
TRENT UNIVERSITY



1 9 9 2 - 1 9 9 3



The
Twenty-ninth
Academic Year

1992-93

Trent University Calendar



Nunc cognosco ex parte

Peterborough,
Ontario, Canada.
K9J 7B8

Telephone: (705) 748-1011
FAX: (705) 748-1246

Important Notice

The contents of this Calendar are not necessarily final and complete. Changes may occur in a number of areas including:

1. new faculty appointments or departures;
2. courses, including withdrawal of courses listed as being offered;
3. policies and procedures related to applications, admissions, and registration for new and returning students;
4. regulations;
5. fee structure;
6. the University Diary.

The University reserves the right to make and implement changes subsequent to the publication of this Calendar, as it deems appropriate.

It is the responsibility of all students to familiarize themselves with the specific requirements for the degree or diploma which they seek. While advice and counselling is readily available, it is the students' responsibility to ensure that the courses in which they register are appropriate and sufficient to the program requirements. Students are bound by the regulations and policies of the University.

No liability shall be incurred by Trent University for loss or damage suffered or incurred by any student or third party as a result of delays, suspension or termination of services, courses or classes, or other academic activities by reason of natural disasters, civil unrest or disobedience, labour disputes, work stoppages, strikes, lockouts, financial exigency, restrictive laws or governmental regulations, inability to procure materials or trades, weather, utility interruptions, damage to University property, or other happenings or occurrences beyond the reasonable control of Trent University.

Notes

Every member of Trent University — faculty, staff or student — has a right to freedom from discrimination in the University by another faculty, staff or student member because of race, ancestry, place of origin, colour, ethnic origin, citizenship, creed, sex, sexual orientation, age, record of offences, marital status, family status, or handicap.

Trent University recognizes its responsibility to those of its students, faculty and staff with special needs. It undertakes to ensure access to its academic programs and physical facilities, short of undue hardship, while protecting the academic integrity of the University.

Trent University is working towards becoming a smoke-free institution. Smoking is prohibited in most public areas including classrooms, but it is permitted in certain designated areas and in student study-bedrooms.

The Trent University Calendar is produced for the Office of the Provost and Dean of Arts and Science by the Communications Office.

Tours or visits to the University can be arranged by contacting the Registrar's Office, Trent University, Peterborough, Ontario K9J 7B8. (705) 748-1332.



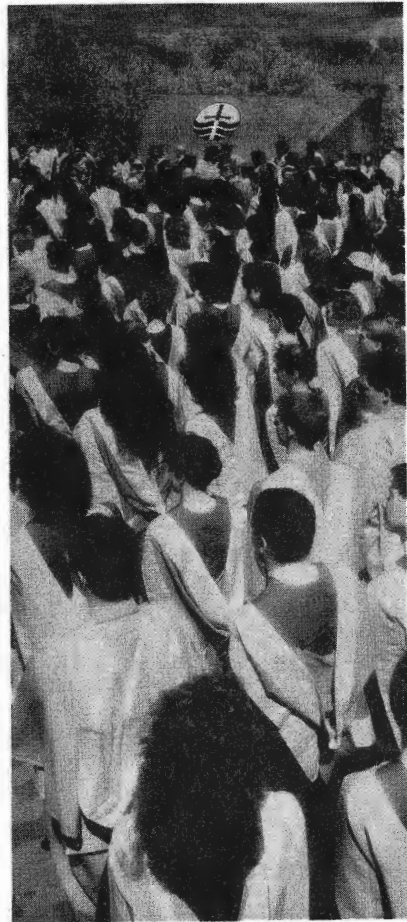
Printed on recycled paper.

*Cover photo: Scott House, Trill College
(Wayne Eardley, Brookside Studio)*

Table of Contents

University Diary	4
Map	8
General Information	
History	9
Peter Robinson College	10
Catharine Parr Traill College	10
Champlain College	11
Lady Eaton College	12
Otonabee College	13
Julian Blackburn College	13
Library	15
Alumni Association	16
Athletic Program	17
University Services	17
Undergraduate Activities	17
Student Services	17
University Bookstore	17
Campus Store	17
Health Service	18
Special Needs	18
Counselling and Career Centre	19
Counselling Services	19
Careers and Placement	19
Off-Campus Housing Service	19
Bus Service	19
Day Care	19
Computer Services	19
Academic Skills Centre	20
Financial Information	
Fees	21
Fee Schedule	23
Student Aid	24
Bursaries	24
Scholarships	29
Prizes	33
Academic Regulations	
Application and Admission	38
Normal Admission Requirements	38
Ontario Secondary School Requirements	38
Specific Program/Course Prerequisite	38
Equivalents to Ontario Secondary School Requirements	39
Colleges of Applied Arts and Technology	39
English Language Proficiency	39
Part-time Credit Studies	39
Refusal of Admission	39
Application Deadlines	40
Exceptions to Normal Requirements	40
Advanced Standing	40
Registration	41
Academic Programs and Standings	
Required	42
Enrolment Status	42
Overload Programs	42
Course Distribution	42
Course Changes	42
Withdrawal	43
Letters of Permission	43
Study at Foreign Universities	43
Assessment of Performance	44
Appeals of University Regulations	45
Plagiarism	45
Academic Penalties	47
Probation	47
Rustication	47
Debarment	47
Honours Program	48
Admission	48
Academic Standings Required	48
Honours Science	49
Administrative Studies	49
General Program	50
Special Emphasis Program	50
Special Emphasis – International Studies	51
International Program	51
Convocation and Transcripts	52
Part-time Studies	52
Programs of Study	
Explanation of Course	
Identification	53
Animal Care Course	53
Administrative Studies	53
Anthropology	59
Biochemistry	63
Biology	63
Canadian Studies	67
Canadian Studies Diploma Program	71
Chemical Physics	72
Chemistry	72
Classical Studies	76
Latin Language and Literature	77
Greek Language and Literature	78
Courses in Translation - Classical History	78
Classical Literature	79
Classical Civilization	79
Comparative Development Studies	80
Computer Studies	83
Cultural Studies	86
Economics	90
Education	94
English Literature	96
Environmental and Resource Studies	102
Geography	109
History	113
Mathematics	118
Modern Languages and Literatures	121
French	121
German	124
Hispanic	126
Native Management and Economic Development	129
Native Studies	129
Native Studies Diploma Program	133
Northern and Polar Studies	134
Philosophy	135
Physics	137
Political Studies	140
Psychology	143
Science	148
Sociology	148
Statistics	152
Vanier Chair	153
Women's Studies	153

Graduate Studies	
Diary	156
General Information	157
Application	157
Admission	157
Transfer of Credit	158
Qualifying Year	158
Language Proficiency	158
Graduate Record Exams	158
Master's Degree Regulations	158
Registration	158
Failure to Register	158
Full-time, Part-time and	
Inactive Status	159
Residence Requirements	159
Time Limits	160
Residence Accommodation	160
Supervision	160
Research and Thesis Requirement	160
Courses	160
Course Changes	160
Audit Courses	160
Grading System	160
Aegrotat Standing	161
Courses at Other Universities	161
Language Requirement	162
Grade Reports	162
Unsatisfactory Work	162
Appeals	162
Thesis Examinations	162
Fees	164
Fee Schedule	165
Programs of Study	166
Anthropology	166
Biology	167
Canadian Heritage and	
Development Studies	167
Chemistry	169
Classics	169
Freshwater Science	169
Geography	170
Methodologies for the Study of	
Western History and Culture	170
Physics	172
Trent-Queen's	172
Watershed Ecosystems	172
Financial Assistance	175
Graduate Awards	176
International Graduate Students	176
Student Services	177
Personnel	
Board of Governors	178
Officers and Administrative Personnel	178
Academic Staff	180



Summer Session 1992*(For Summer Session Deadline Dates See Chart)*

April	27	Monday	Final date for application for transfer between residential colleges
May	8	Friday	Final date for receipt of grades for incompletes and Letter of Permission courses for those planning to convocate in the spring
May	18	Monday	Victoria Day
June	1	Monday	Final date for payment of deposit against residence fees by returning students
	29	Friday	Spring Convocation
	15	Monday	Final date to request Summer Session Letters of Permission
			Final date for receipt of applications for full-time admission to Trent University
			Final date for continuing JBC students to apply for full-time studies
July	1	Wednesday	Canada Day
	15	Wednesday	Pre-registration: Final date for submission of Confirmation of Intent to Register form and tuition deposit required by all students wishing to continue studies on a full-time basis in the fall, 1992
			Final date for appeals of full and b half courses
			Final date for receipt of appeals against academic penalties
August	3	Monday	Civic Holiday
	12	Wednesday	Final date to request Fall/Winter Session Letters of Permission
	14	Friday	Final date for receipt of applications and supporting documentation from new and re-admit part-time applicants for admission to the University
	21	Friday	First instalment of fees is due

Fall/Winter Session 1992-93**Fall Term 1992**

September	7	Monday	Labour Day
			Arrival of new students
	8	Tuesday	Introductory Seminar Week begins
	11	Friday	Registration for new full-time students
			Final date for new full-time and part-time student registration, without late fee
			Final date for receipt of Application for Graduation for Fall Convocation
	13	Sunday	Arrival of returning students
	14	Monday	Classes begin
			Official course registration for returning and re-admitted full-time students begins
	18	Friday	Final date for returning and re-admitted students to register, without late fee
	22	Tuesday	Meeting of the Senate
	25	Friday	Faculty Board Meeting
	28	Monday	Final date for rebate on college fees for transfers from full- to part-time status
	30	Wednesday	Final date for Summer Session appeals

October	2	Friday	Final date for official registration Final date to change or add full and a half courses Final date for receipt of grades for incompletes and Letter of Permission courses for those planning to convocate in the fall
	12	Monday	Thanksgiving Day
	16	Friday	Faculty Board meeting
	20	Tuesday	Meeting of the Senate
	24	Saturday	Classes end Fall Convocation
	26	Monday	Residential Reading and Laboratory Week begins
November	2	Monday	Classes resume
	13	Friday	Final date for withdrawal from a half courses without academic penalty Faculty Board meeting
	17	Tuesday	Meeting of the Senate
	27	Friday	Final date to request Letters of Permission for courses beginning January, 1993
December	4	Friday	Final date for receipt of applications and supporting documentation from new and re-admit part-time applicants for admission to the University for b half courses Faculty Board meeting
	11	Friday	Last day of classes
	12	Saturday	Final examinations for a half courses begin
	14	Monday	Study week begins
	15	Tuesday	Meeting of the Senate
	19	Saturday	Final examinations for a half courses end, 10:30 p.m. Study week ends
	20	Sunday	Christmas Vacation and Reading Period begins
	25	Friday	College residences close Christmas Day

Winter Term 1993

January	1	Friday	New Year's Day
	8	Friday	Final date to register for b half courses for part-time students, without late fee
	10	Sunday	College residences open
	11	Monday	Classes resume
	15	Friday	Second instalment of fees is due
	22	Friday	Faculty Board meeting
	26	Tuesday	Meeting of the Senate
	29	Friday	Final date to change or add b half courses Final date to register for b half courses for part-time students, with late fee Final date for payment of outstanding bookstore and other accounts before the procedure of deregistration takes effect
February	1	Monday	Final date for receipt of application for Spring Convocation Faculty Board meeting
	12	Friday	Meeting of the Senate
	16	Tuesday	Final date for withdrawal from full Fall/Winter Session courses without academic penalty Classes end
	20	Saturday	Residential Reading and Laboratory Week begins
	22	Monday	

March	1	Monday	Classes resume
	5	Friday	Students who have not fully paid their University account for fees, bookstore and other charges will be deregistered
	12	Friday	Final date for withdrawal from <i>b</i> half courses without academic penalty
			Faculty Board meeting
	16	Tuesday	Meeting of the Senate
	19	Friday	Final date for appeals of <i>a</i> half courses
April	2	Friday	Faculty Board meeting
	8	Thursday	Pre-registration: Final date for submission of Course-Preference form required by all students wishing to continue studies on a full-time basis in the fall, 1993
	9	Friday	Good Friday
	10	Saturday	Classes end
	13	Tuesday	Meeting of the Senate
	15	Thursday	Examinations begin for <i>b</i> half and full courses
May	1	Saturday	Examinations end for <i>b</i> half and full courses, 10:30 p.m.
	3	Monday	Final date for application for transfer between residential colleges

Summer Session 1993

(For Summer Session Deadline Dates See Chart)

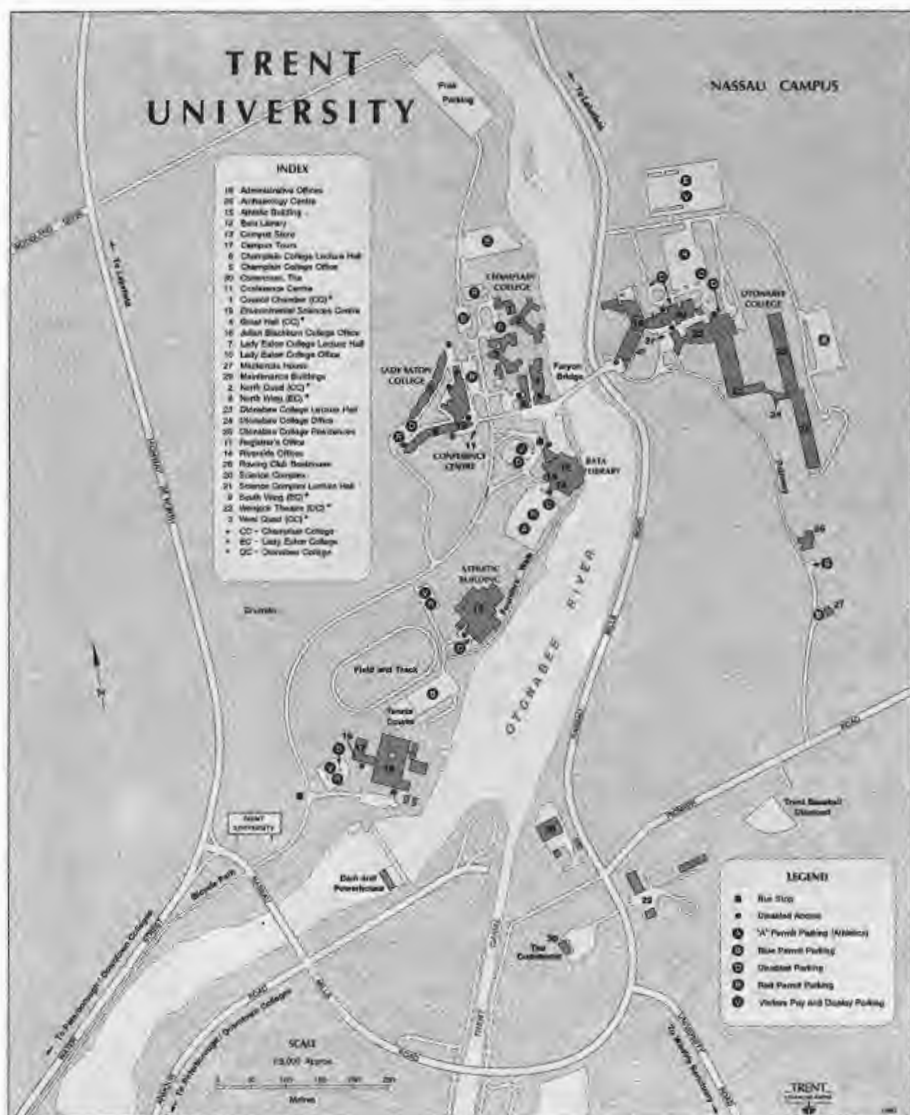
May	14	Friday	Final date for receipt of grades for incompletes and Letter of Permission courses for those planning to convocate in the spring
	24	Monday	Victoria Day
June	1	Tuesday	Final date for payment of deposit against residence fees by returning students
	4	Friday	Spring Convocation
	15	Tuesday	Final date to request Summer Session Letters of Permission
			Final date for receipt of applications for full-time admission to Trent University
			Final date for continuing JBC students to apply for full-time studies
July	1	Thursday	Canada Day
	15	Thursday	Pre-registration: Final date for submission of Confirmation of Intent to Register form and tuition deposit required by all students wishing to continue studies on a full-time basis in the fall, 1993
			Final date for appeals of full and <i>b</i> half courses
			Final date for receipt of appeals against academic penalties
August	2	Monday	Civic Holiday
	13	Friday	Final date to request Fall/Winter Session Letters of Permission
			Final date for receipt of applications and supporting documentation from new and re-admit part-time applicants for admission to the University
	27	Friday	First instalment of fees is due

Summer Session Dates 1992

	8 week term	12 week term	6 week term
Final date for receipt of applications for admission or re-admission with supporting documentation	April 15	April 15	June 15
Final date to register, without late fee	April 22	April 22	June 25
Classes begin	April 29	April 29	July 2
Final date to register, with late fee. Final date to add courses.	May 13	May 13	July 8
Final date for withdrawal	May 29	June 12	July 26
Classes end	June 24	July 22	August 12
Examinations begin	June 26	July 23	August 13

Summer Session Dates 1993

	8 week term	12 week term	6 week term
Final date for receipt of applications for admission or re-admission with supporting documentation	April 19	April 19	June 21
Final date to register, without late fee	April 26	April 26	June 28
Classes begin	May 3	May 3	July 5
Final date to register, with late fee. Final date to add courses.	May 17	May 17	July 12
Final date for withdrawal	June 2	June 16	July 28
Classes end	June 28	July 27	August 13
Examinations begin	June 29	July 28	August 16



General Information

History

Trent University stresses the importance of a liberal undergraduate education, which it looks upon as an education for the intelligent and informed use of freedom in society. In line with this belief, students at Trent are encouraged to make their own decisions about courses, fields of concentration, extracurricular activities and the organization of their time. The University seeks to ensure, through a general emphasis on small-group teaching, that each student has the opportunity to pursue fields of interest intensively in close association with academic seniors.

Trent is one of the smallest and youngest universities of Ontario and it has no ambition to compete in size, but rather in excellence. Formally created as an independent university with full degree-granting powers by the Ontario Legislature in April 1963, the University has chosen to expand gradually in both its undergraduate and graduate programs.

Now in its twenty-ninth teaching year, the University has about 3,800 undergraduates in the full-time program, and about 3,275 in both the part-time winter and summer school programs. In addition, there are about 100 Master's degree candidates in the five fields in which graduate studies are offered.

The University is the result of several years of planning by public-spirited citizens of Peterborough and, after the appointment of T.H.B. Symons as president-designate in 1961, by an Academic Planning Committee and Campus Planning Committee. A nucleus of faculty members and senior administrative staff assumed full-time duties more than a year before the University opened its doors to its first students in September 1964. In 1967, the late Leslie M. Frost, former Prime Minister of Ontario, was elected first Chancellor of the University. The University was elected to full membership in the Association of Universities and Colleges of Canada in 1968.

Trent opened with two residential colleges and a teaching and administrative complex in the heart of Peterborough. GE Canada donated the core of what is

now the 1,400-acre Nassau Campus on a rolling, wooded property located on both sides of the Otonabee River at the northern edge of the city. With the guidance of master planning architect, the late Ronald J. Thom, a long-range plan was developed and a program of construction undertaken which, while retaining facilities developed in the city, provides for the main development of the University on the Nassau Campus. There are now three residential colleges, the main library, two science buildings and central administrative offices, along with recreational facilities, including an athletic and recreation building, playing fields, an all-weather track and tennis courts on the Nassau Campus. The University's first two colleges remain in their original downtown locations, linked to the Nassau Campus by a bus system. In addition to the five co-educational colleges, part-time study is offered through the Julian Blackburn College for continuing education.

Trent's master plan was devised on the twin foundations of the residential college and small-group teaching. The college system enhances the opportunity for both resident and non-resident students to benefit from a liberal education by taking advantage of the corporate life of the colleges. Quite apart from its social amenities, the college system is designed to offer genuine and continuing opportunities to cross those boundaries between different subjects and fields of study which so often hinder discussion in a university. Intellectual isolation can be avoided by bringing together, within each college, students and faculty from all disciplines.

Further opportunities are offered to each student to engage in the exploration of ideas with members of faculty and with fellow students through emphasis given to a variety of small teaching groups according to the requirements of the given discipline. Directed reading, the preparation of essays and other assignments and laboratory work in the sciences, form the basis for regular academic discussions in small groups in most courses.

In the section on Courses of Study in this Calendar may be found the teaching method employed in each course. Each student will be provided with a course

outline in September which may be a detailed week-by-week summary or only a more general outline of aims and teaching methods. It should state the frequency of class meetings, attendance requirements (if any) and the principles of the grading system which will be used. Generally speaking, lectures are less central in the teaching program at Trent than in many universities. In most courses lectures are offered, but, in the senior years particularly, these are to guide, to clarify and to emphasize, rather than cover prescribed material. Lectures are normally open to anyone.

At registration each student is assigned to an academic adviser or counsellor who is responsible for advising on course selection and reviewing the student's progress at regular intervals. Ultimate responsibility for course selection must rest with the student. The tutorial and seminar system demands that a student distribute the work evenly through the academic year. The academic year is divided in two terms with a long recess in December, and one-week reading and laboratory recesses in late October and late February.

Peter Robinson College

Master

J. Milloy, PH.D.

Senior Tutor C. McKinnon; *Senior Don* W. Ramp, M.A.; *Assistant to the Master* J. Johnson, B.A.; *Honorary Director of Music* P. MacKinnon

Peter Robinson College, named after one of the founders of Peterborough, was the first college to open in 1964 and the first to become coeducational in 1967. One of the two city colleges, it is located in converted older houses and new buildings which incorporate residence and academic areas. Sadleir House, the focus of college life, is a striking old Peterborough home which has been redesigned so as to integrate the features of the original architecture with the newer additions. Its location in Peterborough's north end and its size (Trent's smallest college) make Peter Robinson particularly appealing to those students who are interested in an intimate university milieu which is not isolated from the city community.

Besides providing a strong base for traditional academic disciplines such as History, the college encourages interdisciplinary co-operation and is the home base for the Cultural Studies Program on the undergraduate level and two M.A. programs: The Frost Centre for Canadian Heritage and Development Studies and the Methodologies Program for the Study of Western History and Culture. The college strongly supports the arts in all its forms, and has an active program of visiting scholars, artists, broadcasters, musicians and cultural theorists. The dining hall in Sadleir House, originally the hayloft for the stables, has been adapted to accommodate theatre and music and has become the home of experimental theatre productions, classical recitals and the university jazz club. Trent Radio is at the nearest corner and the Jolly Hangman, the college's student-run pub, is a performance centre in its own right.

Peter Robinson has always emphasized the need for student involvement in wider social issues in the community and abroad. The college provides a supportive environment for activities concerned with human rights' international, aboriginal and environmental issues. The offices of the Ontario Public Interest Research Group, Trent Institute for the Study of Popular Culture and the Vanier Professor are located at the college.

Peter Robinson is the only college that has both conventional residential accommodation and single rooms in townhouses where each student has a study-bedroom and shares kitchen and living and dining room facilities with three or five others. College facilities include an 11,000 volume library, a computer room, a dark-room, a recreation area with squash court and sauna and a croquet lawn.

Catharine Parr Traill College

Acting Principal

R.D. Chambers, B.A., B.Litt.

Senior Tutor C.M. Greene, A.M., PH.D.;

Senior Don P. Lafleur, PH.D.

Assistant to the Principal

Lynn Neufeld, B.Sc.

Named in honour of the noted author, botanist and pioneer settler of the Peterborough area, Catharine Parr Traill College is one of the founding colleges

of Trent University. Its students are proud of the college's traditions, and are enthusiastic participants in the way of life its unique character and location make possible. An integral part of the academic and social life of Trent University as a whole, Traill College is also a self-contained and active community, beautifully situated on a drumlin in central Peterborough. Regular and frequent bus service connects the college with the Nassau Campus and the city bus station, while its central location gives easy access to the University Bookstore, the Peterborough Public Library, art galleries, movie theatres, live concerts, shops, local beaches, churches, parks, restaurants and pubs. For those who wish to be engaged in a variety of experiences in both the University and the local community, Traill College is an attractive home.

The college consists of a number of old houses of architectural and historic significance which have been remodelled for residence and teaching purposes. Kerr House accommodates the College Library, with its computer terminals and public access terminals to the University Library, and has ample study and reading space, such as the Alan Wilson Reading Room for Canadian Studies. Wallis Hall, a modern structure, completes the facilities, which include teaching offices, seminar rooms, a lecture hall and the Academic Skills Centre. Total residence accommodation includes study-bedrooms for 215 students, six apartments for faculty and staff who live in the college as residential dons, and the Principal's Lodge.

In addition to being the base for the academic Departments of English, Classical Studies, Canadian Studies and Philosophy, Traill also has faculty members from most disciplines in the arts and sciences. It is thus an active centre for teaching and learning, not only for resident students, but also for Trent's large number of non-resident students, many of whom live in the residential areas around the college.

The intellectual life of the college is supplemented by an active visitors program organized by students and faculty, which gives members of the college the opportunity to meet informally with writers, artists, professional people, politicians, musicians and scholars. The Nineteenth Century Society provides a convivial atmosphere for discussion of any topic, serious or lighthearted, relating to

that period. Over the years, students and faculty members of the college have been actively involved not only in community cultural organizations, such as the Peterborough Symphony Orchestra, but also in world-wide charitable organizations, such as Amnesty International.

Active, responsible student involvement has always been a feature of the college's life. Traill students have assumed leadership roles in the University Senate, and the Trent Student Union; and true to the college's character, have even campaigned in local politics. The College Cabinet plays an important part in organizing academic and social activities for residents and non-residents alike. Facilities at their disposal include the college dining room (which is also used for movies, dances or concerts), The Trend (the student-run snack bar and pub) and various common rooms and lounges, which have proved to be excellent settings for social activities, both formal and informal. The college also has a music room, pottery room, darkroom, exercise room, sauna and outdoor tennis court, frequently used for ball hockey. Ice hockey is popular as well, and each year the college alumni return to Traill for its alumni hockey tournament.

Champlain College

Master

J.I. MacAdam, PH.D.

Senior Tutor I. Chakravartty, M.S.C., PH.D.;

Senior Don P. Dawson, M.S.C., PH.D.

Assistant to the Master
(to be named)

Champlain College, whose name honours the great explorer and founder of New France, lies on the banks of the Otonabee River near the heart of the Nassau Campus. The college is widely acclaimed for its beauty. It provides an appropriate setting for the casual and formal activities of college life.

The centre of the College is the impressive Great Hall, and its adjacent common rooms. The two residential quads are divided into staircases with five single study-bedrooms clustered on each floor. Although the residence is coeducational, some sections may be all-male or all-female. Tutorial offices for faculty fellows, dons' residences and seminar

rooms are interspersed throughout the college. Non-residents share with residents the use of the common rooms, the squash court, music practice room, the Céilie and Junior Common Room, Reading Carrels and the Morton Reading Room.

To the north, beyond the Master's Lodge, the playing field is suitable for a pick-up game of soccer, football, hockey, softball or frisbee.

The academic life of the college is built around Champlain's Society, which brings leading international scholars and public figures to the campus to speak and participate in informal discussions. The student Cabinet, elected annually by the Champlain student body, organizes many social and cultural activities to supplement the regular curriculum, in particular, Harvest Weekend in October and Bon Temps in February. In co-operation with the faculty College Council, the Cabinet also shares in decisions touching the administration of the college. Members of Champlain College have enjoyed a long tradition of active participation in university affairs: rowing, rugby, field hockey, theatre, Trent Radio, student and university government, and *Arthur*, the campus newspaper.

Lady Eaton College

Principal

H.J. Stanford, M.A., Ph.D.

Senior Tutor C.F. Sproule, M.A.;
Senior Don P. Strode

Assistant to the Principal

A. Mancuso, B.A.

Lady Eaton College is the fourth college within the University and the second college on the Nassau site. Named in honour of Flora McCrea Eaton, a native of Omeme and one of the original sponsors of the University, the college provides facilities designed to encourage academic and social interchange for a community of students and fellows in an international atmosphere.

Situated against a drumlin, the residential wings and Commons Block enclose a pleasant quadrangle. One-third of the south wing of the college building is reserved as a women's residence while the remainder of the south wing and the entire north wing house both men and women. In total there are 214 single study-bedrooms, one apartment reserved for upper-year

students and 12 double study-bedrooms. On the first floor of the residence wings are the Principal's Lodge and six apartments for faculty and staff of the University who live in the college as residential dons. There are also offices for many of the fellows of Lady Eaton College and for the Trent International Program as well as the offices of the Provost and Dean of Arts and Science. Teaching takes place in these offices as well as in the college's seminar rooms and lecture hall.

Non-resident members of the college living at home or in lodgings in Peterborough are full members of the college and are encouraged to participate in college activities and to use the T.V. room, the music practice room, the Junior Common Room, the student-run coffee shop (The Magpie), Crawpadies, and other facilities. The dining hall, a spacious and colourful room with small tables, has a warm and friendly atmosphere. It is also used for dances, concerts, and other special events. Extensive grass fields, ideal for a variety of pick-up sports, surround the college. The Athletic Complex and University Library are close by across the main driveway.

Art exhibitions are occasionally held in the college. They complement the permanent collection of the college, which includes Inuit sculptures, a gift from Lady Eaton.

A very active student government organizes and sponsors many college events in which students and faculty participate. These include intramural sports, in which most students take part; a varied social program including regular events sponsored by Cabinet; *The Drumline*, a student publication and the Lady Eaton College section in the Trent Annual (yearbook).

Language tables organized by the Department of Modern Languages and Literatures hold informal weekly meetings in the college during meal times. Each year the College Visitors Program brings scholars, writers, performers, and public servants to the college to meet students and fellows and to present seminars and lectures. There are, in addition, regular, open college symposia given by fellows of the college and guests on topics of special interest. With the assistance of the Canada Council, the college has annually hosted a writer-in-residence program through which an eminent Canadian writer is available for one week of discussions, consultations and readings.

Otonabee College

Head of College

G. Johnston, M.A.

Senior Tutor (to be named)

Senior Dons Theron and Sharon Craig

College Assistant

(to be named)

The college's distinctive red-roofed buildings range along a cedar ridge overlooking the river from which the college derives its name (Ojibwa for "fast water"). To the east, an uninterrupted vista of rolling rural landscapes; to the west, the Faryon pedestrian bridge, providing easy access to the Bata Library, the Athletic Complex and the other Nassau Campus colleges.

Eight "houses" plus four resident dons' apartments and the residence of the Head of College, all of them connected by an interior walkway called "the Street", make up Otonabee's coeducational residence. Each house contains single and double study-bedrooms, laundry facilities, a kitchenette and a commons area. Adjacent to the residence is the College Office where the College Head, College Assistant, College Secretary and Senior Tutor have their offices. Past "the link", a set of faculty offices, are located the junior common room, the senior common room, the private dining room for smaller gatherings and doubling as a music practice room, and the public dining hall.

The academic wing of the college, directly connected to the Science Complex, houses laboratories for Anthropology and Psychology; a Sociology resource area; the Native Studies lounge; several seminar rooms; teaching offices representing most of the disciplines in arts and sciences; and the Wenjack Theatre, which accommodates regular film-shows as well as theatrical productions by amateur and professional companies. Nearby are the Archaeology Centre, Mackenzie House and a wildlife sanctuary with walks and ski trails.

Students at Otonabee play a major role in organizing and conducting the cultural, social and athletic activities there. The Otonabee College Council, comprising student, staff and faculty representatives, has a student President; the Head of College chairs its Executive Committee. The Council, through its committees, sponsors a variety of events for its non-resident and resident members: visiting

authors, artists, musicians; annual inter-house debating for the George Bernard Shaw award; college dinners and dances, a College Winter Weekend; the inter-house Olympics, and intramural coeducational competition in such sports as soccer, softball, volleyball and rowing. Members of the college also participate in the wider social, cultural and athletic activities of the University and the city of Peterborough, including various forms of community service.

Julian Blackburn College for Continuing Education

Associate Dean and Principal

G.A. Nader, PH.D.

Academic Counsellor and Assistant

to the Director B. Donnellan, M.A.;

Administrative Assistant T. Menzies,

M.A.; *Administrative Secretary* Nicole

Douglas, B.A.

Trent University's program of part-time and continuing education was established soon after the University itself. Julian Blackburn College is named in honour of the late Professor Julian Blackburn, one of the key advisers in the founding of the University and a scholar and teacher deeply committed to part-time studies.

The aim of Trent's part-time studies program is to make the University's academic programs available to those students who, for a variety of reasons, do not choose to pursue their studies full-time, but who wish to take university credit courses either for interest, or as part of a degree program. In keeping with this aim, Trent maintains a flexible admissions policy which puts a high value on the applicant's maturity and motivation and is thus particularly advantageous to many prospective part-time students with varying educational backgrounds. Once admitted to the University, part-time students are free to enroll in any Trent course, on or off-campus, provided that they have the prerequisites for the course.

Many part-time students enroll in courses with no thought of proceeding to a degree, including a growing number who already have a degree and who simply cannot break 'the learning habit'.

The college office is located on the west bank of the river in a building housing the Registrar's Office and Julian Blackburn College.

For the convenience of part-time students, especially those who prefer evening or off-campus locations, Julian Blackburn College produces several brochures during the year for both on-campus and off-campus courses. These may be obtained directly from the college by calling (705) 748-1229.

Trent in Oshawa

The University's largest permanent off-campus centre is in Oshawa, through which it also serves neighbouring communities including Newcastle, Bowmanville, Whitby, Ajax, and Pickering. Trent, as Ontario's smallest university, thus attempts to serve the largest population centre in the province without its own university. In doing so it offers many credit courses each year in the Fall/Winter Evening and Summer Evening and Day Sessions leading to General B.A. or B.Sc. degrees in Anthropology, Cultural Studies, Economics, English Literature, History, Politics, Psychology and Sociology, for students who study in Oshawa only, and to General and Honours B.A. and B.Sc. degrees in a number of other disciplines, or to the Bachelor of Administrative Studies degree, for students who can supplement their Oshawa courses with winter evening or summer courses taken on the main Trent campus. All Trent courses in Oshawa are taught at Durham College and all are outlined in the *Part-time Studies Summer and Fall/Winter Session Brochures*.

Fall/Winter On-Campus Late Afternoon and Evening Program

Every Fall/Winter Session a large number of the University's regular courses are scheduled either in the 4:30 to 6:30 p.m. late afternoon or in the 7:00 to 10:00 p.m. evening periods. The courses to be offered in late afternoon or evening hours in the coming Fall/Winter Session are highlighted in the *Part-time Studies Fall/Winter Session Brochure* which is published annually in June.

Fall/Winter Off-Campus Evening Program

Every Fall/Winter Session the University offers courses at off-campus locations, the majority of these at Trent's primary off-campus centre in Oshawa. Details of these courses and any others which may be offered in Cobourg, Lindsay or any other off-campus location are given in the *Part-time Studies Fall/Winter Session Brochure* mentioned above.

Spring Session

A Spring Session of introductory-level courses is offered over a twelve-week period from late January to late April. Courses are offered in both Peterborough and Oshawa.

Summer On-Campus Program

The Summer Session is divided into three parts: a twelve-week session in which courses are taught twice a week from early May to late July, an eight-week session from early May to late June, in which courses are taught three times a week, and a six-week session from early July to mid-August in which courses are taught four times a week. Details of the courses to be offered in the coming Summer Session are available in the *Part-time Studies Summer Session Brochure* which is published annually in February.

Summer Off-Campus Program

The majority of Trent's off-campus summer courses are offered in Oshawa and fall into the same twelve-week, eight-week or six-week periods as on-campus summer courses. However, each summer the University offers a number of other courses at particular times or in special places: Archaeology field schools in the Arctic or in Central or South America; Geography field courses in the Rockies; Anthropology and Comparative Development Studies courses in South America. Details of all these courses are given annually in the *Part-time Studies Summer Session Brochure*.

Non-Degree Credit Courses

In addition to these credit courses leading to General or Honours degrees in Arts or Science, or to the degree of Bachelor of Administrative Studies, the college also provides non-degree business courses which are accepted by various business organizations as part of their professional certificate programs.

Julian Blackburn College Students' Association

Part-time students have an active Students' Association which represents them on Senate and a variety of other University committees. All part-time students are automatically members of this association. Further information may be obtained by contacting the association at 748-1380.

Further information or academic counselling for anyone considering part-time study is available from Julian Blackburn College at (705) 748-1229. JBC provides a year-round counselling and information service for Oshawa area students at (416) 723-9747. During registration periods, the Oshawa Information Office accepts applications as a further service to Durham Region students. Written enquiries should be addressed to Julian Blackburn College, Trent University, Peterborough, Ontario K9J 7B8.



Library

University Librarian

M.W. Genoe, M.A., M.L.S., M.PHIL.

Acquisitions and Serials Librarian,

A. McCalla, B.A., M.L.S. (on leave 1992-93); *Archivist*, B. Dodge, B.A., M.A.; *Catalogue Librarian*, M. Scigliano, B.A., M.L.S.; *Catalogue Librarian & Microforms Librarian*, K. Field, B.MUS.ED., M.L.S.; *Circulation and Inter-Library Loans Librarian*, (to be named); *Collections Librarian*, J. Millard, B.A., M.L.S.; *Information Services Librarian*, J.A. Wiseman, M.PHIL., PH.D., F.L.A.; *Government Publications and Map Librarian*, B. Znamirowski, B.A., M.L.S.; *Systems Librarian*, L. Declerck, B.A., M.L.S. (on leave 1992-93); A. Darnell, B.A., M.A., M.L.S.

The University's Thomas J. Bata Library is adjacent to the University Court and is the focal point of the Nassau Campus. Bright, spacious and air-conditioned, it provides ideal study and research facilities for all student and staff requirements. The building also houses a number of administrative and faculty offices.

An automated library system, the Trent University Online Public Access Catalogue (TOPCAT), is a valuable resource serving the growing needs of all those using the library facilities available at Trent University. The town colleges, Durham College in Oshawa, Sir Sandford Fleming College and Peterborough Public Library are all connected to and/or accessible from Bata Library.

The library contains a collection of more than 447,940 volumes, 238,660 microforms, 3,011 serials subscriptions, 99,770 maps and air photos, and 180,870 government documents. Nearly all the material is available on open shelves and all members of the University are free to browse through the entire collection. The library also subscribes to a number of indexing and abstracting services in CD-ROM format. The following are currently available: Social Sciences Index, Canadian Business and Current Affairs, Life Sciences, and ERIC. Student use of the library has been extensive, with one of the highest per capita circulation rates in Canada.

A number of special collections have been formed and, to support the University's interest in Canadian studies, the library has concentrated on the acquisition

of Canadiana. This development has been augmented by such additions as the G.M. Douglas Arctic collection, the Shell Canada Fund for Canadian literature, the Floyd Chalmers collection of Canadian Explorations and the A.J.M. Smith collection of Canadian poetry and literature. Other specialized collections include the Holm Collection of Children's Literature; the Ernest Thompson Seton Collection; the Robert L. Hunter Canadiana Collection; the Trevor Lloyd Collection; and the Walter A. Kenyon Collection. Transcripts of the Royal Commission on the Economic Union and Development Prospects for Canada (MacDonald Commission) and the transcripts of the Mackenzie Valley Pipeline Inquiry are also valuable resources. The Feinberg Collection of Whitman and Twain material is on permanent loan from the Peterborough Public Library.

The Trent University Archives preserves non-current records of Trent University and historical records of the Trent Valley area. There are over 2,500 cubic feet of textual records—private, family, business and institutional papers—as well as 15,000 photographs, maps and other graphic items. Holdings are particularly strong in literary records, native studies records, World War I materials and business papers. There are several collections which provide primary research materials relating to women's studies. Most of the collection is unrestricted to researchers and provides excellent support for many academic programs at Trent University.

The Trent University Library of Religion, incorporating the Bishop Webster Collection, provides source material for scholars in religion, philosophy, history and related subjects. Extensive support from the Robert Markon Foundation has been used to establish an art book collection. The Donner Foundation has provided substantial assistance in building up library resources in support of native studies, while the Messecar Foundation has provided direct support for Canadian studies. Additional support has been provided to build the Japan Foundation Collection.

The Government Publications and Map Sections are a major resource for students in Politics, Canadian Studies, Administrative and Policy Studies, Geography, Anthropology, Biology, Native Studies and Environmental and Resource Studies.

The University library is augmented by an extensive inter-library loans network through which materials are borrowed from all parts of North America. The Inter-University Transit System, combining electronic-mail communications and a daily courier service, expedites the delivery of materials between university libraries of Ontario and Quebec.

Alumni Association

The Trent University Alumni Association represents the 14,000 graduates of the University. The objectives of the association are to initiate and support activities which further the interests of the University, its students and alumni. It also endeavours to foster a spirit of fellowship among alumni.

The association serves the University by raising funds to support scholarships, bursaries, the library, the colleges and other special projects. The association participates in University governance and committee work and sponsors a number of events aimed at helping students.

The association offers its members a number of services that help keep alumni in contact with Trent and other alumni.

Alumni Council

Mary Elizabeth Luka (President)
 Philip Playfair (Past President)
 Carol MacKinnon (Vice-President)
 John Currie (2nd Vice-President)
 T.H.B. Symons (Honorary President)
 John Leishman (Honorary Vice-President)
 John Boeckh
 Michael Carr
 Kathryn Morrison
 Tom Phillips
 Liesje McKenna
 Diane Kennedy Squires
 Lari Langford (Board representative)
 Michael Beswick (Board representative)
 Martin Boyne (Peterborough Chapter)
 Mary Crawford (Toronto Chapter)
 Fran Cooney (Kingston Chapter)
 Liesje McKenna (Oshawa/Durham Chapter)
 Roy O'Brien, Denis Desjardins
 (Ottawa Chapter)
 Sandra Hudson (Victoria Chapter)
 Jack Duffy (Kitchener-Waterloo Chapter)
 Tony Storey (Director of Alumni Affairs)
 Kathleen Easson (Alumni Affairs Asst.)
 Cathy Kidd (Data Manager)

Athletic Program

The University offers a comprehensive and diversified athletic and recreational program. The programs range from the more organized inter-university competition to completely informal recreational activities.

Located on the campus are rowing facilities, a full-size floodlit playing field, a 400-metre all-weather track, tennis courts, a gymnasium, a 25-metre pool, squash courts, a weight room, saunas, and locker facilities.

Trent University is a full member of the Ontario Women's Intercollegiate Athletic Association, the Ontario Universities' Athletic Association, and the Canadian Inter-collegiate Athletic Union.

Inter-university and intramural competition is organized in a wide range of activities which include badminton, basketball, cross-country running, fencing, hockey, rowing, rugby, skiing (nordic), soccer, softball, squash, tennis, touch football, field-hockey, volleyball, swimming, curling, and golf.

University Services

Undergraduate Activities

The University has fostered the development of a rich and varied program of social and cultural activities. The early years of the University have seen the establishment and lively growth of literary magazines, a radio service, a symphony orchestra*, a concert band*, a choir, community action programs, and of drama, art, debating and film societies, plus a student newspaper and a full range of other activities and events. Participation is welcomed in the numerous student organizations and activities. Each of the college governments encourages a wide variety of formal and informal events.

