff

LITB45Y Literary Considerations and Feminism
A discussion of the implications of a primarily male dominated literary tradition. Examples will be drawn from English, American, Canadian, and European literature.

The purpose of the course is to consider the problem of a literary tradition in which the centre of human consciousness is predominantly male and in which **woman is usually regarded as the other. The course is exploratory in nature, and in consequence, student participation is particularly important. Texts will include Kate Millet's** *Sexual Politics* and Swift's *Words and Women*.
Exclusion: (HUMB64), LITB42
Prerequisite: LITA01 or ENGA01 or FREB02 or one course in literature
Session: Winter Day
S. Namjoshi

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), Charles Gounod's opera *Faust* (1859), Paul Valery's dramatic fragment *Mon Faust* (1946), and Thomas Mann's novel *Dr. Faustus*
(1947). 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 FREB02 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
Session: Winter Evening
B. Brown

See Also:

CLAA01Y	Classical Civilization
DRAB04Y	The History of Theatre II
ENGB31Y	Modern Drama
ENGB34S	Short Story
PHLB04F/S	Philosophy of Literature

Courses Not Offered in 1986/87

LITB02F/S Lyric Poetry of the Middle Ages in the Mediterranean Area
Prerequisite: LITA01 or ENGA01 or FREB02 or one course in literature
Exclusion: (HUMC01)

LITB04Y Fairytales and Folktales
Prerequisites: LITA01 or ENGA01 or FREB02 or one course in literature

LITB05F/S Emergence of Modern Prose
Prerequisite: LITA01 or ENGA01 or FREB02 or one course in literature
Exclusion: (HUMB01)

LITB07Y The Nineteenth Century Russian Novel, 1830-1880
Prerequisite: LITA01 or ENGA01 or FREB02 or one course in literature
Exclusion: (RUSB11), (HUMB58)

LITB08Y The European Experience: Man and Society in the 20th Century French and Italian Novel
Prerequisite: LITA01 or ENGA01 or FREB02 or one course in literature
Exclusion: (HUMB17)

LITB10Y Masterpieces of the German Novel from the Eighteenth Century to the Present
Prerequisite: LITA01 or ENGA01 or FREB02 or one course in literature
Exclusion: (JHGB51)

LITB11F/S Science Fiction
Prerequisite: LITA01 or ENGA01 or FREB02 or one course in literature
Exclusion: (HUMB27)

LITB12Y Dostoevsky's Major Fiction
Prerequisite: LITA01 or ENGA01 or FREB02 or one course in literature
Exclusion: (RUSB17)

LITB13Y Russian and English 19th Century Fiction
Prerequisite: LITA01 or ENGA01 or FREB02 or one course in literature
Exclusion: (HUMB40) (previously HUMB31)

LITB15Y Dramatic Literature and Political Revolution
Prerequisites: LITA01 or ENGA01 or FREB02 or one course in literature
Exclusion: (JHGB50)

LITB16F **The Crisis of Contemporary Society in Modern Italian Drama**
Prerequisite: LITA01 or ENGA01 or FREB02 or one course in literature
Exclusions: ITAB27, (HUMB54)

LITB21Y **Romanticism**
Prerequisites: Either one of LITA01, ENGA01, FREB02 or one course in literature

LITB23Y **Expressionism**
Prerequisites: Either one of LITA01, ENGA01, FREB02

LITB31Y **World Visions from the Late Middle Ages to the Renaissance**
Exclusion: (HUMB33)

LITB32S **The Spanish Civil War: Fact to Fiction**
Prerequisite: LITA01 or ENGA01 or FREB02 or one course in literature
Exclusion: (HUMB45)

LITB33Y **Post-War Europe**
Prerequisites: Either one of LITA01, ENGA01, FREB02

LITB35S **Machiavelli and Aspects of the Italian Renaissance**
Prerequisite: LITA01 or ENGA01 or FREB02 or one course in literature
Exclusion: (HUMB50)

LITB41Y **Time and Literature**
Prerequisites: LITA01 or ENGA01 or FREB02 or one course in literature

LITB42Y **Women and Literature**
Prerequisites: LITA01 or ENGA01 or FREB02 or JHSA01 or one course in literature
Exclusion: (HUMB64), LITB45

LITB44Y **The Holocaust in Modern Literature**
Prerequisite: LITA01 or ENGA01 or FREB02 or one course in literature
Exclusion: (JHGB52)

LITB47F/S **Fantasy in Narnia and Middle Earth**
Prerequisite: LITA01 or ENGA01 or FREB02 or one course in literature
Exclusion: (HUMB39)

LITB48F/S **Utopia: From More to Huxley**
Prerequisite: LITA01 or ENGA01 or FREB02 or one course in literature
Exclusion: (HUMB38)

LITB49F/S **Atlantis**
Prerequisite: LITA01 or ENGA01 or FREB02 or one course in literature
Exclusion: (HUMB37)

LITB61F
LITB62S
LITB63Y **Creative Writing II**
Prerequisite: LITB60 or (HUMB80) or permission of instructor
Exclusion for LITB61/62 is LITB63; for LITB63 is LITB61/62

LITC01-
LITC09F/S **Studies in Critical Theory**
Prerequisite: LITB01 and 2 further full-course equivalents in LIT

LITC20F/S **Colloquium in Literature**
Prerequisites: One of LITC01-C09F/S LITC64F LITC65S LITC66Y Independent Studies: Creative Writing
Prerequisite: LITB60 or (HUMB80) and permission of instructor
Exclusion: for LITC64/65 is LITC66; for LITC66 is LITC64/65

Mathematics

Staff member responsible for curriculum: P. Leah (284-3192)

The development of mathematics was induced by the inherent need to describe and analyse phenomena 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 MATA40F and MATA45S 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 MATB41F, MATB42S, STAB52F, STAB57S in second year.

MATA27 is intended for those Commerce and Economics students who do not expect to take MATB41F, MATB42S in second year.

Specialist Programme in Mathematics
Supervisor: P. Leah (284-3192)

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: MATA40F, MATA45S, MATA55Y*, CSCA58F and CSCA68S;

Second year: MATB25Y, MATB44F, MATB49S, MATB50F*, MATB55S*, STAB52F, STAB57S;

Third year: MATC49S, MATC51F, MATC56S, MATC53Y, MATC60F, MATC65S;

Fourth year: One further half-course from MATB70S, MATC43F, MATC54F, JMCC31F, JMCC32F, CSCC51F, (JMCC51), STAC42S, STAC52S, STAC67F, (JPMC42)

*Students will normally take MATA55Y followed by MATB50F and MATB55S but may substitute MATA26Y followed by MATB41F, MATB42S and MATB43S.

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: P. Leah (284-3192)

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 **MATA40F, MATA45S, CSCA58F, CSCA68S, STAB52F, and STAB57S.**
3 **MATB41F and MATB42S or MATB50F and MATB55S**
4 **One further full-course equivalent from each of the following groups:**

a MATC51F, MATC56S, MATC53Y, MATC60F, MATC65S, (JPMC42)
b STAC42S, STAC52S, STAC67F, CSCB28S, CSCB58F, CSCC50F, CSCC51F (JMCC51)
c MATB25Y, MATB44F, 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.

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
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 MATB41/42.
Exclusion: MATA26; MATA55
Prerequisite: Grade 13 Calculus
Session: Winter Day

MATA40F Introduction to Linear Algebra
Systems of linear equations and related matrix algebra. Vector spaces, subspaces, basis, dimension. Linear transformations: range and kernel, matrix representation. Geometry of R^2 and R^3.

MATA40F is designed for students who intend to pursue further studies in mathematics or science. There is a strong emphasis on the proofs of theorems as well as their applications.
Prerequisite: Grade 13 Functions and Relations
or
Grade 13 Algebra or Grade 13 Calculus
Session: Winter Day

MATA45S Linear Algebra I
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
Session: Winter Day

MATA55Y Calculus with Analysis
Numbers. Induction. Inequalities. Coordinates. Functions. Limits. Continuity. Uniform continuity. Derivatives and applications. Transcendental functions and applications. Techniques of Integration. Mean value theorems. Taylor's formula. L'Hopital's rule. Sequences and series. Differential equations. Polar coordinates. Parametric representations and applications.

This course is designed for students who intend to pursue further studies in mathematics or science. There is a strong emphasis on rigour and proofs. The course will treat the concepts of the calculus, their logical relations, how to bring problems from other disciplines within this frame-work and how to solve them.
Exclusion: MATA26; MATA27
Prerequisite: Grade 13 Functions and Relations; Grade 13 Calculus
Session: Winter Day

MATB25Y Geometry
Isometries in Euclidean plane and space. Similarities. Inversion in a circle. The inversive plane. Circle preserving transformations. Non-Euclidean geometry. Projective and affine geometry. Finite geometries. Free completions. Desargues's theorem and Pappus's theorem. Projectivities, homologies, elations. The fundamental theorem of projective geometry.

This course explores some facets of present-day geometric research. In addition, the interplay between geometry and algebra is emphasized.
Prerequisite: MATA45
Corequisite: MATB44
Session: Winter Day

ATB41F Techniques of the Calculus of Sev-al Variables I
ector algebra in R!un!d, lines and planes in u3!d, complex numbers, matrices, determi-nts and linear equations. Functions of several ariables, partial derivatives, tangent planes, acobian matrix, chain rule and total derivative. ector fields in R!un!d. Gradient, divergence nd curl. Multiple integrals, spherical and ylindrical coordinates, law of transformation of ariables.
xclusion: MATB50
rerequisite: MATA26, MATA27 or MATA55
ession: Winter Day

ATB42S Techniques of the Calculus of everal Variables II
ths and path integrals. Surfaces, parametric presentations of surfaces, surface integrals. ivergence, Gauss' and Stokes' theorems. equences and series of numbers and func-ons. Taylor series and complex Fourier series. xtremal problems. Extremal problems with nstraints and Lagrange multipliers.
xclusion: MATB50, MATB55
rerequisite: MATB41
ession: Winter Day

ATB43S Introduction to Analysis
he least upper bound principle for R, limits in R nd R^2, continuous functions in one and two ariables, space filling curves and nowhere ifferentiable functions, existence of extrema on losed and bounded sets, mean value theorems nd the fundamental theorems of the calculus, e Riemann integral.

This course is designed for students whose terest in mathematics has been stimulated by eir experience in the A26 – B41 – B42 stream, nd who wish to acquire the analytic techniques hich are essential for more advanced work. In articular MATB43S together with MATB42S ay be used instead of MATB55S for prerequi-ite purposes. There will be a fundamental mphasis on rigorous analytic proofs.
Exclusion: MATA55
Prerequisite: 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)
Prerequisite: MATA45
Session: Winter Day

MATB49S Linear Algebra II
Dual spaces, the transpose of a linear transformation, polynomial algebras over a field, prime factorization in F(x), determinants, Cayley-Hamilton theorem, invariant and cyclic subspaces, Jordan and rational canonical forms.
Exclusion: (MATB40)
Prerequitie: MATB44
Session: Winter Day

MATB50F Analysis I
Partial derivatives. Implicit differentiation. Extrema of functions with side conditions. Series of functions. Uniform convergence. Limit and derivative under the integral sign. Multiplication, differentiation and integration of series. Power series. The calculus of vector functions.
Exclusion: MATB41; MATB42
Prerequisite: MATA45; MATA55
Session: Winter Day

MATB55S Analysis II
The topology of the n-dimensional Euclidean space. Multiple integrals and transformation of variables. Integration of n-forms. Exterior calculus. Line integrals, winding number, Green's theorem. Surface integrals and Stokes' theorem. (Mathematical rigour is emphasized.)

Three lectures per week.
Exclusion: MATB41; MATB42
Prerequisite: MATB50
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.
Prerequisite: 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 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

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.
Prerequisite: MATB42 or MATB50 (MATB50 may be taken concurrently) or MATA55, MATA45, and MATB41 (MATB41 may be taken concurrently)
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, geodisies, parallel transport, Gauss Bonnet theorem. Geometry on surfaces of constant curvature.
Prerequisite: MATA45, 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.
Prerequisite: 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

TAB57S Probability and Statistics II
n introduction to statistics. The statistical odel. Large sample methods. Distribution-free ethods. The likelihood function. Estimation. esting hypotheses. Linear models. Design of xperiments. Theory and applications.
xclusion: PSYB07, ECOB11, (MATB57)
rerequisite: STAB52 (MATB52)
ession: Winter Day

TAC52S Experimental Design
he statistical aspects of colleging and analyzg experimental data. Complete randomization nd restricted randomization schemes. Factori- designs.
xclusion: PSYB08
rerequisite: STAB57
ession: Winter Day

TAC67F Regression Analysis
he statistical analysis of linear models. Transrmations. The analysis of covariance. Bioasay. Computational procedures.
xclusion: (MATC67)
rerequisite: STAB57 (MATB57)
ession: Winter Day **Courses Not Offered in 86-87**

ATC32S Advanced Topics in Mathematics
Prerequisite: MATA45, MATB42 or MATB55

PMC42S)
Advanced Classical Mechanics
Prerequisite: PHYA03; MATC51

ATC49S Algebraic Structures II
ATC53Y Real Analysis
ATC56S Differential Equations II
TAC42S Multivariate Analysis
MCC31F Combinatorics

The courses in these 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: M. Gervers (284-3178)
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-level seminars or C-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

ANTB52A*	Field Methods in Archaeology
ANTC29Y*	Analysis of Archaeological Material
DRAB03Y	The History of Theatre I
DRAB12B	Medieval and Early Tudor Drama: Texts and their Production
FARA11S	Medieval Art
FARB10F	Carolingian and Romanesque Art and Architecture
FARB11F	Gothic Architecture
FARB16Y	The Arts in Northern Europe ca. 1400- 1500
FARC06F/S*	Early Medieval Art
FARC07F/S*	Medieval Art
HUMB09F	The Civilization of Spain I
MUSB04F/S	Music of the Renaissance

History

ANTB41S*	Pre-Industrial Technology
ANTB55Y	Cultures of the Middle East and the Islamic World
GERB33S*	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
HISB61Y*	The Beginnings of France: Constantine to Charlemagne
HISC20H*	Anglo-Saxon England
HISC62Y*	The Crusades