Among the facilities offered by the City of Peterborough to members of the University are a fine public library, an art gallery, a museum, a symphony orchestra, a varied theatrical program, and regular visits by musical and theatrical companies, and outstanding speakers.

* In 1990-91 the University established a University student orchestra and a University student concert band. Students interested in joining either the orchestra or the band should contact Tony van Hoeckel in the Finance Office.

Student Services

Director

T.A. Craig, B.A., B.P.H.E., M.A.

Student Services provide a host of programs and services that are designed to contribute to the educational experience of Trent University students.

Student Services is composed of the following departments: *Counselling Services, Careers and Placement, Student Health Services, Financial Aid, Special Needs Services, Off-Campus Housing.*

Student Services representatives serve on a variety of university-wide committees dealing with programs that serve all students at Trent University. These committees include: Health Services Committee, Committee on Colleges, Special Needs Committee, Transportation Committee, Introductory Seminar Committee, Dining Hall Services Committee, Student Aid Committee, Employment Equity Committee.

University Bookstore

The University operates a bookstore in the City of Peterborough which is easily reached from the University buses. The bookstore meets the wide range of needs and interests of the students, faculty, staff, and the Peterborough community.

Most books in print can be obtained on individual order. A collection of bibliographical tools is maintained which students and staff are encouraged to use.

The bookstore aims to be more than a mere outlet for textbooks and stationery supplies. To this end, academic supporting stock, a wide range of periodicals, computer software and supplies, and books of general interest are made available. The bookstore seeks to create an atmosphere that will encourage the enjoyment of books and the building of a private library. There is a spring "buy back" of textbooks.

Campus Store

The Campus Store is situated in the Bata Library opposite the visitor parking lot and provides a variety of convenience items year-round to members of the University and visitors to the campus.

University Student Health Service

The University Student Health Service is located in Otonabee College and provides medical, nursing and counselling services for full-time students and, by arrangement, for part-time students. Hours are 9:00 a.m. to noon and 1:30 to 4:30 p.m. Monday to Friday. Emergency treatment is available 24 hours a day by calling 748-1481.

The University requires all students to carry both medical and hospital insurance. Any student without insurance is held personally responsible for his/her health care costs. (Students from outside Canada should be aware that medical and hospital costs may be higher in Canada than in their own countries.)

Students from Ontario must carry Ontario Health Insurance (OHIP), the government-sponsored plan that provides benefits for both medical and hospital care and for the services of certain health practitioners. All students under OHIP need to be aware of their Health Card numbers.

Canadian students from outside Ontario (except for Quebec) must submit valid health insurance numbers to the Health Service. Students from Quebec and from countries outside Canada (except for those with OHIP coverage) who seek medical treatment will be charged a fee for service which is normally recoverable through their health and medical insurance.

Students from outside Canada including the Trent International Program *must* arrange their own coverage. The Peterborough OHIP office is located at Park Lane Plaza, near Lansdowne and High Streets in the south end of the city (opposite Lansdowne Place), telephone 743-2140.

Students with Special Needs

Coordinator Special Needs
Eunice Lund-Lucas
Telephone: (705) 748-1281
(voice or TDD)

Within its resources, Trent endeavours to ensure the accessibility of its campus and programs to all students, including those with special needs. The University has a Special Needs Office and a Coordinator for Special Needs, who provides support and advocacy on behalf of students with physical, sensory or learning disabilities. Some of the services provided by this office include transcription services for those who are visually impaired or learning disabled, assistance with obtain-

ing note-takers for hearing-impaired students, exam invigilation services for students with a variety of special needs, and liaison with faculty members and with support agencies in the community. In addition, the Special Needs Office has available some adaptive technological aids such as a computer equipped with voice synthesizer, optical scanning equipment, a portable FM system and four-track tape recorders.

Special needs students who are considering attending Trent are strongly encouraged to contact the Coordinator at the time of application since some action may be necessary in advance to accommodate the student's needs. Where appropriate, for example in the case of a learning disability, formal diagnosis and assessment of the condition will be required, normally a report prepared by a psychologist within two years. In all cases early identification of needs is extremely important. For example, if a visually impaired or learning disabled student requires taped texts, these must be ordered at least two months in advance of need, otherwise the student may face long delays in receiving these materials.

While most buildings at Trent have elevators or ramps to accommodate wheelchairs, mobility-impaired students may have trouble negotiating parts of the campus unless they can drive or be driven from building to building. Students with such impairment are strongly urged to visit the campus to determine its suitability to their needs or interests.

Students with special needs are also encouraged to become aware of assistance that is available through various private and public agencies. For example, hearing-impaired students from Ontario may be able to get financial assistance for note-takers or tutors from the Vocational Rehabilitation Service of the Ministry of Community and Social Services. Students from other jurisdictions who have special needs should investigate the availability of assistance through such agencies in their home province or country.

Counselling and Career Centre

Counselling Services

Coordinator

A. Meecham, M.A.

Students will find the Counselling Centre helpful in a variety of situations they may encounter at university. These may range from career decisions, in which interest tests could be helpful, to very personal concerns such as relationships with others, self-confidence, loneliness, or simply vague feelings that things aren't quite right. The goal of counselling is not to provide ready-made solutions, but rather to help individuals develop their own strengths and resources. Of course, all counselling is free, voluntary, and confidential. You may contact a counsellor either by dropping in to the Counselling and Career Centre or by calling 748-1384.

Careers and Placement

Coordinator

S. Welch

The Careers and Placement Service is primarily concerned with providing information on a wide variety of specific careers and employers, as well as colleges of education, graduate and professional schools, work and study abroad programs. Materials concerning resume writing and job search skills can be obtained through the centre. Full-time, part-time and summer employment opportunities are available through the centre, as is information about companies which plan on- and off-campus recruiting activities. Students in their graduating year should note that employers begin recruitment activities as early as October and that recruiting for permanent positions usually occurs before the end of December.

Off-Campus Housing Service

Students coming to Trent University who will not be living in residence and who require accommodation should call or visit the Off-Campus Housing Office.

The Off-Campus Housing Office is open from early May to the end of August. Normally, the office is open seven days a week, 10:00 a.m. to 5:00 p.m. Please consult the "Off-Campus Housing at Trent" brochure for further information on the services provided.

Students are advised, if they need this service, to visit the office at their earliest convenience.

Bus Service

A bus service operated by the City of Peterborough connects the Nassau Campus with the two town colleges and the bookstore. Please see also section on Fees.

Trent Co-operative Day Care Centre

The day care centre, located at 283 King Street, is a parent co-operative in which parents and staff share responsibility for running the centre. Trent Day Care is open to the community as well as the University but priority on the waiting list goes to Trent students and persons associated with the University. Early registration is urged.

Computer Services

The University maintains a VAX/VMS and UNIX time-sharing facilities, a cluster of MS-DOS and Macintosh microcomputers and a network of Unix workstations. These are available to undergraduate and graduate students, faculty and research users from the University community.

Academic Skills Centre

Coordinator Teaching Program

Heather Avery, M.A.

Coordinator Writing Program

Lucille Strath, M.A.

The Academic Skills Centre offers both individual and group assistance in writing, mathematics, and study skills. Any Trent student may use the services of the centre; the length of the contact varies from a single session to regular, long-term assistance.

During Introductory Seminar Week, the centre administers a non-compulsory diagnostic writing exercise. On the basis of the results of this exercise, some students are advised to seek help either by taking workshops or by working one-to-one with an instructor.

Many students begin work at the centre in the early weeks of their first year; however, students may come for help at any time throughout their years at Trent. While the centre's main office is located at Traill College, some students may find it more convenient to meet with an instructor at the Nassau Campus office. At the Traill College office, there is a lending library of books on composition and study skills.

Students who would like the response of an instructor at any point during the essay-writing process—on reading, research, drafting, or revision—or those who seek a review of grammar, seminar presentation, study skills, or high school mathematics, may phone the centre's secretary to enrol in a workshop or to arrange an appointment. Many students—even those who complete the diagnostic writing exercise with ease—find that taking the non-credit workshops early in the first year helps them get a good start in their course work.

Two groups of students who might be particularly interested in working with the centre are students for whom English is a second language and special needs students. These students should make a special effort to visit the centre early in the year or even before term begins.

The Centre's Writing Program writes, publishes, and distributes handbooks that assist students to achieve academic success. *Notes on the Preparation of Essays in the Arts and Sciences* is a guide to correct documentation and style; *Thinking It Through: A Practical Guide to Academic Essay Writing* covers the writing process and the requirements of an academic essay; *Making Your Mark: Learning to Do Well on Exams* helps students study throughout the academic year and prepare for exams; and *Clear, Correct, Creative: A Handbook for Writers of Academic Prose* covers conventional English grammar, style, and word usage. These books may be obtained by contacting the Academic Skills Centre by telephone (705) 748-1720, by Fax (705) 748-1721, or by mail.



Financial Information

Fees

All quoted fees are subject to revision.

Payment of Undergraduate Fees

As a requirement of course registration, **minimum** payment (or proof of OSAP or other support) of a first instalment of fees is required by August 27, 1992. A student can avoid having to stand in line-ups during registration by ensuring that the first instalment reaches the university by that date. The balance of fees is due on January 15, 1993.

Returning students are required to submit a \$50 deposit, confirming their intent to return, prior to July 15, 1992. This deposit will be applied against the first instalment of 1992-93 fees which is due August 27, 1992.

Cheques or other remittances should be made payable to Trent University and mailed to the **Accounts Office, Financial Services, Bata Library, Trent University, Peterborough, Ontario, K9J 7B8.**

The full amount of fees is charged to a student's account at the beginning of the academic year. Interest is levied on any unpaid accounts in accordance with the details separately noted under *Late Payment Charges*.

Students whose fees are paid, in full or in part, by funds from scholarships and awards (other than OSAP), or from other sources of assistance, should consult the Supervisor in the Accounts Office, Financial Services.

Students are urged to consult the Financial Aid Office in advance if the enforcement of fee payment regulations will impose undue financial hardship. Arrangements for fee deferment may be made in exceptional circumstances, but only on the recommendation of the Financial Aid Office.

Tuition Fees

Students who register for three and one-half (3½) courses or more are considered full-time students and are required to pay full tuition fees. In 1991-92 this fee was \$1,770.

Part-time students taking three (3) courses or fewer during a session pay one-fifth of the full-time tuition fee

for each full course registered. In 1991-92 this fee was \$354 per full course, \$177 per half course, and \$354 for two half courses.

A tax certificate covering paid tuition fees will be provided in February.

Special additional fees may be assessed directly by some departments for courses involving laboratory or field work, or for course material.

Ancillary Fees

All students affiliated with one of the five residential colleges must pay full ancillary fees for athletics, health services, and transportation (bus pass and some parking). In 1991-92 these fees were \$100, \$28 and \$111.75 respectively.

Part-time students taking courses offered on the Peterborough campus pay ancillary fees for athletics and health services. In 1991-92 the fee for athletics was \$28.25 per course and the fee for health services was \$2.50 per course. Part-time students taking courses off-campus but who are required to visit the Nassau Campus three or more times per week on a regular basis are also eligible to purchase a bus pass (\$111.75 in 1991-92). Students taking only off-campus courses are not required to pay ancillary fees (see also separate Continuing Studies Brochure for part-time studies).

Residence Fees

Full room and board is provided in single and double accommodation. In addition, limited townhouse accommodation is available without meals. In 1991-92 residence fees were \$4,724 for single, \$4,464 for double and \$2,678 for townhouse.

A \$200 deposit is required with the submission of residence application. Residence applications are submitted directly to the colleges.

Meals

The University's residence fees include the cost of a full meal plan (21 meals per week) for the academic year commencing immediately after introductory seminar week.

Non-resident students may purchase a meal plan for a term or for the entire year (\$2,046 for year in 1991-92); payment in advance is required and arrangements should be made through the College Office. Special meal plans, which offer various levels of discounts and GST exemption, may be purchased from the Accounts Office in Financial Services, Bata Library.

College Fee

All students registered in three and one-half (3½) courses or more are automatically affiliated with one of the five residential colleges, and are required to pay a college fee (\$163 in 1991-92). Students registered in less than three and one-half (3½) courses are normally affiliated with Julian Blackburn College and are required to pay a fee on a per full course basis (in 1991-92 the fee was \$25 per full course registered). If a part-time student, for some exceptional reason, wishes to be affiliated with one of the five residential colleges he/she is required to pay the full residential college fee.

Student Government and Organization Fees

All resident and non-resident students affiliated with one of the five residential colleges must pay full student government and organization fees. In 1991-92 these fees included Student Government \$30.25, Arthur \$9, Trent Film Society \$2.30, Trent Radio Service \$15, Trent Music Society \$1.50, Theatre Trent \$3, Trent International Students Association \$1.50, Montag Magazine \$0.99, Peterborough Rape Crisis Centre \$3, Women's Centre \$0.99, Trent Annual \$18, WUSC \$2, The Commoner \$2, OPIRG \$7, OXFAM \$3, TSU Health Plan \$49.32, and Peterborough Learner's Centre \$4 (The Commoner, OPIRG, OXFAM, TSU (Health Plan) and Peterborough Learner's Centre will provide refunds on request).

Students affiliated with Julian Blackburn College must pay a Student Association fee. In 1991-92 this fee was \$10.

Textbooks

The cost of books and materials varies according to individual course requirements, with those for science courses tending to be more expensive than those for arts courses. Students should be prepared to spend approximately \$125 per course. Most required books are available from the Trent University Bookstore.

Waiver of Undergraduate Fees

The University's Board of Governors have approved a policy to waive all but residence fees for students over 60 years of age who register in any credit course offered by the University.

Refund of Fees

Refunds are provided for all fees except those for student government and student organizations.

Students who wish to withdraw from Trent University must notify their College Head in writing and submit their student identification card to the College Office. A refund of fees will be calculated by the Accounts Office from the date the student identification card has been received by the College Office. The effective date of the refund of residence fees is subject to the regulations in the Residence Agreement signed by each student in residence.

Students who wish to change from full-time to part-time (*i.e.* drop the course load to three courses or fewer) will only be provided a refund in tuition fees. The refund will be calculated from the date a completed Change of Course Registration Form is received by the Office of the Registrar. Students must contact their academic adviser for a copy of the form and approval signature.

Student Charging Privileges

A student with a valid Trent University student identification card is permitted to charge purchases at the bookstore to his/her personal student account during the period September 1 to October 15 as long as the student manages his/her account in a responsible manner (this policy is presently under review and may be subject to change). There is a 50¢ charge for each transaction charged to a personal student account. Bookstore charges are due right away and students are expected to pay their accounts as soon as they are invoiced by the Accounts Office. Additional limited charging privileges for text book purchases only may be extended during the first two weeks of the second term to those students who have paid their first term accounts with the University for fees, bookstore and other charges in full by December 31. (This policy is also under review.) Bookstore charges are subject to interest from the date they are charged to the account. The Bookstore also accepts MasterCard and Visa.

The University reserves the right to withdraw charging privileges.

Late Payment Charges

Students who decide to charge fees or other types of charges (*e.g.* Bookstore) to their student account instead of paying cash or charge their bookstore purchases

to their MasterCard or Visa should bear in mind that during the Fall Term except for the second installment of residence and college fees, all unpaid fees and other charges are due and subject to interest effective the date they are charged by the student to the personal student account. Interest will be charged on unpaid accounts at the rate of 1% per month (12% per annum) on unpaid fees and 1.75% (21% per annum) per month on other types of charges. All interest is calculated and payable monthly. The Winter Term installment of residence and college fees are exempted from interest during the Fall Term but will be subject to interest if not paid by January 29, 1993. Interest rates are subject to change.

Unpaid Student Accounts

Failure to pay unpaid balances for outstanding fees, bookstore accounts, library fines, short-term loans and other charges by the end of the term may result in deregistration from the University and as a result render a student ineligible to write examinations. Furthermore, no transcript will be released if a student has an unpaid account at the end of an academic session. Students with unpaid accounts are not eligible to pre-register or register at Trent University in a succeeding year.

Deregistration for Financial Reasons

A student whose cheque in payment of fees and other charges has been returned unpaid by the bank will be automatically deregistered if payment is not received within fifteen days after being notified of the default by the Accounts Office. There is an automatic \$15 charge for returned cheques.

Outstanding first and second term fees, and bookstore and other charges incurred during the first term are expected to be paid in full by January 29. Students who have not paid their University account in full by January 29 and, who have not arranged for a valid deferment with the Financial Aid Office will automatically be levied \$50 and receive a notice that deregistration procedures have been started against them and that they will be deregistered from all courses effective March 5, 1993, with academic penalty, unless the student has officially withdrawn from the University by the final date for withdrawal from half courses. Deregistration renders the student financially ineligible to preregister or register for the following September.

Schedule of Undergraduate Fees

To assist students in their financial planning, a fee schedule, based on 1991-92 rates, is included. The actual fees for the 1992-93 academic year will not be available until March 1992 after they have been approved by the University's Board of Governors.

Schedule of Fees

(based on 1991-92 fees and subject to revision for 1992-93)

Full-Time Undergraduate Students

	Tuition	Ancillary	Student Government & Organizations	College Fee	Residence Fee	Total	Minimum Payment to register (Aug. 23/91)*	Second Instalment (Jan. 10/92)
Students in residence								
- single room	\$1,770.00	\$251.30	\$152.85	\$163.00	\$4,724.00	\$7,061.15	\$3,800.00	\$3,261.15 + Int.
- double room	\$1,770.00	\$251.30	\$152.85	\$163.00	\$4,464.00	\$6,801.15	\$3,650.00	\$3,151.15 + Int.
- triple room	\$1,770.00	\$251.30	\$152.85	\$163.00	\$4,201.00	\$6,538.15	\$3,525.00	\$3,013.15 + Int.
- townhouse	\$1,770.00	\$251.30	\$152.85	\$163.00	\$2,678.00	\$5,015.15	\$2,800.00	\$2,215.15 + Int.
Non-residence students	\$1,770.00	\$251.30	\$152.85	\$163.00	-	\$2,337.15	\$1,400.00	\$ 937.15 + Int.

Note: *If you wish to avoid interest charges on fees during the first term, the second instalment of tuition fees (\$830) should be included with the first instalment.

Visa Students - In addition to the applicable incidental fees Visa students pay a tuition fee of \$6,673.

Student Aid

Coordinator.
Y. Del Mastro

Ontario Student Assistance Program (OSAP)

The Province of Ontario and the Government of Canada provide a program of grants and loans to university students through the Ontario Student Assistance Program. This program is not based on academic standing but is related to the established need of students in their individual year of university. Awards are made by the Ministry of Colleges and Universities, after assessment of need, and are divided between provincial grants and loans and Canada Student Loan according to a formula established by the government. Students may obtain details of this program through school officials or from the Financial Aid Office, Trent University.

Financial Assistance for Students from Outside Ontario

Students from outside Ontario who need financial assistance in university are strongly urged to consult with officials in their schools about available provincial loan and bursary assistance. Students from foreign countries are urged to consult with the appropriate financial aid authorities. The University has limited bursary funds to assist needy students not eligible for government assistance.

Emergency Short-term Loan Funds

Loan funds are available on a short-term basis to help needy students meet emergency situations. Among these funds is the Henry and Mary Nokes Fund, established by the Cobourg and District Labour Council to honour Mr. and Mrs. Nokes, and augmented by private donors. Funds have also been made available through a joint undertaking of the Trent University Alumni Association, the Trent Student Union (Development Projects Fund) and the College Cabinets/Councils. A fund has also been established by the Major Bennett Chapter, IODE, Peterborough, Ontario.

Bursaries

Bursary funds are intended to assist primarily in emergency situations. Bursaries are usually awarded in second term based on financial need and satisfactory academic achievement. Applications are available from the Financial Aid Office or the College Heads.

Eileen Allemang Bursary Fund

This bursary is to be awarded to a student of Peter Robinson College based on academic achievement, financial need and contribution to college activities.

The Atkinson Charitable Foundation Bursaries

These bursaries are awarded to deserving Ontario undergraduates based on academic achievement and financial need.

Barkley's of Avonmore Bursary

Established by Fred Barkley of Avonmore, a bursary of the value of \$500 will be awarded to a deserving student in any undergraduate year, who is a resident of a province other than Ontario.

Barkley's of Avonmore Visa Bursary

This bursary will be awarded annually to a deserving visa student from a developing country.

Beta Sigma Phi Bursary Fund

Established through the local chapter of the Beta Sigma Phi with funds from the international division to be awarded to deserving students in any undergraduate year.

The Birks Family Foundation Bursary Fund

This bursary will be awarded to a deserving student in any undergraduate year based on academic achievement and financial need.

The Bourinot Bursary Fund

This bursary will be awarded annually to a full-time student from Peterborough County. Preference will be given to an employee of the Canadian Tire Store in Peterborough or a member of their immediate family.

Philip and Annie C. Black Award

These awards are the gift of Isadore and the late Morris Black of Peterborough in memory of their father, Philip Black, the first Rabbi in Peterborough, and mother Annie.

Julian Blackburn College Student Association Bursary Fund

A number of bursaries are available to part-time students undertaking study at Trent on a continuing basis.

Jacob F. Burnham Memorial Bursary

The gift of Daisy McCarrell, a former employee of Trent University, two bursaries of \$500 each will be awarded annually based on financial need and satisfactory academic achievement. Preference will be given to students majoring in Economics, Administration and Policy Studies, and related fields.

Dr. Leslie Calvert Award

Named after one of Trent's first students of German, this award is for deserving students who require financial help to participate in the Year Abroad Program in Freiburg.

The Ron Campbell Bursary

Established by Ron Campbell Enterprises, which operates McDonald's Restaurants in Peterborough and Lindsay, for students from Victoria and Peterborough Counties enrolled in Trent's Environmental and Resource Studies Program. This bursary will be awarded annually based on satisfactory academic achievement and financial need.

Champlain College Cabinet Bursary

This bursary will be awarded annually to a Champlain College student with a minimum C- average and financial need. The recipient will be chosen by a committee of the Master, Assistant to the Master and the College Cabinet President.

Harry Cherney Memorial Bursary

Established in memory of the late Harry Cherney by wife, Erica, his sons, Brian and Lawrence, family and friends, these bursaries will be awarded annually to students studying Administration and Policy Studies, Economics or Computer Studies, based on financial need and satisfactory academic achievement.

Morris Christie Memorial Bursary

Established in memory of Morris Christie by Karen and Mark Christie and family, to be awarded annually to deserving students based on satisfactory academic achievement and financial need with preference given to a student from the Third World.

The City of Peterborough Employees' Awards

The City of Peterborough Employees' Awards have been established by the employees of the City of Peterborough. These awards are available to any child or spouse of a City of Peterborough employee who requires financial assistance with tuition, or related costs, while attending Trent University. Applications will be available through the Personnel Office, City of Peterborough or Trent's Financial Aid Office.

The Commoner Bursary Fund

This bursary established by The Commoner Limited will be awarded annually to a full-time student based on financial need and a minimum C average.

County of Peterborough Bursary Fund

Established by the County of Peterborough to be awarded to deserving students in any undergraduate year who have established a minimum two years residency in the County of Peterborough (which includes the fourteen townships and four villages), has satisfactory academic standing and a demonstrated financial need.

The John S. Cunningham Memorial Bursary

Established in memory of the late John Scott Cunningham by associates of Bell & Howell, friends, and fellow members of the Stoney Lake Cottagers Association, to be awarded to deserving students in any undergraduate year.

The Dainard Foundation Bursary

Established by Mr. Garnet Dainard, Peterborough, to be awarded to deserving students in any undergraduate year.

The Ewing Memorial Honours Awards

A number of awards are available annually to students of high academic standing entering the fourth year. Interested students are encouraged to apply for these awards through the University Financial Aid Office. These awards are the gift of the late C.W. Ewing, a native of Warkworth.

Reginald R. Faryon Bursary

The award is the gift of the Peterborough Branch of B'nai B'rith in memory of Reginald R. Faryon.

The Michael Frisch Memorial Bursary
Established in memory of the late Michael Frisch, to be awarded to an undergraduate student who is actively involved in extra-curricular activities within or beyond the university.

German Studies Bursary

These bursaries will be awarded annually to students majoring in German Studies in second year or higher, who have achieved a minimum B average in the preceding year and have demonstrated financial need.

Jon K. Grant Bursary Fund

This fund has been established in honour of Jon K. Grant in recognition of his distinguished contribution to Trent University as Chairman of The Fund for Excellence campaign, April 1, 1982 to March 30, 1987. The bursaries will be awarded to deserving students based on academic achievement and financial need. Distinction in cultural, athletic or other community activities may also be considered.

**The Hamilton Foundation—
Chaney-Ensign Bursary Fund**

Bursaries are available to assist financially needy undergraduate and postgraduate students. Applicants must be graduates of Hamilton secondary schools, public or separate.

Naomi Harder Memorial Bursary Fund

Established by family and friends in memory of Naomi S. Harder, a second year Comparative Development major at Trent University at the time of her death on December 19, 1988. In the spirit of Naomi's concern for others and her deep commitment to international understanding, this bursary will be awarded annually to a student based on his/her dedication to international and national development, peace and justice issues, financial need and satisfactory academic standing.

The Brian Heeney Memorial Award

Established in memory of the late Brian Heeney, Vice-President (Academic) and Provost of Trent University at the time of his death on September 17, 1983. This award valued at \$1,000 will be given annually to a graduate from Lakefield College School or Lakefield District Secondary School who enrolls at Trent in the undergraduate program. The award will be based on academic standing, financial need and distinction in cultural,

athletic or other community activities. Applications may be made through the Financial Aid Office.

Victor E. Henderson Bursary Fund

These bursaries are named in honour of Victor E. Henderson, local campaign chairman of the Trent University Second Decade Fund. The Henderson Bursaries will be awarded to deserving students from Peterborough County based on academic achievement, financial need, and distinction in cultural, athletic or other community activities.

Agneta Holt Award

The award is the gift of the University Women's Club of Peterborough as a memorial to the late Mrs. Agneta Holt.

**The Interprovincial Pipe Line
Company Bursary Fund**

Established by the Interprovincial Pipe Line Company, these bursaries may be awarded to deserving undergraduates in second or higher years, majoring in sciences or business related programs.

The David Irwin Memorial Bursary

This bursary, established in memory of David Sutherland Irwin, a member of Trent's first graduating class and a former Professor of Biochemistry, is awarded on the basis of academic standing and financial need to a student entering the third or fourth year of an Honours Program in Chemistry or Biochemistry.

Jean Ann Johnston-Gauld Bursary

These bursaries, the gift of the family, in memory of Jean Ann Johnston-Gauld, a part-time student at Trent University from 1982-85, will be awarded annually to part-time students based on satisfactory academic achievement and financial need.

Rhoda Johnston Memorial Bursary

These bursaries, the gift of Robert Johnston in memory of his wife Rhoda, a long term past employee of Trent University, will be awarded annually to deserving undergraduate students in a Canadian Studies program. Bursaries of up to \$1,000 will be awarded on the basis of academic achievement and financial need.

**Principal H.R.H. Kenner and
PCVS Faculty Award**

This award was established by the PCVS Form 5 graduating class of 1937 in honour of Principal Kenner and their teachers. Support has also come from the class of 1939. Bursaries will be awarded to

graduates of secondary schools in Peterborough County based on academic achievement and financial need.

The Keppler Bursaries of German Studies

Established by Hans and Christine Keppler, to be awarded annually to upper-year students studying German, based on financial need and satisfactory academic achievement.

Kiwanis Club of Peterborough Bursary

A bursary of \$500 will be awarded annually to a student in second year or higher, majoring in Administration and Policy Studies, Computer Studies or Economics. Applicants must be residents of the City or County of Peterborough.

Lady Eaton College Students' Bursary Fund

This bursary is to be awarded to a student of Lady Eaton College who can demonstrate financial need.

The Leonard Foundation Bursaries

Bursaries averaging \$1,250 are available to financially needy students. Preference will be given to sons and daughters of clergy, teachers, military personnel, graduates of Royal Military College, members of the Engineering Institute of Canada and the Mining and Metallurgical Institute of Canada. Application deadline date is March 15th.

Malcolm Montgomery Bursary Fund

These bursaries, a bequest from the estate of the late Malcolm Montgomery, will be awarded to needy students in the fourth year of the Native Studies Honours program.

Marriott Corporation Bursary Fund

Established by Marriott Corporation to be awarded to deserving students in any undergraduate year based on satisfactory academic standing and financial need.

The Masonic Foundation of Ontario

The Foundation aims to provide assistance for students near graduation who cannot complete their year owing to a sudden personal emergency.

John C. McDonald Memorial Fund

Assistance from this fund, established in memory of Professor John C. McDonald, former Chairman of the Department of Sociology, is awarded to deserving students who need financial help to continue their studies at Trent University.

William Hamilton Munro Bursary Fund

These bursaries, the gift of the late Mrs. Angele Munro in memory of her husband, William Hamilton Munro, are to be awarded to deserving students in any undergraduate year.

Native Studies Bursary Funds

The Department of Native Studies provides bursaries for students of Métis and non-status Indian ancestry who do not qualify for educational assistance from the Department of Indian and Northern Affairs. Native students who can establish financial need and have been admitted to Trent University are encouraged to apply.

Ontario Credit Union Charitable Foundation Bursary

A bursary of \$250 will be awarded annually to a Trent student who is a Canadian citizen or permanent resident in second, third, or fourth year of a Business Management Program, based on satisfactory academic achievement and financial need.

Ontario Housing Corporation Bursary

OHC will award bursaries to talented students living in OHC accommodations to undertake post-secondary education.

Ontario Public School Teachers' Federation Bursary

Established by the Ontario Public School Men Teachers' Federation to provide assistance for deserving students of Métis and non-status Indian ancestry.

Otonabee College Council Tenth Year Bursary

This bursary of a value of no less than \$150 is to be awarded annually to an Otonabee College student on the basis of academic performance (B average or better), athletic ability and participation within the community. The recipient will be chosen by a committee of the Master, the Senior Tutor, the President and Vice-President of College Council.

Peter Robinson Bursary Fund

These bursaries, a bequest from the estate of the late Lady Maude E. Robinson are to be awarded annually in the name of Peter Robinson, the founder of Peterborough and the brother of Sir John Beverley Robinson, 1st Baronet, to deserving students of Peter Robinson College, demonstrating financial need.

Peterborough Professional Fire Fighters' Bursary

Established from gifts to Trent's Second Decade Fund by the Peterborough Professional Fire Fighters Local Number 519, these bursaries will be awarded annually to students at Trent University.

The Scott Rennie Memorial Bursary

This bursary, the gift of alumni, family and friends, is in memory of Scott Rennie, an alumnus of Otonabee College. The bursary will be awarded to a deserving Otonabee College student to be chosen by the Master of the College in conjunction with the Director of Alumni Affairs.

Royal Canadian Legion Bursary

Bursary assistance of up to \$500 is available for: a) War veterans and their sons and daughters; b) Ordinary members of the Legion and their sons and daughters; c) Associate members of the Legion and their sons and daughters; d) Ladies Auxiliary members and their sons and daughters. Awards are determined by the District Bursary Committee.

Setsu Suzuki Bursary

Donated by David Suzuki in memory of his mother, Setsu Suzuki, to be awarded to a deserving student from the Third World on the basis of academic standing and financial need.

Sir Sandford Fleming College Award

Established by Sir Sandford Fleming College in recognition of Trent's 25th anniversary and to acknowledge the excellent relationship between our institutions, this award for a value of full tuition will be made annually to a graduate of SSFC enrolled at Trent University in a full-time or part-time program based on academic achievement and financial need.

Sisters of St. Joseph of Peterborough Bursaries

These bursaries, the gift of the Sisters of St. Joseph of Peterborough, are to be awarded on the basis of need and academic achievement to students completing third year of the Teacher Education Program for use in their fourth year.

The J. Herbert Smith Bursary

Established by J. Herbert Smith to be awarded annually to a deserving student in their undergraduate year. As Chief Executive Officer, Dr. Smith was instrumental in arranging for the original gift of land to Trent University by GE Canada.

William and Margaret Taylor Bursary

This bursary, the gift of William E. Taylor, Jr., is to be awarded annually in memory of William and Margaret Taylor to a deserving undergraduate student demonstrating financial need. Preference will be given to orphans, native students and Canadian Studies majors.

The Roland Tedford Bursary

Established by Garth Duff in memory of Roland Tedford, former Warden of Peterborough County and Reeve of Douro Township. Two bursaries of \$500 will be awarded annually based on financial need and satisfactory academic progress with preference given to students from Douro and Dummer Townships.

Catharine Parr Traill College Students' Bursary Fund

This bursary is to be awarded to a student of Catharine Parr Traill College who can demonstrate financial need.

William Thompson Graduate Bursary

This bursary, a bequest from the estate of the late William Thompson (1891-1978) of Westwood, Ontario, will be awarded annually to a student registered in a graduate program, based on financial need and satisfactory academic progress.

Trent University Alumni Bursary

Established by the Trent University Alumni Association, to be awarded to returning students on the basis of need, significant contribution to university life, and an acceptable academic average.

TUFA Bursary

These bursaries are funded by the faculty and professional librarian members of the Trent University Faculty Association. They will be awarded annually to students in second year or higher, who achieved a minimum B average in the preceding year and have demonstrated financial need.

The Trent University S & A Bursaries

The employees of Trent University have donated bursaries up to \$500 to be awarded to students who demonstrate financial need, all-round achievement and character, and are permanent residents of the Province of Ontario.

Trent Student Union Bursary

Established by the Trent Student Union, this bursary will be awarded annually on the basis of academic achievement and financial need.

Visa Student Bursary Fund

Established by the Board of Governors of Trent University to be awarded to visa students in any undergraduate year with satisfactory academic standing and who can demonstrate financial need.

The Walling Corporation Bursary

Established by the Walling Corporation of Lindsay, these bursaries will be awarded annually to students majoring in business or environmental studies, based on financial need as well as fitness/health and community involvement.

Scholarships and Prizes

Scholarships

The University has a full and diverse scholarship program designed to foster and reward high academic achievement among its students. Funding for the program comes not only from the University itself, but also from the many private donors whose generosity has created a wide range of endowed scholarships and prizes.

Scholarships are of two sorts: entrance and in-course. All students entering first year (or transferring into a higher year) at the University are automatically considered for entrance scholarships and no separate scholarship application is required, although it is normally not possible to consider students applying to the University after August 1. Likewise, no separate application is required for in-course scholarships, since all continuing Trent students are automatically considered for such scholarships, normally upon completion of each sequence of five full courses or their equivalent in half courses.

All University scholarships of both sorts may be held in conjunction with scholarships awarded by outside agencies when their conditions permit. However, a student may not normally receive funds from more than one major University scholarship in an academic year. Holders of renewable scholarships must maintain a minimum average of 80% in a sequence of five full courses in order for their scholarship to be renewed.

The University endeavours to provide all scholarship holders, including those from the Peterborough area, with places in residence if they wish them.

The Bata Scholarship

This scholarship is the gift of Thomas J. Bata, one of the original honorary sponsors of the University and a member of the Board of Governors.

Biology Department Scholarship

This scholarship is awarded annually to a student, entering the third or fourth year of the Biology program, with high academic achievement and promise.

The B.P. Canada Science Scholarship

This scholarship, the gift of B.P. Canada, is awarded annually to an entering or in-course student who has demonstrated academic excellence in the physical sciences.

Julian Blackburn College**Director's Scholarship**

A tuition-based scholarship to be awarded to a student who is enrolled in the part-time credit program, who has completed at least five full courses or the equivalent as a part-time student at Trent and who has demonstrated high overall academic achievement.

Maurice Boote Scholarship

This scholarship, established in honour of Maurice J. Boote, one of the founding faculty members of Trent University and the first Chair of the Department of Economics, is awarded annually to an outstanding student entering the fourth quarter of the Economics program.

Winifred Elizabeth Burton Scholarship

This scholarship of the value of \$1,000 is awarded annually to an outstanding student entering first or a higher year.

The Canadian Tire Corporation Science Scholarship

This scholarship, the gift of the Canadian Tire Corporation Limited, of the value of \$1,000, is awarded annually for excellence in science to an entering or in-course student proceeding to a Bachelor of Science degree.

The Anthony Cekota Scholarships

These scholarships were established to honour Anthony Cekota. A self-made man, Mr. Cekota edited and published a chain of magazines and newspapers in his native Czechoslovakia. He also authored several books and papers dealing with problems of industrial management and sociology and continued as a consultant and advisor on industrial relations following his retirement (after 45 years with the Bata Shoe organization). These scholarships are awarded on an annual basis to students demonstrating exceptional academic performance.

The Champlain Scholarships

The Champlain Scholarship is available for an entering first year student of exceptionally high academic achievement and promise. This scholarship covers full tuition fees and, for students living in residence, full residence fees. This scholarship is renewable each year so long as the holder's work is of scholarship standing.

The Sylvia Cherney Scholarship

The Sylvia Cherney Scholarship, the gift of the late Harry Cherney and of Brian Cherney and Lawrence Cherney, is named in memory of Sylvia Cherney and is available to in-course students majoring in English Literature with the aim of encouraging promise and interest in the study of drama. The Cherney Scholarship is an annual award to meet tuition fees.

The Howard Darling Scholarship

This scholarship, established in honour of Howard Darling, Supervisor, Grounds and Custodial Services, is awarded annually to an upper-year student who has demonstrated excellence in Environmental Sciences/Studies.

The Roscoe F. Downey Scholarship

The scholarship, the gift of the late Roscoe F. Downey of Peterborough, is available to entering students, one from Peterborough County and one from Victoria County.

The Roy L. Edwards Scholarship

This scholarship, established in honour of Roy L. Edwards, one of the founding faculty members of Trent University and the first Chair of the Department of Biology is awarded annually to an outstanding biology student entering the fourth quarter of the biology program, with the aim of encouraging promise and interest in the study of freshwater ecology.

The Ewing Memorial Scholarships and Honours Awards

Several awards are available each year for students entering the University and for Honours students undertaking a fourth year of study. These scholarships are the gift of the late C.W. Ewing, a native of Warkworth, Ontario.

Faculty Scholarship

A scholarship, the gift of a member of the founding academic staff of Trent University, is available to an entering student living in residence.

The Reginald R. Faryon Scholarships

These scholarships, the gift of Quaker Oats Company of Canada, are named in memory of the late Reginald R. Faryon, an active member of the founding board of Trent University and a former president of the company.

The Eugene Forsey Scholarships

These scholarships are named in honour of Senator Eugene Forsey, a former Chancellor of the University and a member of the Board of Governors for ten years. The scholarships are awarded annually to outstanding students proceeding toward a degree in Administrative and Policy Studies.

Robert M. Fowler Scholarship

This scholarship is a gift of the Quaker Oats Company of Canada in memory of the late Robert M. Fowler, a former member of the Board of Directors of Quaker Oats and of the Board of Governors of Trent University. The scholarship is awarded annually to students in the Administrative and Policy Studies Program and to other students undertaking policy studies in other appropriate university departments.

The Rufus Gibbs Scholarships

These scholarships, the gift of the late Rufus C. Gibbs, are available for annual award to students in all years, on the basis of academic standing, all-round achievement and character.

The Joseph Ernest Goodhead Scholarship

The scholarship, the gift of an anonymous donor, of the value of \$100, is awarded for excellence in the study of Biology.

The Hector and Geraldine Elizabeth Gray Scholarship

This scholarship, the gift of the late Hector and Geraldine Elizabeth Gray, is awarded annually to students entering the third year of an Arts program.

The Brian Heeney Scholarship

Established as a memorial by his family, friends and colleagues, this renewable scholarship covers half the cost of tuition, residence and miscellaneous fees and will be awarded annually to an outstanding student entering first year. A room is reserved in Champlain College for the scholar.

The Heritage Scholarship

This scholarship honours the Curtis and Milburn families, both of whom were very early settlers of the Peterborough area and have contributed continuously to its development. The scholarship is awarded annually to an outstanding student entering the final year of honours in English.

The Howson Scholarship

The George Henry and Jane Laing Howson Scholarship is the gift of the late Miss A. Howson and the late Mrs. M.H. Simpson, and is named in memory of their late parents. The scholarship is available to a student with high academic standing who is proceeding to the degree of Bachelor of Arts.

The Imasco Scholarship

These scholarships, the gift of Imasco Ltd., are available to students of high academic achievement entering first or higher years in the University.

The Richard B. Johnston Scholarship

A scholarship, donated by the family of Professor Richard B. Johnston of the Department of Anthropology in his memory is awarded to a deserving student in North American archaeology.

The Francis Dean Kerr Scholarship

This scholarship, the gift of the late Mrs. F.D. Kerr of Peterborough, is named in honour of her late husband who was one of the original honorary sponsors of the University.

Margaret Laurence Scholarship

This scholarship, named in honour of the late Margaret Laurence, a former Chancellor of the University, is awarded annually for outstanding achievement in the fields of Canadian Literature or Canadian Studies.

The Lodge Physics Scholarship

This scholarship, named in honour of the founding Chair of the Department of Physics, is awarded annually to the student with the highest grade in the Introductory Physics course who is continuing in a program which leads to a

single- or joint-major in Physics, or who is continuing in the Chemical Physics program and enrolled in at least one Physics course at an advanced level.

The Dr. Ross Matthews Scholarship

This scholarship, established in honour of the late Dr. Ross Matthews, is awarded annually to an entering student for demonstrated academic excellence.

The Ralph McEwen Scholarship

These scholarships, established in honour of the late Ralph McEwen are awarded annually to students who are undertaking courses in Canadian Literature or Canadian Social History.

The William Allan Newell Scholarship

This scholarship, the gift of the late Judson Newell of Prescott, named in honour of his father, the chairman and founder of the Newell Manufacturing Co., Ltd., is available to an entering student proceeding to the degree of Bachelor of Science.

The Robert J.D. Page Scholarship in Environmental and Resource Studies

This scholarship, established by Dr. Robert J.D. Page who was associated with the ERS Program from its beginning, is to be awarded annually to a student entering fourth year who best combines academic achievement and public environmental service.

The Dennis Patterson Northern Scholarship

To recognize the visit of the Government Leader of the Northwest Territories, this endowed scholarship was established in 1990. The award is made annually to a student from the Northwest Territories on the basis of academic achievement.

The J.J. Robinette Scholarships

These scholarships were established by friends and colleagues to honour the 60th anniversary of Dr. J.J. Robinette's call to the Bar. He was a member of the first Board of Governors of Trent University and Chancellor from 1984 to 1987.

The Peter Robinson Scholarship

This scholarship, of the value of \$1,000, is awarded to a graduate of a Peterborough City or County Secondary School on the basis of high scholastic merit.

The Peterborough Examiner Scholarship

This scholarship, the gift of the Peterborough Examiner Co. Ltd., is available to an outstanding student entering first or a higher year and living in residence.

The Helen and Barney Sandwell Scholarship

This scholarship, the gift of the distinguished Canadian publisher, B.D. Sandwell, a long-time member of the Trent Board, and its Chair from 1971 to 1975, and of his wife, Helen, is awarded annually to an outstanding student majoring in English Literature entering the third year of a degree program in English.

The Katherine E. Scott Scholarship

This scholarship, the gift of the late Dr. C.M. Scott of Peterborough, is named in honour of his late wife.

The William Bligh Shaw Scholarship

This scholarship, the gift of Muriel Beatrice Shaw, is awarded annually to an outstanding student entering the first year of the Administrative and Policy Studies Program.

The H. Clare Sootheran Scholarship

The gift of the late H. Clare Sootheran, a citizen of Peterborough, this scholarship is awarded for excellence in the Faculty of Arts.

The Ian Stonehewer Memorial Scholarship

Named in honour of Ian Stonehewer, B.A. Honours 1975, this scholarship, the gift of Mr. and Mrs. John Stonehewer, is awarded annually for excellence to a student entering fourth year of an Honours History Program. The value of the scholarship is determined annually.

The Carolyn Sarah Thomson Scholarship

This scholarship was established by the late Carolyn Sarah Thomson, a Trent alumna who was intensely loyal to Trent and to the people — faculty, staff and students, who make the University so unique. This scholarship of \$1,000, is awarded annually for excellence to a student entering the third year of the Canadian Studies Program.

The James G. Wharry Scholarship

This scholarship, a gift of the Quaker Oats Company of Canada, equal in value to full tuition for the fourth year, is awarded annually for excellence to a student or students entering the fourth year of the Canadian Studies Program.

The Trent University S & A Scholarship

The employees of Trent University have donated two \$500 scholarships to be awarded annually to students from the Peterborough and Victoria County and

Separate Boards of Education for academic standing and all-round achievement and character.

The Trent University Scholarship

Several Trent University Scholarships are available to students of high academic achievement entering first or higher years in the University.

Twenty-fifth Anniversary Scholarships

These scholarships were established to commemorate Trent's anniversary. These renewable scholarships cover full tuition and are awarded to entering students.

The David and Joyce Woods Graduate Scholarship

This scholarship, to honour David M. Woods, Chair of the Board of Governors of Trent University from 1975 to 1980, and his wife, Joyce Woods, has been established by their children and friends and is to be awarded to a student in the Watershed Ecosystems Graduate Program. This is the first graduate scholarship to be established at the University.

Externally awarded scholarships

A number of scholarships (and bursaries) are awarded by bodies outside the University. Several corporations, for instance, have special programs for dependents of their employees. Students should consult their guidance counsellors concerning these awards.

Trent University is grateful for the generous donations which will allow the following scholarships to be awarded in the near future.

Binney and Smith Scholarship

Established by Binney & Smith (Canada) Ltd. of Lindsay, manufacturers of Crayola Products, to be awarded to students in the Trent/Queen's Teacher Education Program.

City of Trenton Scholarship

Established by The Corporation of the City of Trenton, to be awarded to an entering student from the city of Trenton.

Prizes

Governor-General's Medals

The gold medal is awarded to the graduate student with the highest standing on graduation and the silver medal is awarded to the fourth-year student with the highest standing on graduation.

President Symons Medals

The Symons Medals were established in 1972 in honour of T.H.B. Symons, the founding president of Trent University. These medals are awarded to students in the Honours program who achieve high overall standing on graduation.

Professor Gilbert Bagnani Medals

The Professor Gilbert Bagnani Medals were established in 1986 to honour the late Professor Gilbert Bagnani, one of the founding faculty members of Trent University. The medals are awarded to graduating students in the General program who achieve high overall standing.

Administrative and Policy Studies Prize in Marketing

This prize, in memory of George Wills, marketing teacher at Lakefield Secondary School, is awarded to the leading Administrative and Policy Studies Program student in *Administration 310a/315b*.

Ambassador of Switzerland Prizes in French and German

The prizes, the gift of the Ambassador of Switzerland, are awarded to the undergraduates who have obtained the highest standings in the French and German languages in their graduating year.

Anthropology Society Prize

This prize is awarded to the most outstanding *Anthropology 100* student on the basis of tutorial work and overall marks.

Sir Donald Banks Prize

This prize, the gift of Professor D.L. Smith, in memory of her father, is awarded annually to a promising student in Spanish planning to participate in the Year Abroad in Granada Program.

Bruce Barrett Memorial Prizes

In memory of Bruce Barrett, a former Trent Philosophy student, several prizes are awarded annually to outstanding students in first-year courses in Philosophy. Approximate value \$100.

Department of Biology Prizes

Awarded to students who show excellence in the study of Biology in first or higher years.

Gordon Campbell Memorial Award

In memory of Gordon Campbell, a former Trent Geography student, one award of \$500 is given annually to a third- or fourth-year undergraduate student in a single- or joint-major program in Geography with a demonstrated and continuing interest in the Canadian North.

Canadian Association of Geographers' Undergraduate Award

This award, presented by the Canadian Association of Geographers, is offered each year to the Honours Geography student at Trent who is judged to have the best academic record in fourth year.

Donald Chase Memorial Prize

This prize, in memory of Donald Chase, a Trent student in 1989, is awarded annually for the best essay in Canadian history written by a first-year undergraduate at Trent.

Comparative Development Prizes

The prizes are awarded annually to students with the highest overall standing in the 200, 300 and 400 level central core courses in Comparative Development Studies.

Consul General's Prizes in French

These prizes, the gift of the Consul General of France, are awarded to the leading undergraduates in French Studies within the University.

CRC Press Freshman Chemistry Achievement Award

This prize is a gift of a copy of the CRC Handbook of Chemistry and Physics from the CRC Press Inc., and is awarded to a student at the end of first year on the basis of outstanding academic achievement in Chemistry.

James Creery Memorial Essay Prize

This prize, in memory of James Harold Creery, a Trent student of Philosophy in 1972-74, is awarded annually for the best philosophical essay written by an undergraduate at Trent.

The Cultural Studies Faculty Prize

The Faculty Prize was established in 1988 through contributions from the Cultural Studies faculty. It is awarded to a Cultural Studies major or joint-major for the best essay of a critical or theoretical nature related to the subject areas of the Cultural Studies Program submitted to a juried competition held annually by the Program. Value \$300.

Currie Honours Awards

These awards are presented to two students enrolled in the fourth quarter of a single-major honours program in Geography, on the basis of both academic achievement and proposed thesis research. They are valued at \$500 each, but under special circumstances three awards of \$333 each may be made.

The Digital Equipment of Canada Award

This award is presented to the student with the highest grades in Computer Studies at Trent University.

The J. Emmett Duff Memorial Prize in Geography

This prize, the gift of Professor T.H.B. Symons and Celanese Canada Inc., was established in memory of the late J. Emmett Duff, who, without formal training in the subject, was possessed of an intense love of traditional geography. It is awarded to a student who attains a standing of at least 70% in *Geography 301b* and who best epitomizes the spirit of cartophilia.

Embassy of Spain Prize in Hispanic Studies

Awarded to an outstanding student in upper years majoring in Spanish.

Department of English Literature Prize

This prize, the gift of the Department of English Literature, is awarded to the best student entering the fourth quarter of the Honours program in English Literature.

Environmental and Resource Studies Program Prize

This prize, a gift of the ERS program, is awarded annually to a first-year student achieving the highest academic standard in the first year ERS course.

Essay Prize in Honours Economics

This prize, the gift of the Department of Economics, is awarded each year to an honours student submitting the most outstanding essay in *Economics 490*.

The Marjorie Elizabeth Foster Prize

This prize, given in memory of Marjorie Elizabeth Foster, is awarded to a student with the highest overall standing in the subject of historical geography.

French Studies Staff Prizes

These prizes are offered by members of the French Studies Section to outstanding students of first-year French Studies.

French Studies Staff Prize (Nantes Program)

This prize is awarded annually by members of the French Studies Section to the outstanding participant in the Nantes Year Abroad Program in French Studies.

The Gregory R. Frith Memorial Prize in Cultural Studies

This prize was established in honour of the late Gregory R. Frith, B.A. Honours 1977. It is awarded to a Cultural Studies major or joint-major for the best submission in any of the arts associated with the Cultural Studies Program to a juried competition held annually by the Program. Value \$300.

The Honourable Leslie Frost Prize

This prize, the gift of the late Hon. Leslie M. Frost, P.C., Prime Minister of Ontario from 1949 to 1962 and first Chancellor of Trent University, is awarded to the leading undergraduate in the first-year course in Canadian History.

Gadfly Prizes

These prizes are available for award to the leading undergraduate in Philosophy in each of the second and third years. The prizes commemorate Socrates' description of himself as one who rouses and reproves the society in which he lives just as a gadfly awakens a sluggish horse.

Department of Geography Prizes

Awarded in the first and second year to students who show excellence in the study of Geography. The second-year prize, known as the Geography alumni prize, is donated by the Trent University Geographical Society using funds contributed by Geography alumni.

Guinand Prize

This prize, in honour of the first Chair of the Department of Mathematics, is awarded to a student of high promise in the mathematics program, normally on entering the fourth quarter of the Honours program.

The Honourable George S. Henry Prize

This prize, in memory of Hon. George S. Henry, Prime Minister of Ontario from 1930 to 1934, and Member of the Legislative Assembly of Ontario for East York from 1913 to 1943, is awarded to the leading undergraduate in the first-year course in Politics.

Graham Hartley Prize

This award, presented by the Chemical Institute of Canada (Peterborough Section) in honour of Graham Harry Hartley, PH.D., M.C.I.C., is given to first and second year students who have shown excellence in the field of General Chemistry.

The Arnold Hyson Prize in Maritime Studies

This prize is awarded to the student with the most outstanding research paper in *Canadian Studies-History 307*.

The David Sutherland Irwin Prize

Established in memory of the late Professor David Irwin, this prize is awarded on completion of *Chemistry-Biology 330* to a student with outstanding performance in biochemistry.

The Richard B. Johnston Prize

A prize, donated by the family of Professor Richard B. Johnston of the Department of Anthropology in his memory is awarded to a deserving student in Ontario archaeology.

The K.E. Kidd Awards in Native Studies

These prizes are awarded each year to graduating students who have demonstrated the highest degree of ability and achievement in the Diploma Program of the Department of Native Studies.

F. Alan Lawson Memorial Prize

Sponsored by the Central Ontario Chartered Accountants Association, this award is made annually to the student majoring in the Administrative and Policy Studies Program, who achieves the highest combined mark in Fundamentals of Financial Accounting and Fundamentals of Management Accounting (*Administration 201a* and *202b*).

Robert Lightbody Prize

This prize was established by the Alumni Association to honour the contributions to the University of alumnus Robert Lightbody, a member of Trent's first class. It is awarded annually to an upper-year Peter Robinson College student.

The Helen E. MacNaughton Prize

This prize is awarded to an outstanding student in Philosophy entering fourth year.

The J. Percy MacNaughton Prize

This prize is awarded to the student achieving the highest academic standing in Environmental and Resource Studies entering fourth year.

The Makhija Prize in Chemistry

This prize, the gift of R & R Laboratories, is awarded to the student with the best overall performance in 300-level courses in chemistry.

The McColl Turner Prize in Accounting

Presented by McColl Turner, Chartered Accountants, to the leading undergraduate student in *Administration 300*, who intends to pursue a career as a Chartered Accountant.

David N. McIntyre Conservation Award

Presented by the Otonabee Region Conservation Authority to the outstanding Geography student who has demonstrated an interest in conservation.

Jane McLarty Memorial Prize

This prize, given in memory of Jane McLarty, a member of Lady Eaton College from 1987-1990, is awarded annually to a deserving student entering the third or fourth quarter of studies in English Literature.

Midwives' Prize

This prize is the gift of three members of the Universities Liaison Committee who assisted at the birth of Trent University. The late Professor J.M. Blackburn, then of Queen's University; the late Dean Frank Stiling, then of the University of Western Ontario; and the late Dr. M.St.A. Woodside, former vice-president of the University of Toronto, were named by their universities to act as a liaison committee between these three universities and the Founding Board of Trent University. The prize is awarded to the student with the highest overall standing in the first year.

Joyce Moonias Memorial Awards

These awards, donated by Frances Six in memory of Joyce Moonias, Native Studies student 1982/83, are offered annually to the student with the highest academic standing in *Native Studies 280* and *380* (Ojibway language).

W.L. Morton Essay Prize in History

Awarded to the second- or third-year student writing the best essay.

National Council for Geographic Education Excellence of Scholarship Award

Awarded to the outstanding graduating Geography major.

The Native Studies Award

These prizes, in memory of Harvey G. Greene of Peterborough, are awarded to outstanding students in Native Studies.

The Norman Townsend Prize in Anthropology

An annual award, in memory of the late Professor Norman Townsend, presented by the Department of Anthropology on the basis of high academic standing to a student pursuing studies in cultural anthropology.

Peterborough Historical Atlas Foundation Prize

This prize is to be awarded to the undergraduate whose essay or project on a Canadian subject is deemed outstanding. An interdisciplinary panel will select the winner from the entries submitted by faculty in appropriate disciplines.

Peterborough Professional Engineers Wives' Association Prize

This prize, a gift of the association, is awarded to an undergraduate who shows excellence in *two-hundred* series courses in Physics or Chemistry.

John Pettigrew Prizes

These prizes, established in memory of the late Professor John Pettigrew, are awarded annually for the best student essays submitted in each first-year English course.

Department of Physics Prize

This prize, a gift of the Department of Physics, is awarded to the student achieving the highest academic standing in the first-year Physics course.

The R & R Laboratories Prize in Analytical Chemistry

This prize, the gift of R & R Laboratories, is awarded to a student with outstanding performance in analytical chemistry on completion of a 300-level course in chemical analysis.

The Denis Smith Essay Prize

This prize, the gift of the Department of Political Studies, is awarded each year to a fourth-year student submitting an outstanding Politics essay.

Department of Psychology Prizes

These prizes, a gift of the Department of Psychology, are awarded to outstanding students in Psychology.

Scott Rennie Memorial Prize

This prize, the gift of family, friends and alumni, is awarded to a deserving Otonabee College student.

Victor T. Ridley Memorial Prize

This prize, the gift of Mrs. F. Millard in memory of the late Victor T. Ridley of Peterborough, is awarded to the leading undergraduate in first-year Mathematics.

J.J. Robinette Prize

The J.J. Robinette Prize is awarded in honour of Dr. John J. Robinette, an eminent constitutional and criminal lawyer, and Trent University's fifth Chancellor. The prize is awarded to the scholastically outstanding graduate of Trent University in any year who undertakes the study of law at another Canadian university.

John Rymes Book Award

The book prize is awarded by the Senior Tutor of Champlain College to a student of the College who has benefitted most from a Trent University education.

J. Paul Scott Jr. Memorial Prize

Established in memory of J. Paul Scott Jr., to be awarded to a deserving student entering Honours Psychology.

The Honourable Sidney Smith Prize

This prize is named in honour of Hon. Sidney Smith, Member of the Legislative Assembly of the United Province of Canada from 1854 to 1861, Postmaster General of the United Province of Canada from 1858 to 1862, and elected Member of the Legislative Council from 1861 to 1863. It is the gift of Hon. S. Bruce Smith, Chief Justice of Alberta, and of Muriel Turner and H.G.H. Smith, Q.C., of Winnipeg, and is awarded annually to the leading undergraduate majoring in Politics and History in the second year.

The Society of Chemical Industry Student Merit Award

This award is given to the student having the highest standing in the final year of his or her course. The student must have a minimum average of 75% and have completed the course in the normal number of years.

The Society of Management Accountants Prize

This prize is awarded to the student proceeding to fourth year in the Administrative and Policy Studies Program who has achieved the highest overall standing in all accounting subjects.

Department of Sociology Prizes

Two prizes of \$100 each are awarded annually to Sociology majors who demonstrate excellence in the study of Sociology. One of the prizes is named in honour of Professor Rodney F. White.

Symons Essay Prizes in Canadian Studies

These prizes were established through a gift from T.H.B. Symons, the founding president of Trent University, to recognize excellence in performance in courses of the Canadian Studies Program. Three prizes are awarded annually for outstanding essays in second-, third- and fourth-year courses.

Trent Alumni Summer Session Prizes

These two prizes, the gift of the Trent University Alumni Association, are awarded annually for outstanding academic achievement by Julian Blackburn College students in the on-campus and the Oshawa Summer Session (including Intersession).

Trent Science Fair Award

This award, of the value of \$100 to be applied against first-year tuition fees, is offered to the Grade 13 student whose project is judged outstanding at the annual Peterborough-Northumberland and Durham Regional Science Fair.

Alan Wilson Prize in History

Awarded to the Honours History student achieving the highest record in fourth year.

Women's Studies Book Prize

This prize, the gift of the Peterborough Women's Committee, will be awarded annually based on academic achievement as well as contributions to the vitality of the program.

College Prizes

Catharine Parr Traill College Scholar

The title of College Scholar is conferred upon the student in his or her graduating year who has achieved academic excellence and who has also made an all-round contribution to the college.

Catharine Parr Traill College Principal's Prize

This prize is awarded to the Catharine Parr Traill College student with the best academic performance in the freshman year.

Champlain College Master's Prize

The prize is awarded to the graduating student of the college with the best overall standing in fourth quarter, Honours.

Champlain College Fellows' Prize

The prize is awarded to the graduating student of the college with the highest overall average in the third quarter, General.

Lady Eaton College Fellows' Prize

An award given by the Fellows of Lady Eaton College to a graduating student of the college for academic excellence over his or her university career.

Otonabee College Prize

This prize, to a value of \$50, is awarded to the Otonabee College student with the best academic performance over a three year period, not including an Honours year.

Otonabee College Senior Common Room Prize

This prize, the sum of \$100, is awarded to the Otonabee College student with the best academic performance in the freshman year.

Julian Blackburn College Student Association Prizes

These prizes are awarded to students with overall academic excellence and involvement in University, college and/or community affairs.

Academic Regulations

Admissions

Application and Admission Procedures for Full-time Studies

Students currently in the Ontario school system should apply to Trent University on the forms developed by the Ontario Universities' Application Centre. These forms are available through the secondary schools and should be completed according to accompanying instructions.

By agreement among the universities, current Ontario Secondary School candidates are notified of acceptance on an agreed upon date in mid-June. Other applicants, including those who complete their secondary school studies in January, may have their applications considered as soon as documentation is complete.

Candidates for admission from outside Ontario, or who are not currently in an Ontario Secondary School, may obtain forms from the Registrar's Office. Applicants must submit official transcripts to the University, or certified copies thereof, showing their standing in each subject.

Applicants not currently in full-time attendance in the final year of a Canadian secondary school program are subject to a non-refundable \$30 supplementary application fee. The cheque or money order should be sent to the Registrar's Office and must include the applicant's name and the Ontario Universities' Application Centre reference number.

All applicants are required to declare their intention to pursue either a four-year Honours or three-year General program as part of the admission process.

Candidates for admission may be asked to attend an interview with the Committee on Admissions and Scholarships. They will be notified of the University's decision concerning their applications as early as possible, within limits of the intra-university agreement cited above.

Normal Admission Requirements

Ontario Secondary School Requirements

In order to be eligible for admission to Trent University, an applicant is required to achieve standing at a level acceptable to the University in a full Ontario Secondary School program. An applicant is required to have the Ontario Secondary School Honours Graduation Diploma (OSSHD) or the Ontario Secondary School Diploma (OSSD), including a minimum of six Grade 13 subjects or six Ontario Academic Courses (OACs); or equivalent qualifications from other provinces or countries. For admission consideration, the *minimum* overall average required on six Grade 13 subjects or six Ontario Academic Courses is 60%. *However, because of space limitations, applicants presenting the best qualifications will be given preference.*

No minimum number of years taken to achieve this standing is specified. Although the length of time taken by an applicant to complete the Ontario Secondary School Diploma will not in itself be a determining factor in the admission decision, applicants who have spent more than five years in secondary school may be required to present a higher level of achievement.

Applicants to all programs must have successfully completed an unspecified OAC in English as well as having OAC's in a minimum of four different subject areas. English OAC 1 is highly recommended, particularly for applicants to programs in the Humanities and Social Sciences.

Specific Program/Course Prerequisite

Administrative Studies

OAC Calculus is strongly recommended. Grade 12 Advanced Math will be accepted as the minimum requirement.

Biology

OAC Biology is strongly recommended. Students may major in Biology without OAC Biology by first successfully completing Trent's *Biology 100*.

Chemistry

OAC Chemistry and OAC Calculus are required. OAC Physics is strongly recommended.

Environmental and Resource Studies (B.Sc. Option)

OAC Chemistry and OAC Biology are strongly recommended. OAC Physics or OAC Geography are recommended.

Mathematics

OAC Calculus and OAC Algebra are strongly recommended. Grade 12 Advanced Math will be accepted as the minimum requirement.

Physics

OAC Calculus and OAC Physics are strongly recommended. One of OAC Calculus or OAC Algebra will be accepted as a minimum requirement.

For more detailed program requirements please consult the appropriate section of the Calendar.

Equivalents to Ontario Secondary School Requirements

Alberta, British Columbia, Manitoba, New Brunswick, Nova Scotia, Prince Edward Island, Saskatchewan—Grade 12.

Newfoundland—First Year, Memorial University. Applicants with Grade 12 standing only will be considered on an individual basis.

Quebec—Completion of Year I of a CEGEP program or equivalent.

England and Wales, West Indies, East and West Africa, Hong Kong. General Certificate of Education (or equivalent) with (a) passes in at least five subjects, two of which must be at Advanced Level, or (b) passes in four subjects of which three must be at Advanced Level.

Advanced Standing may be considered for appropriate Advanced Level subjects with C grades or better.

International Baccalaureate (IB)

Completion of the IB Diploma with at least six subjects (three of which must be at the higher level) with a minimum grade total of 28 on final grades. Advanced Standing may be considered for appropriate subjects at the higher level with grades of 5 or better.

USA—High School Graduation Diploma. Applicants are required to submit College Entrance Examination Board scores and a letter of reference from a high school teacher or counsellor.

Colleges of Applied Arts and Technology

Candidates with satisfactory standing in at least two years of study in appropriate diploma programs will have their transcripts individually evaluated for admission. Those admitted with satisfactory standing and a sufficient number of academic courses in appropriate three-year diploma programs may receive advanced standing for up to five courses. Candidates admitted with satisfactory standing and a sufficient number of academic courses in appropriate two-year diploma programs may receive advanced standing for up to three courses. Applicants are asked to write to the Office of the Registrar for specific information.

Students from areas other than those listed above should submit full details and academic documents to the Office of the Registrar for evaluation.

Possession of the minimum requirements does not, in itself, guarantee admission.

English Language Proficiency

(a) Candidates from areas where English is not the language of instruction will be required to provide evidence of a knowledge of English sufficient to enable them to profit from their university studies. All such International students must write the Test of English as a Foreign Language (TOEFL) and obtain a minimum score of 550; or alternatively, write the Michigan English Language Assessment Battery (MELAB) test and obtain an overall score of 85.

Part-time Credit Studies

Candidates considering a program of part-time credit studies should consult the Part-Time Studies section and the Academic Programs and Standings section of the Calendar. Students currently enrolled in the part-time studies program who wish to enter the full-time program must apply to do so by June 15.

Refusal of Admission

The University reserves the right to refuse admission to any candidate.

The University also reserves the right to refuse re-admission to candidates who have not achieved an acceptable academic standing as determined annually by the Committee on Admissions and Scholarships.

Application Deadlines

Applications will not normally be considered unless received, accompanied by complete documentation, by June 15. Teacher Education applications and documentation must be received by May 1.

Exceptions to the Normal Requirements

The University is prepared to consider other candidates who, while failing to meet the regular requirements, can satisfy the University that they are likely to be successful in university work. Applicants may apply as Mature Students if they are at least 21 years of age and have been out of a full-time educational program for a minimum of two years. Maturity, motivation, and experience will be taken into account. Any candidate who wishes to apply for admission and who does not possess the normal requirements should write to the Office of the Registrar, outlining academic qualifications, experience and the grounds on which admission is requested. In some instances, the Committee on Admissions and Scholarships may require the applicant to be present for an interview. Mature student candidates may be admitted outright or to probationary status in the full-time or part-time program.

Advanced Standing

Students transferring into Trent from other post secondary institutions may receive credit for work satisfactorily completed, at the sole discretion of Trent University, in conformance with criteria established by the Senate of Trent University.

Advanced standing will be assessed by the Committee on Admissions and Scholarships prior to the student's admission to the University. Specific course equivalencies will be assessed by the Committee on Admissions and Scholarships in consultation with Academic Department/Program Chairs, following the student's acceptance of an offer of admission.

Eligible students will be assessed for transfer credits for both the Honours and General degree programs. A maximum of seven and one-half full-course equivalents may be credited towards a General degree. A maximum of ten full-course equivalents may be credited towards an Honours

degree. The maximum number of non-Trent courses that may be counted toward either Trent degree must not exceed half of the degree requirements.

In exceptional circumstances, students with high standing at another university, applying for entrance to the final quarter of the Honours program, may be given transfer credit for up to fifteen full courses.

The last five courses of a degree program should be completed at Trent. *Three-hundred and four-hundred* level course credits in major(s) obtained at another university may be accepted for credit at Trent. However, individual departments may require that all or most of the courses at these levels be taken at Trent.

Unassigned credits up to a maximum of five courses may be granted for courses which are equal in standard but not comparable in content to courses offered at Trent. Not more than three courses at the first-year level may be unassigned.

Advanced standing will be granted only if that course is not needed to qualify for admission. If the course in question constitutes part of admission requirements, prerequisite standing only can be granted. Prerequisite status in a discipline means that the Trent prerequisite will be waived to enable the student to go on to more advanced work in that discipline, instead of having to repeat subject matter satisfactorily completed at another institution.

Students will not be accepted for transfer from another university during a period in which they have been suspended, debarred, or are otherwise ineligible for re-admission to their home university.

Second Degree

Students wishing to pursue a second B.A. or B.Sc. must formally apply for re-admission to the second degree program. All such applications will be considered by the Committee on Admissions and Scholarships as part of the normal re-admission process. If the student elects to pursue a General degree, up to 7.5 full-courses from the first degree program may be credited to the second program. If the student elects to pursue an Honours degree, up to ten full courses from the first degree may be credited to the second program. The maximum number of credits that may be credited from the first degree program to the second program must not exceed half of the degree requirements. Students are required to declare their

intentions to pursue either a General or an Honours degree upon admission to the second degree program.

Registration

1. Academic Adviser

Each full-time student is assigned an academic adviser. Ultimate responsibility for course selection and conformance to the academic regulations of the University does rest with the student, but the adviser can assist on matters of course selection, academic regulations, the selection of majors, university deadlines, etc. Students are advised to make maximum use of their adviser in planning their university program.

2. New Students

New students who have been offered and who have accepted admission to the University will register in person during the Introductory Seminar Week, the week prior to the beginning of classes in September. This is intended to introduce new students to university life at Trent and to complete registration.

During the Introductory Seminar Week students have an opportunity to attend lectures and information sessions in many disciplines and to consult their academic advisers before registering in their courses. In addition, College committees plan a varied program of athletic and social events for the week in order to facilitate new students' integration into both their Colleges and the University as a whole.

It is hoped that each student will take full advantage of the opportunities provided to become familiar with the courses offered, the services and the facilities available, and the workings of the University and College system.

3. Returning Students

In order to facilitate academic planning and to ensure a long-term enrolment balance at the University, returning students intending to continue full-time studies at the University in the Fall/Winter session are required to pre-register in accordance with policy approved by Senate. This process involves the completion of the Course Preference Selection (CPS) form, preferably in consultation with the academic adviser during the Winter Term. The CPS form must be

submitted to the Registrar's Office by the last day of classes of the Winter Term. Students submitting the CPS form after this date will incur a \$50 processing fee.

Full-time students who drop to a part-time course load during the Winter Session may continue in the full-time program in the following Winter Session as long as their academic status is "eligible to proceed".

Returning students must also complete and return the Confirmation of Intent to Register (CIR) form, which they will receive with their final grades in June. The CIR form together with a **non-refundable deposit** against tuition must be submitted by July 15 to the Registrar's Office. Returning students who fail to submit the CIR form or tuition deposit by the due date will incur a \$100 processing fee.

Payment of fees or deposits related to tuition or residence, does not obviate the need to comply with deadlines and procedures related to admission, pre-registration and registration. *Financial eligibility does not guarantee academic eligibility.*

4. Completion of Registration

Registration is complete when the individual has visited the Head of College, has paid fees, has visited the Health Services, has provided required documentation regarding citizenship and eligibility to study in Canada and, following consultation with the academic adviser, is enrolled in an approved program of studies and submits a completed registration form at the course registration centre. Students should register in all half-courses regardless of suffix during course registration in September.

New students are required to register by Friday, the last day of Introductory Seminar Week. All other students are required to register by the following Friday. Please refer to **Important Academic Dates** for specific dates. Late registrants will be charged an incremental late fee based upon the date that the registration form is received by the Registrar's Office.

Any student who has not completed course registration by the third Friday of term will be required to leave the University.

5. Part-time Registration

Registration for part-time students is conducted in person or by mail on application forms available from Julian Blackburn College. Please see part-time summer or winter brochures for further details.



Academic Programs and Standings

Academic Programs

Note: It is the responsibility of each student to ensure that the courses required for the granting of a degree have been completed. Students are therefore cautioned to make absolutely certain that the number and combination of their courses meet all university and departmental requirements for the granting of a degree.

Trent University offers the following degree programs:

- Bachelor of Administrative Studies (Honours)
- Bachelor of Arts (Honours)
- Bachelor of Science (Honours)
- Bachelor of Arts (General)
- Bachelor of Science (General)

1. Enrolment Status

Any student registered in 3.5 or more courses is a full-time student. A student registered in three or fewer courses is classified as a part-time student.

Part-time students must apply to the Registrar's Office by June 15 if they wish to transfer to full-time status for the next Fall/Winter Session. Students placed on probation will not normally be considered for admission or re-admission to the full-time program.

2. Overload Programs

Students wishing to enroll in more than five full courses or equivalent in the Fall/Winter Session must obtain special permission to do so from the Committee on Undergraduate Standings and Petitions. Appeals to the committee must be submitted through the Senior Tutor of the student's college.

Details of normal workloads and overload programs in the Summer and Spring Sessions are available from Julian Blackburn College.

3. Course Changes

Students wishing to change or drop courses must submit Course Change forms to the Registrar's Office. These forms must be signed by the instructor of the course which is being dropped, by the instructor

of the course which is being added, and by the academic adviser. Part-time students require only the signature of the instructor of the course being added.

Once a student registers in a course, a grade will be assigned in that course unless the student withdraws from the course in writing prior to the deadline for withdrawal.

Deadlines

Deadlines for course changes and withdrawals are listed in the University Diary following the Table of Contents in this Calendar.

Students are responsible for making sure that all copies of change forms are received at the Registrar's Office by the deadlines stated in the University Diary.

Students who miss deadlines because of extraordinary circumstances may petition the Committee on Undergraduate Standings and Petitions for special consideration.

4. Withdrawal from the University

Full-time students wishing to withdraw from the University should obtain an official withdrawal form from their College Head. In all cases, the actual date of withdrawal will be the date the official withdrawal form is received in the Registrar's Office. Part-time students withdrawing from courses must notify the Registrar's Office in writing.

If formal notice of withdrawal is not received, the student will be responsible for financial obligations. Failing grades may also appear on the students official academic record.

5. Retroactive Withdrawal

Retroactive withdrawal may be granted by petition to the Committee on Undergraduate Standings and Petitions (CUSP) when it can be shown that compelling and unforeseen circumstances, which adversely affected the student's work, arose *after* the deadline for dropping courses. In such cases the student must show that on the last date for dropping courses he or she would be reasonably certain of a passing mark in the course(s), had these circumstances not intervened. When retroactive withdrawal is requested after the end of an academic session, any such request will apply to all courses in which the student was registered unless it can be shown that the circumstances affected adversely only a particular course or courses. The final dates for receipt of such petitions in the Registrar's Office is March 19 for an *a* half-course,

July 15 for a full course or a *b* half-course, and September 30 for a Summer Session course.

6. Letters of Permission

Students may be permitted to take a limited number of courses at other universities on Letters of Permission. These must be obtained from the Registrar's Office *before* courses are taken. Letters of Permission are issued under the authority of the Committee on Undergraduate Standings and Petitions. It may be necessary to obtain department approval in advance and such approval will be required for all courses in a student's major.

Students wishing to undertake summer courses at another university on a Letter of Permission may not attempt more than two full courses (or equivalent). Students on probation may take only one course at a time on a Letter of Permission.

The maximum number of full courses which may be taken for credit on Letters of Permission is normally five. In the case of transfer students it may be fewer than five, depending on how many transfer credits they have received.

The total number of non-Trent credits may not normally exceed one-half of the total degree requirements. It should also be noted that the last five courses offered by a candidate for a degree should be completed at Trent.

For the Fall/Winter Session, requests for Letters of Permission must be received no later than August 15. For the Summer Session, requests for Letters of Permission must be received no later than two weeks after Spring Convocation. For all Letters of Permission, one week to ten days must be allowed for processing. A fee of \$25 is charged for each Letter of Permission.

7. Study at Foreign Universities

All students wishing to take a full year of study at a foreign university must apply through the Trent International Program and have their plans of study approved by the appropriate academic departments. *A Letter of Permission must be obtained in advance.*

Normally this year of study abroad will constitute the third quarter of an Honours program. A number of departments and programs encourage students to spend a year studying abroad and formal arrangements with foreign universities exist.

Students granted permission to study abroad will be charged an administrative fee.

Assessment of Performance

In determining an undergraduate's final standing in each course, the following criteria will be considered:

- (a) oral and written work completed during term;
- (b) any mid-year or other term tests or examinations;
- (c) any final examinations.

At the beginning of each session students will be informed of the method of assessment in each course. Students' attention will also be directed to the course syllabus at the start of each Session. This course syllabus may be subject to some modifications as the work of the year progresses.

1. Course Credit

Subject to the regulations concerning academic programs and the maximum number of D grades, students retain credits for every course and every half-course successfully completed. Two half-courses count as the equivalent of one full course. Each full course is equivalent to 3.0 academic credits; each half-course is equivalent to 1.5 academic credits. The student's transcript will show each course and half-course attempted and the grade achieved. Withdrawal from the University without academic penalty will be recorded on the student's transcript.

2. Mid-Year Review

At the beginning of the Winter Term, a mid-year progress report summarizing academic performance will be produced for each student. The Academic Adviser and the Senior Tutor of the college will also receive copies of this report. Although the reports are useful in assessing a student's progress, they do not represent official grades and mid-year marks will not appear on any formal document.

3. Grades

Prior to June 1982, there were five passing grades, and one failing grade:

A = 100-80	C = 69-60
B+ = 79-76	D = 59-50
B = 75-70	F = 49-0

Precise numerical equivalents to the above letter grades appear for the 1982-83 Winter Session only.

Since June 1982, the following grading scheme has been in effect:

A+ = 100-90	C = 66-63
A = 89-85	C- = 62-60
A- = 84-80	D+ = 59-57
B+ = 79-77	D = 56-53
B = 76-73	D- = 52-50
B- = 72-70	F = 49-0
C+ = 69-67	

Numerical equivalents appear on students' transcripts.

4. Dean's Honours List

All students who achieve an average of A- (80%) or better over their most recent five courses will have their names placed on the Dean's Honours List. This list is published as a special issue of *Fortnightly* in the autumn of each year following Fall Convocation. Graduating students who are eligible for the Dean's Honours List will have that fact noted in the convocation program.

5. Supplemental Examinations

There are no supplemental examinations.

6. Aegrotat Standing and Incomplete Standing

Requests for special consideration because of illness or misfortune should be made as soon as circumstances arise. In all instances, the student should approach the instructor(s), and requests for extensions or special examinations may be granted. In more serious cases the Academic Adviser or Senior Tutor should be consulted. In certain circumstances, students may appeal for Retroactive Withdrawal (see the section on Withdrawal), for Aegrotat or Incomplete Standing. Students are advised that all requests for special consideration must be documented fully by medical certificates or other supporting evidence.

Aegrotat Standing exempts the student from writing the final examination in a course, and is granted on the grounds of physical or emotional disability. Students seeking Aegrotat Standing must consult the appropriate instructor(s). Because Aegrotat Standing depends upon the completion of all required term work throughout the year, it is not appropriate in cases of prolonged illness and is granted only when the student is unable to write the final examination.

Incomplete Standing permits the student to submit any remaining work in a course at a specified date following the

end of the academic term. Incomplete Standing will be granted only when a student is unable to complete in the prescribed time the required work in a course for reasons beyond the individual's control, such as illness, physical or emotional disability, or loss or damage to work already done or in progress. Failure by a student to organize the workload will not be considered an adequate reason. Petitions for Incomplete Standing must be made through the academic department concerned and must be accompanied by adequate supporting documentation.

Students with Incomplete Standing from the Fall/Winter Session which has not been resolved by August 31 will receive a failing grade. Students with Incomplete Standing from the Summer Session which has not been resolved by September 30 will receive a failing grade.

Appeals of University Regulations

1. Appeals of Academic Regulations

Students who believe that academic regulations have imposed undue hardship on them may appeal to the Committee on Undergraduate Standings and Petitions through the Senior Tutor of their college.

2. Appeal of Grades

Appeals of Term Work

A student may appeal the assessment of term assignments and tests during the course of the year. Such appeals should be directed to the course instructor and subsequently, if necessary, to the Chair of the Department or program.

Appeals of Final Marks

Final marks in individual courses will be reviewed by the department concerned and submitted to the Registrar's Office, countersigned by the Chair.

Before final release, the marks of each student will be reviewed by the Committee on Undergraduate Standings and Petitions. Every student has a right to appeal final standing in any course, regardless of the grade. However, in considering such appeals only the final examination will normally be reassessed. All appeals should be made in writing to the Registrar's Office before March 19 for an *a* half-course, July

15 for a full-course or a *b* half-course, and September 30 for a course in the Summer Session. *Students who have not received final grades because of outstanding financial obligations to the University are subject to the same deadlines.* A fee of \$25 will be charged for the handling of an appeal, refundable if the mark is raised. **Marks cannot be lowered as a result of such an appeal.**

3. Special Appeals

If, after exhausting all other areas of appeal, students still feel that undue hardship has been worked on them, they may appeal directly to the Special Appeals Committee. Such appeals should be made in writing to the Chair of the Special Appeals Committee. All decisions of the Special Appeals Committee are final and take effect when issued.

Plagiarism

Plagiarism is defined in Trent's Notes on the Preparation of Essays as "passing off someone else's words or thoughts as your own", and *Notes* continues:

The worst kind of plagiarism, of course, is submitting an essay written in whole or in part by someone else. Even a short passage copied directly constitutes plagiarism unless the student encloses the passage in quotation marks and acknowledges his source. But the student who changes only the odd word in someone else's sentences is also (perhaps unwittingly) committing plagiarism, as is one who relies heavily on secondary sources for the argument, organization, and main points of his paper. Even proper paraphrasing of someone else's writing constitutes plagiarism if the facts or ideas thus presented are not commonly known or held in the field.

Although the reference to "an essay" highlights the problem of plagiarism in the arts and social sciences, the main definition's use of "words or thoughts" makes quite clear the broader concern over plagiarism and acknowledges the unhappy fact that lab reports, problem sets, and even computer programs may be subject to plagiarism.

Since plagiarism is theft and fraud combined, and strikes at the very roots of the University by threatening the integrity of

its degree, it is obvious that it must be treated as a very serious academic offense and the plagiarist be dealt with accordingly. This is not, of course, to say that every student who inadvertently omits to footnote a brief quotation from a work which s/he has carefully acknowledged in a list of works consulted should be charged with plagiarism. On the contrary, most instructors will certainly continue to judge many such situations as examples of ignorance rather than deceit and will deal with them as they have always done with repeated explanation and with minor penalties (subject to the usual appeal procedures) such as reducing the mark for the assignment or requiring that it be resubmitted.

This policy does not pretend to deal with such cases which should continue to be dealt with at the pedagogical level—between the instructor and the student. What the Policy does do is to set out the procedures to be followed when an instructor wishes to make a formal accusation of plagiarism against a student, and the penalties which are to be imposed if that accusation proves justified.

Procedures

- a) When an instructor wishes to make a formal accusation of plagiarism s/he shall report the matter to the departmental Chair, at the same time informing the student of what s/he has done. (Where the instructor involved is the departmental Chair, then the Chair's role shall be taken by a past Chair or other senior member of the department.)
- b) The Chair shall review the evidence with the instructor and if the Chair agrees that there is a case to be answered s/he shall write to the student, enclosing a copy of this *Policy*, to inform the student that s/he has been formally accused of plagiarism, outlining the evidence on which the accusation is based, and pointing out the penalty which will be imposed in the event of a judgement or guilty, as well as of the fact that, should the student have previously been punished for plagiarism, a further penalty would follow automatically.

The Chair shall offer to meet with and/or to receive a written submission from the student and shall request a reply within two weeks of the date of the letter, failing which the penalty will be imposed.

- c) If the student fails to respond to the Chair's letter or declines to make any defense, and the Chair determines that plagiarism has occurred, s/he shall inform the student in writing and, by copy of the letter the secretary of CUSP, that the penalty of a grade of F(0) in the assignment without the right to repeat the assignment is being imposed.
- d) Upon receipt of the copy of the Chair's letter the secretary of CUSP shall place it in the student's file in the Registrar's Office. The secretary of CUSP shall at the same time consult the student's file and if s/he finds that the student has already been penalized for plagiarism shall report the matter to the next meeting of CUSP for CUSP to impose the appropriate penalty for a second (or third or fourth) offense.
- e) If CUSP finds that because of previous plagiarism a penalty beyond that imposed by the departmental Chair is required they shall impose it, informing the student in writing of the additional penalty which is being imposed, and of the consequences which will result from any further plagiarism. If CUSP finds that no additional penalty beyond that imposed by the departmental Chair is warranted they shall nevertheless inform the student in writing of the fact that the copy of the Chair's letter has been received and included in the student's file, and shall inform the student of the consequences which will result from any further plagiarism.

Appeals

Any student accused and judged guilty of plagiarism may appeal the judgement and the penalty imposed. Appeals against the judgement of a departmental Chair shall be to CUSP and against the judgement and penalty imposed by CUSP, to the Special Appeals Committee whose decision shall be final.

Penalties

- i) For a first case of plagiarism the penalty shall be a grade of F(0) in the assignment concerned without the right to repeat the assignment.
- ii) For any case of plagiarism committed after the student has already received the penalty outlined in (i) above, the normal penalty shall be a grade of F(0) in the course concerned. (Being assigned as a *penalty* the grade of

F(0) will be entered on the student's transcript whether or not the student has since withdrawn or subsequently withdraws from the course.)

- iii) For any case of plagiarism committed after the student has already received the penalty outlined in (ii) above, the normal penalty shall be a grade of F(0) in the course concerned and rustication from the University for a minimum period of one year from the end of the academic session in which the offense occurred.
- iv) For any case of plagiarism committed after the student has already received the penalty outlined in (iii) above the normal penalty shall be a grade of F(0) in the course concerned and immediate debarment from the University.

Publication of Policy

All course syllabuses should contain the following statement:

Plagiarism: Plagiarism is an extremely serious academic offense and carries penalties varying from failure in an assignment to debarment from the University.