Language and Literature

ENGB01Y	Old English Language and Literature
ENGB02Y	Chaucer
ENGB12Y*	English Drama to 1642
ENGC01Y*	Advanced Studies in Beowulf and other Old English Poetry
FREB42Y*	General History of the French Language
FREC22Y*	Introduction to Medieval French Language and Literature
GERB33S*	Practicum in the History and Structure of the German Language
ITAB23S*	Survey of Italian Literature from the Middle Ages to the Renaissance
ITAB31Y*	Dante and Medieval Culture
ITAB32F*	Petrarch and Boccaccio
ITAB34F/S*	Chivalric Poetry of the Renaissance
LATA01Y	Introductory Latin
LATB30F-34F	Supervised Reading
LATB35S-39S	Supervised Reading
LATB40Y	Supervised Reading
LITB02F/S	Lyric Poetry of the Middle Ages in the Mediterranean Area **Exclusion: (HUMC01)**
SPAB12S*	**History of the Spanish Language I**

Philosophy and Religion

CLAB21Y*	Greek and Roman Religion
CLAB23F	Christianity in the Greco-Roman World
HUMA11Y	Greek and Roman Mythology
HUMB11Y	Studies in Greek Mythology and its Influences
HUMB20Y	Primitive Christian Literature and Myth
HUMB28Y	Major Religious Traditions, East and West
LITB31Y	World Visions from the Late Middle Ages to the Renaissance
PHLB40F	Plato and His Predecessors I
PHLB41S	Plato and His Predecessors II
PHLB42F	Aristotle I
PHLB43S	Aristotle II
PHLB44F	Philosophers of the Middle Ages I
PHLB45S	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: M. Gervers (284-3178)

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-level seminar or C-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.

odern Languages

ecialist Programme

ervisor: G. Trembley (284-3315)

e Modern Languages Specialist Programme bles a student to gain a high degree of ncy in two languages, or in one language ther with a concentration in Linguistics. In case of every combination, there is a mmon core for the programme consisting of A05Y, Practical Language Study, and a oice from a set of courses which relate guages to broader social and historical or tural areas. There are ten possible combinans as follows: French and German, French d Italian, French and Spanish, German and lian, German and Spanish, Italian and Span, French and Linguistics, German and Linistics, Italian and Linguistics, Spanish and guistics.

For every combination, students must satisfy e following requirements:

The courses listed under the Major Programmes in two of: French, German, Italian, Linguistics, Spanish.

LINA05Y Practical Language Study

LATA01Y or FREA06Y for students with no background in either language

One full-course equivalent from the following, the choice to be approved by the Supervisor, for every combination other than French/Spanish:

TB30Y	Language and Culture
A01Y	European World
MA01Y	Prologue
B05Y	Romance Languages

OTE: Although there is no Russian Language ajor Programme, students may take Russian nguage at the first and second-year levels. ore advanced Russian Language study may e pursued under Supervised Reading.

Music

Discipline Representative: J. Mayo

Music is one of the liberal arts. The courses at Scarborough emphasise 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 his 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 (284-3126)

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 MUSA01Y Introduction to Music
  MUSB17F Materials of Music I
  MUSB24S Materials of Music II
2 Three full-course equivalents chosen from MUS courses 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, HUMB50S Machiavelli and aspects of the Italian Renaissance, DRAB03Y The History of Theatre I.

* Music Students may be interested in taking the *Specialist Programme in the Arts* or the *Co-operative Programme in Arts Administration*.

MUSA01Y Introduction to Music
A study of the basic materials, principles of design, and cultural significance of representative works of Western and non-Western music, including popular music from the Middle Ages to the present. No musical training is required.

A survey of the style changes in Western music from the Middle Ages to the present. 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.
Session: Winter Day
J. Mayo

MUSB01S Music of the Twentieth Century
Tracing the various trends of music in the present century from Debussy to the most recent electronic and multi-media presentations.

Selected compositions of Debussy, Schoenberg and Stravinsky are analysed in detail to demonstrate the nature of the revolution which took place in music during the early years of the century. The course continues with a survey of the most significant composers and techniques of the succeeding seventy years. Topics to be discussed include the continuing commitment of some composers to tonality; developments in twelve-tone serialism; the influence of jazz; electronic music; the emergence of new aesthetic attitudes. There will be two lecture hours per week.
Prerequisite: MUSA01
Session: Winter Day
J. Mayo

MUSB02F Music of the Classic Period
A study of music from the late eighteenth and early nineteenth centuries with emphasis on the works of Haydn, Mozart and Beethoven.

An examination of the origins of the Viennese classical style will be followed by a study of representative works by the three major composers of the classic period. The works will be studied in the context of the political, social and artistic changes which took place in Europe at this time.
Prerequisite: MUSA01
Session: Winter Day
J. Mayo

MUSB11F Music for the Theatre
Music for the Theatre from the Renaissance to the present day.

A study of the great variety of ways in which music and drama have been combined. Subjects for discussion will include incidental music for spoken drama; music for the dance and the development of the symphonic ballet; opera and its particular dramatic problems and possibilities; music and film; modern multi-media experiments.
Prerequisite: MUSA01 or permission of instructor
Session: Winter Day
M. Coghlan

MUSB13S Bach
A study of the variety of music written by Johann Sebastian Bach.

This course will examine representative works from all the major genres including organ music, church cantatas, concertos and sonatas, the Passions and the B Minor Mass. The music will be studied in the context of works by Bach's contemporaries and the relationships between music and society will be discussed.
Prerequisite: MUSA01
M. Coghlan

MUSB14F 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 exceptionaly well qualified students.

There will be two hours per week lecture and class discussion.
Session: Summer Evening
J. Mayo

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 two half-course
equivalents for credit in these courses.

SB20H Supervised Performance I – orus
e practical study of a wide range of music m the choral repertoire. Students work as mbers of Scarborough College Chorus, a amber choir which performs compositions wn from the literature of the Renaissance to e present day. The choir gives public performances in each term.
In addition, credit students may be required to pare works in conjunction with members of e instrumental performance programme. Prious experience desirable but not essential.
e course meets 2 hours per week for rehearsal h MUSB21H.
clusion: MUSB09H and MUSB10H
e or Corequisite: MUSA01Y
ssion: Winter Day
Coghlan

USB21H Supervised Performance II – orus
continuation of MUSB20H.
clusion: MUSB10H
erequisite: MUSB09H or MUSB20H
ssion: Winter Day
Coghlan

USB22H Supervised Performance I – trumental
e practical study of ensemble performance. Students work in small ensembles (duets, os, quartets) arranged to suit the abilities of dividual performers and prepare works for blic performance within the College. The phasis of the course is on the particular oblems of ensemble performance and it sumes a basic competence on the chosen trument.
Each group will meet for 2 hours per week, e hour with all students of MUSB22H and USB23H in a master class and one hour for oup rehearsal and/ or coaching.
See timetable for time of master class; group hearsal times to be arranged in first week of m.
xclusion: MUSB09H/B10H
e or Corequisite: MUSA01Y
ssion: Winter Day
Coghlan

MUSB23H Supervised Performance II – Instrumental
A continuation of MUSB22H.
Exclusion: MUSB10H
Prerequisite: MUSB22H or MUSB09H
Session: Winter Day
M. Coghlan

MUSC01F
MUSC02S
MUSC03Y 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.
Prerequisite: At least two full course equivalents in music at the B-level; permission of instructor to be obtained by the last date of classes in the previous term.

Courses Not Offered in 1986-87

MUSB04F	**Music of the Renaissance** *Prerequisite MUSA01*
MUSB05S	**Music of the Baroque Era** *Prerequisite: MUSA01*
MUSB06S	**Music of the Romantic Period** *Prerequisite MUSA01 or MUSB08*
MUSB07F	**The Symphony** *Prerequisite: MUSA01 or MUSB08*
MUSB15F	**Music in Elizabethan England** *Prerequisite: MUSA01*
MUSB16S	**Canadian Music** *Prerequisite: MUSA01*
MUSB17F	**Materials of Music** *Prerequisite: MUSA01*
MUSB18F	**Beethoven** *Prerequisite: MUSA01*
MUSB19F	**Keyboard Music** *Prerequisite: MUSA01*
MUSB24S	**Materials of Music II** *Prerequisite:* MUSB17F

Myth and Religion

Supervisor: J.H. Corbett (284-3182)
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.H. Corbett
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
5 One full course equivalent from Group (A) and one full course equivalent from Group (B)
(A)
HUMB11Y Studies in Greek Mythology and its Influence
HUMB20Y Primitive Christian Literature and Myth
HUMB28Y Major Religious Traditions: East and West
CLAB23F/S Christianity in the Greco-Roman World
PHLB61F/S Philosophy of Religion
(B)
ANTB02Y Anthropological Study of Religion
ANTB23Y Comparative Mythology
SOCB03Y History of Social Thought
6 HUMC10H* Humanities Seminar
7 and two and one-half further full-course equivalents drawn from (2), (4) and (5) above and from the following:
ANTB50F/S* Fact and Fiction in Anthropology
ANTC02F/S* Systems of Thought
CLAB02Y Greek and Roman Tragedy
Exclusion: DRAB14
CLAB21Y Greek and Roman Religion
HISB06Y Europe in the Middle Ages
HISB13Y* Europe in the Reformation Era 1450-1650
HISB14F Popular Culture in Early Modern Europe
HISB61Y* The Beginnings of France: Constantine to Charlemagne
HISC14Y* The European Mentality in the Early Modern Period (1500-1700)
HISC62Y* The Crusades
HUMB26Y Women in the Major Western Religions
HUMB29F/S Religion and Western Culture
LITB11S 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 Philosophers of the Middle Ages I
PHLB45S Philosophers of the Middle Ages II
PHLB61F/S Philosophy of Religion
SOCC20F/S* Sociology of Religion

* Students should check these courses for prerequisites.

eurosciences

an area of study the Neurosciences has halgamated aspects of a variety of disciplines th the goal of understanding behaviourial, ological and biochemical processes in ner- ous systems. Techniques borrowed from con- uent disciplines like anatomy, physiology, ochemistry, psychology and pharmacology ve been successfully applied to unravel some the mysteries of the brain and its mechanisms action. Investigators in the Neurosciences ve made fundamental contributions in the nical aspects of medicine and behaviour.

The Specialist Programme in Neurosciences marily includes courses from the two major ntributing disciplines of Psychology and ology. It has been designed for students shing to pursue graduate training in the uroscience or related fields, as well as those shing greater depth and more direct experi- ce than is provided by the Major Programme. e Major Programme is intended to provide a mprehensive exposure to the main content as in the Neurosciences and recommended those students interested in the breadth of owledge concerning the brain and related stems.

Relevant Neuroscience courses available at St. George or Erindale campuses in such partments as Anatomy, Biochemistry, Phar- cology, Physiology, Psychology and Zoology y be used to satisfy a required or elective urse in either the Specialist or Major Pro- mmes, with the permission of the supervisor studies.

Students in both Specialist and Major Pro- mmes should obtain a copy of the Neurosci- ce Programme booklet (available from the pervisor of Studies) which provides general ormation including the research and special erests of faculty members, and a listing of evant courses from the other campuses.

Specialist Programme in Neurosciences
Supervisor: T. L. Petit (284-3321) S-557
The programme requires completion of eleven full-course equivalents plus four full courses in prerequisite and cognate disciplines, i.e., **Concentration Electives**. Elective courses should be chosen in consultation with your advisor or the supervisor. The following outline includes these required courses and indicates the most advantageous sequencing.

1 To be completed in the first year of full-time study (or equivalent).
PSYA01Y Introduction to Psychology
BIOA03Y Introductory
CHMA02Y General Chemistry
(MATA22Y) (Introduction to Calculus),
or
MATA26Y Calculus (or equivalent)

2 To be completed by the end of the second year of full-time study (or equivalent).
CHMB05Y Organic Chemistry I
PSYB07F Data Analysis in Psychology
BIOB17Y General and Comparative Physiology
PSYB60F Brain Mechanisms and Behaviour I
PSYB61S Brain Mechanisms and Behaviour II

3 To be completed by third year of full-time study (or equivalent).
JBCB35Y Introductory Biochemistry
PSYB62Y Research in Physiological Psychology
PHYA03Y Physics for the Life and Physical Sciences

Of the three and one-half elective full-course equivalents available in the second and third year, one and one-half must be selected from the list of **concentration electives** below.

4 To be completed by the end of the fourth year of full-time study (or equivalent).
At least one of:
PSYC60F Current Topics in Comparative and Physiological Psychology
PSYC62S Neuroplasticity, Mechanisms and Function
PSYC66S Clinical Psychopharmacology
PSYC68F Developmental Psychobiology
Two and one-half full-course equivalent **concentration electives** selected from the list below.
Students planning advanced study in the Neurosciences are advised to consider (these are not required):
NROC98 Thesis in Neuroscience
PSYC98 Thesis in Psychology
or

NROC90/C93	Supervised Study in Neuroscience
PSYC90/C93	Supervised Study in Psychology
BIOC01Y/C02Y	Supervised Study in Biology

List of Concentration Electives for Specialists
Students should consult with the supervisor of studies concerning the availability of courses and possible changes in this listing.