Uniformity of Policy

This present *Policy on Plagiarism* as approved by Senate at its meeting of March 22 1988 supersedes all previous University policies on plagiarism and all policies on plagiarism previously established by any department or program of the University or by any individual instructor.

Passed by Senate March 22 1988

Academic Penalties

Three academic penalties may be imposed upon a student as a result of weak academic performance:

- (a) **Probation** may be imposed either as a condition of admission to the University or after unsatisfactory performance. Probation is a warning of a poor academic situation which, if not corrected, can lead to a more serious penalty.
- (b) **Rustication**, a minimum of one year's absence from the University, may be imposed with or without a period of probationary status.

- (c) **Debarment**, a minimum of three year's absence from the University, will normally occur as a result of a weak academic performance subsequent to the imposition of rustication.

Assessment Average

In determining a student's academic status, an assessment average will be employed. This assessment average is defined as the mean grade earned in a minimum of three full courses (or equivalent) taken either concurrently, or consecutively. All courses completed during one such period will be counted in determining the assessment average. The Committee on Undergraduate Standings and Petitions may reconsider and alter the implications of an assessment average which is unduly affected by extremes in course grades.

In evaluating the **assessment average**, the following criteria will normally be employed:

- (a) students with a minimum average of 60% will be *eligible to proceed*;
- (b) students with an average of 50% to 59.9% will be *placed on probation*;
- (c) students with an average of less than 50% will be *rusticated*.

Students on Probation

Students may not proceed on probation for a second assessment period. In the case of a student on probation, an assessment average of 60% or better will clear the student's probation, and the student will be eligible to proceed. Students on probation failing to attain an average of 60% will be rusticated.

A student returning must apply for re-admission to the University. If readmitted, the individual will be placed on probation. If such a student fails to achieve 60% upon the next assessment, the penalty will be debarment. An assessment average of 60% or more will clear the probation and the student will be eligible to proceed.

Academic Degree Programs

Honours Program

Trent University encourages students to plan programs leading to single-major or joint-major Honours degrees.

The Honours degree provides a broad education with specialization in one or two disciplines (single- or joint-major). It is the basic qualification for entry to graduate programs and generally enhances employment opportunity upon graduation.

The University offers the following Honours degree programs:

- Bachelor of Administrative Studies (Honours)
- Bachelor of Arts (Honours)
- Bachelor of Science (Honours)

Students seeking the Bachelor of Administrative Studies degree are normally admitted at the beginning of their first quarter of study. Students seeking the Bachelor of Arts (Honours) or Bachelor of Science (Honours) who have completed four or more full courses must indicate their intent to enter or continue in the Honours program at each registration period. No formal application is required for the Bachelor of Arts (Honours) program or the Bachelor of Science (Honours) program. Students are encouraged to attend departmental Honours information sessions for further information on planning individual Honours programs.

Students with a General degree, who wish to complete an Honours degree program, should apply for re-admission to the University indicating their intent to pursue an Honours degree on the Application for Re-Admission.

1. Academic Standings Required for Entry or Continuation in the Honours Program (B.A. and B.Sc.)

All references to courses relate to full course equivalents.

- At any registration period, a minimum cumulative average of 65% on courses completed for credit is required, either to enter or continue in an Honours program. Normally, only those students who have achieved the minimum cumulative average required for the Honours

program will be allowed to register in *four-hundred* series courses.

- Any student who has completed more than six courses for which credit was not granted (NCR) is ineligible to enter or continue in an Honours program.

In order to facilitate student planning, at the end of every academic session, the Registrar's Office calculates the cumulative grade average for all students who have completed at least four courses. The cumulative average is printed on each student's Grade Report.

Academic Standings Required for an Honours Degree

An Honours degree is awarded upon the successful completion of 19, 19.5 or 20 courses as necessary to meet the requirements of the major- or joint-major subject to the qualifications below:

- no more than seven *one-hundred* level courses may be counted;
- at least three courses must lead to majors in different disciplines;
- at least four distinct disciplines must be included in the student's degree program;
- at least seven courses at the *three-hundred* and *four-hundred* levels (combined) must be included;
- a minimum grade of 60% in the specified introductory course is required in order to major in a given discipline;
- at least nine courses in the major discipline are required in a single-major program. Students in the Bachelor of Administrative Studies program should refer to Administrative Studies under the Programs of Study section of the Calendar for specific requirements;
- at least seven courses are required in each discipline of a joint-major program;
- no more than twelve courses of a nineteen course degree, or thirteen courses of a twenty course degree, may be in any one discipline;
- specific additional major requirements are listed by academic department in the Programs of Study section of this Calendar;
- no more than three D grades may be counted toward the Honours degree;
- only one course with a D standing may be counted for credit in a student's major. One D grade may be counted in each discipline of a joint-major program;

- a course may be repeated for credit only once, and then only if the grade on the preceding attempt was below 60%;
- a minimum cumulative average of 65% on all courses completed for credit is required;
- no more than six courses for which credit was not granted (NCR) are permitted.

Students who do not meet the final two requirements will be awarded a General degree, providing all requirements for the General degree have been met.

2. Bachelor of Science (Honours)

In order to receive a B.Sc. degree, a student must have completed either a Grade 13/OAC course (or equivalent) in Mathematics or a university-level Mathematics course.

Students will automatically qualify for a Bachelor of Science (Honours) degree on completion of one of the following programs of study:

- a single-major Honours program in Biology, Chemistry, Environmental and Resource Studies (B.Sc. option), Mathematics, Physics, or Psychology (thesis-based option);
- a joint-major in any two of Anthropology, Biology, Chemistry, Computer Studies, Economics, Environmental and Resource Studies (B.Sc. option), Geography, Mathematics, Physics or Psychology (thesis-based option).

Students may petition to receive a B.Sc. (Honours) degree on completion of the following programs of study:

- a single-major in Anthropology, Economics, Geography or Psychology (course-based option);
- a joint-major in Biology, Chemistry, Environmental and Resource Science (B.Sc. option), Mathematics, Physics or Psychology (either thesis- or course-based option) and in another discipline not listed in this section;
- in each case, the student's program must include at least fourteen courses from the disciplines listed in this section;
- the student will require the support of the department(s) concerned.

The petition will be made on the Application for Graduation and will be reviewed by the Committee on Undergraduate Standings and Petitions.

Students who complete successfully a joint-major Honours program in *one* of Anthropology, Computer Studies, Economics, or Geography and in another discipline not listed in this section will normally receive a Bachelor of Arts (Honours) degree.

3. Bachelor of Administrative Studies (Honours)

- Students seeking the B.A.S. degree are normally admitted to the Program at the beginning of the First Quarter. Later admission is possible upon application. Applications by students from other programs or by transfer students from other universities will be considered on their individual merits. Upon admission, these students will be assisted by the Director of the Program in developing an appropriate course of study. Admission is not permitted after the completion of more than 17 courses if taking further courses is necessary to attain the required minimum average.
- Successful completion of Grade 12 advanced Mathematics or the equivalent is required for admission.
- To remain in the Program, a cumulative average of 70% in Administrative and Policy courses must be maintained. Students who are unable to maintain this average must transfer to a B.A. or B.Sc. program in another discipline.
- To complete the Program successfully, students will be required to obtain twenty full-course credits or their equivalents with a 70% average in the courses required by the program.
- Upon successful completion of the Third Quarter, students who have met the requirements for a single-major General degree in Economics may convocate with that degree. Students who exercise this option should apply for re-admission to the University indicating their intent to pursue a Bachelor of Administrative Studies (Honours) degree on the Application for Re-Admission. Students should note that the B.A. must be returned before the B.A.S. can be awarded. In other words, the same work can be presented for obtaining one degree only.
- It is not possible to combine Administrative and Policy Studies with any other discipline in a joint-major program.

General Degree Program

1. Academic Standings Required for a General Degree

A General degree is awarded upon the successful completion of fifteen full courses (or equivalent) subject to the qualifications below:

- no more than seven *one-hundred* level courses may be counted for credit;
- at least three courses must lead to majors in different disciplines;
- at least four distinct disciplines must be included in the student's degree program;
- at least four courses at the *three-hundred* level must be included;
- a minimum grade of 60% in the specified introductory course is required in order to major in a given discipline;
- at least six courses in the major discipline are required in a single-major program;
- at least five courses are required in each discipline of a joint-major program;
- no more than eight courses in any one discipline may be counted for credit in a single-major program;
- no more than twelve courses in the two disciplines combined may be counted for credit in a joint-major program. No department can require a student to take more than six courses in that discipline;
- specific additional major requirements are listed by academic department in the Programs of Study section of this Calendar;
- a student must obtain a minimum of 60% in at least twelve courses;
- a student must obtain a minimum of 60% in at least seven *two-hundred* or *three-hundred* level courses;
- no more than three D grades may be counted toward the General degree;
- only one course with a D standing may be counted for credit in a student's major. One D grade may be counted in each discipline of a joint-major program;
- a course may be repeated for credit only once, and then only if the grade on the preceding attempt was below 60%.

2. Bachelor of Science (General)

In order to receive a B.Sc. degree, a student must have completed either a Grade 13/OAC course (or equivalent) in Mathematics, or a university-level Mathematics course.

Students will automatically qualify for a Bachelor of Science (General) degree on completion of one of the following programs of study:

- a single-major in Biology, Chemistry, Environmental and Resource Studies (B.Sc. option), Mathematics, or Physics;
- a joint-major in any two of Anthropology, Biology, Chemistry, Computer Studies, Economics, Environmental and Resource Studies (B.Sc. option), Geography, Mathematics, Physics or Psychology.

Students may petition to receive a B.Sc. (General) degree on completion of one of the following programs of study:

- a single-major in Anthropology, Economics, Environmental and Resource Studies (B.A. option), Geography or Psychology;
- in each case, the student's program must include at least eleven courses from the disciplines listed in the Bachelor of Science (General) section.

The petition will be made on the Application for Graduation form and will be reviewed by the Committee on Undergraduate Standings and Petitions.

Students who complete a joint-major in one of Biology, Chemistry, Computer Studies, Environmental and Resource Studies (B.Sc. option), Mathematics, or Physics, and in another discipline not listed in this section will normally receive a Bachelor of Arts (General) degree.

Special Emphasis Program

The Special Emphasis option exists in both the Honours and General programs in order to accommodate students whose academic needs cannot be met by majors in any of the existing disciplines. While the Special Emphasis Program allows considerable scope for students to define their own program, each student must provide an integrating rationale or theme by which the choice of courses may be justified. Examples of such integrating themes have been studies in religion and medieval studies.

An application will not normally be approved which seems to be simply a major or joint-major without one or two

of the courses required by the departments or programs concerned. Nor will an application be approved which is simply a collection of courses without a unifying theme.

Students wishing to pursue a Special Emphasis Program should consult the Senior Tutor of the college early in their program. The Senior Tutor will advise the student in drawing up a proposal, in obtaining the approval of the academic departments concerned, and in ensuring that the program will meet University degree requirements.

Special Emphasis programs are approved and monitored by the Committee on Undergraduate Standings and Petitions. Application to this Committee is made through the Senior Tutor. Once a program is approved, changes in course selection can be made only by petition to the Committee.

Students should submit applications for the Special Emphasis Program on completion of the First Quarter for both Honours and General programs. The student's proposal should outline the integrating rationale of the program and identify the remaining courses required for the degree in question. In exceptional cases only will the Committee consider applications for the Special Emphasis Honours program from students with ten courses completed. In such instances, the second-year courses already completed must be consistent with the rationale behind the program.

Students should note that after enrolment in the program only two D grades among the ten final courses may be counted for credit for both the Honours and General degree. No more than three D grades may be counted for credit overall.

Students considering an Honours Special Emphasis Program must prepare a statement of the work which they intend to carry out upon entry to the program at the end of the First Quarter of study. At least two of the final four or five courses must be at the *four-hundred* level. Following consultation with the Senior Tutor, the statement should be submitted to the Committee on Undergraduate Standings and Petitions. The proposal must be approved by the Chairs of all the departments and programs involved prior to its presentation to the Committee. Students must also meet the University requirements for entry and continuation in an Honours program. The Committee on

Undergraduate Standings and Petitions will make the recommendation to Senate for the awarding, deferring, or withholding of the Honours degree.

Special Emphasis — International Studies

A Special Emphasis Program in International Studies is available as an interdisciplinary Honours degree to meet the needs of students whose interests cannot be accommodated within a major in a particular department or program. Students must provide a rationale for their course choices.

Students interested in International Studies should write to the Director of the Trent International Program for information and guidance in selecting their courses. Applications for entry into Special Emphasis, International Studies, are to be made by March 19 to the International Studies Advisory Committee. The Committee advises the student in drawing up the proposal, obtains departmental approval for courses where required, and ensures that the program meets University degree requirements. The Advisory Committee makes recommendations for program approval to the Committee on Undergraduate Standings and Petitions (CUSP).

International Program

The Trent International Program offers an unusual opportunity for students from many countries to live and study together in an international community. Students in the program, many of whom are interested in pursuing international careers, are committed to deepening their understanding of world issues, to increasing their sensitivity to different cultures, and, in the long term, to promoting international understanding. This year there are 500 students in the program, representing 70 countries and most Canadian provinces.

Students who enrol in the program have a normal choice of course offerings at Trent: they may major in any field they choose. An International Studies academic program is available to students whose

international interests cannot be accommodated within a major in a particular department or program (See Special Emphasis, International Studies). Once a week, TIP students gather together to explore international issues in a World Affairs Colloquium. The program also organizes many social, education and cultural events.

International Opportunities

Students are encouraged to spend one year of their undergraduate program in a foreign country, either as an exchange student or through one of the many Trent's Year Abroad Programs.

Trent has cooperative and exchange agreements with various universities and higher education institutions all over the world.

To make application

1. The regular application procedure for entry into the University is to be followed.
2. Students must write a letter to the Director, International Program, explaining why they wish to take part in the program.
3. Unless a student has been studying in English and has written a set of university entrance examinations in that language, either the TOEFL test (minimum score, 550) or the Michigan Test (minimum score, 85) must be taken. Students with the International Baccalaureate Diploma who have scored 5 or better in Higher or Subsidiary Level English are not required to take a language test.

Scholarships

The University will actively apply itself to the task of financing scholarships and bursaries in the hope of providing some help to outstanding students.

Convocation and Transcripts

Students who intend to graduate must complete an Application for Graduation form by the deadlines listed in the University Diary for either spring or fall convocation. Only those students completing the application by the published deadline will be considered for evaluation of eligibility to convocate. Students missing the deadline will not be considered and must apply again for any subsequent convocation. In addition to academic qualifications, students must have cleared all financial obligations to the University.

Students with Incomplete Standing in certain courses or on Letters of Permission which have been duly approved should refer to the University Diary for the final date for receipt of such grades for spring and fall convocation. Students whose final grades have not been received by the published final submission date will be required to delay their convocation.

Official copies of a student's academic transcript are transmitted by the Registrar's Office directly to other institutions only at the student's written request. Transcript charges are as follows: 1-5 copies \$3 each; 6-10 copies \$2.50 each; 11 or more \$2 each. *Payment of the fee is required in advance of the release of the transcript.* Grade Reports are provided free of charge to the student upon completion of each session. *However, neither transcripts nor Grade Reports will be released for students having a financial obligation to the University.*

Students who have completed their degree requirements satisfactorily but who have been forced to delay their convocation will be able to have transcripts appropriately notated and issued, provided their financial affairs are in order.

Part-time Studies

(See Julian Blackburn College)

Programs of Study

Explanation of Course Identification

Courses are identified by three digits. Generally, the first digit indicates the year in which the course is normally taken, and the second digit usually indicates an area of study within a discipline. Half courses are indicated by the suffix *a*, *b*, or *c*; indicating courses taught in the fall term, winter term, or throughout the year respectively. Half-courses equal one and one-half credits. Full courses equal three credits. Any two half courses equal one full course for credit purposes.

Animal Care Course

This course deals with the ethical principles, legal aspects and practical considerations regarding animal research. There are no prerequisites and the course is not credited towards a degree. The course is mandatory for all students whose work involves handling and experimentation with live vertebrate animals. The course will be offered only once in the academic year at the beginning of the Fall Term. For details of when the course will be offered, contact the Secretary of Biology, Chemistry, Environmental and Resource Studies or Psychology.

Administrative Studies

Associate Professor and Director of the Program

D. Torgerson, A.B. (CALIFORNIA-BERKELEY), M.E.S. (YORK), M.A., PH.D. (TORONTO)

Professor

I.D. Chapman, B.SC. (LIVERPOOL), M.A. (TORONTO)

Associate Professors

B. Ahlstrand, B.A. (TORONTO), M.SC. (L.S.E.), D.PHIL. (OXFORD); K.L. Campbell, B.A. (TRENT), M.B.A. (TORONTO) (on leave 1992-93); D. Newhouse, B.SC., M.B.A. (WESTERN ONTARIO)

Conjunct Associate Professor

R. Blackmore, B.SOC.SC. (BIRMINGHAM), M.B.A. (WESTERN ONTARIO), C.A.

Assistant Professors

J. Bishop, B.A. (NEW BRUNSWICK), M.A., M.B.A. (MCMASTER), PH.D. (EDINBURGH); M. Quaid, B.A. (MCGILL), M.SC. (L.S.E.), D.PHIL. (OXFORD)

Adjunct Faculty

R. Beninger, B.A. (TRENT), L.L.B. (OTTAWA), L.L.M. (LONDON); I. Henniger, M.A. (MCGILL); K. Taylor, B.A. (TRENT); R. Taylor, B.A. (TRENT), LL.B. (QUEEN'S)

Associated Faculty

Computer Studies, J.W. Jury;
Economics, M. Arvin, D. Curtis,
H. Kitchen, J. Muldoon, K.S. Murthy,
K. Pasula; *History*, B. Hodgins,
D. McCalla; *Mathematics*, E.A. Maxwell;
Political Studies, M. Gunther, V. Lyon,
R. Paehlke, J. Wearing; *Sociology*,
P. Bandyopadhyay, C. Huxley;
Vanier Professor, T.H.B. Symons.

Administrative Studies is a four-year (twenty course credits) Honours Program leading to the degree of Bachelor of Administrative Studies (B.A.S.). This Program is intended for students with an interest in careers in management in the public and private sectors.

The objective of the Administrative Studies Program is to provide students with a generalist rather than a specialist program of study. The administration courses are designed to expose the student to the various administrative techniques (accounting, marketing, management science, computer science, commercial law, etc.) while the policy courses are concerned with strategic decisions affecting the long-range directions of organizations in business and government.

Students entering the B.A.S. degree program in first year must have completed Grade 12 mathematics at the 5th level or its equivalent with a good standing.

To remain in the B.A.S. degree program, a cumulative average of B- (70%) in courses completed (excluding electives) must be maintained. Students who are unable to maintain a B- average may transfer to a B.A. or B.Sc. program in another discipline, provided they can make up any degree requirements for a major. Students who have completed fifteen courses but who are academically ineligible to enter the fourth year of the B.A.S. degree program, may, after consultation with the Director of the Program, petition CUSP for special consideration.

Students entering the fourth year must indicate their course choices to the Director before registering, preferably by May 1 of the previous academic year.

Required Courses

Year I

Administration 105, *Economics 101a* or *b* and *Economics 102a* or *b*, one of *Politics 100*, *Sociology 100* or *110*; and two electives (at least one first year course from History, Philosophy, English, or Modern Languages is recommended). *Mathematics 100* is required of students who have not passed Grade 13 calculus or an equivalent course in calculus. Upper year core courses are not open to first year students.

Year II

Administration 201a and *202b*, *Administration 250*, *Economics 225a* and *220b*, one course in either Policy or Administration (or either *Economics 200* or *Economics 201*), and one elective.

Year III

Administration 350, a further course in Administration, one Policy course, one additional course in either Policy or Administration, and one elective.

Year IV

Administration 400, *Administration 410*, one Policy course, one additional course in either Administration or Policy, and one elective.

Administration Courses

Administration 105

Introduction to managerial communications. The course examines the theory and practice of communications in an organizational context with particular emphasis on written communications. The lectures and workshops stress a strategic approach to management communications in order to enhance the effectiveness of professional writing and the understanding of organization situations. Enrolment normally limited to Administrative Studies students.

I. Chapman and staff

Administration-Native Studies 190

Introduction to management and management decision-making in contemporary aboriginal organizations. The course examines the basic tasks, responsibilities, and practises of management in aboriginal organizations and by aboriginal managers.

Staff

Economics 101a or *b*

Introductory microeconomic analysis. (See Economics)

Economics 102a or *b*

Introductory macroeconomic analysis. (See Economics)

Administration 201a

Fundamentals of financial accounting. An introduction to the basic concepts and principles underlying financial accounting and to the practices followed in the preparation of financial records and statements required for public reporting. Problems related to different types of business and to the various legal forms of business are considered. *Enrolment limited to 70, but guaranteed to students formally registered in the B.A.S. degree program. Not open to first-year students.*

Staff

Administration 202b

Fundamentals of management accounting. An introduction to the basic concepts and procedures used in the collection and manipulation of accounting data for on-going management decision-making. Topics include: manufacturing accounting; cost accounting and variance analysis; cost allocation; cost-volume-profit analysis; introduction to budgeting. Prerequisite: *Administration 201a*. Excludes previous *Administration 305b*.

Staff

Administration-Native Studies 205a

Introduction to financial accounting in contemporary aboriginal organizations. This course provides a foundation in financial accounting concepts and their application to the gathering, analysis, interpretation and presentation of financial information for use in the stewardship and management of aboriginal organizations.

D. Newhouse

Administration-Native Studies 206b

Management control and guidance systems in contemporary aboriginal organizations. This course provides a thorough discussion and examination of the principles, concepts and practices of management control and their use in contemporary aboriginal organizations. The main focus is upon building a framework to approach the design, implementation, operation and change of a control and guidance system.

D. Newhouse

Administration 250

Organization theory. An introduction to organizational theory and an examination of specific organizations. Structure, process, environment, and other aspects of organizations are approached through multiple-frame analysis. Prerequisite:

One of *Politics 100*, *Sociology 100*, or *Sociology 110*.

B. Ahlstrand

Computer Studies 202a

Intermediate computer science.

(See Computer Studies)

Computer Studies 203b

Data structures and processing.

(See Computer Studies)

Computer Studies-Mathematics 241a

Computational algebra with applications.

Prerequisite: *Mathematics 110* or *130*.

(See Mathematics)

Computer Studies 300a

Information management and data base design. Prerequisite: *Computer Studies*

203b. (See Computer Studies)

Economics 225a

Introduction to mathematical economics.

(See Economics)

Economics 220b

Introduction to econometrics.

(See Economics)

Administration 300

Financial accounting. (Not offered 1992-93)

Administration 310a

Introduction to marketing (Part I). This course examines the nature of the marketplace, and introduces basic strategy for adapting a marketing mix to the external environment. Students are invited to create independent projects. The development of ideas through interactive learning is encouraged. Prerequisite: *Administration 201a/202b*.

J. Bishop

Administration 315b

Introduction to marketing (Part II):

Promotion. This course, a continuation of *Administration 310a*, focuses on advertising and the media as well as marketing research and strategy. Students are invited to create independent projects and to present their findings. Prerequisite:

Administration 310a.

J. Bishop

Administration 320b

Financial management. A systematic survey of the fundamental concepts of financial management including: the tax environment, ratio analysis, financial planning and control, inventory models, cash and marketable securities management, capital budgeting, the market for long term securities, debt and preferred shares, valuation and rates of return, the cost of capital, international business finance. Attention will be given to applying these concepts to particular cases. Prerequisites: *Economics 101a* or *b* and *Economics 102a* or *b*; *Administration 201a* or *Administration 293a* (or other accounting deemed sufficient by the instructor).

J. Bishop

Administration 322a

Organizational behaviour. A conceptual and methodological analysis of how individuals react to their employment environment. Topics include motivation, job satisfaction, leadership, group dynamics and decision-making, personnel selection and training, conditions of work, and the effects of technological change. Prerequisite: *Administration 250*, or any full (or equivalent) two-hundred series Psychology course, or permission of the instructor.

M. Quaid

Administration 324a

An introduction to the law aimed at explaining its origins, objects and limitations and at developing in the student an understanding of the law and its role as an instrument of administration and social policy. Cases, statutes and the work of legal theorists will be considered. Prerequisite: *Administration 250* or permission of the instructor.

Staff

Administration 325b

The legal environment of management.

The course will direct itself to the legal limits within which management operates and the laws with which business decision-making must comply. The use of law for protection of the competitive market place, of the consumer and of the businessman will be reviewed and explained through the primary sources of law: cases and statutes. Prerequisite: *Administration 324a*, or permission of the instructor.

Staff

Administration-Sociology 333a

Social organization and bureaucracy. An overview of different approaches to the analysis of complex organizations including classical theories of bureaucracy, the managerial tradition and perspectives drawn from contemporary sociology. Selected case studies are examined with special emphasis on the analysis of the modern business enterprise. Prerequisite: *Sociology 100 or 110*, or *Administration 250* or permission of the instructor. Lecture, seminar weekly.
Staff

Administration 340

Entrepreneurship and the Canadian small business. (Not offered 1992-93)

Administration 341b

Communications in organizations. Theory of organizational communications. Strategies and skills applicable to communications in an organizational setting — interviews, group meetings and presentations. One lecture and one two-hour practice lab weekly. Prerequisite: *Administration 105* and *Administration 322a* or permission of the instructor.
I. Chapman

Administration 350

Managerial planning and control. The processes and problems of planning and control with particular attention to budgeting. The course will focus critically on traditional and innovative budget procedures for organizations in both the private and the public sectors. Emphasis will be placed on the vital role of the budget process in management. Prerequisite: *Administration 201a/202b* and *Administration 250*.
D. Newhouse

Administration-Native Studies 370b

Organizational behaviour in contemporary aboriginal organizations. This course provides a basic grounding in the general issues involved in managing people in organizations and in the particular issues confronting managers of contemporary aboriginal organizations. The major concern of the course is to develop an understanding of the basic dynamics of human behaviour in organizations and their implications for managerial decisions and actions. Prerequisite: *Administration 190*.
Staff

Economics 350a

Economics of trade unions.
(See Economics)

Economics 351b

Labour economics. (See Economics)

Administration 397b

Special topic: Human resource management. A survey of the concepts and practices in the major functions of human resource management. Topics include human resource forecasting, recruitment, selection, human rights, training and development, performance appraisal and compensation. Prerequisite: *Administration 322a* or permission of the instructor.
M. Quaid

Administration 400

Strategic management. The course focuses on the definition and analysis of strategic problems faced by business and government organizations in adapting to changes in their internal and external environments. Students will be expected to draw broadly on knowledge and skills developed over their first three years. *Restricted to students with fourth-year standing in the B.A.S. degree program*.
B. Ahlstrand and staff

Administration 410

Management thought. The course will focus on leading ideas and figures in the development of management thought, particularly through a close reading of some of the 'classics' in the field. Emphasis will be placed on developing individual student interests and on examining in depth selected topics. Prerequisite: Fourth-year standing in the B.A.S. degree program or permission of the instructor.
D. Torgerson

Administration 420

Professional ethics. A seminar on the ethical issues of professional life, especially as encountered in business and government. The primary purpose of the course is to promote an understanding of professional ethics which enlarges the capacity for careful reflection on moral problems. The course will proceed through an identification of concrete moral problems to an application of ethical concepts and a clarification of issues. Students are expected to play a large part in designing their projects. Prerequisite: Fourth-year standing in the B.A.S. degree program; or third-year standing with permission of the instructor.
J. Bishop

Administration 490

Reading course. By individual arrangement, normally by May 1 of the preceding academic year. Prerequisite: Permission of the instructor.

Administration 495

Special topics. For 1992-93 the following courses will be offered.

Administration 4951

Special topic. Organizational change.

This course will examine organizational change, particularly as a response to changing organizational environments. The course will address three main questions. Why do organizations change? How do they manage change? What constitutes successful change? Combining theory with practical cases from both private and public sectors, the course will throughout consider 'organizations as culture' in order to demonstrate the depth and complexity of the change process. Prerequisite: Fourth-year standing in the B.A.S. program or permission of the instructors.

I. Chapman and D. Newhouse

Administration 4952

Special topic. Current issues in human resource management. Canada is experiencing dramatic changes in the composition of its workforce. The new workforce will include more women, visible minorities, aboriginals, disabled and the aged. This course addresses some of the workplace problems and opportunities that arise from the demographic reality of the 1990s and beyond. The course will also examine the human resource implications of conducting business on an international basis. As business becomes more global, Canadians will increasingly work with others from different countries, cultures, ethnic groups and races. Prerequisite: Administration 322a or permission of the instructor.

M. Quaid

Administration 499

Research project. Research based on a project developed with a local organization. Details must normally be arranged with the Director by May 1 of the preceding academic year.

Policy Courses (see Calendar description in the respective departments or programs). Students are advised to check prerequisites and the pertinent department regulations for courses in planning their academic programs.

Canadian Studies-E. and R.S. 310:

Public policy and the Canadian environment

Canadian Studies-Cultural Studies 413:

Cultural policy in Canada

Comparative Development-Economics 330:

Economics of developing countries

Comparative Development-Politics 350:

The political economy of underdevelopment

Comparative Development 400: Development and underdevelopment in newly-industrialized countries

Economics-Canadian Studies 260a:

Canadian economic growth and development I: up to 1929

Economics-Canadian Studies 261b:

Canadian economic growth and development II: after 1929

Economics 301a: Monetary theory

Economics 302b: Monetary institutions and policy

Economics 311a: International trade

Economics 312b: International finance

Economics 316a: Government expenditure analysis

Economics 317b: Canadian tax policy

Economics 341a/b: Industrial organization

Economics-History 360: International economic history

Economics-Canadian Studies 385b:

Health economics

Geography-Canadian Studies 371a/b:

Urban planning

Geography 380b: Regional economic development

History-Canadian Studies 235: History of Canada since 1914

History-Canadian Studies-Politics 301: Canadian federalism

History-Canadian Studies 308: Business history

Native Studies-Comparative Development 305: Native community development

Native Studies 381a: Theory of community-based research and planning

Native Studies 385b: Program planning and evaluation research

Politics-Canadian Studies 201: Canadian politics

Politics 220: International politics

Politics 260: An introduction to political analysis and public policy

Politics-Canadian Studies 309: Ontario politics

Politics 321: International law and organization

Politics-Canadian Studies 362: Public policy and administration in Canada

Politics 420: Foreign policy analysis

Politics-ERS 460: Public policy in comparative perspective

Sociology 334b: Industrial sociology

Sociology-Canadian Studies 340: Sociology of education

Sociology 366: Analysis of social policy

Sociology 383: Cities and society

Sociology 480: Comparative social analysis

Anthropology

Professor and Chair of the Department
J.R. Topic, M.A., PH.D. (HARVARD)

Professors Emeriti

K.E. Kidd, M.A. (TORONTO), LL.D. (TRENT),
F.R.A.I.; K.A. Tracey, B.Sc. (HOWARD),
D.Sc. (KIEL)

Professors

R.S. Hagman, PH.D. (COLUMBIA); P.F.
Healy, B.A. (CALIFORNIA-BERKELEY), M.A.,
PH.D. (HARVARD); H.S. Helmuth, D.Sc.,
DR. HABIL. (KIEL) (on leave Winter Term);
L.J. Hubbell, M.A., PH.D. (CALIFORNIA-
BERKELEY); J.K. So, M.S., PH.D. (SUNY,
BUFFALO); E.M. Todd, B.A. (TORONTO),
PH.D. (NORTH CAROLINA);
T.L. Topic, M.A., PH.D. (HARVARD);
J.M. Vastokas, M.A. (TORONTO), PH.D.
(COLUMBIA)

Associate Professors

R.D. Powell, LIC. EN HISTORIA (CORDOBA),
PH.D. (MCGILL); M.J. Tamplin, B.A.
(TORONTO), M.A. (LONDON), PH.D.
(ARIZONA); R.K. Vastokas, M.A.
(TORONTO), PH.D. (COLUMBIA) (on leave
Fall Term); B.W. von Graeve, M.A.,
PH.D. (TORONTO)

Assistant Professors

S.M. Jamieson, M.A. (MANITOBA), PH.D.
(WASHINGTON STATE); O. Roesch, M.A.
(MCMASTER), PH.D. (TORONTO); J. Solway,
M.A., PH.D. (TORONTO)

Conjunct Professor

P.L. Storck, PH.D. (WISCONSIN)

Post Doctoral Fellow

G. Graffam, M.A., PH.D. (TORONTO)

Required Courses

The single-major Honours program consists of twenty courses. Minimum nine courses in Anthropology, including *Anthropology 100*

200

212

230

240

420

and two other *four-hundred* series courses in Anthropology.

Joint-major Honours program. Minimum seven courses in Anthropology, including *Anthropology 100*

200 and

one of 212, 230, 240

and two other *four-hundred* series courses in Anthropology.

Single-major General program. Minimum six courses in Anthropology, including *Anthropology 100*

200 and

two of 212, 230, 240

Joint-major General program. Minimum five courses in Anthropology, including *Anthropology 100* and
two of 200, 212, 230, 240

Note: In order to be eligible to graduate with a B.Sc. degree, a student must have completed a Grade 13/Ontario Academic course in Mathematics, or equivalent, or a university level Mathematics course.

Special Provisos

- Anthropology Honours students who joint-major in a Department or program which offers a 19-course Honours degree must include at least 19 1/2 courses in their overall program.
- Students who have taken all four of *Anthropology 200, 212, 230, and 240* may recognize one of these courses as equivalent to a *three-hundred* series course.
- Students undertaking a single- or joint-major Honours program should consult the Chair of the Anthropology Department for advice in preparing their programs of study.
- Students with a joint-major in Anthropology and Comparative Development Studies should consult the requirements listed under Comparative Development Studies. Such students may substitute *Anthropology 221* for *Anthropology 212, 230, or 240* in their required Anthropology program.
- Students are limited to no more than one full reading course in Anthropology, or its equivalent, for the General degree and one additional full reading course in Anthropology, or its equivalent, for the Honours degree. Only students who have a B (73%) average will be allowed to enroll in reading courses.
- Details of prerequisites are given under the individual course listings, but it should be noted that *Anthropology 100* is a normal prerequisite for other courses in Anthropology.

Anthropology 100

Introductory anthropology. Understanding and explaining humanity in all its variety. An interdisciplinary, comparative study of people and their cultures throughout the world (cultural anthropology), of human evolution, adaptation, and genetics (physical anthropology), the recovery and development of prehistoric societies (archaeology), and language as an aspect of culture (linguistics). Two-hour lecture weekly, optional film hour weekly, and fortnightly tutorial.

J. So, T. Topic, L. Hubbell, R. Hagman

Anthropology 200

Cultural anthropology. Cross-cultural analysis of religion, gender, economics, change, political and social organization, etc. Ethnography, theory, and method. Prerequisite: *Anthropology 100* or *Sociology 100* or permission of the instructor. Two-hour lecture weekly, seminar fortnightly.

O. Roesch and staff

Anthropology-Native Studies 201

Native societies of Canada. Traditional societies in several areas of Canada, as well as factors leading to socio-cultural change. Lecture, seminar weekly. Prerequisite: *Anthropology 100*, *Native Studies 100* or permission of instructor.

Staff

Anthropology 211

Field methods and techniques in archaeology. An introduction to the recovery, analysis, and interpretation of archaeological evidence in a field situation. Occasional summers only; confirm with the Department Office. Prerequisite:

Anthropology 100 or permission of the instructor. Enrolment may be limited.
Staff

Anthropology 212

Introduction to archaeology. An introduction to the methods used by archaeologists to recover and analyze their data, and a survey of selected culture histories in the Old and New World. No prerequisite. Two-hour lecture weekly, tutorial fortnightly.

P. Healy, M. Tamplin

Anthropology-Comparative Development 221

Development anthropology. An application of the resources of anthropology to the study of modern societies in transition. Analysis of programs of development and research at local, regional and national

levels in Africa, the Caribbean, Latin America and Canada. No prerequisite. Lecture, seminar weekly.

B. von Graeve

Anthropology 230

Introduction to language. How to develop an understanding of any language through linguistic analysis of sounds, words, and sentences; how languages change and language classification; acquisition of language, language in society, and writing; human vs. non-human forms of communication. No prerequisite. Two-hour lecture weekly, seminar fortnightly.

R. Hagman and E. Todd

Anthropology 240

Introduction to physical anthropology. The study of human evolution, the physical characteristics of the living varieties of mankind, and the genetics and growth of the human species. Prerequisite: *Anthropology 100* or permission of the instructor. Two-hour lecture weekly, two-hour seminar in the laboratory fortnightly.

H. Helmuth, J. So

Anthropology-Canadian Studies-Native Studies 253

Art of the Americas. A survey of the visual arts and architecture of the First Nations of North, Central and South America from pre-history to the present. No prerequisite. Two-hour lecture weekly, two-hour seminar fortnightly.

J. Vastokas

Anthropology-Comparative Development 301

Peoples and cultures of Africa. An introduction to contemporary African culture and society, focusing on culture history and indigenous institutions, the impact of colonial rule, and present-day problems of development. Prerequisite: *Anthropology 100* or permission of instructor. (Offered this year and in alternate years.) Two-hour seminar weekly.

O. Roesch

Anthropology 302

Cultures of the Pacific. Peoples and cultures of Oceania (Melanesia, Micronesia, and Polynesia); origins and diversification, traditional social organization, art, languages; consequences of European and Asian contact; contemporary economic and political issues. Prerequisite: *Anthropology 200* or permission of instructor. Two-hour lecture/seminar weekly.

E. Todd

Anthropology 303

Caribbean societies. Prerequisite: *Anthropology 100*. (Not offered this year.)

Anthropology-Comparative Development 304

Latin America. Examination of ethnic and historical foundations of Latin American society. Problems of modernization with special emphasis on peasant movements and interethnic relations. Prerequisite: *Anthropology 100* or permission of instructor. Lecture, seminar weekly.

B. von Graeve

Anthropology 305

Kinship and social organization. Prerequisite: *Anthropology 200* or permission of the instructor. (Not offered this year.)

Anthropology 309

Ethnographic method in cultural anthropology. Intensive study of research design, field methods, ethics, and styles of ethnography. Students will try out a variety of field methods, followed by a major field project. Three-hour seminar weekly. Prerequisite: *Anthropology 200*.

L. Hubbell

Anthropology 310

Archaeological method and theory. Study of methods used to acquire and interpret archaeological data in the field and laboratory. Prerequisite: *Anthropology 212* or equivalent. Two-hour lecture weekly, one-hour lab-seminar weekly.

J. Topic, P. Healy, M. Tamplin, S. Jamieson

Anthropology 311

Prehistory of North America. This course will survey the prehistoric cultures of North America north of Mexico from first human entry into the New World to European contact. Prerequisite: *Anthropology 212* or permission of instructor. Lecture weekly, seminar fortnightly.

S. Jamieson

Anthropology 312

Old World prehistory: Pleistocene and recent periods. Starts with a general survey of prehistoric cultural adaptations to changing Old World environments, followed by a more intensive study of European prehistory, with concentration on recent research in the post-pleistocene period. Prerequisite: *Anthropology 212*. (Offered this year and in alternate years.) Two-hour seminar weekly.

M. Tamplin

Anthropology 313b

Agriculture and urbanism. Agricultural origins around the world and factors that affect agricultural intensification in complex society. Prerequisite: *Anthropology 212* or permission of the instructor. (Offered this year and in alternate years.) Two-hour lecture/seminar weekly.

Anthropology 314

Archaeology, ethnohistory, and ethnography of South America. Prerequisite: *Anthropology 100* or permission of the instructor. (Offered in alternate years, but not this year.)

Anthropology 315b

Underwater archaeology. Prerequisite: *Anthropology 100*. (Not offered this year.)

Anthropology 320

Anthropology of religion. Cross-cultural study of religion, including early Christianity. Myth, symbolism, ritual, etc. Prerequisite: *Anthropology 100* or permission of instructor. Lecture, seminar weekly.

Staff**Anthropology 330a**

Language history. Examination of the various ways in which languages may change; techniques for the reconstruction of extinct languages; inquiry into economic, social, and ideological causes of language change. Prerequisite: *Anthropology 230* or permission of the instructor. Lecture and seminar weekly. (Offered this year and in alternate years.)

R. Hagman

Anthropology 331b

Languages of the world. Prerequisite: *Anthropology 230* or permission of the instructor. (Not offered this year.)

Anthropology 332a

Language in society. Prerequisite: *Anthropology 200* or *230*. (Offered in alternate years, but not this year.)

Anthropology 333a

Language and culture. Prerequisite: *Anthropology 200* or *230*. (Offered in alternate years, but not this year.)

Anthropology 334

Linguistic analysis. Morphological and syntactic analysis of several samples of non-Indo-European languages. A major research project involves the study of a single language (this year it is Cree) with the goal of producing a grammar based on

selected texts. There is a special focus on aspects of syntactic theory. Prerequisite: *Anthropology 230*. Lecture, seminar weekly.

E. Todd

Anthropology-Biology 340

Primatology. Prerequisite: *Anthropology 240* or permission of instructor. (Offered in alternate years, but not this year.)

Anthropology-Biology 341

Comparative osteology and human evolution. The skull and postcranial skeleton of early and modern Man and non-human primates; methods of description and measurement; determination of age and sex. Prerequisite: *Anthropology 240* or permission of instructor. Two-hour lecture weekly, two-hour seminar in the lab weekly. (Offered this year and in alternate years.)

H. Helmuth and staff

Anthropology 342

Issues in social biology. Prerequisite: *Anthropology 100* or permission of instructor. (Not offered this year.)

Anthropology-Biology 343

Human genetics, growth and adaptability. Prerequisite: *Anthropology 240* or permission of instructors. (Offered in alternate years, but not this year.)

Anthropology-History 345

Slavery in the Americas. (See History)

Anthropology 348

Medical anthropology. An intensive and comparative survey of the fundamental aspects of the anthropology of health; research methodology; biological, ecological and sociocultural factors influencing disease patterns; the cross-cultural differences in medical systems. Prerequisite: *Anthropology 240*. One-hour lecture and two-hour seminar weekly.

J. So

Anthropology-Canadian Studies 351

Art, architecture and society. A cross-cultural, thematic approach to the visual arts from the point of view of symbolic and semiotic anthropology. Themes: art as visual communication, cultural conditions of creativity, artist's role in society, economics and art, politics and art, values, universals. Seminar option a) 19th and 20th century Canadian art or b) art and gender from prehistory to the present. No prerequisite. Two-hour lecture weekly, two-hour seminar fortnightly.

J. Vastokas

Anthropology-Biology 370b

Genetics. (See Biology)

Anthropology 390, 391a, 392b

Reading course. A course designed to pursue special interests, largely through independent study. Details to be arranged in consultation with staff in Anthropology.

Anthropology-Comparative Development 407

Politics, economics and culture. A cross-cultural examination of the political and economic institutions of different societies, the concepts of economics and politics, and the nature of dispute settlement, exchange relationships, and political participation. Prerequisite: *Anthropology 200* or permission of instructor. (Support course for *Comparative Development Studies*) Two-hour seminar weekly.

D. Powell

Anthropology 411

Andean prehistory. A general review of Andean cultural history combined with intensive studies of selected problems in Andean archaeology. Emphasis of the course will vary from year to year. Prerequisite: *Anthropology 212* or permission of instructor. Two-hour lecture/seminar weekly. (Offered this year and in alternate years.)

J. Topic and T. Topic

Anthropology 412

Prehistory of Mesoamerica. A survey of the ancient Native civilizations of Mexico and Central America from the earliest settlement to the European conquest. The course includes a study of Aztecs, Maya, Olmec and other societies of Mesoamerica. Prerequisite: *Anthropology 212* or permission of the instructor. Two-hour lecture, seminar weekly. (Offered this year and in alternate years.)

P. Healy

Anthropology 413

Prehistory of the Intermediate Area. Prerequisite: *Anthropology 212* or permission of instructor. (Offered in alternate years, but not this year.)

Anthropology-Canadian Studies 415

Prehistory of Ontario. A detailed survey of Ontario prehistory within the context of general Northeastern archaeology. The course will focus upon both local and regional development from the first human entry to European contact. Prerequisite: *Anthropology 212* or permission of instructor. Three-hour lecture/seminar weekly.

S. Jamieson

Anthropology 420

The history and theory of anthropological thought. A discussion of principal trends in anthropological thinking from the mid-nineteenth century to the present: evolutionism, historicism, diffusionism, structural-functionalism, neoevolutionism and componential analysis, etc. Prerequisite: *Anthropology 200*. Two-hour seminar weekly.

R. Vastokas and staff

Anthropology-Women's Studies 422

Women: an anthropological perspective. A methodological and theoretical re-evaluation of anthropology's approach to women. Cross-cultural approaches to biology, sex roles, ideology, politics, economics, kinship, etc. Prerequisite: *Anthropology 200*. Three-hour seminar weekly.

L. Hubbell

Anthropology 423

Culture and communication. Prerequisite: *Anthropology 200* or *230* or permission of instructor. (Not offered this year.)

Anthropology 430

Field methods in linguistics. A research project in which an unfamiliar language is studied by collecting data directly from a native speaker. Morphological and syntactic analysis will result in a grammatical description of the language. Prerequisite: *Anthropology 230* or permission of the department. Three-hour laboratory weekly. Open to third year students. (Offered this year and in alternate years.)

E. Todd

Anthropology 432a

Phonetics. Prerequisite: *Anthropology 230* or permission of the instructor. (Offered in alternate years, but not this year.)

Anthropology 433b

Grammatical theory. An examination of modern theories of grammatical structure and their application to problems in linguistic analysis. Prerequisite: *Anthropology 230* or permission of the instructor. Two-hour seminar weekly. (Offered this year and in alternate years.)

R. Hagman

Anthropology-Biology 441

Comparative primate anatomy. Prerequisite: *Anthropology 340* or permission of instructor. (Not offered this year.)

Anthropology 442a

Applied anthropometry in modern societies. Prerequisite: *Anthropology 240* or permission of instructor. (Offered in alternate years, but not this year.)

Anthropology-Native Studies-Canadian Studies 450

Native art of Canada. Prerequisite: *Anthropology-Native Studies 253* and permission of the instructor. (Not offered this year.)

Anthropology 490, 491a, 492b

Reading course. A course designed to pursue special interests largely through independent study. Details to be arranged in consultation with staff in Anthropology and proposals to be submitted before registration.

Anthropology 495, 496a, 497b

Special topics in Anthropology. This year the following Special Topics courses are offered.

Anthropology 4951

Special topic. The socio-semiotics of textiles and textile technology. The history, function, and meaning of fibres, of spinning, weaving, patterns, and cloth within their socio-cultural contexts and in cross-cultural perspective. Prerequisite: *Anthropology 200* and *Anthropology 351* or permission of the instructor. Two-hour seminar weekly.

J. Vastokas

Anthropology 496a

Special topic. Social movements and cultural change in Africa. An analysis of the social and political transformations taking place in Africa with particular emphasis on the continuity of traditional elements, the emergent systems, ethnicity, nationalism, and class. Prerequisite: *Anthropology 200* or permission of the instructor. Two-hour seminar weekly.

O. Roesch

Anthropology 497b

Special topic. Social movements and cultural change in Eastern Europe. An analysis of the social and political transformations taking place in Eastern Europe with particular emphasis on the continuity of traditional elements, the emergent systems, ethnicity, nationalism, and class. Prerequisite: *Anthropology 200* or permission of the instructor. Two-hour seminar weekly.

R. Vastokas

Biochemistry

Program Co-ordinators

Chair of the Department of Biology

M. Berrill, B.SC. (MCGILL), M.SC. (HAWAII), PH.D. (PRINCETON)

Chair of the Department of Chemistry

K.B. Oldham, PH.D., D.SC. (MANCHESTER), F.C.I.C. (on leave Winter Term 1993)

Professors

See listing of faculty in Biology, Chemistry and Mathematics.

Required Courses

Because it rests on the disciplines of Chemistry and Biology, Biochemistry can be studied only as a single-major. No joint-major programs exist.

The General program consists of a minimum of seven Biology, Chemistry, and Chemistry-Biology courses, including *Biology 105*

Chemistry 120

130

Biology-Chemistry 203

one other two-hundred level Chemistry course

Biology 325a and *326b* or *382*

Chemistry-Biology 330

The Honours Program

Requirements for the General program must be met, plus: two of the *Chemistry-Biology 431a*, *432b*, *433b* half-courses, three other four-hundred level courses in Chemistry or Biology.

Notes

—For more detailed information, see separate Calendar entries for Biology and Chemistry.

Biology

Professor and Chair of the Department

M. Berrill, B.SC. (MCGILL), M.SC. (HAWAII), PH.D. (PRINCETON)

Professor Emeritus

R.L. Edwards, M.A., D.PHIL. (OXON)

Professors

R. Jones, B.SC. (WALES), M.SC. (KANSAS), PH.D. (WALES) (on leave 1992-93); T.C. Hutchinson, B.SC. (MANCHESTER), PH.D. (SHEFFIELD); D.C. Lasenby, B.SC. (TRENT), PH.D. (TORONTO) (on leave Winter Term

1992-93); P.M. Powles, B.A. (MCGILL), M.SC. (WESTERN ONTARIO), PH.D. (MCGILL); I.M. Sandeman, B.SC. (ST. ANDREWS), F.L.S.

Associate Professors

M. Havas, B.SC., PH.D. (TORONTO); T.R. Matthews, B.SC. (SOUTHAMPTON); C.D. Maxwell, B.SC. (WALES); C.D. Metcalfe, B.SC. (MANITOBA), M.SC. (NEW BRUNSWICK), PH.D. (MCMASTER); E. Nol, B.SC. (MICHIGAN), M.SC. (GUELPH), PH.D. (TORONTO)

Assistant Professor

J.F. Sutcliffe, B.SC. (WATERLOO), M.SC., PH.D. (TORONTO)

Adjunct Faculty

G. Mitchell, B.SC. (TRENT), A.R.T.

Senior Demonstrator

D. Buelow, B.SC. (TRENT), M.SC. (TORONTO)

Note

The curriculum of the Biology Department has been designed to allow students to specialize in one or more major approach to biology; A) physiology and medical biology, B) plant biology, C) animal biology, and/or D) ecology and evolution. Most of the courses offered by the Department are included in one or two of four categories, representing these four approaches. A series of other, cross-listed courses, offered by other departments, are also available.

First-year Course

Biology 101

Upper-year Courses

Categories			
A	B	C	D
203	201	204	202
310b	321a	309a	305
325a	322	310b	321a
326b	324b	312	327a
382	327a	314a	328b
405	328b	336b	350b
410a		382	360
			403a
			404

The following cross-listed courses may be taken as Biology courses, but do not fulfill category requirements.

CE-BI230b	AN-BI340	AN-BI343
CE-BI330	AN-BI341	
PS-BI375a	AN-BI441	
PS-BI376b	ES-BI304	
ES-BI412a		
CE-BI430		

Further specialization is possible through supervised independent study in *Biology 390, 490, 401 and 402*.

Required Courses

The single-major Honours program consists of twenty courses of which a minimum of ten are in Biology, including: *Biology 101* and the equivalent of at least one full course from each of the four categories above (where a course appears in two categories, it may be counted as one of the required courses in only one of the categories). At least eight of the ten courses must be selected from the four categories. The fourth quarter of the single-major Honours program will include *Biology 402* or *Biology 490*. It is recommended that the remaining fourth quarter courses be at the *three- or four-hundred* level.

The joint-major Honours program consists of twenty courses, of which a minimum of seven are in Biology, including: *Biology 101* and the equivalent of at least one full course from two of the four categories above. At least six of the seven courses must be selected from the four categories.

The single-major General program consists of fifteen courses of which at least six are in Biology, including: *Biology 101* and the equivalent of at least one full course from three of the four categories above. At least five of the six courses must be selected from the four categories.

The joint-major General program consists of fifteen courses of which at least five are in Biology, including: *Biology 101* and the equivalent of at least one full course from two of the four categories above. At least four of the five courses must be selected from the four categories.

*Students entering second, third or fourth year may substitute *Biology 150* or *Biology 100* for *Biology 101*, and may complete their degrees by satisfying the above requirements. Alternatively, they may satisfy the requirements that existed when they began their degrees (described in the 1991-92 Calendar).

Note: In order to be eligible to graduate with a B.Sc. degree, a student must have completed a Grade 13/Ontario Academic course in Mathematics, or equivalent, or a university level Mathematics course.

Highly Recommended Additional Courses

Chemistry 130
Mathematics-Statistics 150
Computer Science 100
Chemistry 210a, 230b.

Recommended Further Courses

Environmental and Resource Science 100
Geography 101
Mathematics 100 or 110
Mathematics-Statistics 150
Physics 100
Science 350
Computer Studies 100

Biochemistry

For a program in biochemistry see the Chemistry section.

Notes

- Students with a strong background in high school biology may consider taking a second year Biology course concurrently with *Biology 101*.
- If fewer than five students enrol in a course the format may be changed.
- All *three-hundred* and *four-hundred* series courses except *Biology 400, 401, 402* and *490* can be taken in either the third or the fourth quarter of the Honours program, and some will be offered only in alternate years. Students wishing to register in a *three-hundred* or *four-hundred* series course outside of their year must obtain permission of the instructor.
- Students planning to take *Biology-Environmental and Resource Science 202* should take *Mathematics-Statistics 150* in their first year.
- Where students lack the necessary pre-requisites for a course, and are admitted on the instructor's permission, they should expect to carry a much heavier work load.
- Transfer students should consult the department Chair before selecting courses. The departmental committee should be consulted for departures from any of the above programs.
- Charges may be made for field trips in some courses.
- The following courses will require the completion of the Animal Care course; *Biology 382, 400, 401, 402* and *410b*.
- Students intending to take the Graduate Record Examinations (GRE) Advanced Biology Test, required by some Canadian and American Graduate Schools,

would be well advised to include the following courses in their program: *Mathematics 100*, *Chemistry 130*, *Biology-Environmental and Resource Science 202*, and *Biology 203* and *360*.

Biology 101

Biological interactions. An introduction to selected aspects of biology, including ecology, plant and animal associations, cell biology and molecular genetics, illustrated by examples of current biological interest, and providing the foundations for the four categories of upper-year courses. Two lectures and one three-hour laboratory period or workshop weekly. Fortnightly workshop for students lacking OAC biology or its equivalent.

J.F. Sutcliffe and staff

Biology 201

Biology of plants. An introduction to the diversity of plants, focusing on their evolution, design, nutrition, growth and reproductive biology. Not available to students with *Biology 150*. Two lectures and three-hour laboratory weekly, tutorials every three weeks.

C.D. Maxwell and staff

Biology-Environmental and Resource Science 202

A study of the interactions between organisms and their environment; the study of individuals, populations and communities within various ecosystems. Prerequisite: One of *Biology 100*, *101*, or *150*. Recommended: *Mathematics-Statistics 150*. Two lectures weekly, three-hour laboratory fortnightly and seminar every three or four weeks.

D. Lasenby and E. Nol

Biology-Chemistry 203

Development, physiology and genetics of cells and tissues. Prerequisite: one of *Biology 100*, *101* or *150*. Highly recommended *Chemistry 130*. Two lectures per week; laboratory fortnightly.

Biology 204

Biology of invertebrates. An introduction to the diversity of invertebrate animals emphasizing their evolutionary relationships and focusing on functional, behavioral and ecological aspects of their biology. Not available to students with *Biology 150*. Two lectures and one three-hour laboratory period weekly; tutorial every two to three weeks.

I.M. Sandeman and staff

Biology-Chemistry 230b

Elementary biochemistry. (See Chemistry)

Biology 305

Limnology. (Not offered this year.)

Biology 309a

Biology of insects. An introduction to the diversity of the insect world. Lectures emphasize insect behavior, physiology and anatomy. Labs provide a taxonomic overview of insects. Prerequisite: *Biology 100*, *101* or *150*. Two lectures, tutorial, three-hour laboratory period weekly. An insect collection is required for this course. Equipment and materials for collecting will be available from the Biology department after the end of classes in the second term.

J. Sutcliffe

Biology 310b

Medical entomology. A study of insects that produce medical conditions as a direct result of their interactions with humans or as carriers of disease. Prerequisites: *Biology 100*, *101* or *150* and *309a/b* or permission of the instructor. Two lectures, tutorial, three-hour laboratory period weekly.

J. Sutcliffe

Biology 312

Vertebrate zoology. The evolution, structural and functional morphology of the vertebrates. Prerequisite: *Biology 100*, *101* or *150*; *Biology 202* recommended. Lecture, three-hour laboratory weekly with required dissections; tutorial every three weeks.

P.M. Powles

Biology 314a

Fish biology. The biology and ecology of marine and fresh water fishes and management of fisheries. Prerequisites: one of *Biology 100*, *101* or *150*; *Biology-Environmental Resource Studies 202*. Recommended: *Mathematics-Statistics 150*. Lecture weekly. Two-hour laboratory fortnightly alternating with second lecture; workshop fortnightly.

P.M. Powles

Biology 321a

Plant ecology. (Not offered this year.)

Biology 322

Biology of seed plants. (Not offered this year.)

Biology 324a

Biology of the algae and cyanobacteria. An introduction to these important groups of plants which are often considered a nuisance but which are also one of the world's important natural resources. Their ecological role in both the marine and freshwater environments will be emphasized as well as their economic importance. Prerequisite: *Biology 150*. Lecture, three-hour laboratory and seminar or tutorial weekly.

C.D. Maxwell

Biology 325a

Microbiology. (Not offered this year.)

Biology 326b

Advanced microbiology. (Not offered this year.)

Biology 327b

Plant population biology. The study of reproductive strategies of plants, with particular emphasis on the success of weed species. Seed production, dispersal, germination, establishment and vegetative means of reproduction will be examined. Prerequisite: *Biology 150*. Recommended: *Biology 202*. One lecture and laboratory or project time equivalent to three hours per week. Tutorial fortnightly.

C.D. Maxwell

Biology 328a

Stress ecology of plants. (Not offered this year.)

Biology-Chemistry 330

General biochemistry. (See Chemistry)

Biology-Psychology 336b

Animal behaviour. An introduction to the ecological, physiological and evolutionary mechanisms which influence the behaviour of animals, with particular emphasis on animal societies. Prerequisite: *Biology 100* or *150* and Animal Care Course for those involved in projects using vertebrates. Recommended: *Biology 202*. Lecture, film-seminar weekly, tutorial fortnightly, and projects equal to a three-hour laboratory weekly.

M. Berrill

Biology 339a

Wildlife biology. (Not offered this year.)

Biology-Anthropology 340

Primatology. (See Anthropology)

Biology-Anthropology 341

Comparative osteology and human evolution. (See Anthropology)

Biology-Anthropology 343

Human genetics, growth and adaptability. (See Anthropology)

Biology 350b

Biogeography. Major patterns of distribution and abundance of animal and plant species as affected by geological, ecological and evolutionary processes. Prerequisite: At least one of *Biology 110*, *120*, *150* or *250*. Two hours of lectures, one-hour seminar weekly.

Biology 360

Population genetics and evolution. A study of the biological processes and events of evolution, including modes of selection, sources of genetic variation, coevolution and tempo of evolution. Prerequisite: *Biology 100*, *101* or *150*. Two lectures per week, one lab every two weeks, seminar or tutorial every two or three weeks.

M. Berrill and E. Nol

Biology-Psychology 375a

Principles of the nervous system. (See Psychology)

Biology-Psychology 376b

Neuropsychology. (See Psychology)

Biology 382

General physiology of animals. The general principles governing physiological processes in animals. Prerequisite: *Biology 100*, *101* or *150* and Animal Care Course. Recommended: *Chemistry 230b* and *Biology 203*. Lecture, three-hour laboratory weekly and tutorial or seminar fortnightly.

T.R. Matthews

Biology 390, 391a, 392b, 393c

Reading course. This course provides an opportunity for more intensive or broader study of a selected topic under the guidance of a faculty member. Open to students who have obtained credits in two full courses taught by members of the department of Biology. One of the courses must be at the two-hundred level or higher. Students wishing to enroll in this course can obtain an application form from the Department Secretary. It is the responsibility of the applicant to find a course supervisor and a second reader. All University deadlines as specified in the University Calendar apply.

T. Matthews and staff

Biology 3951, 396a, 397b, 398c

Special topics in biology.

Biology 402

Research thesis. This research course, in which students will investigate a specific field of interest under the guidance of a faculty member, counts as two credits and double fees are charged. A student wishing to take this course must submit the topic to the departmental committee for approval. Animal Care Course is prerequisite if applicable.

P.M. Powles and staff

Biology 403a

Research design and data analysis. Practical instruction in design of research projects, data collection and analysis, and presentation of results. The course will rely heavily on tutorials and workshops. Prerequisite: *Biology 202* and *Mathematics-Statistics 150*, or permission of instructor. Seminar, Tutorial and two- to three-hour laboratory weekly. Enrolment will be limited to 25.

E. Nol

Biology 405

Electron microscopy. The biological applications of light microscopy as well as transmission and scanning electron microscopy. Practical instruction in histological and other techniques that are used in the study of plant and animal tissues. Recommended: at least one of *Biology 100*, *101* or *150*. Lecture, tutorial, three-hour laboratory weekly. Enrolment will be restricted, and registration will be by written permission of the instructor.

J.F. Sutcliffe

Biology 404

Marine biology. An introduction to the study of the sea. Compulsory week-long field trip to Jamaica in the Fall Term at cost to student. Prerequisites: *Biology 202* and at least one other course in Biology or permission of instructor. Lecture, seminar weekly. Field trip equals about three hours work weekly. Enrolment may be limited.

T.R. Matthews and staff

Biology 410b

Parasitology. The biology of animal parasites. Prerequisite: *Biology 150*. The Animal Care Course will be required for those intending to study vertebrates. Lecture, three-hour laboratory period and tutorial weekly.

I.M. Sandeman

Biology-Chemistry 430

Advanced biochemistry. (See Chemistry)

Biology-Anthropology 441

Comparative primate anatomy. (See Anthropology) (Not offered this year.)

Biology 490, 491a, 492b, 493c

Reading course. This course provides an opportunity for more intensive or broader study of a selected topic under the guidance of a faculty member. Open to students in their fourth quarter who have obtained credits in two full courses taught by members of the Department of Biology. One of the courses must be at the two-hundred level or higher. Students wishing to enroll in this course can obtain an application form from the Departmental Secretary. It is the responsibility of the applicant to find a course supervisor and a second reader. All University deadlines as specified in the University Calendar apply.

T. Matthews and staff

Canadian Studies
Chair of the Program

J.H. Wadland, M.A. (WATERLOO), PH.D. (YORK)

Professors Emeriti

G. Roper, M.A., PH.D. (CHICAGO);
A. Wilson, M.A. (DALHOUSIE), PH.D. (TORONTO)

Professor

J.E. Struthers, M.A. (CARLETON), PH.D. (TORONTO)

Associate Professors

D. Clarke, M.A. (MCMASTER), PH.D. (CARLETON); M. Lacombe, M.A., PH.D. (YORK); C. Verduyn, B.A. (TRENT), M.A., PH.D. (OTTAWA) (on leave Fall Term 1992)

Adjunct Faculty

S.D. Grant, M.A. (TRENT); J. Favreau, M.A. (TRENT)

Associated Faculty

Anthropology, S.M. Jamieson, J.M. Vastokas; *Comparative Development Studies*, D.R. Morrison; *Cultural Studies*, J. Bordo; *Economics*, J. Muldoon, P. Wylie; *English Literature*, G.A. Johnston, S.H.W. Kane, O.S. Mitchell, J.E. Neufeld, M.A. Peterman, Z. Pollock; *Environmental and Resource Studies*, T. Whillans; *French*, J.-P. Lapointe; *Geography*, W.P. Adams, A.G. Brunger, F.M. Helleiner, J.S. Marsh; *History*,

B.W. Hodgins, J.N. Jennings, E.H. Jones, P.D.W. McCalla, J. Sangster, S.D. Standen, K. Walden; *Native Studies*, P. Kulchyski, J.S. Milloy; *Philosophy*, J.W. Burbidge; *Political Studies*, R. Campbell, K.R.V. Lyon, R.C. Paehlke, J. Wearing; *Sociology*, R.A. Lockhart, G. Thibault; *Vanier Professor*, T.H.B. Symons.

Required Courses

The Canadian Studies Program is not founded upon a single department, but is the product of co-operation by members of several departments and programs within the University. At all levels the Program encourages the *interdisciplinary* examination of Canadian experience. A detailed brochure explaining options available to students in the Canadian Studies Program may be obtained at the Office of the Chair.

N.B. Students must have completed at least three courses before enrolling in any Canadian Studies course. Exceptions by permission of the instructor only.

The single-major Honours program consists of nineteen courses. Minimum nine courses in Canadian Studies. These courses will include *Canadian Studies 200*, *Canadian Studies 250* or *252*, *Canadian Studies 300* and at least three four-hundred series Canadian Studies courses.

Joint-major Honours program. Minimum seven courses in Canadian Studies. These courses will include *Canadian Studies 200*, *Canadian Studies 250* or *252*, *Canadian Studies 300* and at least two four-hundred series Canadian Studies courses.

Joint-major General program. Minimum five courses in Canadian Studies. These courses will include *Canadian Studies 200*, *Canadian Studies 250* or *252*, and *Canadian Studies 300*.

Canadian Studies-Environmental and Resource Studies 200

Canada: The land. An interdisciplinary enquiry into the function and idea of the land in Canadian culture; concepts of the land in history, geography, literature, art, economics, politics and philosophy; settlement and resource development, land policy, aboriginal rights, bioregionalism and social ecology. Lecture weekly; tutorial weekly.

J.H. Wadland

Canadian Studies-Politics 201

Canadian politics. (See Political Studies)

Canadian Studies-History 221

Modern Ontario: Social, political and economic development in Ontario from Confederation to the present, emphasizing late nineteenth and twentieth century problems. Education, social policy, manufacturing, resource development, northern regionalism, literature and political traditions. Lecture weekly; seminar weekly.

J.E. Struthers

Canadian Studies 230

Canada: Economic policy. (Not offered this year.)

Canadian Studies-History 235

The History of Canada since 1914. (See History)

Canadian Studies-French 250

La civilisation québécoise. A general survey of the social and cultural history of the Quebec people, illustrated by readings on the arts, letters, religious social and political life. It attempts to synthesize the history of ideas in Quebec to promote a better understanding of contemporary Quebec culture. Prerequisite: *French 110* or by permission of the instructor. Lecture weekly; seminar weekly.

Staff

Canadian Studies 252

La Francophonie: French identities in Canada. This course addresses the evolution of francophone identities in Canada from the Quiet Revolution to the present, exploring Quebec society from a comparative perspective. As an introduction to the political, literary and popular culture of the 1960s, 1970s and 1980s, the course spends one semester exploring contemporary Quebec, and one semester discussing recent franco-Manitoban, franco-Ontarian and Acadian realities. English lectures. Choice of English or French tutorials. Lecture, tutorial weekly.

M. Lacombe

Canadian Studies-Anthropology-Native Studies 253

Art of the Americas. (See Anthropology)

Canadian Studies-History 254

Canada and the modern experience. (See History)

Canadian Studies-Native Studies-History 255

History of the Indians of Canada. (See Native Studies)

Canadian Studies-Economics 260a
Canadian economic growth and development I: up to 1929. (See Economics)

Canadian Studies-Economics 261b
Canadian economic growth and development II: after 1929. (See Economics)

Canadian Studies-Geography 263a
Historical Geography. (See Geography)

Canadian Studies-English 265
English Canadian Prose. (See English Literature)

Canadian Studies-Native Studies-History 270
History and politics of the Metis and non-status Indians of Canada. (Not offered this year.)

Canadian Studies-Women's Studies 275
Women in Canada. An interdisciplinary introduction to the study of women in Canada in relation to developing social, economic, technological, political and cultural contexts. Lecture weekly; seminar weekly.
M. Lacombe

Canadian Studies-Women's Studies 280
Canadian women's writing. (Not offered this year.)

Canadian Studies-Native Studies 285
Native People and the North. (See Native Studies)

Canadian Studies 290
Religion in Canada. (Not offered this year.)

Canadian Studies-History 300
Canada: Communities and identities. An interdisciplinary study of regionalism, ethnicity and community in Canadian life. First Term: regional identity in Western, Atlantic, Central and Northern Canada. Second Term: immigration, multiculturalism, minority rights, and ethnic identity. Lecture weekly; seminar weekly.
J.E. Struthers

Canadian Studies-History-Politics 301
Canadian political culture, 1864 to the present. (See History)

Canadian Studies-History 302
The emergence of modern Quebec, 1886-1970. (See History)

Canadian Studies-History 303
Early French Canada: economic, social, institutional and ideological foundations of Quebec. (See History)

Canadian Studies-Politics 305
Politics and society in Quebec. (Not offered this year.)

Canadian Studies-History 307
The Atlantic provinces. (Not offered this year.)

Canadian Studies-History 308
Business history: The Canadian experience in international perspective, 1650-1960. (See History)

Canadian Studies-Politics 309
Ontario politics. (See Political Studies)

Canadian Studies-Environmental and Resource Studies 310
Public policy and the Canadian environment. (See Environmental and Resource Studies)

Canadian Studies-History-Women's Studies 316
Women in North America. (See History)

Canadian Studies-Politics 322
Canadian-American relations since World War II. (See Political Studies)

Canadian Studies-French 325
Théâtre et poésie du Québec. (See Modern Languages and Literatures, French Studies Section)

Canadian Studies-Geography 332b
Settlement Geography. (See Geography)

Canadian Studies-Environmental and Resource Studies-Geography 333a
Wilderness resources. (See Geography)

Canadian Studies-Sociology 340
Sociology of education. (See Sociology)

Canadian Studies-Anthropology-Native Studies 351
Art, architecture and society. (See Anthropology)

Canadian Studies 355
English Canadian and Quebec prose literature. (Not offered this year.)

Canadian Studies-Native Studies 360
Native peoples in literature. (Not offered this year.)

Canadian Studies-Geography 361
Geography of Canada. (See Geography)

Canadian Studies-Politics 362
Public policy and administration in Canada. (See Political Studies)

Canadian Studies-Geography 363b
Historical Geography of Canada before 1900. (See Geography)

Canadian Studies-Geography 364 (a/b)

Geography of the Polar regions.
(See Geography)

Canadian Studies-English 365

English-Canadian Poetry (Not offered
this year.)

Canadian Studies-Politics 366

Canadian political economy. (See Political
Studies)

Canadian Studies 370

Science in Canadian society. (Not offered
this year.)

Canadian Studies-Geography 371 (a/b)

Urban planning. (See Geography)

Canadian Studies-Geography 376 (a/b)

The Urban-Rural fringe. (See Geography)

Canadian Studies-French 383

Le roman québécois. (See MLL-
French Section)

Canadian Studies-Economics 384b

Health economics. (See Economics)

Canadian Studies-Sociology 389

The social structure of Canada.
(See Sociology)

Canadian Studies 390, 391a, 392b, 393c

Reading course. A structured course
arranged between student and instructor,
approved by the Program Chair, involving
independent study of material. Regular
meetings and detailed written work.

Canadian Studies 395, 396a, 397b, 398c

Special topic. A structured course
arranged by a group of students and an
instructor, approved by the Program
Chair.

Canadian Studies 401

Single credit Honours thesis.
Arrangements to be made through the
Program Chair.

Canadian Studies 402

Double credit Honours thesis.
Arrangements to be made through the
Program Chair.

Canadian Studies-History 403

Canadian intellectual and cultural history.
(See History)

Canadian Studies-Politics 405

Contemporary Canadian problems.
(See Political Studies)

Canadian Studies-History 406

Upper Canada. (See History)

Canadian Studies-History 407

The Canadian-American frontier.
(See History)

Canadian Studies-History 410

Social and political traditions and ideas
in the United States and Canada, since
1896. (See History)

*Canadian Studies-Cultural Studies 413**The Vanier Seminar*

Cultural policy in Canada. (Not offered
this year.)

Canadian Studies-Anthropology 415

Prehistory of Ontario. (See Anthropology)

Canadian Studies-History 422

Canada: The North. (See History)

*Canadian Studies-History-Native
Studies 425*

The evolution of the settlement common-
wealth. (See History)

Canadian Studies-Sociology 445

The media and communications in Canada.
An examination and analysis of the com-
munications industries and policies of
Canada. The growth and development of
book, newspaper and periodical publish-
ing, radio, television, telecommunications
and film. Two-hour seminar weekly.

D. Clarke

*Canadian Studies-Anthropology-
Native Studies 450*

Native Art of Canada. (Not offered
this year.)

*Canadian Studies-Comparative
Development 460*

Canada and the Third World. (See
Comparative Development Studies)

Canadian Studies-English 4651

Advanced studies in Canadian Literature.
(See English Literature)

Canadian Studies-English 4652

Advanced studies in Canadian Literature.
(See English Literature)

Canadian Studies-History 475

History of everyday life. (See History)

Canadian Studies-History 476

Studies in Canadian labour. (Not offered
this year.)

Canadian Studies-History 477

Studies in Canadian social policy. This
research course examines the evolution of
social policy from the early 19th to the late
20th century; governmental, professional
and organizational responses to poverty,
disease, old age, mental illness, physical
disability, family fragmentation. Seminar
fortnightly.

J.E. Struthers

Canadian Studies 485, 486a, 487b, 488c
Field course. A structured course of supervised activity in the field, including detailed written work. Arrangements to be made through Program Chair.

Canadian Studies 490, 491a, 492b, 493c
Reading course. For 1992-93, one formal reading course, *Canadian Studies 4901*, will focus on Bioregionalism: The Otonabee River Watershed, Haliburton Section. Ecology, history and culture; sustainable development; appropriate technology; regional planning. Permission of instructor required.

J.H. Wadland

Canadian Studies 495, 496a, 497b, 498c
Special topic. A structured course arranged by a group of students and an instructor, approved by the Program Chair.

Diploma Program in Canadian Studies

The Canadian Studies Program offers a special Diploma for foreign students and others who wish to undertake a single academic year (September-April) focused directly upon Canadian political economy, society, environment and culture. Individuals wishing to enrol in the diploma program must apply, in writing, to the Chair of the Canadian Studies Program, indicating course preferences. As the number of spaces is limited, *acceptance is not automatic*. A committee made up of faculty members teaching in the Canadian Studies Program, will select the successful candidates in consultation with the Admissions Committee.

Eligibility

Applicants must either be students registered in, or graduates of an accredited post-secondary educational institution other than Trent University. An official transcript, including evidence of the content of courses completed and grades received must accompany the application.

Language Requirements

In accordance with University regulations applicants must have a competence in written and spoken English. Facility in the French language is desirable but not compulsory.

Special Events

All students admitted to the Diploma program will attend field trips, films, special lectures and conferences as part of their curricular activity.

Visas, Fees and Accommodation

All students admitted to the Diploma program are expected to make their own arrangements for visas, financing and accommodation during the year at Trent. Nevertheless, every effort will be made to assist in this process.

The Diploma

The official Diploma will be awarded in the Spring. With it will be included an official Trent University transcript identifying all courses undertaken and grades received.

Course Requirements

All students admitted to the Diploma program will be required to take four courses and the Canadian Studies Colloquium. One course must be selected from each of columns A, B and C (for a total of three courses):

A Studies in the Social Sciences	B Studies in Regionalism and the Environment	C Studies in Culture
201	200	250
230	221	252
235	285	253
255	300	254
260a	302	265
261b	303	280
270	305	290
275	307	325
301	309	351
308	310	360
316	332a	365
322	333a/b	380
340	361	381a
362	364a/b	382b
366	371a/b	390
370	376a	403
375	397a/b	413
384b	402	445
389	406	450
405	407	465
410	415	480
425	422	481a
460	480	482b
475	481a	
476a	482b	
477		

All students *must* enroll in either *Canadian Studies 200* or *Canadian Studies 300* and in the Canadian Studies Colloquium. The Colloquium is not a graded course but is offered as a venue for special seminars and

lectures on subjects of interest to students in the Diploma program. It will also function as a vehicle for sorting out areas of difficulty and for integrating material from the various courses. Students must complete formal courses with a mark of 60% or better in order to qualify for the Diploma.

Chemical Physics

Program Co-ordinators

Professor and Chair of the Department of Chemistry

K.B. Oldham, PH.D., D.S.C. (MANCHESTER), F.C.I.C. (on leave Winter Term 1993)

Professor and Chair of the Department of Physics

P.C. Dawson, M.S.C. (TRENT), PH.D. (VICTORIA)

Professors

See listing of faculty in Chemistry, Mathematics and Physics

Required Courses

The program in Chemical Physics is a sequence of mutually supportive courses offered by the Departments of Chemistry, Physics and Mathematics that comprise an integrated whole. Not available as a joint-major.

The General program consists of a minimum of ten courses in the three disciplines, including

<i>Chemistry</i>	120
	200
	300
<i>Physics</i>	100
	202a
	302a
	321
<i>Mathematics</i>	110
	200
	301

either *Chemistry 130* or a two-hundred or three-hundred level Physics course.

The Honours Program

Requirements for the General program must be met, plus: two of *Chemistry 403a*, *404b*, *405b*; *Physics 400*; three more courses in Chemistry, Physics or Mathematics, of which two must be at the four-hundred level.

Notes

- For more detailed information, see separate Calendar entries for Chemistry and Physics.
- Students wishing to transfer to a single-major program should consult the appropriate Department Chair before commencing the third quarter.

Chemistry

Chair of the Department

K.B. Oldham, PH.D., D.S.C. (MANCHESTER), F.C.I.C. (on leave Winter Term 1993)

Professors Emeriti

S.A. Brown, B.S.A. (TORONTO), M.S., PH.D. (MICHIGAN STATE); A.H. Rees, M.A., PH.D. (CAMBRIDGE), M.A. (OXFORD), PH.D. (LONDON), F.C.I.C., Assoc. R.C.S.; R.A. Stairs, B.SC. (MCGILL), M.SC. (WESTERN ONTARIO), PH.D. (CORNELL), F.C.I.C.

Professors

P.F. Barrett, M.S.C. (QUEEN'S), PH.D. (TORONTO), F.C.I.C.; E.G. Lewars, B.SC. (LONDON), PH.D. (TORONTO) (on leave Fall Term 1992); R.E. March, B.SC. (LEEDS), PH.D. (TORONTO), F.C.I.C.

Associate Professor

R.G. Annett, B.SC., PH.D. (WINDSOR) (on leave Winter Term 1993)

Assistant Professors

J.F. Cormier, B.SC. (ST. FRANCIS XAVIER), PH.D. (MCGILL); J.M. Parnis, B.SC., PH.D. (TORONTO)

Conjoint Associate Professors

R.C. Makhija, M.S.C., PH.D. (LUCKNOW), C.CHEM., F.C.I.C.; A.M. Zobel, M.S.C., PH.D. (WARSAW)

Demonstrators

H. Al-Haddad, B.SC. (BAGHDAD), PH.D. (STRATHCLYDE), M.C.I.C.; S. Landry, B.SC. (TRENT)

Required Courses

The single-major Honours program consists of twenty courses including

<i>Chemistry</i>	120
	130
	200
	210a and 211b
	240a

three three-hundred level Chemistry courses

four four-hundred level courses, of which

one may be from another discipline, including at least three Chemistry lecture half-courses and no more than two credits from project courses.

Thus, the minimum number of Chemistry courses required is ten, provided *CE-ER 341b* is included.

Joint-major Honours program. To arrange an appropriate program, early consultation with both departments is urged. A minimum of seven courses in Chemistry is required, including

Chemistry 120
130

three *two-hundred* level or *three-hundred* level Chemistry courses
two *four-hundred* level Chemistry courses.
See listings under Biochemistry and Chemical Physics.

Single-major General program. Minimum six Chemistry courses, including

Chemistry 120
130
200
210a
240a

two *three-hundred* level or *four-hundred* level Chemistry courses.

Joint-major General program. Minimum five Chemistry courses, including

Chemistry 120
130

three *two-hundred* level or *three-hundred* level Chemistry courses.

Special Provisos

- Students who have successfully completed two or more full Chemistry courses at the *two-hundred* level prior to September 1992 are not required to take *Chemistry 240a* for the purpose of fulfilling single-major, General or Honours Chemistry degree requirements. The combination of *Chemistry 240a* and *Chemistry-Environmental and Resource Science 341b* may be regarded as a full *three-hundred* series course in Chemistry.
- Departures from the normal pattern of courses may sometimes be permitted. Apply to the Chair.

Notes

- First year students who intend to major in Chemistry or Biochemistry are encouraged to take both *Chemistry 120* and *Chemistry 130* in the first year.
- First year students who wish to take one Chemistry course only, and whose prin-

cipal interest is in Physics or Mathematics or Environmental and Resource Studies, should enroll in *Chemistry 120*.

- First year students who wish to take one Chemistry course only, and whose principal interest is in the life sciences should enroll in *Chemistry 130*.
- *Chemistry 120* and *Chemistry 130* proceed at a pace appropriate to students with an O.A.C. or equivalent in Chemistry. Students without this background may need to undertake extra studies; they should contact the instructor prior to registration, so that special arrangements can be made.
- Students who intend to major in Chemistry should note that a grounding in Physics and in Mathematics is essential.
- Students who intend to become professional chemists should note that the minimum number of Chemistry courses required for a major program in Chemistry is insufficient to guarantee admission to membership in the Chemical Institute of Canada.
- All students taking one or more Chemistry courses pay a laboratory deposit of \$60 for one laboratory course or \$100 for two or more laboratory courses. This deposit may be returned wholly or in part depending on breakages incurred.
- Laboratory manuals where provided are subject to a charge.

Chemistry 120

Introduction to inorganic and physical chemistry. Gases, liquids and crystals; atomic theory and valency; redox reactions and electrochemistry; descriptive inorganic chemistry; thermodynamics and kinetics. Experimental work to illustrate concepts in analytical, inorganic and physical chemistry. See Notes. Two lectures weekly; laboratory and problem session in alternate weeks.

P.F. Barrett and R.E. March

Chemistry 130

Introduction to organic and biological chemistry. The chemical basis of life and the fundamental principles that govern it; bonding; hydrocarbons and organic compounds of oxygen and nitrogen; acids and bases; features of biochemical processes. Experimental work to illustrate concepts in analytical, organic and biological chemistry. See Notes. Two lectures weekly; laboratory and tutorial in alternate weeks.

R.G. Annett and E.G. Lewars

Chemistry 200

Elementary physical chemistry. The kinetic theory of gases; thermodynamics of physical and chemical processes; chemical kinetics; electrochemistry. Prerequisites: *Chemistry 120* and *Mathematics 110* or permission of instructor, possibly requiring a special examination to be held in the first week of term. First half year: one tutorial and three lectures weekly; second half year: one tutorial and two lectures or three lectures, and one laboratory weekly.
K.B. Oldham

Chemistry-Biology 203
(See Biology)**Chemistry 210a**

Elementary organic chemistry. Chemical techniques and the chemistry of those important classes of organic compounds that form the basis of both organic chemistry and biochemistry. Prerequisite: *Chemistry 130*. Two lectures and laboratory weekly; tutorial to be arranged.
J.F. Cormier

Chemistry 211b

Continuing organic chemistry. Main classes of compounds including some with more than one functional group. Synthetic methods and mechanisms; spectroscopy; qualitative organic analysis; laboratory preparations. Prerequisite: *Chemistry 210a*. Two lectures and laboratory weekly; tutorials to be arranged by instructor.
E.G. Lewars

Chemistry-Biology 230b

Elementary biochemistry. (Not offered this year.)

Chemistry 240a

Analytical chemistry. The theory of chemical equilibrium as it applies to analysis; experiments in gravimetric and volumetric analysis. Prerequisite: *Chemistry 120* or, with the permission of the instructor, *Chemistry 130*. Two lectures and laboratory weekly; tutorials to be arranged by instructor.
J.M. Parnis

Chemistry 300

Physical chemistry. Introduction to quantum chemistry, chemical bonding, statistical mechanics, spectroscopy and reaction rate theory. Prerequisite: *Chemistry 200*. Recommended: *Mathematics 200*. Two lectures weekly, tutorials

fortnightly; laboratory weekly. Seminars to be arranged.

R.E. March

Chemistry 310

Organic chemistry. A survey of organic chemistry, including heterocycles and some natural products. Mechanistic aspects and modern spectroscopic methods will be emphasized. Prerequisite: *Chemistry 211b*. Two lectures or tutorials and one laboratory weekly.
J.F. Cormier

Chemistry 320

Inorganic chemistry. Atomic structure and its relation to chemical properties of the elements, valence theory, stereochemistry of inorganic compounds, co-ordination chemistry. Prerequisites: *Chemistry 200* or permission of the instructor. Two lectures or tutorials and one laboratory weekly.
P.F. Barrett

Chemistry-Biology 330

General biochemistry. Chemical processes in animals, higher plants and micro-organisms; composition of tissues; biocatalysis and the nature of enzymes; energy relationships; the formation and degradation of metabolically important compounds and the control of metabolism. Prerequisite: *Chemistry-Biology 230b* or with the permission of the instructor, *Chemistry 211b*. Two lectures and laboratory weekly; tutorial or seminar in alternate weeks.
R.G. Annett

Chemistry-Environmental and Resource Science 341b

Instrumental analysis. Theory and practice of electrochemical, spectroscopic and chromatographic methods in analysis; sampling theory and strategies; trace analysis. Prerequisite: *Chemistry 240a*. Laboratory and two lectures weekly, tutorials to be arranged by instructor.
J.M. Parnis and C.D. Metcalfe

Chemistry 403a

Electrochemistry. Prerequisite: *Chemistry 300*. Two lectures, tutorials or seminars weekly.
K.B. Oldham

Chemistry 404b

Gas phase reaction dynamics. Prerequisite: *Chemistry 300*. Two lectures, tutorials or seminars weekly.
R.E. March

Chemistry 405b

Quantum mechanics in chemistry. (Not offered this year.)

Chemistry 411 a

Retrosynthetic analysis. Prerequisite: *Chemistry 310*. Two lectures, tutorials or seminars weekly.