JBCB36H	Laboratory in Biochemistry
JLPC55F	Disorders of Speech and Language
PSYB01S	Introduction to Psychological Research
PSYB08S	Experimental Design in Psychology
PSYB32F/S	Abnormal Psychology
PSYB34F	Psychometric Methods
PSYB40F	Learning
PSYB45F	Behaviour Modification: Origins and Application
PSYB50F	Sensation and Perception
PSYB51F	Perceiving and Knowing
PSYB53	Microcomputers in Experimental Psychology
PSYB57S	Human Learning and Memory
PSYB65F	Biological Foundations of Behaviour
PSYC40S	Current Topics in Animal Learning
PSYC41F	Research in Operant Conditioning
PSYC53S	Current Topics in Human Information Processing
PHYB13Y	Physics for the Life Sciences II
BIOB02Y	Basic Microbiology
BIOB05Y	Genetics
BIOB08Y	Invertebrate Zoology
BIOB11Y	Animal Population and Evolution
BIOB19S	Biology of Macromolecules
BIOB20F	Cell Ultrastructure
BIOB22Y	Morphogenesis and General Biology of Invertebrates
BIOB23Y	Developmental Biology
BIOB27Y	Comparative Vertebrate Histology
BIOB31F	Invertebrate Neurobiology
(BIOB43Y)	(General Vertebrate Biology)

Major Programme in Neurosciences
Supervisor T. L. Petit (284-3321) S-557
The programme requires seven and one-half full-course equivalents. Students who might consider completing a Four-Year Degree are encouraged to include in the electives below the following courses: PHYA03, CHMB05 and JBCB35, so that they would be eligible for the specialist programme.

The following outline indicates the required courses and the most advantageous sequencing for the Major Programme in Neurosciences.

1 To be completed in the first year of full-time study (or equivalent).

PSYA01Y	Introduction to Psychology
BIOA03Y	Introductory Biology
CHMA02Y	General Chemistry (MATA22Y) (Introduction to Calculus),
or	
MATA26Y	Calculus (or equivalent)

2 To be completed by the end of the second year of full-time study (or equivalent).

PSYB07F	Data Analysis in Psychology
BIOB17Y	General and Comparative Physiology
PSYB60F	Brain Mechanisms and Behaviour I
PSYB61S	Brain Mechanisms and Behaviour II

3 To be completed by the third year of full-time study (or equivalent).

PSYB62Y	Research in Physiological Psychology

OC90F/S/H
OC93F/S/H
ervised Study in Neuroscience
eading or research project.
hese courses provide an opportunity to in-tigate an area in depth after completing ic coverage in regularly scheduled courses. y are not intended as substitutes for ad-ced courses in fields where these are avail-e. The student must demonstrate that his or background is adequate for the project posed and should present a clear rationale rospective supervisors. Frequent consulta-with the supervisor is necessary and exten-library research and/or data collection will required. Such a project will culminate in a en submission. These courses cannot be ated for credit.
equisite: Three full-course equivalents in chology or Biology; permission of the uctor.
usions: PSYC90, BIOCO1
usions for NROC93: PSYC93, BIOCO1
ion: Summer Day, Summer Evening, Win-Day, Winter Evening.
ordinator: TBA

OC98Y Thesis in Neuroscience
course is intended to offer to qualified ents the opportunity to engage in a year-research project under the supervision of erested member of the faculty in the oscience areas (Psychology or Biology). project will culminate in a written report in orm of a thesis and a defense of that report. g the course of the year, at appropriate , students will meet to present their own rch proposals, to appraise the proposals ers and to discuss the results of their tigation.
dents will meet as a group with the inator as well as individually with the rvisor.
equisite: Satisfactory completion of fifteen course equivalents in any discipline, but ding PSYB07; one laboratory half-course in chology or Biology, consent of a faculty ber in Psychology or Biology to serve as rch supervisor.
usions: PSYC98Y, BIOC02
ion: Winter Day
ordinator: TBA

Discipline Representative: J.H. Sobel
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 year cycle: those not offered in one academic year will normally be available in the following year while PHLA01, PHLB01, PHLB20, PHLB50 and PHLB60 are 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 at the B-level. These sequences are usually scheduled in the same time slot. The B-series of courses is arranged in decade units according to areas within Philosophy, not in order of difficulty.

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 1986-87 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 program 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: J.H. Sobel (284-3288)
Students must complete at least twelve full-course equivalents including:

1 PHLA01Y Fundamental Questions of Philosophy
PHLB01F Ethics
PHLB20F/S Belief, Knowledge and Truth
PHLB50F Symbolic Logic
PHLB60F/S Existence and Reality

2 Four half-courses from PHLB40F to PHLB49S

3 Two full-course equivalents in C-level Philosophy courses.

4 Six additional half-courses in Philosophy

5 Two full-course equivalents from cognate courses in other disciplines agreed upon consultation with the Supervisor.

Major Programme in Philosophy
Supervisor: J.H. Sobel (284-3288)
Students must complete at least six full-course equivalents in Philosophy including:

1 PHLA01Y Fundamental Questions of Philosophy
2 Two of the following half-courses:
PHLB01F Ethics
PHLB20F/S Belief, Knowledge and Truth
PHLB50F Symbolic Logic
PHLB60F/S Existence and Reality
3 Two half-courses from PHLB40F to PHLB49S
4 Two half-courses in C-level PHL courses
5 Four additional half-courses in Philosophy

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
After going through Beardsley's *Thinking Straight* (a book about reasoning), we examine these questions by reading works of great philosophers of the past in the light of contemporary discussion. Readings include Plato's *Meno;* Augustine's *On Free Choice of the Will;* Descartes' *Meditations;* Martin Buber's *I and Thou;* and Richard Taylor's *Metaphysics*. These works will introduce us to philosophical issues concerning the nature of persons and of God; freedom and immortality; evil; and the limits of knowledge.
Session: Winter Day
Paul Gooch

L02
A basically historical approach to these questions will be taken. However, the course begins with a brief examination of logic and the patterns of correct reasoning as well as the patterns of *incorrect* reasoning (the fallacies). We will then read Plato's *Republic*, Descartes' *Meditations on First Philosophy*, Hume's *Enquiry Concerning Human Understanding*, and, time permitting, Kant's *Polegomena to any Future Metaphysics*.
Session: Winter Day

L03
Fall Term Texts will be selected from Plato's *The Last Days of Socrates, Gorgias* and *Republic*, Kant's *Foundations of the Metaphysics of Morals*, and Nietzsche's *Beyond Good and Evil*. Spring Term Texts to be announced.
Session: Winter Day
W. Graham

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

PHLB01S Ethics
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.
Session: Winter Day

PHLB04F Philosophy of Literature
An examination of philosophical theories and claims about literary works.

A study of the nature of literature as a form of imaginative human expression. Texts will include the writings of philosophers as well as selected poetry, prose and drama.
Session: Winter Day
W. Graham

PHLB05F 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.

In 1986-87 the course will involve an examination of abortion, world hunger, war, discrimination, capital punishment, and animal liberation.
Session: Winter Day
P. Thompson

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. Issues and philosophers studied will be: the justification of the state and political authority (Hobbes and Hume), the proper province of law and the limits of legitimate authority and of obligations to obey states and their laws (Locke, Socrates, and Mill), and possible philosophical foundations for democratic states (Rousseau). The course will combine study of classical theories with non-technical treatments of topics in game theory (in connection with Hobbes and Hume), and in social choice theory (in connection with Rousseau).
Session: Winter Day
J.H. Sobel

PHLB11F Philosophy of Law
A study of some fundamental legal conceptions.

The course will be concerned with responsibility and rights. The first part treats of *legal responsibility:* under what conditions is an agent held legally responsible? what view of the will is implicit in recognised legal defences such as duress, insanity, lack of intent? why is negligence punishable? The second part of the course deals with *rights:*
can there be rights which are unenforceable?
should we believe in the existence of natural rights? which ones?

Readings: *Philosophy of Law*, ed. J. Feinberg ç H. Gross Session: Winter Day

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.

An examination of human knowledge and questions which arise from this. One of the most ancient of philosophical questions is whether knowledge is possible at all. The skeptic claims that it is not, that for various reasons all our beliefs are subject to examine this claim from both an historical and a modern perspective to see if some structure of knowledge which escapes the skeptic's attack cannot be constructed. Topics include: what is knowledge, is certainty necessary for knowledge, what is the source of justification for our beliefs– Texts to be announced.
Session: Summer Evening, Winter Day
P. Thompson, TBA

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.

The course will centre on Plato's presentation of Socrates: his philosophical motivation and method; his irony and ignorance; his ethics and religion. We read many of the Socratic dialogues and include a detailed study of the *Gorgias*, the *Protagoras* and the *Symposium* Session: Winter Day
P. Gooch

PHLB41S Plato and His Predecessors II
A continuation of PHLB40.
The central text for this continued study of Plato is the *Republic*, which will be studied in some detail. Passages of some later dialogues will also be incorporated at appropriate points.
Prerequisite: PHLB40
Session: Winter Day
P. Gooch

PHLB44F 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.
The course will consider philosophers from the beginning of the Christian era to the eleventh century. Most of the time will be spent on Augustine, but Boethius and Anselm will be read as well, along with some other thinkers representative of the period.
Session: Winter Day

PHLB45S Philosophers of the Middle Ages II
A continuation of PHLB44. A study of central themes in the philosophy of Christian, Islamic, Boethius, Avicenha, Alfarabi, Malmonides, Anselm, Aquinas, Ockham.
Session: Winter Day

PHLB46F Philosophy of the Early Modern Age I
Philosophy in the seventeenth century.
Session: Summer Evening
J. Liszka

PHLB47S *Philosophy of the Early Modern Age II*
Philosophy in the eighteenth century.
Session: Summer Evening
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. Texts: Hegel, *Texts and Commentary: Preface to the the 'Phenomenology of Spirit'; Introductory on Art, Religion, Philosophy;* Schopenhauer, *Essays and Aphorisms;* Nietzsche, *A Nietzsche Reader*. Session: Winter Evening
W. Graham

PHLB49S Philosophy in the Later Modern Age II
A continuation of PHLB48.
Session: Winter Evening
W. Graham

PHLB50F Symbolic Logic
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/Winter Evening
J.H. Sobel/TBA

PHLB53F The Art of Thinking
An examination of the ways in which arguments can be identified, common fallacies can be avoided, and clear thinking can be achieved.
Session: Winter Day

PHLB60F *Existence and Reality*
A consideration of problems in metaphysics.
Session: Summer Evening/Winter Day

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 this 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: Winter Day
Paul Gooch

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 rationalaity and progress of science.
Exclusion: PHLB71
Prerequisite: One course or half-course in Philosophy or in the Division of Science.
Session: Winter Day
P. Thompson

PHLB71F Philosophy of Biology
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*
Prerequisite: BIOA03
Session: Winter Day
P. Thompson

PHLB81S Theories of Mind
An examination of the philosophical presuppositions of psychological theories such as those of Freud and Jung, Behaviourism and Existential Psychology. Problems such as the relation of mind and body, conscious and unconscious, the meaning of mentalistic concepts and the analysis of dreaming will be studied.
An examination of questions concerning the nature of mind and thinking. Traditionally, the mind has been conceived as a mysterious component of human beings, existing in relative independence from the conditions of physical life. Modern research into the structure and function of the brain have thrown doubts on this view, and work in computer science suggests that minds and thinking can even be attributed to machines. We will examine the nature of the mind, and such questions as what thinking is, and whether or not machines can have a 'mental life'. Texts to be announced.
Session: Winter Day

PHLC05S Biomedical Ethics
An examination of the social and ethical aspects of the life sciences and medicine.
In 1986-87 the ethical aspects of the following issues will be discussed: the definitions of health and disease: euthanasia, genetic technologies, reproductive technologies (e.g. artificial insemination by donor); autonomy and paternalism, and health care delivery.
Exclusion: (PHLB87)
Prerequisites: PHLB05 or PHLB01
Session: Winter Day
P. Thompson

PHLC51S Symbolic Logic II
A continuation of PHLB50F.
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: JMPC51
Prerequisite: JMPB50/PHLB50
Session: Winter Evening
J.H.Sobel

PHLC71S Advanced Topics in Philosophy of Biology
A seminar course dealing with conceptual and logical aspects of explanation and theory in Biology, and logical and heuristic aspects of models in Biology.
The following topics will be discussed: the logical structure of evolutionary theory and the conceptual assumptions underlying it, models in biology, and cladistic versus evolutionary *systematics*.
Prerequisite: PHLB70 or PHLB71; permission of instructor
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.

PHLC77S Seminar in Philosophy: Decision Theory
A seminar in recent developments in the theory of rational choice related in particular to the difference between potential 'evidential bearings of actions' -- their status as possible *signs* of good and bad things -- and potential *causal bearings of actions on good and bad things.*
Prerequisite: PHLB50 (JMPB50)
Session: Winter Day
J.H. Sobel

PHLC86S Seminar in Philosophy:
To be announced. Information will be available in September and may be obtained from the discipline representative.
Session: Winter Day

PHLC89S Seminar in Philosophy: The Philosophy of Friedrich Nietszche
A study of the thought of one of the most controversial philosophers of the modern age. In the past two decades Nietzsche's writings have gained importance as being relevant to present philosophical concerns and problems. For the first time there is a critical edition of his works available, and a radical re-evaluation of his thought is underway in various parts of the philosophical world.
Prerequisite: Two B-level half-courses in Philosophy, *permission of instructor*
Session: Winter Day
W. Graham

PHLC95F/S
PHLC96F/S
PHLC97F/S
PHLC98F/S
PHLC99Y 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.
Prerequisite: At least 2 full course equivalents in Philosophy; permission of supervisor.
Session: Winter Day
Staff

Courses Not Offered in 1986-87
PHLB03F/S Philosophy and Art
PHLB06F Moral Theory and Nuclear Deterrence
PHLB12F Marx and Marxism
Prerequisite: One course or half-course in Philosophy, Political Science or Economics -- PHLB10 is recommended but not required
PHLB14F *Philosophy of Social Science*
Prerequisite: One course in Philosophy or in the Division of Social Sciences.
PHLB15F/S Philosophy of Education
PHLB16F/S Philosophy of History
PHLB17S Anarchism
PHLB30S Existentialism
PHLB42F Aristotle I
PHLB43S Aristotle II
PHLB80F Philosophy of Language
PHLC02F/S Contemporary Ethical Theories
Prerequisite: One full-course equivalent in Philosophy including PHLB01
PHLC11S Topics in the Philosophy of Law
PHLC52S Modal Logic and Probability
Prerequisite: JMPB50/PHLB50
PHLC53S Games and Decisions
Prerequisite: Two B-level courses (not necessarily in Philosophy); permission of instructor.
PHLC54S Metalogic
Prerequisite: JMPB50/PHLB50
PHLC61S *Studies in Philosophy of Religion*
Prerequisite: PHLB61

Physics

Discipline Representative:
Prof. J. King, (284-3318)
Physics is the study of the basic laws which describe how material objects move and influenceeach other. The effect of a star on the motion of aplanet, 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 beaccurately described in terms of the generallaws 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 pred-ict 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 programe 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.)