J.F. Cormier

Chemistry 412 b

Modern organic synthesis. Prerequisite: *Chemistry 310*. Two lectures, tutorials or seminars weekly.

J.F. Cormier

Chemistry 413 a

Molecular orbital theory. (Not offered this year.)

Chemistry 421 a

Organometallic chemistry. Prerequisite: *Chemistry 320*. One two-hour discussion meeting weekly.

J.M. Parnis

Chemistry-Physics 422 b

Principles and applications of group theory. Prerequisite: *Chemistry 320* or *Physics 302a*. One two-hour lecture or discussion meeting weekly.

J.M. Parnis

Chemistry 423 a

Advanced topics in inorganic chemistry. (Not offered this year.)

Chemistry-Biology 431 a

Development of enzymology. Prerequisite: *Chemistry-Biology 330*. Lecture weekly, tutorial and seminar in alternate weeks.

R.G. Annett

Chemistry-Biology 432 b

Theoretical aspects of enzymology. (Not offered this year.)

Chemistry-Biology 433 b

Secondary metabolism. Prerequisite: *Chemistry-Biology 330*. Lecture weekly, tutorial and seminar in alternate weeks.

Chemistry 451

Project course in chemistry or biochemistry. Study, usually involving experimental research, under the supervision of a faculty member. Seminars and written report. About eight hours per week. Prerequisite or corequisite: two chemistry lecture half-courses at the four-hundred level. Departmental permission required. Contact Department Chair as soon as possible and no later than the beginning of the previous term.

Chemistry 452

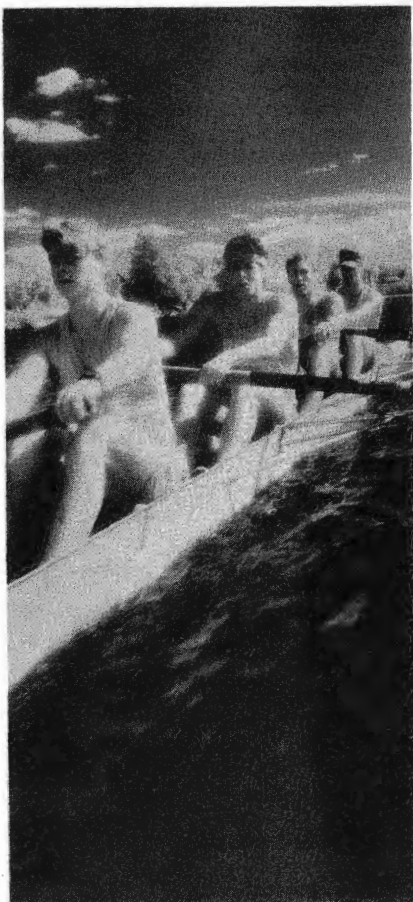
Double-credit project course in chemistry or biochemistry. About 16 hours per week; otherwise, as *Chemistry 451*.

Chemistry 453 a, 454 b, 455 c

Half-credit project courses in chemistry or biochemistry. As *Chemistry 451*; about eight hours per week (about four hours for *Chemistry 455c*).

Chemistry 490

A reading course on topics from one of the following fields: analytical chemistry, biochemistry, inorganic chemistry, organic chemistry, physical chemistry, and theoretical chemistry. Project work outside the laboratory may be involved. Offered only by prior arrangement.



Classical Studies

Professor and Chair of the Department

I.C. Storey, B.A. (UNIV. TRIN. COLL.),
M.A., PH.D. (TORONTO), M. PHIL. (OXFORD)

Professors

J.P. Bews, B.A. (QUEEN'S), M.A., PH.D.
(LONDON) (on leave Winter Term 1993);
K.H. Kinzl, DR. PHIL. (VIENNA)

Associate Professors

D.F.R. Page, B.A. (SHEFFIELD); A.M.
Young, M.A. (MELBOURNE, TORONTO),
PHIL.M. (TORONTO)

Adjunct Faculty

J.M. Tinson, B.A. (TRENT), M.A. (QUEEN'S)

The department contains three distinct fields, which for the purpose of degree regulations are treated as separate disciplines. Courses are offered towards majors in:

- A. Latin Language and Literature
- B. Greek Language and Literature
- C. Classical Studies
 - a. Classical History
 - b. Classical Studies

Required Courses

The single-major Honours program consists of nineteen courses, for which the minimum requirements are:

- A. Latin Language and Literature: eight courses in Latin which must include:
Latin 200 and *220*
Two *four-hundred* level courses in Latin
plus one course in Roman History.
- B. Greek language and literature: eight courses in Greek which must include:
Greek 200 and *220*
Two *four-hundred* level courses in Greek
plus one course in Greek History.
- C. a. Classical History: nine courses
Classical History 100
201
Four *two-hundred* level or *three-hundred* level courses in
Classical History (one course in
Classical Civilization may be
substituted).
Classical History 410 or *420*
490
One *two-hundred* level course
in Latin or Greek.
- b. Classical Studies: ten courses in the
Department of Classical Studies, of
which six must be beyond the one-
hundred level and at least two at the

three-hundred level. The program must include:

Two of *Classical Literature 490*,
Classical Civilization 490,
Classical History 410 or *420*
or *490*.

Students who propose to include more than two Greek or Latin courses in their program will need to obtain the permission of the Department.

The minimum requirements for the joint-major Honours program are:

- A. Latin language and literature: seven courses in Latin, which must include:
Latin 200 and *220*
Two *four-hundred* level courses in Latin.
 - B. Greek language and literature: seven courses in Greek, which must include:
Greek 200 and *220*
Two *four-hundred* level courses in Greek.
 - C. a. Classical History: seven courses
Classical History 100
201
Two other *two-hundred* level or *three-hundred* level
Classical history courses (one
Classical Civilization course may
be substituted).
One *two-hundred* level course in
Greek or Latin
Classical History 410 or *420*
490.
 - b. Classical Studies: seven courses
in the Department of Classical
Studies, of which six must be
beyond the *one-hundred* level and at
least one at the *three-hundred* level.
The program must include:
Two of *Classical Literature 490*,
Classical Civilization 490,
Classical History 410 or *420*
or *490*.
- Single-major in the General program.
- A. Latin Language and Literature: six courses in Latin, including *Latin 200* and *220*.
 - B. Greek Language and Literature: six courses in Greek, including *Greek 200* and *220*.
 - C. a. Classical History: six courses in
Classical History, two at the *three-hundred* level, including:
Classical History 100 and *201*
One course in Classical Civilization
may be substituted for a course in
Classical History.

- b. Classical Studies: seven courses in the Department of Classical Studies, of which four must be beyond the *one-hundred* level and two at the *three-hundred* level. Students who propose to include more than two courses in Latin or Greek must obtain the permission of the Department.

Joint-major in the General program.

- A. Latin Language and Literature: five courses in Latin, including *Latin 200* and *220*.
- B. Greek Language and Literature: five courses in Greek, including *Greek 200* and *220*.
- C. a. Classical History: five courses in Classical History, of which one must be at the *three-hundred* level, including:
Classical History 100 and *201*
 One course in Classical Civilization may be substituted for a course in Classical History.
- b. Classical Studies: five courses in the Department of Classical Studies, of which four must be beyond the *one-hundred* level and at least one at the *three-hundred* level. Students who propose to include more than one course in Latin or Greek will need to obtain the permission of the Department.

Notes and Special Provisos

- A joint-major in two of the separate programs offered by the Department (Latin; Greek; Classical History or Classical Studies) is permitted under the regulations of the University.
- Students are not limited to a maximum of twelve courses within the Department (eight in a General program), as long as they do not exceed the maximum of twelve (or eight) within a particular discipline.
- Students who propose to pursue a single or joint-major within the Department should consult the Chair at the end of their first year or very early in their second year.
- Students may take both *Classical History 100* and *Classical History 201* in their first year.
- Courses at the *four-hundred* level are normally limited to students in the fourth quarter of the Honours program.
- *Philosophy 210* may be counted as a credit toward programs in Classical Studies.

- One of *Classical Literature 100* or *200* may be counted for credit toward a major in English.
- *Classical Civilization 231a* and *232b* are core courses in the Program of Women's Studies.
- Students are not restricted to one special-topic or reading course (*Latin 395/495*, *Greek 395/495*, *Classical Literature 395/495*, *Classical History 390*, *Classical Civilization 390/490*) either in one year or in their overall program. Indeed completion of more than one such special-topic course will be essential for certain programs within the Department.
- Only one course in New Testament Greek may be counted toward a major in Greek.
- Students in the Honours program in Classical Studies are strongly advised to include one course in Latin or Greek.
- Students considering graduate work in any branch of Classical Studies are strongly encouraged to begin their study of the ancient languages as early as possible. An upper-year course in French or German is also recommended.

Latin Language and Literature

Latin 100

Elementary Latin. Latin through reading. For students with little or no previous knowledge of the language. No prerequisite. Four hours weekly.

D.F.R. Page

Latin 200

Intermediate Latin. Continuation and completion of Latin grammar, with reading of relatively easy selections from prose and verse, republic to silver age. Prerequisite: *Latin 100* or OAC Latin. Three hours weekly, including language study.

J.P. Bews and staff

Latin 220

Myths and legends of the origins of Rome, as illustrated in the works of Vergil and Livy, writers of the Augustan Period. Prerequisite (or corequisite): *Latin 200*, or permission of the Department. Three hours weekly, including language study.

A.M. Young

Latin 395, 396a, 397b

Special-topic course in Latin language and literature, to be arranged in March of the preceding academic year in consultation with the Department. Prerequisite: *Latin 200* or *220*. Three hours weekly, including language study.

Staff

Latin 495

Special-topic course in Latin language and literature, to be arranged in March of the preceding academic year in consultation with the Department.

Staff

Greek Language and Literature**Greek 100**

Elementary Greek. An introduction to the basic elements of ancient Greek, providing the fundamentals of grammar and vocabulary to allow the student to read ancient Greek literature in the second year. Some easy selections of ancient Greek will be read in this course. No prerequisite. Four hours weekly.

A.M. Young

Greek 200

Intermediate Greek. Continuation and completion of classical Attic syntax and grammar, with readings from Lysias (*Against Eratosthenes*), Euripides (*Alcesteis*), Lucian (*Real History*). Prerequisite: *Greek 100* or OAC Greek. Three hours weekly, including language study.

A.M. Young

Greek 220

(Not offered this year.)

Greek 240

New Testament Greek. Designed to offer two or three of the New Testament texts in the original (*John*, *Acts*, *Galatians*). Prerequisite: *Greek 100*. Two hours weekly.

I.C. Storey

Greek 395, 396a, 397b

Special-topic course in Greek language and literature, to be arranged in March of the preceding academic year in consultation with the Department. For 1992-93 one topic is likely to be Greek Tragedy.

Prerequisite: *Greek 200* or *220*. Three hours weekly, including language study.

Staff

Greek 495

Special-topic course in Greek language and literature, to be arranged in March of the preceding academic year in consultation with the Department.

Staff

Courses in Translation**Classical History****Classical History 100**

Ancient Greek society and institutions: the history of Greece from the beginnings to the decline of the city-states. An introduction to the study of ancient history, illustrated by the problems of the period 600-323 B.C. (early Sparta, the reforms of Solon and Kleisthenes, Greek tyranny, the emergence of democracy, the Athenian Empire, the world empire of Alexander). Two lectures weekly, fortnightly seminar.

K.H. Kinzl

Classical History 201

Rome from the Republic to the Caesars, c. 150 B.C. - A.D. 69. A study of republican institutions, Roman imperialism, the crisis which witnessed the collapse of the republic in the last century B.C., the monarchy of Julius Caesar, the "restored republic", the new order of the principate of Augustus, and the administrative, military, economic and social developments under the Julio-Claudian dynasty. Two lectures weekly, fortnightly seminar. Open to first-year students.

D.F.R. Page

Classical History 205a

International relations in the Greek world, c. 500-146 B.C. This course examines such aspects as national and 'racial' attitudes, imperialism, alliances and diplomacy, political propaganda, etc. Special attention will be given to the original documents of the time, to be studied in translation. Weekly two-hour meetings. Open to students beyond first year.

K.H. Kinzl

Classical History 207b

Alexander the Great and his age. A course offering both a survey of the life and deeds of Alexander and an examination of the background, the ancient sources, and modern assessments. Weekly two-hour meetings. Open only to Classical History students in the second quarter or beyond, except with the permission of the instructor.

K.H. Kinzl

Classical History 305

Government and politics in the Greek city-states, c. 600-300 B.C. A course examining such forms of government as democracy, tyranny, oligarchy, etc. Open only to Classical History students beyond the second quarter, except with the permission of the instructor. Two-hour meeting weekly.

K.H. Kinzl

Classical History 331

The Augustan principate and its origins 44 B.C.-A.D. 14. A study of Roman political history, in particular the career of the first emperor Augustus, covering the period from the assassination of Julius Caesar to the death of Augustus. Special attention will be given to the ancient documents, to be studied in translation. Two-hour weekly meeting. Prerequisite: *Classical History 201*, or with the permission of the instructor.

D.F.R. Page

Classical History 351a

The Roman Empire, A.D. 69-305. (Not offered this year.)

Classical History 352b

The Late Roman Empire, A.D. 305-c. 600. (Not offered this year.)

Classical History 390

Reading course in classical history, to be arranged in March of the preceding academic year in consultation with the Department. Open to students in the third and fourth quarter. Prerequisite: two courses in Classical Studies in translation, one of which must be at the upper-year level.

Staff

Classical History 410

The Athenian Empire. (Not offered this year.)

Classical History 420

The Principates of Nerva, Trajan, and Hadrian (A.D. 96-138). A course examining the major developments of the period with special emphasis on the ancient sources and the validity of modern assessments. Prerequisite: *Latin 100* or equivalent. Two-hour meeting fortnightly. Open to students in the fourth quarter only.

D.F.R. Page

Classical History 490

Reading course in classical history, to be arranged in March of the preceding academic year in consultation with the

Department. Open only to students in the fourth quarter. Prerequisite: *Greek 100* or *OAC Greek*, or *Latin 100* or *OAC Latin*.
Staff

Classical Literature

Classical Literature 100

Greek drama in translation. Selected plays of the three major tragedians (Aeschylus, Sophokles, Euripides), and of the two comic poets (Aristophanes, Menander), and also Aristotle's *Poetics*, the first example of literary criticism. Lectures will present also the role of drama in classical Greek society. Two lectures weekly, fortnightly seminar.

I.C. Storey and staff

Classical Literature 200

Mythological themes in Greek and Latin literature, e.g. gods and demi-gods; the hero, epic and tragic; the quest theme; and literary archetypes. This course will also deal with modern theories concerning the nature and function of myth. Weekly lecture and fortnightly seminar. Open to students beyond the first quarter.

J.P. Bews and staff

Classical Literature 395, 396a, 397b

Special-topic course in classical literature, to be arranged in March of the preceding academic year in consultation with the Department. For 1992-93 one such topic (*CL 395I*) is likely to be *The Classical Novels of Mary Renault*. Open to students in the third and fourth quarter. Prerequisite: two courses in Classical Studies in translation, one of which must be at an upper-year level.

Staff

Classical Literature 495, 496a, 497b

Special-topic course in classical literature, to be arranged in March of the preceding academic year in consultation with the Department. For 1992-93 one such topic (*CL 495I*) is likely to be *The Classical Novels of Mary Renault*. Open only to students in the fourth quarter.

Staff

Classical Civilization

Classical Civilization 211

Belief and ritual in Greek society. (Not offered this year.)

Classical Civilization-Women's Studies 231a

Women in the Greek world. The experience of women in Greek archaic and classical periods (c. 700-300 B.C.) as seen through literature, philosophical and medical treatises, law codes, and the visual arts. The material will be considered

within the context of current trends of approach (feminist, sociological, anthropological, literary). Lecture and seminar weekly. Open to students in the second quarter and beyond.

J. Tinson

Classical Civilization-Women's Studies 232b

Women in the Roman world. The role in society of Roman women in the late republican and imperial periods (100 B.C.-A.D. 300). Topics will include the status of women in Roman law, the Roman family, sexuality and motherhood, feminine religious cults, women in Roman literature. The material will be considered within the context of current trends of approach (feminist, sociological, anthropological, literary). Lecture and seminar weekly. Open to students in the second quarter and beyond.

J. Tinson

Classical Civilization 390, 391a, 392b

Reading course in classical civilization, to be arranged in March of the preceding academic year in consultation with the Department. Open to students in the third and fourth quarter. Prerequisite: two courses in Classical Studies in translation, one of which must be at an upper-year level.

Staff

Classical Civilization 490, 491a, 492b

Reading course in classical civilization, to be arranged in March of the preceding academic year in consultation with the Department. Open only to students in the fourth quarter.

Staff

Ancient Philosophy

See the entry under *Philosophy 210*.

Comparative Development Studies

Associate Professor and Chair of the Program

R.D. Powell, LIC. EN HISTORIA (CÓRDOBA), PH.D. (MCGILL)

Professors

P. Bandyopadhyay, B.A. (CALCUTTA), M.A. (OXFORD, MANCHESTER), PH.D. (MANCHESTER); J. Hillman, M.A. (OXFORD), PH.D. (SUNY, BUFFALO); D.R. Morrison, M.A. (SASKATCHEWAN), D. PHIL (SUSSEX)

Associate Professor

C.V. Huxley, B.A. (YORK, ENGLAND), M.A. (SIMON FRASER), PH.D. (TORONTO)

Assistant Professors

J. Solway, B.A. (OAKLAND), M.A., PH.D. (TORONTO); W. Lem, M.A., PH.D. (TORONTO)

Associated Faculty

Anthropology, O. Roesch, B.W. von Graeve; *Economics*, S. Choudhry, K.S.R. Murthy; *Geography*, J.S. Marsh; *Hispanic Studies*, T. Noriega; *History*, D. Scheinin, P. Zeleza; *Native Studies*, D.N. McCaskill; *Political Studies*, A. Pickel, E. Helleiner

Honorary Professor

L.A. Costa Pinto, LIC.SOC. (BRAZIL)

The Program in Comparative Development Studies involves the comparative examination of societies and cultures undergoing rapid change, and of the complex global relations between industrialized countries and the developing areas of Africa, Asia, the Caribbean, and Latin America. It is offered with the cooperation of the following Departments and Programs: Anthropology, Cultural Studies, Economics, Environmental and Resource Studies, Geography, History, Native Studies, Hispanic Studies, Political Studies, Sociology and Women's Studies.

Students are strongly encouraged to enrol in some cognate courses. *Economics 101a/b*, *102a/b*, *Anthropology 100*, *Politics 100*, and *Sociology 100* are recommended. Students are also advised that some Program courses offered by participating departments carry prerequisites.

Required Courses

The single-major Honours program consists of nineteen courses. Minimum nine courses in Comparative Development Studies, including:

CD 100

CD 200

CD-Economics 330

(prerequisite: *Economics 101a/b* and *102a/b*)

one of *CD 300*, *CDAN 301*,

CDAN 304, *CDHI 340*

CD 400

at least three other core courses, two of which must be at the four-hundred level.

Joint-major Honours program. Minimum seven courses in Comparative Development Studies, including:

CD 100

CD 200

one of CD 300, CDAN 301,

CDAN 304, CDHI 340

CD 400

at least one other course in the four-hundred series.

General joint-major. Minimum five core and support courses, including:

CD 100

CD 200

one of CD 300, CDAN 301,

CDAN 304, CDHI 340

Notes

Only one support course can be counted towards the minimum requirements of each degree program. Courses from the student's other joint-major cannot be included among the minimum five courses for a General degree.

Anthropology students: Students undertaking joint-majors in Anthropology and Comparative Development Studies are advised that they may substitute *Anthropology-Comparative Development 221* for one of *Anthropology 212, 230 or 240* in their Anthropology requirements.

Depending upon their area of interest, students are encouraged to enroll in French or Spanish language courses.

Year Abroad Program

This program is offered in Ibarra, Ecuador and is designed primarily for CDS and Anthropology majors. *Spanish 100* and high academic standing is a prerequisite. Director for 1992-93: Professor C. Huxley. Details of the next program will be available in the Calendar Supplement.

Core Courses

Comparative Development 100

Human inequality in global perspective. An interdisciplinary introduction to the basic ideas and perspectives of development analysis including issues of population growth, food, transformation of rural life, gender, the environment, urbanization and industrialization. The investigation of development and under-development proceeds from comparative and historical perspectives with illustrations from widely differing societies.

W. Lem and staff

Comparative Development 200

Development analysis. An examination of the strengths and limitations of the major perspectives that have informed development studies. Consideration of selected monographs which address critical issues on the basis of well-defined models and sound empirical research.

J. Solway

Comparative Development 250

Technology and Development. (Not offered this year.)

Comparative Development 300

South Asian development. An examination of the structure of agrarian production systems, role of land tenure and market relations in selected Asian societies. The process of social change from precapitalist, precolonial to colonial and contemporary institutions and the development of political and ideological movements will be analyzed. Two-hour lecture, seminar fortnightly. Prerequisite: *Comparative Development 200* or permission of instructor.

P. Bandyopadhyay

Comparative Development-Sociology 382

Historical sociology. An introduction to the comparative study and analysis of past societies. Elements of social structure, economic practices, political authority and the cultural symbols, beliefs and products will be studied. This year the focus is on Ancient Israel and Medieval Islamic societies. Prerequisite: C- or higher in *Sociology 100* or *Comparative Development 200*.

P. Bandyopadhyay

Comparative Development 385b

Field course. (Next offered 1994.)

Comparative Development 400

Modernity and development. A study of the problems developing countries face in the passage from local or national traditions, cultures, and relations to modernity and global integration and hierarchy. This year the focus will be on indigenization and westernization with regard to industry, law and national institutional development in various regions. Prerequisite: *Comparative Development 300* or permission of the instructor.

P. Bandyopadhyay

Comparative Development 421c

Assessment of development projects. An examination of techniques for analyzing and assessing projects for industrial, rural and social development, and of selected case studies. Case studies will include Canadian projects for development assistance in third world countries. Introductory lectures and weekly seminars. Prerequisite: *Comparative Development 300* or permission of the instructor.

R.D. Powell

Comparative Development-Canadian Studies 460

Canada and the Third World. Canada's relations with developing countries — economic, political and socio-cultural — and Canada's role in North-South issues, especially the debt crisis and structural adjustment, human rights, immigration and refugees, ecologically-sustainable development, and regional conflicts. Also applies theoretical perspectives on comparative and international development to Canada and its place within the global political economy. Two-hour seminar weekly. Prerequisite: *Canadian Studies 200* or *Comparative Development 200* or permission of the instructor. Open only to students in the fourth quarter of the Honours degree. Enrolment limited to 12.

D.R. Morrison

Comparative Development 496a

Special topic: religion and social movements in Latin America. An examination of the religious movements generated by social upheaval in contemporary Latin America with attention given to both Catholicism and Evangelical Protestantism. Prerequisite: *Comparative Development 200* or permission of the instructor.

J. Hillman

Comparative Development 497b

Special topic: perspectives on ethnicity. The creation of ethnicity in relation to the process of development in a variety of settings. Articulation of ethnicity with gender and class. Comparison between ethnicity, kinship and nationalism as forms of constitution of social difference. Prerequisite: two-hundred level CDS, Anthropology or Sociology course or permission of the instructor.

J. Solway

Other Core Courses**Comparative Development-Anthropology 221**

Development anthropology. (See Anthropology)

Comparative Development-Sociology 280

Society and economy. (See Sociology)

Comparative Development-Anthropology 301

Africa. (See Anthropology)

Comparative Development-Anthropology 304

Latin America. (See Anthropology)

Comparative Development-Economics 330

Economics of developing countries. (See Economics)

Comparative Development-History 340

The emergence of modern Africa. (See History)

Comparative Development-Economics 370a

Comparative economic systems and planning. (See Economics)

Comparative Development-Native Studies 305

Native community development. (See Native Studies)

Comparative Development-Women's Studies 325

Women in development. (See Women's Studies)

Comparative Development-Environmental and Resource Studies 360

Environment and development. (See Environmental and Resource Studies)

Comparative Development 390, 391a, 392b

Reading course in comparative development. Open only to students taking a major in Comparative Development Studies, and designed to provide an opportunity for specialized studies on selected topics. Periodic tutorials. Prerequisite: permission of the Chair and the instructor concerned.

Comparative Development-Cultural Studies 3952

Special topic: Media and development. (See Cultural Studies)

Comparative Development 401

Honours thesis. A specific scholarly project on a well-defined topic for which double credit will be given.

Comparative Development-Anthropology 407

Politics, economy and culture.
(See Anthropology)

Comparative Development-Politics 440

Political economy and comparative politics. (See Political Studies)

Comparative Development-Politics 450

Problems of underdevelopment: building democracy. (See Political Studies)

Comparative Development-Native Studies 482

Indian responses to cultural interaction.
(See Native Studies)

Comparative Development 490, 491a, 492b

Reading courses in comparative development open only to students in the fourth quarter of the Honours program in Comparative Development Studies. Periodic tutorials. Prerequisite: permission of the Chair and the instructor concerned.

Support Courses

Economics 311a: International trade

Economics 312b: International finance

English 315: Commonwealth fiction

Geography 380b: Regional economic development

History-Anthropology 345: Slavery in the Americas

History 3952: Latin America

History 4955: Mexican history

History 4956: African labour history

Native Studies 384b: Social survey research methods

Native Studies 385b: Program planning and evaluation research

Politics 220: International politics

Politics 240: Comparative politics

Spanish 326: Contemporary Latin-American novel

Associated Faculty

L.E. McHardy, B.Sc., M.Sc. (WESTERN ONTARIO); *Geography*, J.G. Cogley; *Mathematics*, C. Carter, D.G. Poole, E.A. Maxwell; *Philosophy*, B. Hodgson, R.M. Neumann

Laboratory Demonstrator

M.E. Soper, B.A. (WESTERN ONTARIO), B.Sc. (TRENT)

The Program offers study of computers and their application from a generalist, humanist and liberal arts point of view. It combines courses in computer science with courses in mathematics, philosophy and social and behavioral studies. The intent is to provide students with a sound basis in computer studies along with a comprehensive education in areas where the application of computer technology is having a major influence. To meet these goals, many courses in the program deal with advanced technical material from a humanist perspective. Students in the Program pursue General or Honours Joint-major Degrees by combining core and cross-listed Computer Studies with courses in another area of study, either in the arts or the sciences.

Required Courses

Joint-major Honours program. Minimum of seven courses in Computer Studies at the two-hundred level or above of which at least five must be core courses and include:

Computer Studies 202a and *203b*
300b or 301a
330
400

At least two courses must be at the four-hundred level.

Joint-major General program. Minimum five courses in Computer Studies including *Computer Studies 202a* and *Computer Studies 203b* and four other courses in Computer Studies, at least two of which must be core courses. At least two core courses or cross-listed courses must be at the third year level.

Note: In order to be eligible to graduate with a B.Sc. degree, a student must have completed an Ontario Academic course in Mathematics, or equivalent, or a university level Mathematics course.

Computer Studies

Professor and Chair of the Program
J.W. Jury, M.Sc., Ph.D. (TORONTO)

Associate Professors

S.B. Regoczei, M.Sc. (TORONTO); M.J.

Tamplin, B.A. (TORONTO), M.A. (LONDON), Ph.D. (ARIZONA)

Assistant Professors

M. Green, M.Sc., Ph.D. (NORTHEASTERN);

R.T. Hurley, Ph.D. (WATERLOO)

Core Courses**Computer Studies 100**

Introduction to computer science. Impact of computers on society, history of computing, modern applications including word processing and spreadsheets. Hardware considerations including CPU functioning and input/output systems including data communications. Algorithmic approaches to problem-solving using BASIC language programming. Operating systems including those for personal computers. Data Base Management Systems, Expert Systems and Artificial Intelligence, Management Information Systems, Graphics. No prerequisites. Two lectures weekly plus periodic workshops.

J.W. Jury and staff

Computer Studies 202a

Intermediate computer science. Program and system design, FORTRAN and introductory Pascal language programming, compilers, operating systems, applications including simulation and graphics. Prerequisite: *Computer Studies 100* or equivalent. Two lectures weekly plus periodic workshops.

R.T. Hurley

Computer Studies 203b

Data processing and file structures. Introduction to file structures and processing. Use of COBOL for data processing, including use of advanced language features and modular software engineering techniques. Efficiency in data management. Prerequisite: *Computer Studies 100* or equivalent. Two lectures weekly.

Computer Studies 210

Computing in the social sciences and humanities. A survey of research problems, methods and data in the humanities and social sciences with particular emphasis on computer-based techniques of analysis. It is intended both as an introduction to research problems not usually encountered by computer science students with mathematics and science backgrounds and for non-majors who wish to use computers for research in their disciplines. Prerequisite: *Computer Studies 100* or equivalent. Two lectures and one one-hour laboratory weekly.

M.J. Tamplin and staff

Computer Studies 220b

Information systems in organizations. Management information systems, including decision support and expert systems in organizations. Introduction

to end user computing, systems analysis, software development, and office automation. Systems in the organizational context. Major hardware, software, and communications technologies employed in data processing and applications. Prerequisite: *Computer Studies 100*.

S. Regoczei

Computer Studies 300b

Data structures. Computer languages (including Pascal) used for information management and list processing. Data structures including stacks, trees, lists, linked lists and rings. File manipulation and data structuring. Information management systems. Prerequisite: *Computer Studies 202a*. Two lectures weekly.

R.T. Hurley

Computer Studies 301a

Scientific programming techniques. Structured programming and logic flow. Design of effective algorithms for scientific application. Languages for scientific computing, Pascal and C. Modular programming and library usage; documentation; correctness; optimization; anti-bugging and debugging techniques. Prerequisite: *Computer Studies 202a*; *Mathematics 100* or *Mathematics 110* or *Mathematics 130* or permission of instructor. Two lectures weekly.

J.W. Jury

Computer Studies 320

Societal impact of computer technology. This course deals with the impact of computers on society and is presented at an advanced level by experts from a variety of disciplines. Topics covered will be chosen from the following: historical impact of computers and automated technology; ethical, legal and privacy issues of computerized information storage and flow; computers in policy formation and decision making; robotics and automation theory; progress towards artificial intelligence; image processing and pattern recognition. Prerequisite: *Computer Studies 100* or equivalent. Two lectures weekly, seminar fortnightly.

S. Regoczei and staff

Computer Studies 330

Microcomputers, computer architecture, and introduction to operating systems. Introduction to computer hardware configurations and operating system design and operation. Memory management; assembly language; networking; distributed systems. Prerequisites:

Computer Studies 202a or Computer Studies 203b. Two lectures weekly, microcomputer laboratory periodically.

Computer Studies 340b

Data base structures. Data base systems and their use in the management of data. History and development of data base theory. Hierarchical, network and relational data base structures. Prerequisite: *Computer Studies 203b.* Two lectures weekly.

S. Regoczai

Computer Studies 350

Artificial intelligence. Foundations, directions and applications of artificial intelligence. Knowledge acquisition, representation and processing, knowledge bases and rule-based systems. Issues and techniques will be addressed primarily through expert systems. Vision systems, natural language processing, machine learning, applications in knowledge-based fields and industry. Prerequisite: *Computer Studies 202a or Computer Studies 203b* or permission of the instructor. Two lectures weekly.

M. Green

Computer Studies 390, 391a, 392b

Reading course dealing with advanced topics in computer studies chosen in consultation with supervising faculty members in Computer Studies. Prerequisite: permission of the Program.

Computer Studies 400

Software engineering project. Follows software development through a normal life cycle, within a general project management framework. Starting with requirements analysis and feasibility studies, it discusses systems and information analysis, software architecture, conceptual data base design and improved programming techniques and concludes with software installation, testing, system maintenance and impact assessment. Prerequisite: *Computer Studies 301a or Computer Studies 300b; Computer Studies 340b* recommended. Two lectures weekly.

M. Green and staff

Computer Studies 410

Comparative languages. Addresses programming languages and their structures as intellectual objects. From an assumed base of BASIC, FORTRAN, COBOL, C and Pascal, the course discusses general language design goals, data and control abstractions and structures. It progresses

through lower level Assemblers to higher block structured languages (ADA), special purpose languages (such as Modula, FORTH, LISP) to concepts of verifiable and applicative languages, large programs, predicative programming and program transformation. The future of programming languages is discussed. Prerequisite: *Computer Studies 300b or Computer Studies 301a.* Two lectures weekly. Periodic workshops.

M. Green

Computer Studies 430

Advanced operating systems and computer architectures. The course addresses the concepts of computer structures, processor and memory utilization, input-output channels, software and hardware optimization techniques, system protection and security. The course includes study of specific computer architectures. Prerequisite: *Computer Studies 330.* Two lectures weekly, fortnightly tutorial.

R.T. Hurley

Computer Studies 490, 491a, 492b

Advanced reading course. Prerequisite: permission of the Program.

Cross-listed Courses

Computer Studies-Philosophy 240a
Symbolic logic. (See Philosophy)

Computer Studies-Mathematics 260
Discrete structures. (See Mathematics)

Computer Studies-Geography 405b
Geographical computer graphics. (See Geography)

Computer Studies-Mathematics 341
Linear and discrete optimization. (See Mathematics)

Computer Studies-Philosophy 341 b
Logic and logical theories. (See Philosophy)

Computer Studies-Mathematics-Statistics 351
Linear statistical models. (See Mathematics)

Cultural Studies

Professor of Cultural Studies and English Literature and Chair of the Program

I. McLachlan, M.A. (OXFORD)

University Professor

D.F. Theall, B.A. (YALE), M.A., PH.D. (TORONTO)

Professors

J. Fekete, M.A. (MCGILL), PH.D. (CAMBRIDGE); S. Kane, B.A. (CARLETON), M.A., PH.D. (TORONTO); D. Smith, M.A., D.PHIL. (OXFORD) (on leave 1992-93); A. Wernick, M.A. (CAMBRIDGE, TORONTO)

Associate Professors

Z. Baross, B.A. (U.B.C.), M.A. (LONDON), PH.D. (AMSTERDAM); J. Bordo, B.A. (MCGILL, ALBERTA), M.A., M.PHIL., PH.D. (YALE)

Assistant Professor

A. O'Connor, B.A. (TRINITY COLLEGE, DUBLIN), M.S., PH.D. (YORK)

Lecturers

R. Green, B.A. (WESTERN ONTARIO), M.A. (MCMASTER, TORONTO); V. Hollinger, M.A. (CONCORDIA), M.ED. (NEWCASTLE, UPON-TYNE)

Adjunct Faculty

M. Blyth, B.A. (TORONTO), M.A. (YORK); V. de Zwaan, B.A. (TRENT), M.A. (MCGILL); M. el Komos, M.A. (CAIRO); E. Loder, B.A. (BARD), M.F.A. (PRATT); W. Pearson, B.A., M.A. (MCGILL); W. Ramp, M.A. (YORK); R. Wright, B.A. (TRENT), M.A., PH.D. (QUEEN'S)

Associated Faculty

English Literature, R. Dellamora
Vanier Professor, T.H.B. Symons

The Program offers study in the nature and criticism of culture and the arts, chiefly literature, film, drama, music and the visual arts, in the light of guided interdisciplinary enquiry into the social conditions in which thought and expression take shape. The Program as a whole provides the kind of academic experience which may have pre-professional value to a cultural and social critic or to a teacher of literature, drama or the arts who wishes to emphasize workshop experience in future teaching. This focus of practical and speculative needs is realized in courses whose overall concern is for the way in which theoretical understandings inform, as they are informed by, actual practice

by artists, critics and thinkers in different conditions. The focus is preserved on the level of term-work in that actual production experience or critical work in cultural activity is recommended as a way of sustaining a reflection on cultural problems and conditions in Canada and elsewhere.

The *one-hundred* series course is the normal entry point to the Program for first year students and should normally be taken by all students who are, or who are preparing to be, Cultural Studies majors or joint-majors. First year students who also wish to take, in exceptional circumstances, a second Cultural Studies course, must obtain written permission from both the course instructor and the Chair of the Program. First year students who may wish to major or joint-major in Cultural Studies are urged to take one or more of the following courses as well: *Classical Literature 100*, *English 105* or *115*, *History 120*, *Philosophy 101*, *Sociology 100*, and any of the first-year language courses in the department of Modern Languages and Literatures.

Two-hundred and *three-hundred* series courses are grouped into two categories: (a) those having a generalist emphasis (205, 235, 250, 305, 350, 355); and (b) those having a specialized focus on culture in one or more media (211, 216, 222, 225, 226, 246, 270, 280, 295, 311, 315, 321, 322, 325, 345, 346, 370, 375, 380, 381, 385, 395). Cultural Studies majors are required to choose at least two courses from each category. In so doing, they may pursue a particular concentration within the different cultural areas that the Program draws together (e.g. Comparative Literature; Fine Arts; Performing Arts; Social and Cultural Theory).

Required Courses

The single-major Honours program consists of nineteen courses. Minimum nine courses in Cultural Studies including *Cultural Studies 100*, at least two from category (a), at least two from category (b), and at least two Cultural Studies courses at the *four-hundred* series level.

Joint-major Honours program. Minimum seven courses in Cultural Studies including *Cultural Studies 100*, at least two from category (a), at least two from category (b), and at least two Cultural Studies courses at the *four-hundred* series level.

Single-major General program. Minimum six courses in Cultural Studies including *Cultural Studies 100*, at least two from category (a) and at least two from category (b).

Joint-major General program. Minimum five courses in Cultural Studies. Same requirements as for single-majors.

Special Provisos

Two-hundred and three-hundred series courses.

Any two- or three-hundred series course is open to any upper year student, subject only to the conditions specified below under the descriptions of certain individual courses.

Four-hundred series courses are normally limited to students in the fourth quarter of Honours Cultural Studies. However, students may petition the Program to enroll in a four-hundred series course as part of a General program. Students wishing to take more than one *Cultural Studies 490* reading course must petition the Chair of the Program. The fourth quarter of the Honours program will normally consist of four courses.

Cultural Studies 100

Introduction to the study of modern culture. Introduction to the interpretation and foundations of modern culture. Looks at the problem of how to make sense of art works and other forms of cultural expression, in different media, both as texts and as practices in a context. A major focus will be on what distinguishes twentieth century culture from, and what connects it to, the tradition of modern culture as a whole. Two lectures and seminar, weekly. Field trips fee: \$40. (Excludes *Cultural Studies 200*)

Z. Baross, J. Bordo, R. Green, S. Kane, A. O'Connor and staff

Cultural Studies 205

Nineteenth century comparative arts. (Offered in alternate years, but not this year.)

Cultural Studies 211

Drawing. (Not offered this year.)

Cultural Studies 216

Western art, the monument and modernity. An introduction to the history and theory of mostly Western art and monumental sites especially with respect to the formation and articulation of a cultural condition referred to as "modernity" by an examina-

tion of the monumental character of Western art, in particular the pictorial art that arose with the Renaissance and came into question with Marcel Duchamp's *The Large Glass*. Thrice monthly lectures and tutorials; field trips to museums, galleries and relevant cultural sites. Field trip fee: \$40.

J. Bordo

Cultural Studies 222

Culture in the novel. (Not offered this year.)

Cultural Studies 225

Oral narrative. An enquiry into oral culture approached through its stories; a study of oral narrative forms and values (myth, legend, and folk tale), and an exploration of the relationship between oral and visual literature in voice, structure and ideology. The course provides practical experience in the writing or telling and evaluation of story, with an emphasis on traditional storytelling as a signifying as well as an artistic practice. Two hours weekly. (May also be offered Summer 1992.)

S. Kane and staff

Cultural Studies 226

Storytelling workshop. (Not offered this year.)

Cultural Studies-English 229

Science fiction. Introduction to the history, theory, and representative works and authors of science fiction from Mary Shelley and H.G. Wells to Philip Dick, Ursula Le Guin, and Marge Piercy in the present. Such types of science fiction as alternate worlds, human destiny stories, space adventure, stories of alien encounter and non-contemporary earth life, and stories of new capacities, new technologies, or new belief systems will be examined. Two hours weekly.

J. Fekete and V. Hollinger

Cultural Studies 235

Mass media and society. Introduction to the history, sociology and critical interpretation of contemporary mass communicated culture, both as an overall formation and with reference to such specific elements as the newspaper press, advertising, network TV and recorded popular music. Two-hour lecture and seminar weekly. (Excludes *Cultural Studies-Sociology 240*) (May also be offered Summer 1992.)

A. O'Connor and staff

Cultural Studies 246

Music in the nineteenth century. (Not offered this year.)

Cultural Studies 250

Civilization and human nature. An introduction to the thought of several of the founders of modern social and cultural theory including Marx, Nietzsche and Freud. Such topics explored as ideology and illusion, reason and eros, individualism and alienation, and the idea of progress. One hour lecture, seminar weekly. A. Wernick

Cultural Studies 270

History and theory of theatre. An introduction to theatre as a performing art. Examines the evolution of European theatrical practice and dramatic theory from Classical Greek tragedy to late nineteenth century naturalist drama. Topics include acting styles, theatre design and architecture, the changing relationships among playwrights, performers and spectators, and the institution of theatre in relation to religion, morality and politics. Two hours weekly. Field trips fee: \$45. I. McLachlan

Cultural Studies 280

History and theory of the cinema. An introduction to critical interest in the cinema: the medium, the spectator, ideology, apparatus, pleasure and meaning. Lectures and seminars reflect upon the question of origin and relation to other arts (television and photography) and follow the evolution of cinematic language and narrative strategies from silent film (Griffith, Eisenstein) to classical Hollywood, from (early) experimental to (modern) European film. A selection of critical writings (Barthes, Cavell, Eisenstein) brings Andre Bazin's question, "What is cinema?" into a new focus. Weekly films, lectures and seminars. Z. Baross and staff

Cultural Studies-English 295

Science fiction. Introduction to the history, theory, and representative works and authors of science fiction from Mary Shelley and H.G. Wells to Philip Dick, Ursula Le Guin, and Marge Piercy in the present. Such types of science fiction as alternate worlds, human destiny stories, space adventure, stories of alien encounter and non-contemporary earth life, and stories of new capacities, new technologies, or new belief systems will be examined. Two hours weekly. J. Fekete and V. Hollinger

Cultural Studies 305

Politics and culture. The relationship between art and critical social practice in the context of self-conscious cultural movements in the twentieth century (e.g. futurism, surrealism, expressionism, existentialism). Examines the relationship between 'avant-garde' culture and 'mass' culture; between aesthetic experimentalism and political engagement; between cultural activity and the marketplace. Lecture, seminar weekly. (May also be offered in Summer 1992.)

D. Theall

Cultural Studies 311

Visual arts studio: form, process, object (and image). An introduction to the relationship between traditional ideas of form and dynamic process-oriented strategies in two and three dimensions. These studies are related to contemporary developments in non-objective art, with incursions into the question of image. Emphasis on the free exploration of materials and concepts; the alternative directions and implications of any given problem; the questions of scale and 'richness'; the development of active creative strategies. Open to Cultural Studies majors, and students with the pre- or co-requisite *Cultural Studies 216, 305, or 315* or permission of the Chair of the Program. Enrolment limited to 20. Art materials fee: \$60. (May also be offered in Summer 1992.)

E. Loder

Cultural Studies 315

History and theory of modern art. (Offered in alternate years, but not this year.)

Cultural Studies-English 321

Literature and society. (See English Literature)

Cultural Studies 322

Experimental fiction. A course in the work of some of the major twentieth-century writers of experimental fiction, ranging from Proust, Joyce and Kafka to Pynchon and Borges. Individual works will be related to various theories of narrative which seek to explain and contextualize them. Weekly lectures and seminars.

D. Theall

Cultural Studies-English 325

Literary and critical theory. A study of ideas about the nature and function of literature, interpretation, and evaluation. The spectacle and background of competing contemporary theoretical models will be considered through such figures as

Plato and Aristotle, Sidney, Coleridge and Arnold, Frye and McLuhan, Lukacs and Adorno, Barthes, Derrida and Foucault, Kristeva and Spivak. Two-hour seminar weekly.

J. Fekete

Cultural Studies-English 329

Utopia (Future fiction). (Not offered this year.)

Cultural Studies 345

Music in twentieth century industrial society. (Offered in Summer 1992.)

Cultural Studies 346

Music workshop. Pre- or co-requisite: *Cultural Studies 345*. (Not offered this year.)

Cultural Studies-Sociology 350

Modern cultural theory. (Not offered this year.)

Cultural Studies 355

(Post) modernity and the sublime. An exploration of the idea of the sublime from its early modern and pre-Romanticist emergence to (post) modernism. Philosophical, religious and literary sources will be drawn upon with particular intertextual reference to visual art, in particular Northern landscape painting and modern art. Three hours weekly with discussion groups, workshops and field trips.

J. Bordo

Cultural Studies 370

Theatre in the twentieth century. (Offered in alternate years, but not this year.)

Cultural Studies 375

Theatre workshop: staging ideas. A practical course in modern acting with a focus on methods of performance in works that dramatize ideas and the conflicts between them. Pre- or co-requisite: *Cultural Studies 270* or *370* or permission of the Chair of the Program. Workshop fee: \$50. Enrolment limited to 20. Four hours weekly.

V. Hollinger

Cultural Studies-English 380

Narrative literature and film. (Not offered this year.)

Cultural Studies 381

European film. (Not offered this year.)

Cultural Studies 385

Film workshop. Pre- or co-requisite: *Cultural Studies 280* or *Cultural Studies 381*. Workshop fee: \$50. (Not offered this year.)

Cultural Studies 395

Special topics in cultural studies. The following special topics will be offered in 1992-93.

Cultural Studies 395I

Music and society. The relationship of music and drama will be explored through a consideration of opera both as a historical performance tradition and as it participates in contemporary cultural life in the opera house, in film, and television. Issues such as the relationship of music to text, the role of the singer, representation of gender, and socio-political aspects of the performance will be examined in works by Mozart, Wagner, Puccini, and others. Weekly lectures and seminars.

R. Green

Cultural Studies-Comparative Development Studies 3952

Media and development. Approaches to communication and development especially in the 'Third World'. The course deals with topics such as images of 'other' peoples, debates about a New World Information and Communication Order, women's media, educational and community radio, Third World film making, the role of communication in struggles for democracy. Weekly lecture and seminar.

A. O'Connor

Note: The Academic Development Committee and Senate are in the process of reviewing proposals for a number of new four-hundred level courses which include:

Cultural Studies 400: Honours seminar.

Cultural Studies 415: Advanced topics in visual arts.

Cultural Studies 420: Advanced topics in literary studies.

Cultural Studies 425: Advanced topics in literary and critical theory.

Cultural Studies 435: Advanced topics in mass media and popular culture.

Cultural Studies 470: Advanced studies in theatre and the performing arts.

Cultural Studies 480: Advanced studies in film and video.

Please see the Calendar Supplement for details.

Cultural Studies 401

Interpretation and the media. (Not offered this year.)

Cultural Studies 402

Honours thesis. A double-credit course, for which double fee is charged, in which instruction in research methods leads to a thesis of about 15,000 words. The Program deadline for a thesis abstract and bibliography (signed by the thesis supervisor) is May of the year prior to the entry to the fourth quarter of the Honours program.

Cultural Studies-Canadian Studies 413**The Vanier Seminar**

Cultural policy in Canada. (Not offered this year.)

Cultural Studies-Sociology 440

Special topics in the sociology of culture and knowledge. (See Sociology)

Cultural Studies 450

Current issues in cultural theory. Focuses on the concept of postmodernism and the issues surrounding the way this term (and its compounds) has been deployed as a way to characterize contemporary theory, culture, and society. Explores what is meant by a break from the modern. In the light of this question, and by reflecting on key statements by Lyotard, Rorty, Jameson, Baudrillard, Jencks and others, considers such topics as the postmodern turn in architecture, the rise of deconstruction and ironic modes of theorising, and the cultural centrality of television. Two hour seminars weekly.

A. Wernick

Cultural Studies 495

Special topics in cultural studies. For the list of special topics courses, students should attend the Honours Information Session in the Spring or visit the Program Office.

Reading Courses

Reading courses are available as *Cultural Studies 390* or *490*. Registration in reading courses is contingent on permission of the instructor and the Chair of the Program in advance of course registration.

Economics**Professor and Chair of the Department**

H.M. Kitchen, M.A. (MCMASTER)

Professor Emeritus

M.J. Boote, B.A. (WALES), PH.D. (MCGILL)

Professors

D.C.A. Curtis, M.A. (QUEEN'S), PH.D. (MCGILL) (on leave Winter Term 1993); K.S.R. Murthy, B.SC. (ANDHRA), M.SC. (KARNATAK), M.A. (DELHI, WESTERN ONTARIO), PH.D. (WESTERN ONTARIO)

Associate Professors

T. Drewes, B.A. (LAKEHEAD), M.A., PH.D. (QUEEN'S); M. Huberman, B.A. (MCGILL), M.A., PH.D. (TORONTO); P. Wylie, B.SC. (QUEEN'S, BELFAST), M.A., PH.D. (QUEEN'S)

Assistant Professors

M. Arvin, B.SC. (LONDON), M.PHIL. (OXFORD), PH.D. (QUEEN'S); B. Leith, B.A. (WESTERN), M.A., PH.D. (YORK); J. Muldoon, B.SC. (BROCK), M.A. (GUELPH), PH.D. (MCMASTER) (on leave Winter Term 1993)

Conjoint Professor

D. Auld, B.A. (WESTERN), M.A. (TORONTO), PH.D. (A.N.U.)

Note

Economics 101a/b and *102a/b* are prerequisites for all other courses in Economics. A standing of C- (60%) or higher is required in *Economics 101a/b* and *102a/b* to allow registration in upper year Economics courses. With the exception of *Economics 225a* and *Economics 220b*, two-hundred series courses in Economics are accepted as three-hundred level courses to meet the University requirements of a minimum number of three-hundred series courses.

It is strongly recommended for single-majors, that *Economics 320a* and *Economics 325a*, and for joint-majors, that *Economics 225a* and *Economics 220b* be completed before students enter their fourth quarter.

Required Courses

The single-major Honours program consists of twenty courses. Minimum ten courses in Economics, including *Economics 101a/b* and *102a/b*

200	220b*	400a
201	320a*	405b
225a*	325a	401

plus one other four-hundred series

Economics course. Or, one full course equivalent from the *three-hundred* series, approved by the Department, may be substituted in the fourth quarter of an Honours program.

Joint-major Honours program. Minimum seven and one-half courses in Economics, including

Economics 101a/b and 102a/b
 200 220b*
 201 400a
 225a* 405b
 401

plus a further one-half *four-hundred* series Economics course. Or, one half course equivalent from the *three-hundred* series, approved by the Department, may be substituted in the fourth quarter of an Honours program.

Single-major General program. Minimum six courses in Economics, including

Economics 101a/b and 102a/b
 200 225a*
 201 220b*

Joint-major General program. Minimum five courses in Economics, including

Economics 101a/b and 102a/b
 200
 201

*indicates that courses of equivalent content can be substituted for *Economics 225a/220b*. This will be determined by the Department Chair.

Note: In order to be eligible to graduate with a B.Sc. degree, a student must have completed a Grade 13/Ontario Academic course in Mathematics, or equivalent, or a university level Mathematics course.

For students majoring in Economics, *Economics 225a* and *Economics 220b* fulfill the Mathematics requirement for the B.Sc. Degree.

Economics 101a/b

Introductory microeconomic analysis. Introductory microeconomic analysis deals with methods of analysis and questions of policy relating to the market for individual products or services. The development of market supply and demand analysis, the examination of industrial structure and organization, and the role of tax and competition policy are given particular emphasis. Selected aspects of international economics, such as the gains from trade and trade barriers are also addressed. Lectures and discussions three hours weekly.

Economics 102a/b

Introductory macroeconomic analysis. Introductory macroeconomic analysis deals with methods of analysis and questions of policy relating to the aggregate economy at the national level. National income analysis, gross domestic product (GDP), employment, unemployment, the price level, inflation, monetary and fiscal policy are given particular emphasis. Selected aspects of international economics such as the balance of payments, exchange rate systems and exchange rate policy are also addressed. Lectures and discussions three hours weekly.

Economics 200

Microeconomic theory and its applications. Comprehensive treatment of the theoretical techniques which economists use to deal with problems of resource allocation and applications of those techniques. Addresses problems of demand and supply, market equilibrium, income distribution and economic welfare. Develops skills necessary for advanced work in economics. Two lectures weekly, seminar fortnightly. **Note:** Students cannot count both *Economics 200* and *Administration 210a* for credit.

J. Muldoon and staff

Economics 201

Macroeconomic theory and policy. Current theories of national income determination and economic policy as they apply to the problems of employment, unemployment, inflation and economic stability in both open and closed economies. Two lectures weekly, workshop fortnightly. **Note:** Students cannot count both *Economics 201* and *Administration 211b* for credit.

D. Curtis and staff

Economics 220b

Introduction to econometrics. Basic probability and statistical theory. Data Analysis; Statistical Inference; estimation, hypothesis testing. Correlation and Regression as applied to economic relationships and economic data. Prerequisite: *Economics 225a*. Two lectures weekly and seminars fortnightly.

K.S.R. Murthy

Economics 225a

Introduction to mathematical economics. Economic applications of elementary linear algebra, calculus and optimization theory. Emphasis on graphical analysis and linear equation systems as well as on optimization tools as they apply to the consumer, producer and macro-economic equilibrium. Three lectures weekly and seminars fortnightly.

M. Arvin

Economics-Canadian Studies 260a

Canadian economic growth and development I: up to 1929. The application of economic analysis to the study of Canadian development to 1929. The Staples thesis, the colonial economies, Confederation, the National Policy, prairie settlement, industrialization and the development of money, capital and labour markets. Two lectures weekly, seminar fortnightly.

P. Wylie

Economics-Canadian Studies 261b

Canadian economic growth and development II: after 1929. The application of economic analysis to the study of Canadian development since 1929. Models of income growth and fluctuations, government policy on trade, foreign investment and macroeconomic stabilization, and the economics of federal-provincial relations. Two lectures weekly, seminar fortnightly.

P. Wylie

Economics 301a

Monetary theory. Theories of the demand for money, money in Keynesian and classical macroeconomic models, monetarism and the debate over the use of monetary policy. (Excludes *Economics 301*) Prerequisite: *Economics 201* or *Administration 211b*. Two lectures weekly, seminar or tutorial fortnightly.

D. Curtis

Economics 302b

Monetary institutions and policy. (Not offered this year.)

Economics 311a

International trade. Theories of world trade and the analysis of trade policy and trade relationships in the world economy. The theory and practice of protectionism and preferential trade arrangements (trade blocs). The role of the multinational corporations in international trade and investment. (Excludes *Economics 310*). Two lectures weekly, seminar fortnightly. (Support course for Comparative Development Studies)

Economics 312b

International finance. The operation of international money and capital markets and theoretical and policy aspects of exchange rates and the balance of international payments. Macro-economic management domestic open economies and the world economy and the evolution, management and reform of the international financial system. (Excludes *Economics 310*). Two lectures weekly, seminar fortnightly. (Support course for Comparative Development Studies)

P. Wylie

Economics 316a

Government expenditure analysis. Efficiency criteria will be emphasized in the analysis of public goods, externalities, natural monopolies, cost-benefit analysis and the structure and growth of government expenditures in Canada. (Excludes *Economics 315*). Two lectures weekly, seminar fortnightly.

H. Kitchen

Economics 317b

Canadian tax policy. Efficiency and equity criteria will be emphasized in evaluating personal income taxation, corporate income taxation, commodity taxation, local government taxation and income transfers. (Excludes *Economics 315*). Two lectures weekly, seminar fortnightly.

H. Kitchen

Economics 320a

Econometrics. Simple and multiple regression models. Problems of estimation and testing of economic relationships under conditions of autocorrelation, errors in variables, etc. Introduction to distributed lags and simultaneous equations. Prerequisite: *Economics 225a, 220b* (or equivalents). Pre/corequisites: *Economics 200, 201*, or permission of the instructor. Two lectures, tutorial weekly.

K.R. Murthy

Economics 321b

Applied econometrics. The major objective of this course will be to give students concrete experience in integrating economic theory with econometric technique. The emphasis will be on solving the practical problems of empirical economics: how to translate an economic problem into an empirical model; how the economic data itself affects the choice of empirical model; how to develop strategies for anticipating the effects of imperfect data sets; how to recognize and overcome

estimation problems which arise in common empirical models. Prerequisite: *Economics 320a*.

B. Leith

Economics 325a

Mathematical economics and economic models. Application of simple mathematical tools to the problems in Economics. Use of mathematics in building simple micro- and macro-economic models and their analyses. Prerequisite: *Economics 225a* (or equivalent). Pre/corequisites: *Economics 200, 201* or permission of instructor. Three lectures, seminar weekly.

J. Muldoon

Economics-Comparative Development 330

Economics of developing countries. Historical perspectives of industrialized and developing countries, models of growth and development, examination of sectoral problems of development such as agriculture, industry, trade, etc. Planning and policies for development and the study of experiences of selected developing countries. Prerequisite: *Economics 101a/b* and *102a/b* or permission of the instructor. Two lectures weekly, seminar fortnightly.

Economics 341a/b

Industrial organization. (Not offered this year.)

Economics 350a

Economics of trade unions. (Not offered this year.)

Economics 351b

Labour economics. The economic theory of labour markets used to understand their outcomes and evaluate policies. Topics include wage differentials, investment in human capital, and structural unemployment problems. Prerequisites: *Economics 200* or *Administration 210a*. Two lectures weekly, seminar fortnightly.

T. Drewes

Economics 360

International economic history, 1750-1950. A survey of European industrialization with special emphasis on the British experience. Other topics include the growth of the international economy in the late 19th century, and the economic problems of the inter-war period. Prerequisite: *Economics 101a/b* and *102a/b* or permission of instructor. Two lectures weekly, seminar fortnightly.

M. Huberman

Economics 365a

History of economic thought. (Not offered this year.)

Economics-Comparative Development 370a

Comparative economic systems and planning. (Not offered this year.)

Economics-Environmental and Resource Studies 381a

Environmental economics. The economic basis of environmental problems and the economics of pollution control. The tragedy of the commons, economic incentives in regulatory policy, and cost-benefit analysis applied to environmental policy. Theoretical treatment followed by application to environmental policy. (Excludes *Economics 380*). Two lectures weekly, seminars fortnightly.

B. Leith

Economics-Canadian Studies 384b

Health economics. (Not offered this year.)

Economics 396a, 397b

Special topics in economic analysis and policy.

Four-hundred Series Courses:

Four-hundred series courses are normally open only to students in the fourth quarter of the Honours program.

Information meetings for prospective fourth quarter students will be arranged early in the Winter Term when *four-hundred* series course offerings will be outlined.

Economics 400a

Topics in advanced microeconomic theory: development of utility theory from axiomatic preference theory, homogeneous utility and production functions, duality in production and consumption, decisions involving risk and uncertainty, market structures and market failure. Prerequisites: *Economics 200, 225a, 220b* (or equivalents).

T. Drewes

Economics 405b

Topics in advanced macroeconomics. The Classical model; IS/LM model and Resurrection of Keynes; Keynesian macroeconomics as an equilibrium and disequilibrium phenomena; microfoundations of macroeconomics; wealth effects and government budget financing; New Classical Macroeconomics; optimal

choices of monetary policy instrument; and demand for money. Prerequisites: *Economics 201, 225a, 220b* (or equivalents).

M. Arvin

Economics 415b

Public sector economics. Topics include a discussion of market failure and the rationale for government intervention; consumer's and producer's surplus and the measurement of welfare change; theory of public goods; externality; cost-benefit analysis; economic effects of taxation; and tax incidences. Lecture, tutorial weekly. Prerequisite: *Economics 200* or permission of the instructor.

Economics 420b

Topics in advanced econometrics. Prerequisite: *Economics 320a* or permission of the instructor. (Not offered this year.)

Economics 425b

Advanced topics in mathematical economics. Classical programming; differential equations; constrained optimization with inequality constraints (linear and non-linear programming); dynamic optimization; optimal control methods; game theory; and economics of uncertainty. Economic applications will be stressed throughout the course. Prerequisite: *Economics 325a* or permission of the instructor.

M. Arvin

Economics 401

Honours essay. This course is designed in such a way that the student must research a topic of individual interest under the close supervision of a faculty adviser.

H. Kitchen

Economics 496a, 497b

Special topics in economic analysis and policy. (Not offered this year.)

Students contemplating careers in teaching in either elementary or secondary schools are able to undertake a four-year concurrent teacher education program offered by Trent University in co-operation with the Faculty of Education, Queen's University. Students may enroll in programs which qualify them for either a Bachelor of Arts or a Bachelor of Education degree. At the same time the student will obtain an Ontario Teacher's Certificate with either Primary-Junior (Grades K to 6) or Junior-Intermediate (Grades 4 to 10) or Intermediate-Senior (Grades 7 to OAC) specialization. The first three years of the program are conducted at Trent while half of the final year is held at Queen's.

Primary-Junior Program

This program is designed for candidates who intend to begin their teaching careers in elementary schools. Candidates are prepared to teach all subjects in the Primary division (Kindergarten to Grade 3) and the Junior division (Grades 4 to 6). It is strongly recommended that candidates take an OAC Mathematics and an OAC Science.

Candidates admitted to this program are required to include in their overall Arts/Science program:

- 1 course in Psychology
- 1 course in language or linguistics
- 1 course in Mathematics or Grade 12 Advanced Level Mathematics
- 1 course in the arts
- 1 course in social science (History, Geography, Politics, Sociology or Anthropology, Native Studies, Canadian Studies, Comparative Development Studies, and Environmental and Resource Studies 200 or 310).

Junior-Intermediate Program

This program prepares candidates to teach in the Junior division (Grades 4 to 6) and the Intermediate division (Grades 7 to 10). In addition to a core program preparing generalist teachers, there is the opportunity for candidates to do further study in one teaching subject of the Intermediate division. It is strongly recommended that candidates take an OAC Mathematics and an OAC Science.

Candidates selecting this program may major in any subject but must include in their total undergraduate degree program three full courses in one teaching subject, i.e. English, Drama, Geography, History,

Education

Director Trent-Queen's Teacher Education Program and Assistant Professor

D. Berrill, B.A. (NORTHWESTERN), M.A. (TORONTO), PH.D. (EAST ANGLIA)

Assistant Professor

S. Solomon, B.A., M.ED. (WESTERN), ED.D. (TORONTO)

Adjunct Faculty

L. Skube, B.A. (WESTERN), B.ED./M.ED. (TORONTO)

Mathematics, Visual Arts and Science. Exceptions are French and Music, where five full undergraduate courses are required.

In addition, candidates are required to include in their overall Arts/Science program:

- 1 course in Psychology
- 1 course in language or linguistics
- 1 course in Mathematics or 1 course in Computer Science. If standing is held in Grade 12 Advanced Level Mathematics, a quantitative science course may be taken instead of Mathematics or Computer Science.

Intermediate-Senior Program

This program prepares candidates to teach in the Intermediate division (Grades 7 to 10) and the Senior division (Grades 11 to OAC). Candidates admitted to this program must select two teaching subjects for the study and development of teaching methods in these divisions. They must include in the undergraduate degree five full courses in one teaching subject and three full courses in the other. Exceptions are French and Music, where five full undergraduate courses must have been completed. Also included in the undergraduate degree must be one course in Psychology. In addition to the subject concentrations mentioned above in the Junior-Intermediate program, candidates may also select from Biology, Chemistry, Computer Science and Physics.

Program Design

Candidates must have obtained an overall B average or an Honours degree in their Arts/Science courses before proceeding to the final year of the program.

The design of the concurrent program is an attempt to make teacher preparation both academic and field centered. The program is spread over a four-year period and places the students in contact with school children in each of the four years while at the same time allowing the students to pursue academic and professional studies. The students' involvement in the professional program increases from year to year and culminates in a one-half year of internship from January to April of the final year. Program choices need not be indicated until the final year at Trent.

The program encourages candidates to do an Honours degree. Candidates for an Honours B.A. or B.Sc. take a full fourth quarter in arts and science and complete

the final year of the education program in their fifth year.

Approximately 125 candidates may be accepted in first year. Candidates will be selected on the following criteria:

1. Academic Profile 50% (Ontario Grade 13 or 6 OACs or equivalent).
2. Experience Profile 50% (showing candidate's related experience and stressing responsibility, leadership and initiative).
The program is actively seeking candidates with experience (1) with special needs populations and (2) in multi-cultural settings.
3. The program actively seeks candidates who are interested in teaching science at both elementary and secondary school levels. In addition, the program seeks women interested in science at all levels.

Required Courses

Year 1

Up to five full B.A. or B.Sc. courses.

One Education half course: Introduction to Schools and Teaching.

Equivalent of two weeks service in a classroom, closely observing pupils.

Year 2

Up to five full B.A. or B.Sc. courses.

One Education half course: Explorations in Learning Environments (Sociology).

Equivalent of two weeks in a classroom, closely observing and teaching consecutive lessons.

Year 3

Up to five full B.A. or B.Sc. courses.

One Education half course in Psychology.

Equivalent of two weeks in a classroom, the second week of which is evaluated teaching.

An overall B average on the Arts/Science courses or an Honours degree is required for entry into the final year.

Final Year

Fall semester at Queen's University – Curriculum Studies, Foundations, School Law and Policy, and Fall teaching round. Winter semester – internship in a school in either the Peterborough, Oshawa-Pickering, or Kingston areas.

English Literature

Professor and Chair of the Department
Z.H. Pollock, B.A. (MANITOBA), PH.D.
(LONDON)

Professors Emeriti

G. Roper, M.A., PH.D. (CHICAGO);
J. Winny, M.A., PH.D. (CAMBRIDGE)

University Professor

D.F. Theall, B.A. (YALE), M.A., PH.D.
(TORONTO)

Professors

R.D. Chambers, B.A. (MCGILL), B.LITT. (OXFORD); R.J. Dellamora, A.B. (DARTMOUTH COLLEGE), B.A. (CAMBRIDGE), M.PHIL., PH.D. (YALE); J.A. Fekete, M.A. (MCGILL), PH.D. (CAMBRIDGE); S.F. Gallagher, B.A., PH.D. (IRELAND), M.A. (WESTERN ONTARIO); G.A. Johnston, B.A. (TORONTO), M.A. (HARVARD); S. Kane, B.A. (CARLETON), M.A., PH.D. (TORONTO); W.I. McLachlan, B.A. (OXFORD); O.S. Mitchell, M.A. (ALBERTA), PH.D. (LONDON); J.E. Neufeld, B.A. (TORONTO), M.A., PH.D. (CHICAGO); E.M. Orsten, M.A. (OXFORD), PH.D. (TORONTO) (on leave Fall Term 1992); M.A. Peterman, A.B. (PRINCETON), M.A., PH.D. (TORONTO); J.M. Treadwell, B.A. (TORONTO), M.A. (CAMBRIDGE); F.B. Tromly, B.A. (GRINNELL), M.A., PH.D. (CHICAGO)

Associate Professors

B.L. Beach, B.A. (ACADIA), M.A. (DALHOUSIE), PH.D. (MCGILL); M.S. Berkowitz, B.A. (NEW YORK), M.A., PH.D. (MASSACHUSETTS); K.A. Chittick, M.A. (TORONTO), PH.D. (EDINBURGH) (on leave Fall Term 1992); G.D. Eathorne, B.A. (NEW ZEALAND), M.A. (CANTERBURY); A.G. Fisher, M.A. (SASKATCHEWAN); D.K. Glassco, B.A. (QUEEN'S), M.A. (MELBOURNE) (on leave Winter Term 1992)

Assistant Professors

S.W. Brown, B.A., M.A. (WINDSOR), B.A., PH.D. (QUEEN'S); J. Buckman, B.A. (MCGILL), M.A. (SUSSEX), PH.D. (MONTREAL); L.J. Clark, B.A., M.A. (TORONTO), PH.D. (VIRGINIA); M.C. Eddy, M.A. (WESTERN ONTARIO), PH.D. (TORONTO); E.A. Popham, M.A. (MANITOBA), PH.D. (QUEEN'S) (on leave 1992-93)

Lecturer

M.C. Eddy, M.A. (WESTERN ONTARIO)

Research Associates

S.L. Keefer, M.A., PH.D. (TORONTO); A.E. Russell, B.A. (TRENT), M.A., PH.D. (YORK)

Note

The curriculum of the department has been designed to accommodate a wide range of approaches to the study of English Literature. Courses are arranged in six categories. Each of the first five categories (A to E) encompasses a single literary period, and courses within each category provide a variety of approaches to the period. These approaches include literary-historical surveys, studies of outstanding writers in relation to their age, and studies of literary topics or genres associated with a particular literary period though not necessarily confined to it. The sixth category (F) consists of courses which are not confined to any particular period, but which provide comprehensive inquiries into genres, literary theory and criticism, and the history of ideas. The department encourages students to explore as many different kinds of study as possible.

A	B	C	D	E	F
800 to 1500	1500 to 1642	1642 to 1790	1790 to 1900	1900 to 1985	Genres, etc.
230	251	201	210	105	115
331	253	202	231	229	120
332	280	300	232	265	200
431	351	302	320	340	310
432	420	434	321	345	315
	433		435	350	325
			436	365	329
				371	370
				440	380
				450	381
				460	410
				465	
				475	

Required Courses

The single-major Honours program in English consists of nineteen courses. Minimum ten English courses. At least one course must be chosen from each of the categories listed above, and at least three of the final four courses in the Honours program must normally be *four-hundred* series English courses.

Joint-major Honours program. Minimum eight English courses. Five of these courses are to be chosen from different categories listed above, and at least two of the final four courses in the Honours program must normally be *four-hundred* series English courses. Program to be established in consultation with the Department.

Single-major General program. Minimum six English courses. Five of these courses are to be chosen from different categories listed above.

Joint-major General program. Minimum five English courses. Four of these courses are to be chosen from different categories listed above.

Special Provisos

One-hundred series courses: Only one one-hundred series English course may be taken by first-year students, and no more than two may be counted towards a degree. First-year students wishing to take a second English course must obtain written permission from the Department Chair.

Normally, a student will be required to take a first-year English course and obtain a grade of C- (60%) or better in order to major in English.

Two-hundred and three-hundred series courses: Any two- or three-hundred series English course is open to any upper-year student. Two-hundred series courses are considered equivalent to three-hundred series courses to satisfy the University requirement of four full courses in the three-hundred series.

Fourth quarter: The fourth quarter of the Honours program will normally consist of four courses.

Note:

As one of the optional English courses allowed in the General and Honours programs in English, students may count one of the following full- or two of the following half-courses: *Canadian Studies* 280, 355, 360; *Classical Literature* 100, 200, 395/495; *Cultural Studies* 205, 222, 225, 270, 322, 370, 420; *German* 220; *Spanish* 324a, 325b. However, none of these courses may be used to satisfy the category requirements for English majors.

The Department recommends that students considering graduate studies in English literature complete an upper-year course in a second language.

English 105

The modern period and its roots. The course introduces students to the study of literature through a critical examination of the work of the most significant writers of the modern period (Conrad, Yeats, Joyce, Lawrence, Eliot, and Woolf) and some of their most important forerunners (Brown-ing, Hopkins, Dickens, and Hardy). Weekly lecture and seminar, and monthly workshop.

D.K. Glassco and staff

English 115

Studies in English drama. The course introduces students to the study of literature through a critical examination of English drama from the medieval mystery plays to the modern *avant garde*. The plays will be examined from a literary and a theatrical perspective. Writers to be studied include Shakespeare, Jonson, Wycherley, Sheridan, Wilde, Shaw, Williams, Beckett, and Pinter. Weekly lecture and seminar, and monthly workshop.

F.B. Tromly and staff

English 120

Varieties of heroism. The course introduces students to the study of literature through the critical examination of the relationship between the heroic individual and society. The course will draw on a wide range of periods, but special emphasis will be put on works from the Renaissance to the Romantic era. Writers to be studied include Shakespeare, Milton, Swift, Fielding, Austen, Wordsworth, and Emily Brontë. Weekly lecture and seminar, and monthly workshop.

L.J. Clark and staff

English 200

Critical approaches to literature. An introduction to the assumptions underlying a number of contemporary critical approaches to literature, focusing on their key concepts and aims, and exploring their strengths, weaknesses, and silences when applied to a wide variety of English literary texts. Theories to be studied will include some of: New Criticism, Structuralism, Semiology, Deconstruction, Feminist Theory, Marxism, Psychoanalysis, Reader-Response Criticism, Archetypal Criticism, and New Historicism. Two hours of lectures, workshops, and seminars weekly.

M.C. Eddy

English 201

Studies in Milton. An examination of Milton's development as man and artist through the study of his major works including "Comus", "Lycidas", *Areopagitica*, *Paradise Lost*, *Paradise Regained*, and *Samson Agonistes*. Weekly lecture and tutorial. (Offered this year and in alternate years.)

M.S. Berkowitz

English 202

Literature and belief. (Offered in alternate years, but not this year.)

English 210

The Romantics. A study of the major English writers of the Romantic revolution: Blake, Coleridge, Wordsworth, Scott, Austen, Byron, Shelley, and Keats, with some attention to minor figures and to Romantic theories of the imagination. Weekly lecture and seminar.

O.S. Mitchell and staff

English-Cultural Studies 229

Science fiction. (See Cultural Studies)

English 230

The history of the English language. (Not offered this year.)

English 231

The American Renaissance. Studies in the literature of the pre-Civil War United States. Attention will focus on the work of Poe, Emerson, Thoreau, Hawthorne, Melville, Whitman, and Dickinson. Weekly lecture and tutorial. (Offered this year and in alternate years.)

M.S. Berkowitz and staff

English 232

American literature: The Gilded Age. (Offered in alternate years, but not this year.)

English 251

The Renaissance lyric. (Offered in alternate years, but not this year.)

English 253

Elizabethan and Jacobean literature. Studies in the literature of the English Renaissance. The course will deal with the poetry, prose, and drama of a period when new ideas both stimulated literary expression and unsettled established assumptions about man, language, and the order of the universe. Writers to be studied include Sidney, Spenser, Marlowe, Shakespeare, Donne, Jonson, and Bacon. Weekly lecture and tutorial.

F.B. Tromly

English-Canadian Studies 265

English Canadian prose. A study of the principal Canadian writers of prose in English from the nineteenth century to the present day. Writers to be studied include Callaghan, Davies, Duncan, Haliburton, Kroetsch, Laurence, Leacock, MacLennan, Moodie, Munro, Richler, Ross, and Wiebe. Weekly lecture and seminar; workshops.

Z.H. Pollock and staff

English 280

Studies in Shakespeare. An examination of Shakespeare's dramatic career through the study of about a dozen representative works spanning the period from the early comedies to the last plays. Particular consideration will be given to Shakespeare's imaginative development.

Weekly lecture and seminar; workshops.

S.W. Brown and staff

English-Cultural Studies 295

Science fiction. (See Cultural Studies)

English 300

Pope and his age. (Offered in alternate years, but not this year.)

English 302

London. Studies in the literature of the Restoration and eighteenth century with particular attention to the city as a major influence upon literary sensibility and literary form. Authors to be studied include Pepys, Defoe, Addison, Steele, Gay, Pope, Fielding, Boswell, and Johnson. Weekly lecture and seminar. (Offered this year and in alternate years.)

J.M. Treadwell and staff

English-Women's Studies 310

Gender and literature. A study of relations between gender and literature in the works of writers, mainly women, in England and United States (Wollstonecraft, Austen, Brontë, Eliot, Dickinson, Christina Rossetti, Whitman, Forster, Woolf, Plath, Rich, Lessing, and Alice Walker) and some of their important forerunners. Weekly lecture and tutorial. (Offered this year and in alternate years.)

J. Buckman

English 315

Commonwealth fiction. A study of prose fiction of the Commonwealth with special emphasis on the West Indies, Africa and Asia. Writers to be studied include V.S. Naipaul, Jean Rhys, Chinua Achebe, Ngugi wa Thiongo, J. Coetzee, Nadine Gordimer, N.K. Narayan, Salman

Rushdie, and Anita Desai. Weekly lecture and two-hour fortnightly tutorial. (Offered this year and in alternate years.)
G.D. Eathorne

English 320

The Age of Dickens. (Offered in alternate years, but not this year.)

English-Cultural Studies 321

Literature and society. Studies in the relation between literature and society in a number of nineteenth-century works that deal with social, cultural, and women's issues. Writers to be studied include Arnold, C. Brontë, Carlyle, Dickens, George Eliot, Engels, Gaskell, Marx, Hill, Morris, and Hardy. Weekly lecture and tutorial. (Offered this year and in alternate years.)

K.A. Chittick and staff

English-Cultural Studies 325

Literary and critical theory. A study of ideas about the nature and function of literature, interpretation, and evaluation. The spectacle and background of competing contemporary theoretical models will be considered through such figures as Plato and Aristotle, Sidney, Coleridge and Arnold, Frye and McLuhan, Lukacs and Adorno, Barthes, Derrida and Foucault, Kristeva, and Spivak. Two-hour seminar weekly.

J.A. Fekete

English-Cultural Studies 329

Utopia (Future fiction). (See Cultural Studies)

English 331

Chaucer and his age. A study of Chaucer's works, especially *The Canterbury Tales*, and of other English writers and literary interests of the fourteenth century. Lecture and seminar weekly; language workshops. (Offered this year and in alternate years.)

English 332

Medieval romance. (Offered in alternate years, but not this year.)

English 340

Modern poetry. (Offered in alternate years, but not this year.)

English 345

Modern British fiction. The course charts the major developments in British fiction in the twentieth century. The focus will be on thematic, technical, and stylistic innovation as a response to an era of unprecedented social change and uncer-

tainy. Writers to be studied include Huxley, Ford, Joyce (*Ulysses* and *Finnegans Wake*), Lawrence, Woolf, Wyndham Lewis, Beckett, Gordiner. Weekly lecture and seminar.

D.F. Theall

English 350

Modern drama. Studies in the works of recent English, Irish, American, and Canadian dramatists. Writers to be studied include Shaw, Synge, O'Casey, O'Neill, Williams, Osborne, Pinter, Davies, and French. Weekly lecture and seminar.

S.F. Gallagher

English 351

English drama to 1642. (Not offered this year.)

English-Canadian Studies 365

English Canadian poetry. A study of the principal Canadian writers of poetry in English from the nineteenth century to the present day. Writers to be studied include Lampman, Pratt, Klein, Avison, Purdy, Cohen, Atwood, and Ondaatje. Weekly lecture and seminar. (Offered this year and in alternate years.)

G.A. Johnston

English 370

Studies in the novel. (Offered in alternate years, but not this year.)

English 371

Modern American fiction. A study of American fiction from 1920 to the present. Writers to be studied include Hemingway, Fitzgerald, Faulkner, West and Steinbeck; and some of Bellow, Doctorow, Heller, Malamud, McCullers, Toni Morrison, Salinger, Leslie Silko, Updike, Vonnegut, and Alice Walker. Weekly lecture and seminar. (Offered this year and in alternate years.)

R.D. Chambers and staff

English-Cultural Studies 380

Narrative literature and film. (Not offered this year.)

English 381

Literature and psychology. A study of the contributions of certain psychological theories and concepts to an understanding of literary works. Among the major theories to be considered will be those of Freud, Jung, and the modern humanistic psychologists. Weekly lecture and fortnightly seminar.

B.L. Beach

Four-hundred Series Courses

The fourth quarter of the Honours program may be completed on a full-time or part-time basis. Information meetings for prospective Honours students are held during the Winter Term when the details of next year's *four-hundred* series course offerings are outlined.

Note:

Four-hundred series courses are normally limited to students in the fourth quarter of the Honours program. However, students may petition the Department for permission to enroll in a *four-hundred* series course as part of an General degree program.

After 1992-93, *four-hundred* series courses may not normally be used to satisfy category requirements for single- or joint-major degrees.

English 402

Honours thesis. A double-credit course, for which double fee is charged, in which instruction in research methods leads to a thesis of about 15,000 words. The Department deadline for a thesis abstract and bibliography (signed by the thesis supervisor) is May 1 of the student's third year.

English 410

Advanced studies in literary and critical theory. Topic for 1992-93: Feminist literary theory and criticism. The course will examine the question of 'difference' while considering the dangers of an essentialist approach and will explore theories relating to: feminist poetics; female archetypes; mother-daughter relationships; feminist utopias; androgyny; lesbianism; black and third-world women writers; and the problematic centrality of male psychoanalytic theory to French feminist writers. Two-hour seminar weekly.

J. Buckman

English 420

Advanced studies in Shakespeare. Topic for 1992-93: Shakespeare's responses to Marlowe. The course examines Shakespeare's career as playwright and poet by focussing on his varied responses to the work of Christopher Marlowe. The applicability to these writers of various models of literary 'influence' and 'intertextuality' will be considered. Two-hour seminar weekly.

F.B. Tromly

English 431

Studies in Old English language and literature. Topic for 1992-93 to be announced.

English 432

Advanced studies in Middle English language and literature. (Not offered this year.)

English 433

Advanced studies in Renaissance literature. (Not offered this year.)

English 434

Advanced studies in Restoration and eighteenth-century literature. Topic for 1992-93: Seduction and the novel. The course examines various forms of narrative including the picaresque, the epistolary, pornography, the novel of sensibility, libretti, memoirs, and letters. Writers to be studied include Behn, Casanova, Cleland, Defoe, Fielding, Haywood, Manley, Lady Mary Wortley Montagu, Richardson, and Frances Sheridan. Two-hour seminar weekly.

S.W. Brown

English 435

Advanced studies in the Romantics. Topic for 1992-93: Blake's composite art. The course will concentrate on the relationship between text and design in Blake's *Book of Thel*, *Songs of Innocence and of Experience*, *The Marriage of Heaven and Hell*, *The First Book of Urizen*, *America*, *Europe*, and *Jerusalem*, though some attention will also be given to relevant work of Sir Joshua Reynolds, Wordsworth, Coleridge, Keats, and Shelley. Two-hour seminar weekly.

O.S. Mitchell

English 436

Advanced studies in Victorian literature. (Not offered this year.)

English 440

Advanced studies in modern poetry. (Not offered this year.)

English 450

Advanced studies in modern drama. Topic for 1992-93: Modern Irish drama. A study of drama in Ireland from the foundation of the Abbey Theatre to the present. Playwrights to be studied include Shaw, Yeats, Lady Gregory, Synge, O'Casey, Lennox Robinson, Denis Johnston, Brian Friel, Hugh Leonard, and Thomas Murphy. Two-hour seminar weekly.

S.F. Gallagher

English 460

Advanced studies in modern fiction. Topic for 1992-93: The literature of imperialism and its aftermath. The course explores the literary expression of the tensions inherent in the British Empire and of the complexities of its decline, ending with an examination of those important contemporary novelists whose work can best be described and understood as 'post-imperial'. Writers to be studied include Cary, Farrell, Forster, Gordimer, Greene, Kipling, Naipaul, Narayan, Orwell, Rushdie, Paul Scott, and Leonard Woolf. Two-hour seminar weekly.
G.D. Eathorne

English-Canadian Studies 4651

Advanced studies in Canadian literature. Topic for 1992-93: The literature of Ontario. A study of the evolution of a distinctive Ontario outlook in Canadian literature from the early 19th century to the present. Writers to be studied include Traill, Moodie, Kirby, Duncan, Connor, Davies, Finley, Hood, Atwood, Munro, Engel, Shields, and Ondaatje. Two-hour seminar weekly.

M.A. Peterman

English-Canadian Studies 4652

Advanced studies in Canadian literature. Topic for 1992-93: Fiction from British Columbia and the Maritimes. An in-depth study of a few representative novelists and short story writers from the Atlantic and the Pacific regions of Canada. Major writers to be compared are Ethel Wilson and Ernest Buckler; Jack Hodgins and Antonine Maillet; Audrey Thomas and Alistair McLeod. Two-hour seminar weekly.

M. Lacombe

English 4751

Advanced studies in American literature. Topic for 1992-93: The ideology of modern American fiction: the politics of race, gender, and class. The course will re-examine canonical 20th century writers of fiction such as Hemingway and Faulkner in terms of the issues of race, gender, and class before going on to focus on more recent fictional approaches to these issues in the post-modern fiction of Pynchon, the new realist fiction of Mailer, and the fiction of Afro-American women writers such as Toni Morrison and Gloria Naylor. Two-hour seminar weekly.
M.C. Eddy

English 4752

Advanced studies in American literature. Topic for 1992-93: The historical imagination. The course explores ways in which the historical imagination has been expressed in modern American fiction both in the historical novel proper and in the 'non-fiction novel'. Writers to be studied include Berger, Capote, Cather, Dos Passos, Faulkner, Hersey, Mailer, Stegner, Styron, and Wilder. Two-hour seminar weekly.

R.D. Chambers

English 490

Reading course. The course allows the student to select, with the approval of the department, an area for research study which is then pursued under the direction of a member of the Department. Students are advised that Calendar deadlines for registration in courses apply to *English 490*.

English 4951

Special topic. Topic for 1992-93 (category E): Literature of the Great War. The course focuses on the memoirs, novels, and poetry that came out of World War I. Writers to be studied include H.G. Wells, F.M. Ford, D.H. Lawrence, Richard Aldington, S. Sassoon, E.M. Remarque, R. Graves, and E. Blunden. Two-hour seminar weekly.

D.K. Glassco

English 4952

Special topic. Topic for 1992-93 (category F): History of the Book. An introduction to historical bibliography, the production, dissemination, and consumption of print in the English speaking world from the 15th to 19th centuries. Topics to be studied will include literacy and reading habits; the development of printing, publishing, and bookselling; press licensing and censorship; copyright and piracy; book collecting and the development of libraries. Two-hour seminar weekly.