The listed pre- 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:
STC10Y Relativity and Cosmology

Specialist Programme in Physics
Supervisor: A. Griffin (284-3227)
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. Griffin during their second year of studies.

First year:
PHYA03Y Physics for the Physical and Life Sciences
MATA55Y Calculus with Analysis
MATA40F Introduction to Linear Algebra
MATA45S 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
or
(MATB50F Analysis I)
MATB42S Techniques of the Calculus of Several Variables II
or
(MATB55S – Analysis II)
MATC51F Differential Equations I

Third year:
PHY326H/PHY325Y 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: A. Griffin (284-3227)
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 Lasboratory
PHYB17S Quantum Physics A
PHYB19S Thermal Physics A
MATB41S Techniques of the Calculus of Several Variables I
MATB42S Techniques of the Calculus of Several Variables II
or
(MATB50F, B55S Analysis I and II)

Third year:
MATC51F Differential Equations
One and one-half additional full-course equivalents from PHYB18F, PHYC04F, PHYC05H, PHYC07F, PHYC08S and *PHYC09S.*

For Specialist Programme in Computer Science and Physics see Computer Science.

PHYA03Y Physics for the Physical and Life Sciences
A survey of the principles of physics with appli-cation to both the Physical and Life Sciences. Topics include motion of individual particles and of complex bodies on a scale from molecules to animals, *vibrations and waves,* sound, light, heat and thermodynamics, and kinetic theory. The sub-jects of relativity, nuclear physics, and quantum mechanics are also introduced.
Two lectures and one tutorial per week, and a *three-hour laboratory every second week.* Lab Fee: $20.00
Corequisite: MATA26 or MATA27 or MATA55
Session: Winter Day

PHYB01S Electricity and Magnetism
Coulomb's law, electric fields, Gauss' law, elec-tric potential, capacitance, dielectrics, magnetic forces and fields, inductance, magnetization.
Prerequisite: PHYA03 and MATB41
Other recommended courses: PHYB03; PHYB08; MATB42 or MATB55
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. Lab Fee: $10.00
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 or MATB50
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

PHYC04F Physics of Solid State Devices
An introduction to the basic principles of solid state physics which underlie devices of modern technology. The quantum physics needed to under-stand the electronic properties of semiconductors and metals is discussed with emphasis on device characteristics and operation. Topics include semiconductor diodes, P-N junctions, field-effect transistors and other elements of large-scale integrated circuits, superconducting magnets, Josephson junctions, liquid crystal displays.
Prerequisites: PHYB01; PHYB03; PHYB19
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. Lab Fee: $10.00
Prerequisite: PHYB08 and permission of instructor
Corequisite: (PHYC01) PHYC07
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.
Prerequisites: PHYB01; PHYB04; MATB41 or MATB50
Corequisite: MATC51
Exclusion: (PHYC03)
Session: Winter Day

Courses Not Offered in 1986-87

JPMC42S Advanced Classical Mechanics
PHYB18F Special Relativity
PHYC01F Quantum Physics II
PHYC03S Electromagnetic Fields

Assistant Chairman: S. Solomon
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 more limited sequence of courses.

Specialist Programme in Political Science
Supervisor: R. Manzer
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:
POLA01 Introduction to Political Studies
Two courses in political theory from:
POLB70-B72, POLC70-C71
POLB50 Introduction to Canadian Politics
One course from each of any three of
Canadian Government POLB51-B55, POLC51, POLC65
Public Administration and Public Policy POLB53, POLB60-64, POLC60-63
International Relations: POLB80-B84, POLC80-C84
Comparative Politics, Industrial Countries: POLB85-B90, POLC85-C90
Comparative Politics, Developing Countries: POLB91-B99, POLC93-C97
Students in the Specialist Programme may not take more than fourteen full-course equivalents in Political Science. In selecting courses from other disciplines they should consult with the supervisor or with a member of the Political Science staff.

Major Programme in Political Science
Supervisor: R. Manzer
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 B71)
4 One course from each of any three of
A Canadian Government POLB51-B55, POLC51, POLC65
B Public Administration and Public Policy POLB53, POLB60-64, POLC60-63
C International Relations: POLB80-B84, POLC80-C84
D Comparative Politics, Industrial Countries: POLB85-B90, POLC85-C90
E Comparative Politics, Developing Countries: POLB91-B99, POLC93-C97

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: Winter Day
J. Esberey

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.
Session: Winter Day

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 tutorial once every two weeks.
Exclusion: (POLB01; POLA01 prior to 1978-79)
Session: Winter Day
R.S. Blair

POLB52Y 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: (POLB52F)
Prerequisite: POLB50
Session: Winter Day
R.S. Blair

POLB53F Public Policies in Canada
A study of the patterns of growth in federal and provincial policies for economic progress, social order, and human development; of the relationship between changing public policies and Canadian political development; and of the contributions made by instruments of government toward the achievement of basic political values.
Exclusion: (POLB35)
Prerequisite: POLA01 or POLB50
Session: Winter Day
R. Manzer

POLB54S 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: (POLB19)
Prerequisite: POLB50
Session: Winter Day

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-and selected administrative processes-financial and personnel administration, administrative co-ordination, reorganization, and intergovernmental administration. Problems of administrative accountability and responsiveness.
Exclusion: POLB60
Prerequisite: POLA01 or POLB50
Session: Winter Evening
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 Evening
R. Manzer

POLB63S 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.
Session: Winter Day
J. Esberey

LB70Y Political Thought from Plato to ke
examination of the central political texts from to the early modern period.
tudents will be expected to read Plato's ublic, Aristotle's Politics, Machiavelli's The ce, Hobbes' Leviathan (Parts one and two) Locke's Second Treatise of Government. political writings of St. Augustine and St. mas Aquinas will also be studied.
hours of lectures and one tutorial hour per k.
lusion: (POLB06)
ion: Winter Day
ndrew

B71Y Political Thought of the Eighth and Nineteenth Centuries
dy of the major political philosophers of ighteenth and nineteenth centuries. rticular emphasis will be placed on Rous- s *Discourse on Inequality and Social tract*; Burke's *Reflections on the Revolution nce*, and selected writings of J.S. Mill Marx.
hours lecture and one tutorial per week.
sion: (POLB03)
on: Winter Day
ndrew

B72Y Political Analysis
mination of the methods of analysis used mpirical study of politics. The pur- f the course is to enable the student who olitical literature to identify underlying and assumptions, to differentiate good oor logic of argument, to distinguish n adequate and inadequate use of evi- and between warranted and unwar- conclusions drawn from that evidence. l attention will be paid to the ques- urrounding the "science of politics".
ion: POLB65 (1985-86)
n: Winter Day
rnon

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. The purpose of the course is to help the student develop intellectual tools with which to analyze politics at the international level.
Exclusion: (POLB10)
Session: Winter Day
A. Rubinoff

POLB81F 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: (POLB40)
Prerequisite: POLB50
Session: Winter Day

POLB82Y American Foreign Policy
An examination of the foreign policy of the United States by looking at the tradition and context of American decision-making, the process by which it is formulated, and its application to a number of specific regions and problems in the world.
Exclusion: (POLB42)
Prerequsite: POLB80 (POLB10) or POLB87 (POLB26)
Session: Winter Day
A. Rubinoff

POLB85Y 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: POLB18
Prerequisite: One course in Political Science or Permission of Instructor
Session: Winter Day
J. Esberey

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, both internally and in its relations with other states.
Exclusion: (POLB23)
Session: Winter Day
D. Schwartz

POLB87Y *U.S. Government and Politics*
A general examination of national institutions and political processes in the United States with special emphasis on the role of presidential leadership in policy making.

Specific topics include: the "constitution", the social basis of political conflict, political participation, the links between state and society, the Washington Community and patterns of public policy.
Exclusion: (POLB26)
Session: Winter Evening
A. Rubinoff

POLB89Y Politics and Society of Japan
An analysis of politics and government in contemporary Japan. Special attention will be given to social and cultural explanations of political behaviour. The contributions made by government policy toward achieving miraculous economic growth will be considered.
Exclusion: (POLB39)
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 multinational 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.

The major aim of this course is to demonstrate that any successful anti-poverty programme for Third World societies must combine widespread change in both national and international political and economic orders. The course thus encompasses analyses of both the political economy of each of four Third World countries and the transnational influences emanating from advanced industrialized countries. A good book which examines the link between reform at the national and international levels is Mahbub ul Hag's *The Poverty Curtain: Choices for the Third World* (New York: Columbia University Press, 1976).
Exclusion: (POLB38)
Session: Winter Day
R. Sandbrook

POLB92Y Politics and Society in Independent Africa
Although the focus of this course is independent Africa, it is about the generic problems of under-development in the Third World and the possibilities for progressive change. 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?
Prerequisite: none, but a course in introductory political science would be helpful
Session: Winter Day

LC51S Topics in Canadian Government
intensive study of selected important topics he field of Canadian government and ics.
he course will be taught in a weekly two- r seminar and the students will be ex- ed to undertake regular preparatory read- and to participate actively in class dis- ion.
usion: (POLB37)
equisite: POLB50 or (POLB01)
ion: Summer Evening, Winter Day

C61S Policy Development and Political uation
ries of political choice and alternative ap- ches to problems of evaluation in policy opment. Basic types of policy-making in- ons and processes for political evalua- Problems in defining and applying stan- s for political evaluation such as efficiency, iveness, legitimacy, and justice.
quisite: POLB53 or POLB62 or POLB61
on: Winter Day
azer

C65F Topics in Political Leadership
course will involve detailed studies of spe- olitical leaders in the light of a variety ories of leadership. While the emphasis on psychological theories, students ve the necessary background may ap- er approaches. It is assumed that the s selected for study will come from the of Canada, the United States and n Europe but other political leaders may ed where the students have the ap- e background.
course will be taught in a weekly two- minar and the students will be ex- to undertake regular preparatory read- to participate actively in class dis- n.
ion: (POLC12)
uisite: POLB66 (POLB24) or POLA01 or 0 (POLB01) or POLB85 (POLB18) or 7 (POLB26) or POLC50 (POLC15)
n: Summer Evening, Winter Day

POLC73S 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, POLB71 or Permission of Instructor
Session: Winter Day
E. Andrew

POLC94S 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.
Prerequisite: A Social Science courses on the Third World or development
Session: Winter Day
R. Sandbrook

POLC98F 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 Poltical Science, wish to pursue further intensive study on a relevant topic of special interest.
Exclusion: (POLC04)
Prerequisite: One B-level course in Political Science; Permission of Instructor.
Session: Summer Evening, Winter Day, Winter Evening
Staff

POLC99S 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: (POLC05)
Prerequisite: One B-level course in Political Science; Permission of Instructor.
Session: Summer Evening, Winter Day, Winter Evening
Staff

Courses Not Offered In 1986-87

POLB51F **Government and Politics in Ontario**
Exclusion: (POLB37)
Prerequisite: POLB50 or (POLB01)

POLB55Y **Comparative Provincial Government**
Exclusion: POLB51
Prerequisite: POLB50

POLB66Y **Psychology and Politics**
Exclusion: (POLB24)

POLB83Y **Soviet Foreign Policy**
Prerequisite: POLB80 or POLB86 or HISB07

POLB88Y **Urban Politics**
Exclusion: (POLB36)

POLB93Y **The Chinese Political System**
Exclusion (POLB17)

POLC60F **Adminstrative Politics**
Prerequisite: POLB61 or POLB62

POLC62F **Organized Interests and the State**
Prerequisite: POLA01 or POLB50 (now B60) or POLB85

POLC63S **Administrative Theories and Policy-Making**
Prerequisites: POLB61 and LB62

POLC70Y **Twentieth Century Political Thought**
Exclusion: (POLB29)

POLC71Y **Canadian Political Ideas**
Prerequisite: one of POLB50, POLB70, POLB71, HISB04

POLC72F **Selected Topics in Political Philosophy**
Prerequisite: POLB70, POLB71, or permission of instructor.

POLC81S **The Psychology of International Relations**
Exclusion: (POLC11F/S)
Prerequisite: POLB66 or POLB80

POLC85Y **Comparative Communism**
Exclusion: (POLC06)
Prerequisite: One B-level course in Political Science

POLC93F **Selected Topics on Developing Areas**
Prerequisite: POLB91 or permission of instructor

Psychology is that branch of scholarship which seeks to understand behaviour and experience. Why humans and infrahumans act as they do is a puzzle which has always challenged humanity. Philosophers, artists, novelists, theologians and others have sought the answer through reason and intuition. But the methods of scientific enquiry can also be applied to an understanding of behaviour.

The areas of interest which psychology encompasses include: how organisms perceive their environments; how they learn and adapt; how they change over their lifetimes; how they choose among alternate courses of action; how they respond to stress and conflict; how the presence of other organisms in social settings influences their behaviour; how their behaviour relates to physiological functions; and how individuals differ from one another. The course offerings in Psychology consider how psychologists pursue enquiries into these areas and what knowledge they have gained.

The Specialist Programme in Psychology includes courses from the main subfields within the discipline. It has been designed both for students wishing to pursue graduate work in psychology and for students who have a general interest in this field. Students considering graduate study in Psychology should include the thesis course (PSYC98Y) in their Programme. The Major Programme is similarly designed to expose students to the main areas within Psychology and is recommended for those with less specialized interest in the field.

Students particularly interested in the relation of brain to behaviour should consider the Major and Specialist Programmes in the Neurosciences (NRO) described in this calendar.

Students particularly interested in language, communication, and thought should consider the Cognitive Sciences programme described in this calendar.

Specialist Programme in Psychology
Supervisor: J. Rotman, 284-3337
The programme requires completion of 11.5 full-course equivalents.

A. 9.5 full-course equivalents in Psychology as follows:

1 PSYA01Y Introduction to Psychology
Statistical Methods
(i) *PSYB07F/S Data Analysis in Psychology and*
(ii) *PSYB08F/S Experimental Design in Psychology*
Laboratory Training
(i) *PSYB01F/S Introduction to Psychological Research*
and
(ii) *0.5 from among:*
- *PSYB11F/S Social Psychology Laboratory*
- *PSYB34F/S Psychometric Methods*
- *PSYB40F/S Learning*
- *PSYB53F/S Microcomputers in Experimental Psychology*
- *PSYB62Y* Research in Physiological Psychology*

**Students selecting PSYB62Y also receive 0.5 course credit towards satisfaction of Requirement 4b or 6 below*

Courses at the B-level: 3.0 full course equivalents: Students are required to select at least 1.0 full-course equivalent from each of the three content groups listed below in Requirements a, b, and c.
a Social, Developmental and Personality courses at the B-level listed in the 10-, 20-, and/or 30-series
b Comparative, Learning and Physiological courses at the B-level listed in the 40-, 60-, and/or 70 series
c Sensation, Perception, Cognition and Memory courses at the B-level listed in the 50-series

Courses at the C-level: 2.0 full course equivalents.**
The following restrictions apply to the selection of C-level courses in Requirement 5:
(i) *Not more than 1.5 full-course equivalents may be selected from any one of the content groups listed under 4a, b, c*
(ii) *Not more than 1.0 full-course equivalent may be selected from the C90-series*

1.5 additional full-course equivalents at the B- or C-level in any area of Psychology
2.0 full-course equivalents at the B- and/or C-level in a discipline or disciplines other than Psychology
STUDENTS MUST BALLOT FOR C-LEVEL COURSES – READ THE INSTRUCTIONS BELOW

Major Programme in Psychology
Supervisor: J. Rotman, 284-3337
The programme requires completion of 6.0 full-course equivalents in Psychology as follows:

1 PSYA01Y Introduction to Psychology
2 Statistical Methods
PSYB07F/S Data Analysis in Psychology
3 Laboratory Training
PSYB01F/S Introduction to Psychological Research
4 Courses at the B-level: 1.5 full-course equivalents Students are required to select at least 0.5 full-course equivalents from each of the content groups listed below in Requirements a, b, and c
a Social, Developmental and Personality courses at the B-level listed in the 10-, 20-, and/or 30-series
b Comparative, Learning and Physiological courses at the B-level listed in the 40-, 60, and/or 70 series.
c Sensation, Perception, Cognition and Memory courses at the B-level listed in the 50-series
5 Courses at the C-level: 1.0 full-course equivalent.**
The following restriction applies to the selection of C-level courses in Requirement 5:
Not more than 0.5 full-course equivalent may be selected from the C90-series.
6 1.5 additional full-course equivalents at the B- or C-level in any area of Psychology

**STUDENTS MUST BALLOT FOR C-LEVEL COURSES – READ THE INSTRUCTIONS BELOW

NOTE: The above requirements are for the B.A. Specialist and B.A. Major degrees in psychology. Students desiring a B.Sc.
(I) Specialist must complete 0.5 additional full-course equivalent at the B- or C-level in any science
(II) Major must complete 1.0 additional full-course equivalent at the B- or C-level in any science

BALLOTING: In March, students will be required to ballot for all C-level courses they wish to take in the following year. Ballots will be available in the Chairman's Office or from the supervisor of undergraduate studies. The completed ballot must be accompanied by a stamped self-addressed envelope. Permission to register in courses for which the student successfully balloted will be returned in June. No students may register in any C-level course for which permission has not been given. (For the ballot confirmation to be valid, students must register by the early-registration deadline.) The deadline for submission of ballots is April 30.

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 Introduction to Psychological Research
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 course in psychology. Lab fee $10.00.
Prerequisite: PSYA01
Session: Winter Day, Winter Evening
G. Biederman, M. Smith

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 distributions.

Psychologists, like other scientists, arrive at general principles on the basis of limited evidence. How is the psychologist able to make the leap from the specific data of his experiments to the generalization he may wish to affirm? 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. (Students concerned about the adequacy of their background in mathematics should consult H. M. Walker's *Mathematics Essential for Elementary Statistics*, available in the College library, for a detailed survey of the skills required.) Four hours of lecture and one hour of tutorial per week.
Exclusion: ANTB43, ECOB11, GGRB02, STAB57 (MATB57), SOCB06
Session: Summer Evening, Winter Day
B. Forrin

B08S Experimental Design in Psychology
analysis of variance as a research tool and tionale and mechanics of its applica- o a variety of experimental designs: simple omized, repeated measures, factorial. tional topics discussed include: homoge- of variance, multiple comparisons, trend ysis, the analysis of covariance. e course extends the range of techniques ined in PSYB07. Procedures are con- ed which permit the analysis and interpre- n of data from complex experiments ving the simultaneous manipulation of sev- dependent variables. The course is recommended for all students contem- g supervised individual research in ology. Three hours of lecture and one f tutorial per week.
ion: (MATC52)
quisite: PSYB07 or STAB57 (MATB57)
on: Winter Day
rrin

10F Introduction to Social Psychology
influence (conformity and obedience), dice, sexism, attitude change, group iour (crowding, crowd behaviour, pan- ggression, cooperation and competi- onverbal communication, person percep- attraction and emotions.
cial Psychology focuses on the problem of uman behaviour is influenced by oth- The course is designed to demonstrate phenomena of social behaviour and sent theories and research evidence re- to these phenomena.
quisite: PSYA01
on: Winter Day
silli

11S Social Psychology Laboratory
oduction to conceptual and practical is- oncerning research in social psychol- y gaining experience with several differ- pes of research.
course is designed to consider in depth s research approaches used in social ology (such as attitude questionnaires, vational methods for studying ongoing interaction). Limited enrolment: 25. Lec- iscussion, and laboratory work.
quisite: PSYB07; PSYB10; PSYB01 (be- g 1983-84)
on: Winter Day
silli

PSYB12S Advanced Social Psychology
A detailed examination of selected social psychological issues 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 relationship 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
Session: Winter Day
J. Bassili

PSYB20F Developmental Psychology
Developmental processes during infancy and childhood. Material covered will be drawn from both cognitive and social developmental perspectives.

This course is divided into two parts. The first examines broad frameworks which have been offered to explain human development, e.g. Piaget's cognitive 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. Two lecture hours and one tutorial per week.
Prerequisite: PSYA01
Session: Winter Day
J. Grusec

PSYB21F 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
Session: Winter Day
K.K. Dion

JLPB24S Developmental Psycholinguistics
The development of language in children. How do children acquire phonological, syntatic, semantic and pragmatic rules? How is language development related to other kinds of cognitive developments.

There will be lectures, discussions and analyses of tapes of children's language
Exclusion: (LINB15)
Prerequisite: One full-course equivalent in LIN or PSY.
Session: Winter Day
A.Gopnik

PSYB30S Personality
An introduction to some of the influential theories and 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 Evening
TBA

PSYB32F/S Abnoral Psychology
A critical examination of psychoanalytic, S-R, cognitive-interpersonal, biological and phenomenological views concerning the cause and treatment of abnormal behaviour. The conceptual problem of defining abnormality and categorizing its varieties will be emphaized.

Definition and identification of abnormality, historical-cultural influences on attitudes, practices, theories, and research; a variety of past and current viewpoints in hypothesis, model and theory development, 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, genetics, and epidemiological research; management, control, and modification of abnormal behaviour, within and outside institutions, including pharmacological, psychotherapeutic, learning-based, and social engineering approaches.
Prerequisite: PSYA01
Session: Summer Evening, Winter Evening
J. Pauker

PSYB34S Psychometric Methods
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. Limited enrolment: 25

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.
Exclusion: (PSYB33)
Prerequisite: PSYB07 (or equivalent); PSYB01
Session: Winter Day
B. Forrin

PSYB40S Learning
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 behavior. 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.
Lab fee $10.00.
Prerequisite: PSYA01; PSYB01; PSYB07 or STAB57 (MATB57)
Session: Winter Day
G.B. Biederman

[illegible]45S Behaviour Modification: Origins and [illegible]ations
[illegible]ey of attempts to understand and regulate [illegible] behavior in non-laboratory settings [illegible]ed on principles derived from the learning [illegible]onditioning laboratory. A critical analysis [illegible]rent applications and systems of behavior [illegible]cation and control.
[illegible]osophical underpinnings; basic concepts [illegible]odels of behavioral change; research [illegible]gies; operant procedures; reinforcement [illegible]ules, extinction, shaping, self-reinforce- [illegible] fading, chaining, instructions, the token [illegible]my, behavioral contracting, biofeedback, [illegible]ment and its side effects; cognition and [illegible]iour therapy; attribution, placebo effects, [illegible]ive therapy, rational-emotive therapy, [illegible]t stopping, problem-solving, modeling; [illegible]ishment of new behaviors, fear extinction, [illegible]ive training; treatment of obesity, treat- [illegible] of depression; systematic desensitization; [illegible]ent of anxiety; aversive countercondition- [illegible]eatment of alcohol and drug abuse.
[illegible]quisite: PSYA01
[illegible]on: Winter Evening
[illegible]ner

[illegible]50F Sensation and Perception
[illegible]vestigation into the processes by which we [illegible] information about the world around us, and [illegible]ws which govern the way in which that [illegible]mation is used to construct our perceptions. [illegible]muli for the human senses, especially light [illegible] sound; receptors and sensory pathways [illegible]emphasis on vision; sensitivity; colour and [illegible], spatial and temporal resolution; contrast; [illegible]ption of space and movement; perception [illegible]ttern and form. The teaching method will be [illegible]res, for which preparatory reading will be [illegible]rtant, and classroom demonstrations of [illegible]y phenomena under discussion.
[illegible]quisite: PSYA01
[illegible]ion: Winter Day

[illegible]51S Perception and Cognition
[illegible]ry and empirical research on visual and [illegible]le perception, representation and [illegible]mmunication.
[illegible]opics include perception and depiction in [illegible]handicapped and normal perceiver, per- [illegible]tual information and projection, illusion, [illegible]ility 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 on different species. Demonstrations and exercises form part of the course work.
Pre-requisite: PSYA01
Session: Summer Evening, Winter Evening
J. Kennedy

PSYB53F Microcomputers in Experimental Psychology
Examination of the widespread impact of computers in experimental psychology. This is a laboratory course emphasizing 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. Limited enrolment: 20.

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.
Prerequisite: PSYB01 and at least two other B-level psychology courses.
Session: Winter Day
C. MacLeod

JLPB55F Psycholinguistics
Theories and experiments that address the question: how is language comprehended and produced– Linguistic theories that form the basis of psychological theories and the experimental evidence for and against each theory are reviewed. An overview of current work in the field is offered.

Lectures and discussion.
Prerequisite: One full-course equivalent in either LIN or PSY.
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 and problem solving, and their role in a general model of information processing.

Three lecture hours per week. Concurrent readings from original sources will supplement the text and lecture material.
Co-requisite: PSYB01; PSYB07
Session: Winter Day
C.M. MacLeod

PSYB60F Brain Mechanisms and Behaviour: I
The relationship between behaviour and the structure and function of the nervous system. Topics covered include: neuroanatomy, structure and function of neurons, neural mechanisms and movement, and the physiological basis of perception. Students with prior credit 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
TBA

PSYB61S Brain Mechanisms and Behaviour: II Physiology of Motivation and Learning
A continuation of PSYB60. 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. Neurophysiological basis of learning and memory will be dealt with and then integrated with motivational moels to provide a basis for understanding brain function in behaviour. Three hours of lecture per week.
Prerequisite: PSYB60
Session: Summer Evening, Winter Day
T. Petit

PSYB62Y Research in Physiological Psychology
Instruction in a variety of techniques used in investigations of nervous system function. The course is intended for students particularly interested in the neurosciences who are pursuing a Specialist Programme in Psychology, Biology or 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 lectures and three hours of scheduled laboratory work per week; in addition, students might spend a few further hours of their free time working in the student laboratory. The course involves a series of five laboratory projects. Lab fee $20.00.
Prerequisite: PSYA01; PSYB07 or STAB57 (MATB57); PSYB01 or a Biology course; permission of instructor
Corequisite: PSYB60; PSYB61 and PSYB08 are recommended
Session: Summer Evening, Winter Day
N.W. Milgram

PSYB65F Biological Foundations of Behaviour
An examination of the structural and physiological basis of behaviour. The course is geared towards non-biologically oriented students. Students with prior credit for PSYB60 may not take PSYB65 for credit.

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: disorders of the central nervous system (multiple sclerosis, epilepsy, organic brain damage,

s, senility, and speech disorders); drugs and abuse (stimulants, depressants, and inogens); and the biological basis for nce, schizophrenia, depression, psychosis anxiety. Three hours lecture weekly.
sion: PSYB60
quisite: PSYA01 or permission of ctor.
on: Winter Day
it

16F Critical Analysis in Social hology
ess in psychology is predicated on devel- nts in both theory and methodology. The ry goal of the course is to enhance skills for ally analyzing both domains in Social chology. European and North American aches to criticism are compared. Evolu- y and revolutionary models of develop- are contrasted. Disciplinary and profes- aspects of social psychology are ssed in relation to scientific progress. al emphasis is placed on social and nality factors which shape theory con- ion and validation. Examples are drawn both cognitive and motivational approach- social phenomena. Finally, the analogy en Piaget's account of intellectual devel- nt in the child and developments in social hology is considered.
quisite: PSYB10
on: Winter Day
pchik

C18S Psychology of Gender
course focuses on theory and research ning to gender and gender roles. The l psychological and social-developmental ch literature concerning gender differ- will be critically examined. Other topics l be considered, such as gender-role zation. Teaching method: seminar. Limit- rolment: 25
quisite: PSYB10
on: Winter Day
Dion

PSYC20S Current Topics in Developmental Psychology
An intensive examination of selected issues and research problems in developmental psychology. Limited enrolment: 25.

The specific content will vary from year to year with the interests of both instructor and students. Lectures, discussions, and oral presentations by students.
Prerequisite: PSYB20
Session: Winter Day
TBA

PSYC22F 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, PSYB20
Session: Winter Day
K.K. Dion

PSYC32S Current Topics in Abnormal Psychology
An intensive look at selected current problems and issues in the study of abnormal behaviour. Limited enrolment: 30.

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.
Prerequisite: PSYB20, PSYB32
Session: Winter Evening
J. Pauker

PSYC40S 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 resoutions. 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: PSYB40
Session: Winter Day
G. B. Biederman

PSYC53F Current Topics in Human Information Processing
An intensive examination of selected issues and research problems in human information processing.

In 1986-87, the course will focus on the application of psychology to the law, particularly the perceptual and memorial processes which influence the giving of testimony.
Session: Winter Day
M. Smith

PSYC54F Art and the Psychology of Perception
Recent theories of perception and representation relevant to skill in the use of pictures and language.

Topics may include making and interpreting metaphors, recognizing cross-modal equivalence, learning how to draw and symbolize, acquiring the capacity to read and write narrative, the training of talent, and effects of perceptual and cognitive handicaps on the development of skills with pictures and words. The research to be considered will emphasize studies on child development. Teaching method includes lectures and student presentations.
Prerequisites: a PSYB20 series or a PSYB50 series.
Session: Winter Evening
J. M. Kennedy

JLPC55F Disorders of Speech and Language
The study of abnormalities in the processes of language use and language development discussed in JLPB24 and JLPB55.

In the course we will discuss various types of aphasias and their relationship to brain injury, developmental disorders such as stuttering, dysphasias, and dyslexia, and disorders of language that are related to general disorders such as deafness, blindness or schizophrenia. We will discuss these disorders in relationship to normal language processing and development. Lecture and discussion.

Enrolment limited to 25 Psychology majors or specialists, 45 over all.
Prerequisite: One full course equivalent at B-level in Linguisitcs or PSYB60 or PSYB65
Exclusion: LINB29
Session: Winter Day
A. Gopnik

PSYC60F Current Topics in Comparative and Physiological Psychology
An intensive examination of selected issues and research problems in comparative and physiological psychology. Limited enrolment: 25
Prerequisite: PSYB60; permission of instructor
Session: TBA
TBA

PSYC62S Neuroplasticity Mechanisms and Function
Neuroplasticity refers to the nervous system's capacity of modifying itself and plays a critical role for normal processes such as memory and pathological development such as epilepsy. This course will first consider events at the cellular level which provide substrates for neuroplasticity. Next, several experimental models of neuroplasticity will be reviewed and evaluated. The final topic will be that of the functional significance of neuroplastic processes. The course will meet for two hours weekly and will have a lecture format.
Prerequisite: PSYB60, PSYB61 and PSYB62; PSYB61 and PSYB62 can be taken concurrently.
Session: Winter Day
N. W. Milgram

[illegible]S Clinical Psychopharmacology
[illegible]acology of the central nervous system, [illegible]acokinetics and theoretical bio-[illegible]atry. Detailed discussion centres on the [illegible]otropic drugs used as anti-psychotics, [illegible]nics, anxiolytics, and anti-depressants. [illegible]d content areas, such as geriatric phar-[illegible]ogy and pharmacological applications to [illegible] neuropsychology will be introduced. [illegible] course is designed to integrate abnormal [illegible]ology and physiological psychology con-[illegible]as. Lecture, seminar and practicum [illegible]vation.
[illegible]uisite: PSYB60 or PSYB65 or permission [illegible]uctor
[illegible]n: Winter Day

[illegible]F Developmental Psychobiology
[illegible]ourse covers the development of the [illegible]s system and correlated behaviour from [illegible]ption to death. The major emphasis will [illegible] prenatal brain development, and factors [illegible]ing its normal or abnormal growth. The [illegible]nd of the developmental spectrum, the [illegible] brain will also be considered, including [illegible]ological problems and theories of aging on [illegible]ain. Students will be required to work 3-4 [illegible]per week in a practicum situation, working [illegible]entally retarded, autistic, etc. children, or [illegible]ged or senile adults.
[illegible]quisite: PSYB60; permission of instructor.
[illegible]n: Winter Day

[illegible]0F Philosophy and Psychology
[illegible]alysis of selected philosophical issues [illegible] concern the discipline of Psychology. [illegible]ssed will be such topics as: Behaviorism [illegible] Phenomenology; the mind-body prob-[illegible]ree-will versus determinism; possible [illegible]nces between Psychology and traditional [illegible]ific disciplines. Limited enrolment: 25
[illegible] course is intended to develop sophistica-[illegible] dealing with philosophical issues which [illegible] in the practice of psychology. The specific [illegible]s discussed vary from year to year.
[illegible]hing method consists of two hours of [illegible]ar weekly.
[illegible]quisite: One B-level half course in Psychol-[illegible]nd one B-level half-course in Philosophy; [illegible]B50 is recommended
[illegible]ion: Winter Day

PSYC85F 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. Limited enrolment: 25

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.
Prerequisite: PSYA01; two B-level half-courses in Psychology
Session: Winter Day
G. Cupchik

PSYC90F/S/H
PSYC93F/S/H Supervised Study in Psychology
A reading or research project.

These courses provide an opportunity to investigate an area in depth after completing basic coverage in regularly scheduled courses. They are not intended as substitutes for advanced courses in fields where these are available. The student must demonstrate 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.
Prerequisite: Three full-course equivalents in Psychology; permission of instructor
Session: Summer Day, Summer Evening, Winter Day, Winter Evening
Supervision by a faculty member

PSYC98Y Thesis in Psychology
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 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.
Prerequisite: Satisfactory completion of fifteen full-course equivalents in any discipline but including PSYB07; one laboratory half-course in Psychology and two additional full-course equivalents in Psychology; consent of a faculty member in Psychology to serve as research supervisor. Students must have at least a B GPA.
Corequisite: PSYB08 recommended
Session: Winter Day
Coordinator: *G. B. Biederman*

Courses Not Offered In 1986-87

PSYC15F **Current Topics in Social Psychology**
Prerequisite: PSYB12 or PSYB10 (plus permission of instructor)

PSYC30F **Current Topics in Personality and Motivation**
Prerequisite: PSYB30

PSYC41S **Research in Operant Conditioning**
Prerequisite: PSYB01, PSYB40

PSYC52S **Structures in Psychology**
Prerequisite: PSYB07 or STAB57 (MATB57); PSYB20 or PSYB51; permission of instructor

Major Programme in Quaternary Studies
Supervisor: TBA.
The Quaternary Period embraces the last two million years of Earth history. Major climatic changes which occurred during this time resulted in repeated expansion and recession of continental and montane glaciers, alternating wet and dry periods in low latitudes, marked fluctuations in sea level, deveopment of ephemeral but often large inland seas and proglacial lakes, etc.

These dramatic changes have strongly influenced the distribution and,to an extent, the forms of plant and animal life on earth today. Among these are the hominids whose appearance and development coincides with the Quaternary.

Detailed reconstruction of Quaternary environments - involving both the physical and biological components of the landscape – and their placement in a historical context is clearly an interdisciplinary task. Such studies bring together the Quaternary geologist, physical geographer, historical ecologist, paleoanthropologist, archaeologist and many others. In this Programme the student will develop experience in the multidisciplinary approaches used in studying the Quaternary as well specialist expertise in one or more of the sub-disciplines.

The Programme consists of eight courses, two of which are required: QUAA03Y and QUAC01Y. Both reflect the interdisciplinary nature of Quaternary Studies and are presented by faculty from Scarborough College and occasionally from other parts of the University who are involved in Quaternary research. Of the remaining five courses required, the student is given a wide choice but is nevertheless expected to develop expertise in one (or more) of the sub-disciplines by following a sequence of A and B- or C-level courses noted below.

A-Level

QUAA03Y (NSCA03)	Ice Ages and Human Ecology In the first two years:
ANTA01Y	**Introduction to Anthropology**
BIOA03Y	**Introductory Biology and, either**
GGRA05Y	**Introduction to Physical Geography**
or	
GLGA01Y	**Planet Earth: an Introduction to Geology**

C-Level

C01Y (NSCB02)	Quaternary Environments and Man plus at least three full-course equivalents from:
B26Y	**Introduction to Prehistoric Archaeology**
B11F	**Human Behaviour in the Old Stone Age**
B12S	**The Rise of Civilization**
B14Y	**Human Evolution**
12Y	**Fundamentals of Ecology**
C11Y*	**Quaternary Plant Ecology**
B07Y*	**Geomorphology: The Pleistocene Epoch**
C25S*	**Sedimentary Models**
B03Y	**Climatology**
B01Y	**Mineralogy and Petrology**
B02S	**Stratigraphy and Sedimentation**
B04S*	**Quaternary Stratigraphy**

student should note that prerequisites for courses are not included in the Quaternary Programme.

AA03Y Ice Ages and Human Ecology
matic introduction to the interdisciplinary of the "Ice Age" (Quaternary) and of n paleoecology, involving several Quater- specialists.
series of lectures which emphasize arch problems of current interest, such as atic change, the formation of glacial ice, ice ements and their effect on the landscapes, glacial ecology, faunal extinctions, human ns, the domestication of plants and animals, an migration into the Western Hemisphere, earliest occupations in Ontario. One two- lecture per week, and occasional fieldtrips.
lusion: (NSCA03)
sion: Winter Day
ordinator TBA

QUAC01Y Quaternary Environments and Man
An interdisciplinary course on the physical, biological and cultural events and processes of the Quaternary Period. The seminars and reading part of the course will be devoted to recent, advanced methods in environmental reconstruction. The laboratory part will be centred on a local project in which geological, biological and cultural aspects of a site or site complex will be subjected to an integrated field and laboratory investigation.

One two-hour seminar per week and one three-hour field/laboratory period on alternate weeks.
Exclusion: (QUAB02Y)
Prerequisites: QUAA03Y plus any two (2) of the B-courses listed in the Quaternary Studies Major Programme
Session: Winter Day
TBA

Discipline Representative: S. Whalen
The Russian discipline offers a selection of courses in Russian language. Courses in translation are offered under Humanities and Literature. Students who wish to study Russian literature in the original may do so under Supervised Reading.

Overseas Programme
Students of Russian, after completing their second year of Russian language study, become eligible to apply to go to the Pushkin Institute of Russian Language and Literature in Moscow, USSR, as participants of the Russian Studies Programme at Dalhousie University in Nova Scotia.

Each year some twelve Canadian students are selected by Dalhousie to spend four moths studying Russian in Moscow (February – May). The programme involves 4 1/2 hours of intensive instruction per day by Soviet staff; students are housed three to a suite at the University Hotel; late afternoons and evenings are free for cultural and other activities. The cost, which covers air transportation Montreal-Moscow return, tuition, texts, room and board, is $3,400.

Before applying to Dalhousie, and in order to improve their chances, interested students are encouraged to undertake some additional Russian language study in a supervised reading course.

For information consult the Supervisor.

See also the following courses in translation:

HUMB07F/S/H	Russian Culture
HUMB13Y	The Russian Revolution of 1917: Promise and Fulfilment
LITA01Y	Introduction to Literature
LITB07Y	The Nineteenth-Century Russian Novel, 1830-1880
LITB12Y	Dostoevsky's Major Fiction
LITB13Y	Russian and English Nineteenth-Century Fiction
LITB17F/S	Russian Shorter Fiction of hoe 19th and 20th Centuries
LITB22Y	The Modernist Adventure
LITB34Y	Soviet Russian Literature, 1917-1980
LITB40F/S	Disaster and the Literary Imagination

RUSA10Y Introductory Russian
Fundamentals of Russian grammar, with emphasis on comprehension, reading, writing and conversation.

Starting with the Cyrillic alphabet, students will study basic grammar and vocabulary. Equal emphasis is given to written and oral drills. Three hours per week of intensive grammar and structural oral and written drills. This course is to be taken in conjunction with RUSA11H.
Session: Winter Day
S. Whalen

RUSA11H Language Practice
Practical application of language offered in con-junction with RUSA10Y. The focus is on pronuncia-tion and acquisition of conversational Russian.

Two hours of free conversation based on material covered in the introductory course, supplemented by structural drills in the laboratory.
Corequisite: RUSA10Y
Session: Winter Day
S. Whalen

RUSB02Y Intermediate Russian Expanded study to increase ability in speaking, writing and reading Russian.

A study of Russian morphology involving translation, composition, selected reading in the original. Three hours a week plus additional language laboratory practice.
Prerequisite: RUSA10 or completion of Grade 13 Russian
Session: Winter Day
C. Ponomareff

RUSC02F
RUSC03S
RUSC04H
RUSC05Y
Supervised Reading
These supervised reading courses are designed for individual or very small groups of students who would like to pursue specific projects in Russian language and/or literature. Classes usually meet every other week for a two-hour session and students engaged in a literary project are expected to produce a paper in their area of study.
Prerequisite: RUSB02
Session: Winter Day
Staff

programme provides a focus for the study cial, political and ethical aspects of icine in North America and cross culturally. ere has in the last decade been an insing awareness of the large extent to h social, political and ethical judgments concepts are involved in the theory and tice of medicine. There has also been a ing awareness that, while an increased y on the part of physicians to deal with e aspects of medicine is desirable and ly needed – an excellent reason for those emplating a medical career to consider usly this programme – these are matters t which society and not medicine alone uld deliberate and make judgments. How-, this requires that individuals be exd to the issues and be provided with the tic skills that enable them to think as ly as possible about the issues. This prome is designed to meet these requirets.

or Programme in Society, Values and icine
ervisors: M. Hammond (Sociology 284-3); P. Thompson (Philosophy 284-3279)
Programme requires completion of six full rse equivalents as described below.
ANTB51Y; ANTC45F/S or ANTC46F/S; B05F/S; PHLC05F/S; PSYB32F/S; B65F/S; SOCB17F/S
Two full-course equivalents from the followgroup: ANTB44Y; PHLB71F/S; PHLC71F/S; C66F/S; SOCB11Y; SOCB19Y; CC28F/S; ANTB47F/S; JBHB09F/S; and chever course of ANTC45F/S or ANTC46F/S not selected in 1
: ANTA01Y and PSYA01Y are normally requisites for ANT and PSY courses in this gramme.

Assistant Chairman: S. Ungar
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: R. James
The Programme requires completion of ten full-course equivalents in Sociology as described below. No more than fourteen full-course equivalents in Sociology may be included in the four-year degree.
1 SOCA01Y Introduction to Sociology
2 SOCB01Y Methods in Social Research
SOCB06F/S Social Statistics
3 SOCB03Y History of Social Thought
4 One B-level macrostructure course (see list under Major Programme).
5 One B level microstructure course (see list under Major Programme).
6 SOCC05Y Contemporary Social Theory

7 One full-course equivalent at C-level from courses C01-C29.
8 One full-course equivalent at C-level from courses C40-C43.
9 One and one-half 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 LINB15S may be applied toward requirement 9.

Major Programme in Sociology
Supervisor: R. James
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 equivalent): SOCB04Y, SOCB05Y, SOCB10Y, SOCB13Y, SOCB14Y, SOCB15Y, SOCB16Y, SOCB20Y, SOCB23Y or JCSB27Y.
4 One B-level microstructure course from the following (full-course equivalent): SOCB02Y, SOCB07Y, SOCB08F/B09S or SOCB18Y.
5 One full-course equivalent at the C-level in Sociology.
6 Two other B- or C-level full-course equivalents in Sociology following the usual prerequisite rules applying to chosen courses.

Note: SOCB06F/S is a corequisite of SOCB01Y and counts toward the requirements in 6 above. LINB14F and LINB15S may be applied toward requirement 6.

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, J. Lee, 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 Evening
J. Drakich

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

yze the beginnings of modern social ght with special emphasis on the emer- e of sociology and the work of such ists as Comte, Marx, Durkheim, Spencer, el and Weber. Finally, contemporary ols of sociological theory will be dered.
quisite: One full-course equivalent in ology
ion: Winter Day
ajiw

B04Y Political Sociology
cal Sociology is concerned with power in its l context. The course will examine al-pluralist and Marxist conceptions of r; the rise of democracy and social s; political ideologies; political parties social movements; war and warfare; race politics.
quisite: One course in Sociology
ion: Winter Day
nner

B05Y Urban Sociology
iew of theories of urban genesis and urban , interrelationship of urbanization, industri- ion and modernization, issues in urban g (housing, transportation, urban-renewal, rty, unemployment, etc.), urban social orks (ethnic and cultural heterogeneity, hbourhood, community and other voluntary ciations).
quisite: One full-course equivalent in ology
ion: Winter Day
nnigan

B06F Social Statistics
nsideration of elementary statistics includ- he summarizing of data, the logic of tical decision-making and a number of mon statistical tests. Statistics is a basic used by sociologists. An understanding of stics is necessary for the student who wants ecome an informed reader of social re- rch. A working knowledge of elementary bra is required. However, the lecturer will ertake brief reviews of mathematics as the d arises. This course is intended to supple- t SOCB01.
lusion: PSYB07, ECOB11
equisite: One full-course equivalent in ology
ion: Winter Day
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
A. Tuzlak

SOCB08F Sociology of the Family as a Group
The sociological study of the family in contemporary Western society. This course will focus on the family as a small group, emphasizing the family life cycle, member roles, interaction, patterns and interpersonal problems in the family relationships.
Exclusion: (SOCB12)
Prerequisite: SOCA01
Session: Winter Day
A. Tuzlak

SOCB09S Sociology of the Family as an Institution
An examination of the family in its community, institutional and historical setting, emphasizing the various social factors which will affect family life and its changing nature.
Exclusion: (SOCB12)
Prerequisite: SOCA01
Session: Winter Day
A. Tuzlak

SOCB11Y Sociology of Science
A study of the relationship between science and society. In the first term, the effects of different social structures on the development of science and scientific ideas will be analyzed in a number of historical contexts. During the second term, the effects of science on contemporary societies will be studied, with particular attention given to the Canadian situation. For instance, we will consider from a sociological perspective such topics as nuclear energy and genetic engineering. This course will be of interest to students of both the natural and social sciences.
Session: Winter Day
M. Hammond

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: One course in Sociology
Session: Winter Day

SOCB14Y Comparative Social Structure
An examination of the institutional structure in different societies in order to develop a better understanding of the effects of structural variations on human behaviour.
Prerequisite: One full-course equivalent in Sociology
Session: Winter Evening
J-L. deLannoy

SOCB15Y Sociology of Mass Media and Communications
The study of the social organization of the mass media – radio, TV, newspapers, magazines and trade publications – and of the effects of the contents of mass communications on the general public.
Exclusion: (SOCC14)
Prerequisite: SOCA01
Session: Summer Evening, Winter Day
J. Hannigan

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: One full-course equivalent in Sociology
Session: Summer Evening, Winter Day
R. Beals

SOCB20Y Ethnic and Race Relations
A study of the structure and processes in a society made up of a variety of ethnic and racial groups. The focus will be on Canada. The course will study ethnic stratification immigration, prejudice and discrimination, ethnic social mobility and ethnic conflict, assimilation and ethnic identity retention, and the problem of integration of society. Specific topics will include: conflict of generations, stereotyping, Canadian bilingualism and multiculturalism and others.
Prerequisite: One full-course equivalent in Sociology
Session: Winter Day
W. Isajiw

SOCB24F Sociology of Education: Primary and Secondary Levels
The sociology of the classroom peer group influences on school performance, social class and sub-cultural influences on students and teachers. The formal organization of school systems.
Exclusion: (SOCC08)
Prerequisite: SOCA01
Session: Winter Day
J. Lee

SOCB25S Sociology of Education: University and Adult Levels
Allocation and training of upper-level students, and relationships of higher education to the occupational system. Problems of education or retraining of older adults.
Exclusion: (SOCC08)
Prerequisite: SOCA01
Session: Winter Day
J. Lee

JCSB27Y Organizational Behaviour
Social factors in administration, the structuring of intra-organizational and interorganizational relationships, and the distribution of power and dependency in society. Empirical studies used in the first term will focus on single organizations. Those used in the second term will focus on industries and other inter-dependent organizations.
Prerequisite: One previous course in Sociology, Commerce, Economics, or Political Science
Session: Summer Evening, Winter Day, Winter Evening
M. Purboo

CC01F/S Sociology of Revolution
phenomenon of revolution as defined, cribed and analyzed from comparative and torical perspectives. Specific case-studies utilized in order to explain the causes and rses of revolutionary leadership, mobiliza-, and strategy.
Particular attention is paid to revolution as h cause and effect of major social change.
requisite: Two full-course equivalents in ciology
sion: Winter Day
deLannoy

CC05Y Contemporary Social Theory
consideration of basic questions underlying iological thinking as they arise in the work of temporary theorists and theoretical schools. dents will be expected to develop an rmed, critical perspective on current de-es within the discipline. Though not formally quired, a previous course in social and/or litical theory (e.g. SOCB03Y) would be a tinct asset.
erequisite: Two full-course equivalents in ciology, one of which must be a B-level urse
ssion: Winter Evening
Hammond

CC07S Sociology of Occupations and fessions
is course examines the relationship of people their work and occupations in contemporary pitalist society. Topics will include: the ucture and organization of work; the nature d meaning of work; women and the work-ce; technology and the labour process; enation and job dissatisfaction; theories of rk behaviour; industrial democracy; nemployment.
erequisite: Two full-course equivalents in ciology, one of which must be a B-level urse
ssion: Winter Day
Tanner

CC10F Sex, Self and Society
e single most important influence on our haviour is being male or female. Gender is ilt into how our institutions are put together, w we are socialized, and how opportunities d access to scarce resources are structured. is course is a sociological examination of nder 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: Two full-course equivalents in Sociology, one of which must be a B-level course
Session: Winter Evening
J. Drakich

SOCC11F Sociology of Law and Law Enforcement
Studies of existing legal systems, the process of creation of legislation, court interpretation of law, and the law enforcement institutions.
Prerequisite: SOCB18
Session: Winter Day
J. Lee

SOCC13S Industrial Sociology
Comparative studies of industrial organization, considering scale, division of labour, organization of work teams, levels and forms of organization.
Prerequisite: One B-level full-course equivalent in Sociology (JCSB27 recommended)
Session: Winter Day

SOCC16S 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 student presentations (as well as participation) will be employed. Depending on the cost, films will also be used.
Session: Winter Day
S. Ungar

SOCC17F Social Change in the Third World
Sociological studies of stratification, politics, religion, education, and kinship organization in countries of Africa, Asia, Latin America.
Prerequisite: Two courses in Sociology, one of which must be a B-level. (SOCB14 and SOCB16 recommended.)
Session: Winter Day
J-L. deLannoy

SOCC18Y 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: SOCC09 and SOCC18F/S
Prerequisite: Two full-course equivalents in Sociology
Session: Winter Day
R. O'Toole

SOCC20Y 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 the forms of religion in historical and contemporary contexts.
Exclusion: (SOCC20F/S)
Prerequisite: Two full-course equivalents in Sociology, one of which must be a B-level course.
Session: Winter Day
R. O'Toole

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: Two courses in Sociology, one of which must be a B-level course.
Session: Winter Day
R. James

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: Two full-course equivalents 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 forms, voluntary childlessness, communes and co-operatives, and "swinging". Special reference to structural and functional dimensions, role changes, special problems and community response.
Prerequisites: SOCB08 and SOCB09
Session: Winter Day
R. James

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 "singleness", "living together", androgeny as a life style, non-monogamous forms, voluntary childlessness, communes and co-operatives, and "swinging". Special reference to structural and functional dimensions, role changes, special problems and community response.
Prerequisite: SOCB08 and SOCB09
Session: Winter Day
R. James

SOCC30S Criminal Behaviour
An advanced study of the causes and consequences of criminal behaviour, with special emphasis on Canada.
Exclusion: (SOCC21)
Prerequisite: SOCB18
Session: Winter Evening
A. Tuzlak

SOCC40F/C41S 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 ten full-course equivalents and permission of instructor.
Session: Summer Evening, Winter Day, Winter Evening
Staff

SOCC42F 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.
Prerequisites: SOCB01, SOCB03, and SOCB06
Session: Winter Day
J-L deLannoy

CC43S Advanced Seminar in Research hods
cial topics in methodologies used in con-porary sociological research. Designed as a year course for students taking a Specialist amme in Sociology.
equisites: SOCB01, SOCB03 and SOCB06
ion: Winter Day
rigar

rses Not Offered in 1986-87

CB10Y Social Class and Social Stratification
Prerequisite: One full-course equivalent in Sociology

CB16Y Social Change
Prerequisite: SOCA01

CB17S Medical Sociology

CB19Y Sociobiology

B23Y Population
Prerequisite: One full-course equivalent in Sociology or JCSB27

CC03F Collective Behaviour
Prerequisite: Two full-course equivalents in Sociology, one of which must be a B-level course.

CC04S Social Movements
Prerequisite: Two courses in Sociology, including a B-level course

CC06F Applied Sociology
Prerequisite: Two full-course equivalents in Sociology, one of which must be a B-level course

CC12F/S Mathematical Methods in Sociology
Prerequisite: Permisson of instructor

CC19F Sociology of Knowledge
Exclusion: (SOCB22)
Prerequisite: SOCB03

CC22S Qualitative Methods in Social Research
Prerequisite: SOCA01 and one B-level course in Sociology

CC25F Comparative Race Relations
Prerequisite: two full-course equivalents in Sociology, one of which must be a B-level course.

CC27F Social Class in Canadian Society
Prerequisite: Two full-course equivalents in Sociology

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 listing in the Calendar.

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.

Major Programme in Spanish Language
Supervisor: R. Skyrme (284-3205)
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
SPAC01Y	Advanced Spanish
SPAB04F	Phonetics
SPAB12S	History of the Spanish Language I
HUMB09F	The Civilization of Spain I
HUMB10S	The Civilization of Spain II
or	
HUMB14Y	Topics in Latin American Culture and Literature
SPAB21F/S	Stylistics and Translation
SPAB22F/S	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. Gödde 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
.I K. Gödde 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
.I K. Gödde and P. León

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
.I K. Gödde and P. León

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

SPAB21F Stylistics and Translation
The examination of Spanish literature in relation to the resources of the language.

This course includes an analysis of the principles of stylistics applied to pertinent problems inherent in the study of Spanish texts of various periods, especially those dealing with the translation of literary texts. A certain amount of creative composition is expected.
Prerequisite: SPAB01
Session: Winter Day
R. Skyrme

SPAB22S History of the Spanish Language II
The Spanish language from the medieval period to the present.

Through analysis of texts from the ninth to the twentieth centuries, this course will focus on inherent changes in and external influences on the development of Castilian from a dialect in the medieval period into one of the major languages of modern times.

Three hours per week in tutorial format.
Prerequisite: SPAB12
Session: Winter Day
R. Skyrme

C01Y Advanced Spanish
sive study of grammar and syntax; translacomposition, and oral practice.
tailed examination of the subtleties of ish grammar through intensive practice in lation from and into Spanish, composition, conversation. Three hours per week in re/tutorial format. Course required for nish Major, but open to all qualified ents.
equisite: SPAB01
ion: Winter Day
kyrme

C02F-C06F
S-C10S
Y-15Y Supervised Reading
ents who wish to enter the Spanish rvised Reading programme should enrol in of the above courses (Y, F or S as opriate). They should then contact a partic- instructor in the discipline to discuss a osed topic. Students should have sufficient kground in the area they want to study more ely, and they should provide a rationale for osing a specific topic. They will be expected ad much of the material on their own, and to t with their tutor once a week. The exact ngements will depend on the nature of the s and the level of ability of the students. ecific topics in Peninsular Spanish and n American literature, linguistics and culture.
equisite: SPAB01
ion: Winter Day
Gödde, P. León, R. Skyrme

also the following courses offered under manities and in the Literature Programme:
MB09F The Civilization of Spain I
MB10S The Civilization of Spain II
MB14Y Topics in Latin American Culture and Literature
B22Y The Modernist Adventure
B32S The Spanish Civil War: Fact to Fiction

urses Not Offered in 1985-86
AB12S History of the Spanish Language I
Prerequisite: SPAB04

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.

First Year
MATA26Y or A27Y or A55Y
MATA40F*
MATA45S*
CSCA58F
CSCA68S

Second Year
STAB52F
STAB57S
MATB41F or B50F
MATB42S or B55S

Third Year
STAC67F
STAC52S or C42S

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.**

NOTES * MATA40F and MATA45S 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

STAC52S Experimental Design
The statistical aspects of collecting and analyzing experimental data. Complete randomization and restricted randomization schemes.
Exclusion: PSYB08
Prerequisite: STAB57

STAC67F Regression Analysis
The statistical analysis of linear models. Transformations. The analysis of covariance Bioassay. Computational procedures.
Exclusion: (MATC67)
Prerequisite: STAB57
Session: Winter Day.

Courses Not Offered in 1986-87

STAC42S Multivariate Analysis

Major Programme in Women's Studies
Supervisor: J. Drakich (284-3168)
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 (FCE's) 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 necessary course prerequisites.

The Major Programme in Women's Studies with an Emphasis in the Humanities
Students must select six FCE's as follows:
1 JHSA01Y Introduction to Women's Studies
2 3 FCE's from list A
3 5 FCE's from list B
4 JHSC01H Senior Project in Women's Studies

The Major Programme in Women's Studies with an emphasis in Social Sciences
Students must select six FCE's as follows:
1 JHSA01Y Introduction to Women's Studies
2 3 FCE's from list B
3 1.5 FCE's from list A
4 JHSC01H Senior Project in Women's Studies

A: Humanities
C40F* Women Poets
C81F/S George Eliot
C82F/S* 19th Century Women Writers
C91F/S Virginia Woolf
B80F/S* Images of Women in French Literature
B81F/S* Women's Consciousness in French Literature
B10F/S* Women from the Renaissance to the Present
B26Y Women in the Major Religions
B60F/S Women Artists in Society
B61F/S Women in Ancient Greece
C28F/S* Language and the Sexes
42Y* Women and Literature
45Y* Literary Considerations and Feminism
B05F/S Social Issues

B: Social Sciences
B15Y* Biological Anthropology
B20Y* Introduction to Social Organization
B40Y* Anthropological Demography
B54Y Anthropology of Sex
C11Y* Anthropology of Women
C12F* Social Behaviour of Non-Human Primates
B10F/S* Introduction to Social Psychology
B22F/S* Socialization Processes
C18F/S* Psychology of Gender
CB08F/S* Sociology of the Family as a Group
CB09F/S* Sociology of the Family as an Institution
CC10F/S* Sex, Self and Society
CC24F/S* Changing Family Life in Canada
CC28F/S* Sociology of Aging
CC29F/S* Variant Family Forms

onal Courses with Permission of Super- r and Course Instructor
B46Y Childhood in Contemporary Culture
C22F/S Personnel Administration
RB05Y Urban Geography
C85F/S* Seminar in Philosophy: Feminism
Directed Reading Courses focused on women may be included.

udents should check these courses for requisites.

JHSA01Y Introduction to Women's Studies
Women and their roles and relationships in various societies.
This course introduces you to the subject of women from a number of discipline perspectives. Faculty who teach and write about women lecture throughout the year to provide you with a comprehensive survey on the subject of women. You will explore with them the patriarchal foundations of our society; the process through which we become female or male; the images of women in the media, language, religion, literature; the role of women in history, in the labour force, in the family; and women's issues such as pornography and censorship, reproductive rights, and sexist research.
Session: Winter Day
Co-ordinator: J. Drakich

JHSC01H 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

6

Timetable

NOTE: Winter Session Timetable will be available in early June.

Key

'Y' A course taught throughout the session and worth one full-course credit.
'A' A course taught in the first term and worth one full-course credit.
'B' A course taught in the second term and worth one full-course credit.
'F' A course taught in the first term and worth one-half a course credit.
'S' A course taught in the second term and worth one-half a course credit.
'H' A course taught throughout the session and worth one-half a course credit.

Explanation of M,T,W,R,F and T.B.A.

M,T,W,R,F – the days of the week with R denoting Thursday.
T.B.A. – denotes that the student is responsible for arranging time and/or room with the instructor for that course.

Explanation of Letters
L – Lectures
P – practical work in laboratories or studios (* denotes every other week)
T – tutorials
E – evening

Explanation of Lecture Section Numbers
01 etc. day sections
30 etc. evening sections

Tying of Sections
Some lecture, practical and tutorial sections must be taken as a "package". This means that the first two digits of the lecture, practical or tutorial section numbers must be the same, e.g. P0101 and T0102 must be taken with L01; and T3001 or T3002 must be taken with L30.

The reason for "tying" sections is that the subject matter may differ from section to section. Many courses are "untied" so it does not matter which practical or tutorial section is assigned with any particular lecture section. In such cases the first two digits of the practical or tutorial section number will be 00,eg.P0001 or P0002 and T0001 or T0002 may be taken with L01 or L02 or L03.

Rooms
Students will be advised of rooms for courses in May, for Summer Session courses, and September, for Winter Session courses.

mmer Session Courses, 1986

day 12th May:
ses for "F" "H" "A" and "Y" courses begin
y 27th June:
ses for "A" and "F" courses end
day 2nd July:
ses for "B" and "S" courses begin
y 15th August:
ses for "Y" "B" "H" and "S" courses end

Key: MTWRF: days of the week with R as Thursday
Tutorials may be given in addition to the lecture times given below. They will normally be given on the same night except as noted below.
When registering for the following courses, identify evening courses as lecture section L30 and day courses as L01.

rse	Title	Day & Time
B21Y	North American Background to Canadian Native Peoples	TR7-10
A01Y	Financial Accounting	TR7-10
B01Y	Management Accounting	TR7-10
C04F	Principles of Marketing	MW7-10
C05S	Introduction to Marketing Management	MW7-10
C30Y	The Legal Environment of Business	MW7-10
A56H	Computer Programming	MW7-9
B15A	A History of Musical Theatre	MTWR7-10
A01Y	Introduction to Economics	MW7-10
B03Y	Price Theory	TR5-7
B07Y	Macroeconomic Theory and Policy	MW7-10
B11F	Quantitative Methods in Economics I	TR7-10
B62F	International Economics Trade Theory	MW5-7
B09B	Prose & Poetry of the English Renaissance 1500 – 1660	MTWR7-10
B36F	American Fiction Since 1960	TR7-9
C92F	Postmodernism	MW7-9
B85A	Intermediate Etching	MTWR1-4
B16B	Language Practice II	MTWR9-12:30
B43F	The French Language in Canada	MW7-9
A05Y	Introduction to Physical Geography	TR7-10
B04Y	Introduction to Canadian History	MW7-9
	Tutorials	M5,M6
B16Y	Modern France 1750 to Present	TR7-9
B27Y	Organizational Behaviour	MW7-10
TA26Y	Calculus	TR 7-9
	Tutorials	TR6
		TR9
LB20S	Belief, Knowledge and Truth	TR7-9
LB46F	Philosophy of the Early Modern Age I	MW7-9
LB47S	Philosophy of the Early Modern Age II	MW7-9
LB60F	Existence and Reality	TR7-9
LC51F	Topics in Canadian Government	MW7-10
LC65S	Topics in Political Leadship	MW7-10
YA01Y	Introduction to Psychology	MW7-10
YB07F	Data Analysis in Psychology	TR7-10
YB32F	Abnormal Psychology	MW7-10
YB61S	Brain Mechanisms and Behaviour II: Physiology of Motivation and Learning	MW7-9
YB62Y	Research in Physiological Psychology	TR7-10
CB15Y	Sociology of Mass Media and Communications	MW7-10
CB18Y	Sociology of Deviant Behaviour	TR7-10

Special Summer Programmes

Stratford Summer Seminars

Every August, in Stratford, Ontario, the division of Humanities organizes week-long Shakespeare Seminars. These seminars accommodate up to 100 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.

Each week members are provided with tickets to eight productions in Stratford, participate in house seminars which provide an academic background of the plays, and attend seminars conducted by the leading actors, directors, and designers of the Stratford Festival. In 1985 these seminars counted among their guests such people as John Neville, Edward Atienza, and Nicholas Pennell.

The Seminar Programme maintains a large mailing list by which prospective members are given full details of the programme for each summer. Students at Scarborough College are invited to contact Professor Andrew Patenall (H324, 284-3185) who will be pleased to provide them with further details of the programme. For inclusion on the mailing list, students should contact the programme's administrator, Mrs. Lois Pickup (H525A, 284-3185) who will provide them with current newsletters, and ensure that they receive future newsletters.

The Seminar Programme also organizes theatre outings during the academic year, and usually brings distinguished actors into the College for seminars and master classes during the term.

In 1986 we plan to conduct two Seminars in the weeks of 11 August and 18 August.

In Reading Week 14-21 February 1987, a seminar for 40 members is being conducted in London, England. Return airfare, ground transportation, hotel and breakfast, a banquet, six theatre tickets, tours and seminars are included in the cost of the program.

English Writing Skills
To be announced.

hone Directory: frequently called numbers

e Dean	284-3124
Association (S.C.A.A.)	284-3395
ore	284-3251
ia	284-3110
Counselling & Placement	284-3292
's Office	284-3103
unity Relations Office	
enquiries)	284-3243
ter Centre	284-3122
Office	978-2142
Service	284-3253
ulties Division	
cs, History, Philosophy	284-3185
a, Music	284-3126
Art, English, Humanities, guistics	284-3146
uages	284-3151
man's Office	284-3304
ry	
ry, Circulation Desk	284-3246
rence Desk	284-3183
Sciences Division	
gical Sciences, Psychology	284-3237
rman's Office	284-3291
ical Sciences Division	
ing Office	284-3342
ing Office	284-3227
rman's Office	284-3289
ical Services	
king enquiries)	284-3203
t Office	284-3271
	284-3177
ncipal's Office	284-3111
creation Centre	
unter (Squash reservations,etc.)	284-3392
ice (Athletic programme information)	284-3393

Registrar's Office	
Records (Registration, transcripts, etc.)	284-3127
Admissions/Liaison Counsellor	284-3359
Timetable, examinations, etc.	284-3300
Student Services	284-3292
Registrar	284-3266
Residence Office	
Office	284-3174
Dean of Students in Residence	284-3210
Security Desk (including lost and found)	284-3398
Social Sciences Division	
Receptionist	284-3137
Chairman's Office	284-3149
Student Councils	
Scarborough College Student Council (S.C.S.C.)	284-3135
U of T S.A.C. Desk	284-3219
Student Services Office	284-3292
Writing Laboratory	284-3369

Scarborough Campus
University of Toronto
1265 Military Trail
Scarborough, Ontario M1C 1A4

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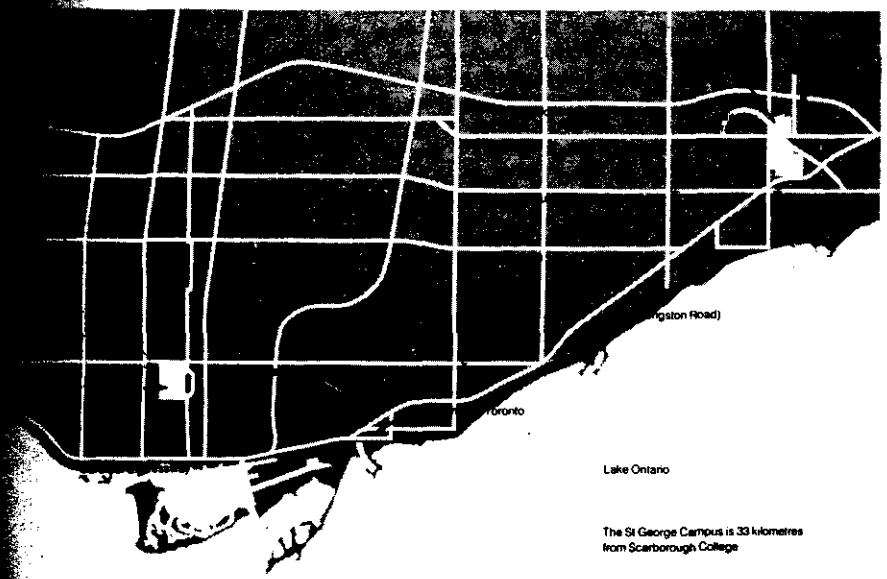
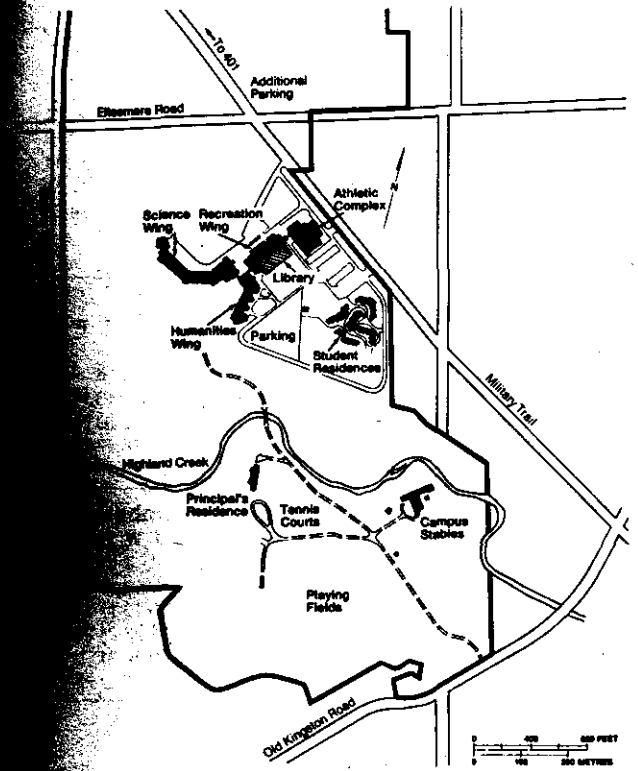
Location



The St George Campus is 33 kilometres from Scarborough College



Scarborough College Campus

1986

January

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1987

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November

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December

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