J.M. Treadwell

Environmental and Resource Studies

Professor and Chair of the Program

T.C. Hutchinson, B.Sc. (MANCHESTER),
PH.D. (SHEFFIELD)

Professors

C. Carter, PH.D. (LONDON) (on leave
Winter Term 1992); W.F.J. Evans, M.A.,
PH.D. (SASKATCHEWAN); R.C. Paehlke,
B.A. (LEHIGH), M.A. (NEW SCHOOL FOR
SOCIAL RESEARCH), PH.D. (BRITISH
COLUMBIA) (on leave 1992-93); M.L.
Rubinoff, B.A. (QUEEN'S), M.A., PH.D.
(TORONTO)

Associate Professors

R.D. Evans, B.Sc. (TORONTO), PH.D.
(MCGILL) (on leave Winter Term 1993);
M. Havas, B.Sc., PH.D. (TORONTO);
C.D. Metcalfe, B.Sc. (MANITOBA), M.Sc.
(NEW BRUNSWICK), PH.D. (MCMASTER);
T.H. Whillans, B.A. (GUELPH), M.Sc.,
PH.D. (TORONTO) (on leave 1992-93)

Assistant Professors

M.G. Fox, B.Sc. (PENNSYLVANIA), M.E.
DES. (CALGARY), PH.D. (QUEEN'S); D.G.
Holdsworth, B.Sc. (WATERLOO), M.Sc.
(MCMASTER), PH.D. (WESTERN); B. Leith,
B.A. (WESTERN), M.A., PH.D. (YORK);
R. Ponce-Hernandez, B.ENG., M.Sc.
(CHAPINGO), PH.D. (OXFORD)

Conjunct Professor

P. Welbourn, B.Sc., PH.D. (BRISTOL)

Conjunct Associate Professor

B.A. Heidenreich, B.A. (YORK), M.A.
(MCMASTER), M.I.A. (COLUMBIA)

Associated Faculty

Biology, E. Nol, D.C. Lasenby; *Canadian
Studies*, J.H. Wadland; *Chemistry*, J.M.
Parnis; *Geography*, J.M. Buttle, J.S.
Marsh, C.H. Taylor; *Physics*, A.J.
Slavin, R.G. Johnson, J.W. Earnshaw

Demonstrator/Technician

W.A.C. Gibson, B.Sc., M.Sc. (TRENT);
R.K. Loney, B.Sc. (TORONTO)

The Environmental and Resource Studies Program is an interdisciplinary program offered by Environmental and Resource Studies (ERS) in cooperation with eighteen other University departments and programs. It provides an opportunity to take a single or joint honours, or a single or joint General B.A. (Environmental Studies) or B.Sc. (Environmental Science) degree, consisting of ERS core courses and

departmentally-offered support courses. Students should refer to the program handbook for suggested coherent programs combining ERS with other disciplines, and to the individual departmental course listings to ensure that they have the necessary prerequisites for any support courses they may wish to take for ERS credit.

Degree Requirements

Please read the section of the Calendar that describes the university-wide requirements for B.A. and B.Sc. degrees. Note also that a B.Sc. degree requires completion of a Grade 13/O.A.C. course in Mathematics, or equivalent, or a university-level Mathematics course. For a B.A. one of *Economics 101/102*, *Geography 101*, *Philosophy 105* or *Mathematics-Statistics 150* must be taken. Another course with quantitative content may be substituted with permission of the ERS Chair.

Single- and joint-major Honours programs consist of twenty full-course equivalents. Minimum of ten of these in ERS for a single-major and eight for a joint-major. Additional requirements include:

Bachelor of Science

ES 100

one of *ES 202*, *220*, *230*

five *three-hundred* and *four-hundred*
level ERS courses (single-major)

three *three-hundred* and *four-hundred*
level ERS courses (joint-major)

one *two-hundred* level or higher
arts course

fourteen science courses

Bachelor of Arts

ES 100

one of *ER 200*, *250*

five *three-hundred* and *four-hundred* level
ERS courses (single-major)

three *three-hundred* and *four-hundred*
level ERS courses (joint-major)

one *two-hundred* level or higher science
course

The thesis course, *ER 401/402* or *ES 401/402*, is equivalent to two full-courses, but requires permission of the ERS Chair and a minimum average in ERS credit courses of 75%. It is anticipated that most honours students will not do a thesis. Candidates for the thesis course that begins in September should normally have applied for entry by the previous May 1st. Acceptance for the thesis course is

dependent upon the candidate having made arrangements with a suitable ERS supervisor.

One listed support course may be taken for ERS credit in either the single- or joint-major honours program. Occasionally a second of these courses may be approved by the ERS Chair for single-majors.

Single- and joint-major General programs consist of fifteen full-course equivalents. Minimum of seven of these for a single-major and five for a joint-major. Additional requirements include:

Bachelor of Science

ES 100

one of *ES 202, 220, 230*

three *three-hundred* level ERS courses (single-major)

two *three-hundred* level ERS courses (joint-major)

11 science courses

Bachelor of Arts

ES 100

one of *ER 200, 250*

three *three-hundred* level ERS courses (single-major)

two *three-hundred* level ERS courses (joint-major)

One listed support course may be taken for ERS credit in either the single- or joint-major General program.

Core Courses

Environmental and Resource Science 100

Scientific bases of environmental problems. Interdisciplinary environmental science stressing the socio-economic, physical, biological and technological foundations of environmental degradation and preservation; air and water pollution; solid wastes disposal and recycling; non-polluting energy resources; radiation; and noise. Three hours of lecture and film weekly, seminars fortnightly.

M. Havas and staff

Environmental and Resource Studies-Canadian Studies 200

Canada: The land. (See Canadian Studies)

Environmental and Resource Science-Biology 202

Ecology. (See Biology)

Environmental and Resource Science 220

Methods in environmental science. An interdisciplinary course which will familiarize students with a wide range of laboratory and field methods directly

applicable to the study of environmental problems. Prerequisite: *Chemistry 120* or *130* or permission of instructor. Two-hour lecture weekly, laboratory fortnightly.

Staff

Environmental and Resource Science 230

Energy science and technology. A discussion of the scientific principles of energy and thermodynamics, and the current and future prospects for energy production, conversion, storage and transmission. Prerequisites: *Physics 100* or *Chemistry 120* or *130*, or permission of the instructor. Two lectures weekly, one-hour seminar fortnightly. Occasional field trips.

C. Carter, W. Evans

Environmental and Resource Studies 250

Canadian natural resource theory and management. This course examines the theories of renewable and non-renewable resource management and the way in which specific resources have been developed in Canada. Prerequisite: *ERS 100* or permission of the instructor. One and one-half hour lecture weekly, seminar/workshop fortnightly.

M. Fox, D. Holdsworth

Environmental and Resource Science-Biology 304

Aquaculture. The culture of fish, aquatic invertebrates and other organisms is a major and growing source of food in the world. In North America, hatcheries also play an important role in the management of many of our fish stocks. This course examines techniques used in Canadian and worldwide aquaculture, their biological bases, and current research to improve production, control disease, etc. Excursions to aquacultural facilities are planned. Prerequisite: *ERS-Biology 202* or permission of instructor. Two hours of lecture, three hours of lab, fieldwork or seminars weekly.

M. Fox

Environmental and Resource Studies 306

Environmental impact assessment: A case study approach. Environmental impact assessment brings together scientific, economic, social and political perspectives in an attempt to anticipate and manage the consequences of human actions for the environment. This course will examine different approaches to environmental impact assessment, contrasting provincial with federal and social with biophysical. Case studies will be used to illustrate particular

theoretical and practical approaches. Prerequisites: *Environmental and Resource Studies 250* or *Environmental and Resource Science 100* and permission of the instructor. Two hours of lecture/workshop weekly. (Offered in alternate years. May not be offered in 1992-93.)
Staff

Environmental and Resource Studies 307
Risk assessment: issues and techniques. This course explores the components and process of environmental risk assessment as undertaken by scientists, individuals and societies. It considers the role of science in risk assessment, and also examines the approaches and techniques used by different scientific disciplines to study situations involving risk. A special focus is the influence of societal values and goals on the ways in which risks are viewed, accepted and managed. Three hours of lecture and seminar weekly.
D. Holdsworth

Environmental and Resource Studies 308
Waste management. This course examines conventional and unconventional approaches to the management of waste. It considers questions such as how wastes can be converted into resources. The course explores socio, economic, health, political and ecological considerations in waste management. Prerequisite: *Environmental and Resource Science 100*. One-hour lecture and two hours of workshop weekly.
B. Wallace

Environmental and Resource Studies-Canadian Studies 310
Public policy and the Canadian environment. A comparative study of Canadian environmental policy and the history of the Canadian environmental movement with an emphasis on policies relating to occupational and environmental health, energy conservation, waste management, and renewable resources. Weekly lecture and seminar. Second year students wishing to take the course should seek permission of the instructor.
Staff

Environmental and Resource Science 312
Introduction to nuclear science; radioactivity, ionizing radiations, dosimetry concepts and calculations, health effects of ionizing radiations, sources and levels of environmental radiation. Uses of radio-nuclides in environmental research; detection of radio-isotopes, tracer methods,

practical aspects of research with radio-nuclides. Prerequisite: *ERS 220* or *Physics 100* or permission of the instructor. (Offered in alternate years, but not this year.)

Environmental and Resource Science 320
Management of forest ecosystems. This course offers an appreciation of the problems in managing forest ecosystems. It looks at the ecological processes which create and maintain forests and at how foresters attempt to manipulate them. With the groundwork established, a series of case studies, drawn from Ontario and other parts of the world, are then examined. Prerequisite: *Biology-Environmental and Resource Science 202* or permission of the instructor.
Staff

Environmental and Resource Studies 330
Environmental ethics. A critical examination of issues arising from human interaction with the natural environment. The course will focus on such themes as: the domination of nature, the allocation of scarce resources, animal versus human rights, social benefit and technological risk, conservation, preservation, and human responsibility to future generations. Special attention will be given to public and corporate policies affecting the environment with particular emphasis on the Canadian context within which these policies apply. Prerequisites: one two-hundred level Philosophy course, or *Environmental and Resource Studies/Canadian Studies 200* or *Environmental and Resource Studies 250*. One-hour lecture and two hours seminar weekly. Enrolment limited to 30.
L. Rubinoff

Environmental and Resource Studies-Canadian Studies-Geography 333a
Wilderness resources. (See Geography)

Environmental and Resource Science-Chemistry 341b
Instrumental analysis. (See Chemistry)

Environmental and Resource Science 350
Ecology and management of wetland systems. This course involves intensive first-hand study of one type of ecosystem in natural and culturally degraded states. Wetlands occur at the interface of terrestrial and aquatic ecosystems. Although they have unique traits, wetlands share characteristics with both of these types of ecosystem. Wetland management, thus requires understanding of ecological pro-

cesses and management practices common to most of Canada. Prerequisite: *ERS-Biology 202* or *ERS 220* or *ERS 250* with permission of the instructor. Two-hour lecture weekly, two or three hour field trips or workshop weekly. (Not offered this year.)

Environmental and Resource Studies-Comparative Development Studies 360
Environment and development. This course examines the relationship between economic development and its impact on the global environment. It includes an analysis of the legal and policy options currently being implemented or proposed to halt environmental degradation at international, national and community levels. Issues explored include agriculture, food policy and land use; deforestation; energy policy; export of hazardous products; industrial development; militarization and its relationship to environmental degradation. Particular attention is paid to the relationship between the environmental destruction and the international political/economic system, and to the impact of developed-country institutions and decisions. Co-requisite for CDS majors: *CDS 300*; Prerequisite for ERS single- or joint-majors: *ERS 250* or permission of the instructor. Three-hour lecture/workshop weekly.
Staff

Environmental and Resource Science 370
Aquatic toxicology. The course will examine the toxicological impact of aquatic contaminants, the basis of toxicity testing for acute and chronic effects, as well as the uptake and excretion of contaminants in aquatic organisms. Other sections include the toxic effects of lake acidification, and a discussion of the occurrence and detection of mutagens/carcinogens in the aquatic environment and drinking water. All students taking *ERS 390* are required to take the Animal Care course. Prerequisites: *Biology 100* and *ERS 220*. It is strongly recommended that students have taken *Biology-Chemistry 230b*, and *Chemistry 210a*.
C.D. Metcalfe

Environmental and Resource Studies-Economics 381a
Environmental economics. (See Economics)

Environmental and Resource Studies-Science 385, 386a, 387b, 388c
Field course. This course is offered occasionally when opportunity arises. In the Summer of 1992 one course is planned. Check the 1993-94 Calendar for offerings in the Summer of 1993.

Environmental and Resource Studies-Science 390, 391a, 392b, 393c
Reading course. This is a research course on a specific topic. The course is normally open only to ERS majors or joint-majors with two B credits (or better) in ERS courses. Arrangements must be made by each student with one or more instructors. Application must be made, preferably in the Spring, with the Program Office prior to enrolling in the course.

Environmental and Resource Studies-Science 395, 396a, 397b, 398c
Special topics. These are either experimental courses or courses which are offered on a temporary basis. The following are offered in 1992-93:

Environmental and Resource Science-Geography 396a
Introduction to geographical information systems. (See Geography)

Environmental and Resource Science 397a
Atmospheric pollution. Sources, distribution and impacts of atmospheric pollutants are examined. The course addresses alternative scientific approaches in monitoring atmospheric pollution and modelling systemic responses. Emphasis will be on questions other than climatic change.
W. Evans

Environmental and Resource Science 398a
Land resources evaluation for land-use planning. The land is evaluated in terms of its suitability for a given use, the inputs needed and the outputs expected. Land evaluation provides a link between the basic land resource surveys and the decision-making in land-use planning with regard to the potential outputs and the environmental consequences of each alternative. The principles and methodology for quantitative land evaluation are examined in this reading and research seminar. Prerequisite: *Environmental and Resource Science 220*. Interested students should contact the instructor as enrolment will be limited.
R. Ponce-Hernandez

Environmental and Resource Studies-Science 402

Thesis: This is a major research project combining one credit for Environmental and Resource Studies and one for the other discipline in a joint-major or counting as two credits for Environmental and Resource Studies. This project course requires permission of the ERS Chair and a minimum average in ERS credit courses of 75%. It is anticipated that most honours students will not do a thesis. Candidates for the thesis course that begins in September should normally have applied for entry by the previous May 1st. Acceptance for the thesis course is dependent upon the candidate having made arrangements with a suitable ERS supervisor. Students are required to attend a regularly scheduled two-hour workshop in which techniques and approaches to thesis research are presented and discussed.

Environmental and Resource Science-Biology 403a

Research design and data analysis.
(See Biology)

Environmental and Resource Science-Geography 404a

Hydrochemical fluxes in the hydrosphere.
(See Geography)

Environmental and Resource Science-Biology-Geography 406a

The geochemistry of natural waters. The course will examine the chemical and physical properties of water, snow and ice. An emphasis will be placed on those parameters which influence the distribution of biota, nutrients and contaminants in the aquatic environment. Topics for discussion will include the hydrologic cycle, the carbonate system and pH control, weathering and water chemistry, redox equilibria, hydrologic transport, and the properties of snow and ice. Enrolment is open to fourth quarter students in the Departments of Geography and Biology, or to students with a joint or single honours in Environmental Science. Prerequisite: *Geography 101* and *Biology-ERS 202* or permission of the instructor. Recommended: *Chemistry 120* or *130*, *Biology 305*, *Geography 353a*. Lecture and seminar weekly.

R.D. Evans

Environmental and Resource Science-Biology-Geography 407b

The fate of contaminants in the aquatic environment. The course will emphasize the mathematical modelling of the fate and

distribution of aquatic contaminants, including models for toxic metals, organic xenobiotics and groundwater contaminants. The course will examine the basic algorithms and assumptions of contaminants models, and will give the students hands-on experience in applying existing models (e.g. MINTEQA, QWASI). An emphasis will be placed on using models to determine the dominant pathways influencing the fate of inorganic and organic contaminants in the aquatic environment. Enrolment is open to fourth quarter students in the Departments of Geography and Biology, or to students with a joint or single honours in Environmental Science. Prerequisite: *Geography 101*, *Biology-ERS 202*, *Geography-Biology-ERS 406a*, or permission of the instructor. Recommended: *Chemistry 120* or *130*; *Biology 305*; *Geography 353a*. Tutorial, seminar weekly. (May not be offered in 1992-93.)

Environmental and Resource Science-Biology 412a

Environmental carcinogenesis. Prerequisite: *ERS 220* and *Biology 100*. *Biology 203* is highly recommended. (Not offered in 1992-93.)

Environmental and Resource Studies-Politics 460

Public policy. (Not offered in 1992-93.)

Environmental and Resource Studies-Science 485, 486a, 487b, 488c

Field course. This course is offered when opportunity arises. It will not be taught in the Summer of 1992. Check the 1993-94 Calendar for offerings in the Summer of 1993.

Environmental and Resource Studies-Science 490, 491a, 492b, 493c

Reading course. This is a research course on a specific topic. The course is normally open only to ES majors or joint-majors with a B average (or better) in ERS courses. Arrangements must be made by each student with one or more instructors. Application must be made, preferably in the Spring, with the Program Office prior to enrolling in the course.

In addition to these individually arranged courses one option will be available in 1992-93:

Environmental and Resource Studies 490I
Bioregionalism: the Otonabee River watershed, Haliburton section. Ecology, history and culture; sustainable development; appropriate technology; regional planning.

Permission of instructor required.

J. Wadland

Environmental and Resource Studies-Science 495, 496a, 497b, 498c

Special topics. These are either experimental courses or courses which are offered on a temporary basis. The following are offered in 1992-93:

Environmental and Resource Science 496a

Community responses to change in the hydrosphere. The course will examine the responses of biological communities to changes in the physical, chemical and biological parameters of aquatic ecosystems. Discussions may include forest clear-cutting, water-level fluctuations, habitat rehabilitation, exotic species introductions, eutrophication, and acid rain. The course will be seminar-based, with an emphasis on examining case histories related to the individual student's research.
P. Welbourn

Environmental and Resource Science-Geography 497b

Geographical information systems: principles and applications. (See Geography)

Environmental and Resource Science 498b

Climatic change. This course will examine the meteorological principles, measurements and models that are the basis of current understanding of climatic change. It addresses, in particular, the biological impacts of climatic changes and the ways in which these biological changes might affect human resources and the process of climatic change itself. Prerequisite: *Environmental and Resource Science 100* or *Geography 101* or *Physics 100* or *Biology 150*; minimum of 10 university credits. One one-hour and one two-hour lecture weekly.

W. Evans, T. Hutchinson

Support Courses

Arts

Administration 410: Management theory

Administration 420: Professional ethics

Canadian Studies 370: Science policy

Comparative Development 250:

Technology and development

Comparative Development 400:

Modernity and development

Computer Studies 100 or *202a/203b*

Economics 101a/b, 102a/b

Economics 260a: Canadian economic growth and development I: up to 1929

Economics 261b: Canadian economic

growth and development II: after 1929

Economics-Comparative Development,

330: Economics of developing countries

Geography 101: Human and physical environments

Geography 303a: Statistical applications in geography

Mathematics-Statistics 150:

Native Studies 150a, 151b: Community development

Philosophy 105: Practical reasoning

Political Studies-Comparative

Development 450: Problems of under-development

Political Studies 321: International law and organization

Science

Biology 100, 150

Biology 305: Limnology

Biology 314a: Fish

Biology 321a: Plant ecology

Biology 339a: Wildlife

Biology 350b: Biogeography

Chemistry 120 or *130*

Chemistry 210a/230b: Organic, biochemistry

Chemistry 240a: Analytical chemistry

Chemistry 341b: Instrumental analysis

Computer Studies 100 or *202a/203b*:

Introduction

Geography 245: Climatology

Geography 341a/b: Climatic change

Geography 356a: Pedology

Mathematics 110: Calculus

Mathematics-Stats 150: Elementary statistics

Mathematics-Computer Studies 351:

Linear statistical models

Physics 100: Elementary physics

Science 350: Communicating science

Four-hundred Series

Approval may be given for other courses, not in the above lists, to be taken as support courses in a single major Honours program.

Geography

Professor of Geography and Chair of the Department

F.M. Helleiner, M.A., PH.D. (WESTERN ONTARIO)

Professors

W.P. Adams, B.A. (SHEFFIELD), M.SC., PH.D. (MCGILL); A.G. Brunger, B.SC. (SOUTHAMPTON), M.SC. (ALBERTA), PH.D. (WESTERN ONTARIO); J.G. Cogley, M.A. (OXFORD), M.SC., PH.D. (MCMASTER); J.S. Marsh, B.A. (READING), M.SC. (ALBERTA), PH.D. (CALGARY); G.A. Nader, B.A. (LONDON), PH.D. (DURHAM); C.H. Taylor, M.A. (CANTERBURY), PH.D. (MCGILL)

Associate Professor

J.M. Buttle, B.A. (TORONTO), PH.D. (SOUTHAMPTON) (on leave Winter Term 1993)

Assistant Professors

P.M. Lafleur, B.SC. (BRANDON), M.SC. (TRENT), PH.D. (MCMASTER) (on leave Fall Term 1992); R. Ponce-Hernandez, B.ENG., M.SC. (CHAPINGO), PH.D. (OXFORD)

Technicians/Demonstrators

M.A. Ecclestone, B.SC. (TRENT), M.SC. (GUELPH); D.W. Steele, B.A. (WILFRID LAURIER), M.SC. (TRENT)

Required Courses

The single-major Honours program consists of twenty courses. Minimum ten courses in Geography including *Geography 101*

201

the equivalent of one full course from among 231a, 245, 250, 263a and 271a (and former 220 or 270) 411a/b, 303a, one of 401, 402, 440, 470, 490

Highly recommended: *Geography 486a, 487b, 488c*

Joint-major Honours program. Minimum eight courses in Geography. Same required and recommended courses as for single-major Honours program.

Single-major General program. Minimum six courses in Geography, including *Geography 101*

201

the equivalent of one full course from among 231a, 245, 250, 263a and 271a (and former 220 or 270)

Highly recommended: *Geography 411a/b* and *Geography 303a* and *Geography 486a, 487b, 488c*.

Joint-major General program. Minimum five courses in Geography.

Same required and recommended courses as for single major.

Students should note that, because most *three-hundred* series courses are offered only in alternate years, they should plan their courses well in advance. It is possible to take certain *three-hundred* series courses after *Geography 101* and most *four-hundred* series courses after *Geography 201*.

Recommended Courses

The attention of students in Geography is drawn to *Mathematics 100*, *Mathematics-Statistics 150*, *Philosophy 105*, *Science 350*, and *Computer Studies 100, 202a*.

Students intending to teach are advised to include a regional course; *Geography of Canada (Geography 361)* and *Geography of the polar regions (Geography 364a/b)* are particularly useful. The Canadian Studies, Computer Studies, Environmental and Resource Studies and Comparative Development Studies programs can complement a Geography program.

Note: In order to be eligible to graduate with a B.Sc. degree, a student must have completed a Grade 13/Ontario Academic course in Mathematics, or equivalent, or a university *one-hundred* level Mathematics course.

Students with an interest in Applied Geography are urged to consider the following Diploma programs offered by the School of Natural Resources, Sir Sandford Fleming College (Lindsay): *Geographic Information Systems Technology* and *Cartography Technology*. The Department of Geography intends to develop more formal links with these programs. *Geography 303a* and *405b* are appropriate preparatory courses for the Fleming programs.

Geography 101

Human and physical environments. Serves to indicate the scope and methods of geography. A survey of environmental systems, human interactions with them, and the use of distinctive areas on Earth. Emphasis on concepts, problems, research methods, and Canadian examples. Approximately

four hours weekly, lecture, films, laboratory exercises, field project.
W.P. Adams, J.S. Marsh

Geography 201

Methods of geographical analysis. The course describes quantitative techniques of investigation in geography. Commonly used statistical tools are explained. Data retrieval methods include remote sensing and forms of terrestrial survey. Cartographic and other representational techniques are presented. Prerequisite: *Geography 101*. Three hours weekly, lectures, tutorials and laboratory classes. Field work.

J.M. Buttle, P.M. Lafleur

Geography 231b

Recreation geography methods. Examines methods for determining the historical geography of recreation, the demand for recreation, the supply of land, facilities and services for recreation, and the economic, environmental and social impacts of tourism. Excludes *Geography 334*. Prerequisite: *Geography 101*. Lecture and seminar weekly.

J.S. Marsh

Geography-Science 240

Geology. Open to students in second year and above, and to first-year students with permission of the instructor. (Not offered this year.)

Geography 245

Climatology. Study of the elements of weather and climate; global and local energy and water balance regimes; climate change and classification. Prerequisite: *Geography 101* or *Environmental and Resource Studies 100*. Three hours of lectures, laboratories and seminars per week, and field work.

W.P. Adams, P.M. Lafleur

Geography 250

Geomorphology. Geomorphic processes and landscape evolution. Running water, ice, and other landforming agents. Geometrical and mechanical explanation of forms and processes. The imprint of the Ice Ages. The physical landscape and its problems for man. Prerequisite: *Geography 101* or *Environmental and Resource Studies 100*. Three hours weekly; lectures, laboratories, and field work.

J.G. Cogley

Geography-Canadian Studies 263a

Historical geography. Geography of North America before 1800, emphasizing early Canada. Themes pursued include exploration, environmental perception, resource exploitation, colonial settlement, urbanization, and regional development. Particular attention is paid to the geography of the northern imperial possessions of France and England in what is now Canada. Excludes *Geography 330*. Prerequisite: *Geography 101*. Lecture and tutorial weekly; field work.

A.G. Brunger

Geography 271a

Introductory urban geography. The nature of urban geography; the historical development of urban systems, emphasizing Canada; the location, size, function, and spacing of cities at national and regional levels; regional planning and development. Excludes *Geography 270*. Prerequisite: *Geography 101*, or *Economics 101a/b* and *Economics 102a/b*, or *Sociology 100*. Lecture and seminar weekly.

Staff

Geography 303a

Statistical applications in geography. A survey of some of the more important statistical techniques used in geography with particular emphasis on computer-based analysis. Computer packages such as SPSS and SAS will be used in the application of these techniques to geographical data. Among the analytical techniques to be covered are correlation, regression, chi square, analysis of variance, factor analysis and non-regression models. Prerequisite: *Geography 201* or *Mathematics-Statistics 150*. Lecture and laboratory weekly. *Geography 303a* is a prerequisite for *Geography 401/402/490* and is required for honours graduation.

G.A. Nader

Geography-Canadian Studies 332b

Settlement geography. Process, patterns and forms of human settlement, with special reference to North America and Europe; explanation and interpretation of the evolution and geographical location of rural settlement at continental, regional and local scales. Prerequisite: *Geography 201* and *263a* as a pre- or co-requisite. Lecture and tutorial or laboratory weekly, field work. (Offered this year and in alternate years.)

A.G. Brunger

*Geography-Canadian Studies-
Environmental and Resource
Studies 333a*

Wilderness resources. An examination of the wilderness concept and the history, planning and management of wilderness resources with special reference to national parks and Canada. Prerequisite: *Geography 201* or *Geography 231a* or *Environmental and Resource Studies 200* or *Environmental and Resource Studies 250*. (Offered this year and in alternate years.)

J.S. Marsh

Geography 337b

Recreation geography issues. Excludes *Geography 334*. Prerequisite: *Geography 231a/b*. (Offered in alternate years, but not this year.)

Geography 341a

Climatic change. Mechanisms and patterns of changes in weather and climate, both natural and person-induced. An understanding of the principles of general circulation, global and local energy balance models, and basic meteorological processes is assumed. Prerequisite: *Geography 245*. Lectures, tutorials and exercises. (Offered this year and in alternate years.)

J.G. Cogley

Geography 342b

Hydrometeorology — snow and ice. Study of geographical aspects of ice with particular reference to its role in hydro-meteorological processes. Treatment of falling snow, snowcover, lake ice, glacier ice. Pre- or co-requisite: *Geography 245*. One lecture per week, one seminar per week, several days of field work. (Offered this year and in alternate years.)

W.P. Adams

Geography 351a

Glacial and Quaternary geomorphology. Prerequisite: *Geography 250* or *Geography-Science 240*. (Offered in alternate years, but not this year.)

Geography 353a

Hydrology. Prerequisite: *Geography 245* or permission of instructor. (Offered in alternate years, but not this year.)

Geography 354b

Fluvial geomorphology. Morphology of rivers and river systems; relationships between process and form. Erosion, transportation and deposition of sediments; channel morphology, the drainage basin as a geomorphic unit; man's impact on river

morphology. Prerequisite: *Geography 250* or *Geography-Science 240* or permission of instructor. Three hours of lectures, tutorials and laboratories weekly, field work. (Offered this year and in alternate years.)

C.L. McKenna-Neuman

Geography 355a/b

Introduction to groundwater movement. Prerequisite: *Geography 353a* and *Mathematics 100* or equivalent. (Offered in alternate years, but not this year.)

Geography 356a

Pedology. The course will concentrate on the techniques employed in the analysis of the physical, hydrological, chemical and biological properties of soils, as well as those processes which control the development of the soil. Prerequisite: *Geography 250* or *Geography-Science 240* or permission of instructor. Four hours weekly; lectures, laboratories and field work. (Offered this year and in alternate years.)

J.M. Buttle

Geography 357b

Modelling applications in physical geography. Prerequisite: *Geography 201* and either *245* or *250* and *Mathematics 100*; highly recommended: *Computer Studies 100*. (Offered in alternate years, but not this year.)

Geography-Canadian Studies 361

Geography of Canada. A problem-oriented course with a strong concentration for a short period on background knowledge, followed by a variety of themes and issues, treated from a geographical perspective. Prerequisite: *Geography 101* or permission of instructor. Three hours or more weekly; lectures, seminars, tutorials, occasional field trips. Enrolment in this course is limited.

F.M. Helleiner

Geography-Canadian Studies 363b

Historical geography of Canada before 1900. Prerequisite: *Geography 263a*. Excludes *Geography 330*. (Offered in alternate years, but not this year.)

Geography-Canadian Studies 364a/b

Geography of the polar regions. Prerequisite: *Geography 101* or permission of instructor. (Not offered this year.)

Geography-Canadian Studies 371b

Urban planning. Prerequisite: *Geography 101* and *271a*. (Offered in alternate years, but not this year.)

Geography 373b

Advanced urban geography. The city as a system; historical perspectives on urban change; the internal organization of cities; social and economic patterns and processes within cities; contemporary urban geographic problems; urban planning. Excludes *Geography 270*. Prerequisite: *Geography 271a*. Lecture and seminar weekly.

Staff

Geography-Canadian Studies 376a

The urban-rural fringe. The course is primarily concerned with the urban-rural land use conflicts occurring in the areas surrounding major cities, the problems arising from these conflicts, and the types of policy required to resolve them. A particular focus will be the impact of urbanization on the countryside in Canada. Prerequisite: *Geography 101*, or *Economics 101a/b* and *Economics 102a/b*, or *Sociology 100*. Lecture and seminar weekly. (Offered this year and in alternate years.)

Staff

Geography 380b

Regional economic development. Analysis of how a region grows; regional responses to national economic development; the land use structure of regions; regional planning principles; review of Canadian regional planning policies. Prerequisite: *Geography 101* or permission of instructor. One lecture and one tutorial per week. (Offered this year and usually in alternate years.)

Staff

Geography 390, 391a, 392b, 393c

Reading course. Prerequisite: *Geography 101*. (Offered only if instructor is available.)

Geography 395, 397b

Special topic in geography. (Offered only if instructor is available.)

Geography-Environmental and Resource Science 396a

Introduction to Geographical Information Systems. The fundamental concepts and principles of Geographical Information Systems (GIS) are introduced in this course. GIS components, capabilities, and operations are described. The essentials of spatial data structures, data acquisition and capture, storage, retrieval, manipulation and spatial modelling. Types of GIS and GIS applications and products. Demonstrations and laboratory exercises

with different spatial data structures from real situations provide practical experience. Prerequisite: *Geography 101* and *201*, or *Computer Studies 100*, or *Environmental and Resource Science 100* and *220*, or permission of the instructor. Lectures and workshops weekly.

R. Ponce-Hernandez

Geography 401, 402

Honours thesis. Students will engage in a major research project entailing periodic meetings with faculty. Seminar presentations in Fall and Winter terms on research. Students taking this course are strongly encouraged to obtain full details of it and begin preparation prior to registering for the course. *Geography 402* is double-credit in *Geography*. *Geography 401* is single-credit involving the same thesis as submitted to the other department/program in a joint-major. *Geography 401* or *Geography 402* excludes *Geography 490*. Prerequisite: *Geography 303a*, two other *three-hundred* level *Geography* course equivalents, and a 70% average in *Geography* courses.

W.P. Adams, F.M. Helleiner

Geography 404a

Hydrochemical fluxes in the hydrosphere. The course will examine techniques for monitoring hydrochemical fluxes within the hydrological cycle. The curriculum will cover problems relating to the measurement of variables such as discharge, soil moisture, organic and inorganic constituents in the saturated and unsaturated zones, atmospheric vapour fluxes, precipitation, and snowcover. The focus of the lectures and labs will be on measurement, sampling techniques, and instrumentation. Prerequisite: *Geography 201* and permission of instructor.

J.M. Buttle

Geography-Computer Studies 405b

Geographical computer graphics. Prerequisite: *Geography 201* or an equivalent methodological course; *Computer Studies 202a*. Note: Open to students in third quarter. (Not offered this year.)

Environmental and Resource Science-Biology-Geography 406a

The geochemistry of natural waters. Enrolment is open to fourth quarter students in the Departments of *Geography* and *Biology*, or to students with a joint or single honours in *Environmental Science*. (See ERS)

R.D. Evans

Environmental and Resource Science-Biology-Geography 407b

The fate of contaminants in the aquatic environment. Enrolment is open to fourth quarter students in the Departments of Geography and Biology, or to students with a joint or single honours in Environmental Science. Prerequisite: *Geography 101*, *Biology-ERS 202*, *Geography-Biology-ERS 406a*, or permission of the instructor. Recommended: *Chemistry 120* or *130*; *Biology 305*; *Geography 353a*. Tutorial, seminar weekly. (May not be offered in 1992-93.) (See ERS)

Geography 411b

Philosophy of geography. The evolution of geographical ideas, particularly concepts of place, region, environment, or organization of space by nature and by society; philosophy of science and history; ethical issues, academic and social prejudice in geographical studies, radical geography. Prerequisite: *Geography 201*. Note: Open to students in third quarter. *Geography 411a/b* is required for honours graduation.

A.G. Brunger

Geography 440

Research in physical geography. A seminar course on themes, methodologies and approaches of current major interest. Individual presentations based on directed readings and study. Prerequisite: Two of *Geography 341a*, *342b*, *351a*, *353a*, *354b*, *355b*, *356a*, *357b*. Three hours, fortnightly in alternate weeks to *Geography 470*.

C.H. Taylor

Geography 470

Research in human geography. A seminar course on themes, methodologies and approaches of current major interest. Individual presentations based on directed readings and study. Prerequisite: Two of *Geography 332a/b*, *333a/b*, *337b*, *363b*, *371a/b*, *373b*, *376a/b*, *380a/b*. Three hours, fortnightly in alternate weeks to *Geography 440*.

A.G. Brunger

Geography 486a

Field course in geography. This course is highly recommended for all Geography majors, and may be taken in the third or fourth quarter. It involves an extended period during the Fall or Winter Reading Break in the field area with extensive preparation and follow-up. Prerequisite:

Geography 201. One lecture, and seminar per week. Minimum of six days in the field at cost to student.

J.S. Marsh, R. Ponce-Hernandez

Geography 490

Advanced reading course. Students will meet periodically with faculty and will complete one or more major essays or reports, and seminar presentations (as in *Geography 401/402*). Students taking this course must obtain full details of it and begin preparation in the term prior to registering in the course. Prerequisite: *Geography 303a*, two other *three-hundred* level Geography course equivalents, and a 70% average in Geography courses. *Geography 490* excludes *Geography 401/402*.

W.P. Adams, F.M. Helleiner

Geography 495, 496a, 498c

Special topic in Honours Geography. Systematic and/or regional geography on themes, problems and questions of interest to individual faculty. Prerequisite: fourth quarter standing and permission of the instructor. (Offered only if instructor is available.)

Geography-Environmental and Resource Science 497b

Special topic. Geographical Information Systems: principles and applications. The principles and applications of Geographical Information Systems (GIS). Data input, georeferencing and geocoding. Data structures, spatial data bases and models. Advanced algorithms for spatial analysis and spatial modelling. Remote sensing information and GIS. Spatial modelling and remote sensing applications to environmental problems. Special topics in GIS operations: uncertainty, data quality and errors, output quality. Planning, implementation and maintenance of GIS. Decision Support Systems, Expert Systems and GIS. Future trends in GIS. The course is supported by exercises on real data, dealing with all the theoretical aspects, to provide hands-on practical experience through the formulation and completion of an individual project. Prerequisite: *Geography-Environmental and Resource Science 396a* or permission of the instructor. Lectures and workshops weekly.

R. Ponce-Hernandez

History

Professor and Acting Chair of the Department

S.D. Standen, B.A. (BRITISH COLUMBIA),
M.A. (OREGON), PH.D. (TORONTO)

Professors Emeriti

F.A. Hagar, A.B. (HARVARD), M.A.,
PH.D. (CALIFORNIA-BERKELEY), M.LITT.
(CAMBRIDGE); A. Wilson, M.A.
(DALHOUSIE), PH.D. (TORONTO)

Professors

J.C. Barker, M.A. (CAMBRIDGE, TORONTO),
M.DIV. (YALE), PH.D. (TORONTO) (on leave
1992-93); J.T. Gilchrist, B.A., PH.D.
(LEEDS); C.M. Greene, A.B. (AMHERST),
A.M. (COLUMBIA), PH.D. (HARVARD); B.W.
Hodgins, B.A. (WESTERN ONTARIO), M.A.
(QUEEN'S), PH.D. (DUKE) (on leave 1992-93);
E.H. Jones, B.A. (SASKATCHEWAN), M.A.
(WESTERN ONTARIO), PH.D. (QUEEN'S);
D. McCalla, B.A. (QUEEN'S), M.A.
(TORONTO), D.PHIL. (OXFORD) (on leave
1992-93); J.S. Milloy, B.A. (ST. PATRICK'S),
M.A. (CARLETON), D.PHIL. (OXFORD); S.T.
Robson, B.A. (BRITISH COLUMBIA), D.PHIL.
(OXFORD); J.E. Struthers, M.A. (CARLE-
TON), PH.D. (TORONTO); J.O. Stubbs,
B.A. (TORONTO), M.SC. (LONDON SCHOOL OF
ECONOMICS), D.PHIL. (OXFORD); J. Syrett,
B.A. (COLUMBIA), M.A., PH.D. (WISCONSIN);
K. Walden, M.A., PH.D. (QUEEN'S)

Associate Professors

J.N. Jennings, B.A. (TORONTO), M.A.
(CALGARY), PH.D. (TORONTO); P.M.
Morton, M.A., PH.D. (TORONTO) (on leave
1992-93); J. Sangster, B.A. (TRENT), M.A.,
PH.D. (MCMASTER); P.T. Zeleza, B.A.
(MALAWI), M.A. (LONDON), PH.D.
(DALHOUSIE)

Assistant Professors

O. Andriewsky, B.A. (BROWN), M.A.,
PH.D. (HARVARD); K. Cruikshank, B.A.
(CARLETON), M.A., PH.D. (YORK); D.
Evdenden, M.A., PH.D. (MCMASTER);
D. Sheinin, B.SC. (TORONTO), M.A.,
PH.D. (CONNECTICUT)

Lecturer

C. Kay, B.A. (TORONTO), M.PHIL. (OXFORD)

University Librarian

M.W. Genoe, M.A. (WATERLOO), M.L.S.
(WESTERN ONTARIO), M.PHIL. (WATERLOO)

Adjunct Faculty

K. Arnup, M.ED., PH.D. (TORONTO); M.
Elbl, M.A. (CHARLES), M.A. (TORONTO);
S.D. Grant, M.A. (TRENT); D. Schweitzer,
M.A. (GUELPH), PH.D. (LONDON); N.
Thornton, B.A. (TRENT), B.ED. (OTTAWA),
PH.D. (ADELAIDE); R.A. Wright, B.A.
(TRENT), M.A., PH.D. (QUEEN'S)

Required Courses

The single-major Honours program consists of nineteen courses. Minimum nine History courses: *History 100, 120 or 170*, two *two-hundred* series courses, three *three-hundred* series courses, plus four courses in the fourth quarter of the program, of which at least three must be *four-hundred* series courses. One course in the fourth quarter may be in a field other than History.

Joint-major Honours program. Minimum seven History courses: *History 100, 120 or 170*, two *two-hundred* series courses, two *three-hundred* series courses, plus at least two *four-hundred* series courses.

Single-major General program. Minimum six History courses: *History 100, 120 or 170*, two *two-hundred* series courses, and three *three-hundred* series courses.

Joint-major General program. Minimum five History courses: *History 100, 120 or 170*, two *two-hundred* series courses, and two *three-hundred* series courses.

Special Provisos

- Departures from patterns above must be authorized by the Department through the Chair.
- One-hundred series courses*: Only one *one-hundred* series History course may be taken by first quarter students, and no more than two may be counted towards a degree. First quarter students wishing to take a second History course must obtain written permission from the Department Chair.
- There are no prerequisites for any History courses but History majors or joint majors normally are required to take *two-hundred* series history courses before taking *three-hundred* series history courses.
- Students seeking admission to *four-hundred* series courses before entering the fourth quarter must apply to the instructor and their application must then be approved by the Chair.

- History majors and joint majors must complete, in addition to either *History 100*, *120* or *170*, one course from each of the three lists below. Some courses appear in two lists and fulfill two requirements. Students considering a third-year abroad will simplify their program planning if they satisfy this requirement in their second year.

I	II	III
200	211	200
205	221	205
303	235	220
311	254	320
350	255	330
360	270	335
380	300	336
3951	301	340
	302	350
	303	351
	307	360
	308	370
	310	380
	311	3951
	312	3953
	316	399
	345	
	3952	

- In individual cases, with the approval of the Department, certain courses in Canadian Studies may be counted as History credits.
- With the permission of the Chair, a student may count one *two-hundred* or *three-hundred* series Classical History course, except *Classical History 201*, toward a History major.

Enrolment limits

Allocation of places in restricted enrolment courses will be by departmental preregistration, held before the deadline for submission of university CPS forms. Details of the procedure may be obtained from the Office of the Chair, History instructors, and College Offices after the Winter Reading Week. Information regarding the availability of places in all courses with enrolment limitations will be published in the Calendar Supplement in September.

History 100

Canada: selected problems critically examined. Not a survey, the course examines issues in Canada's social, political, intellectual, regional and economic history, with an emphasis on historiography. Weekly lectures and weekly tutorial.

D. Standen and staff

History 120

A survey of West European history from the Middle Ages to the present. The course aims to introduce students to some of the main themes of western civilization, and to the variety of historical interpretations of those themes. Weekly lectures and tutorial.

D. Evenden, C. Kay and staff

History 170

World history. The world's history since 1500, survey and analysis. The course focuses on how different continents and civilizations have shaped the global community and emphasizes the richness and diversity of the human experience.

P. T. Zeleza and staff

History 200

The expansion of Europe in the early modern era, 1450-1825. An exploration into the origins of the phenomenon of European global domination. Special emphasis is given to Europe's impact on the Americas, Africa and Asia, the impact of the wider world on European thought, economy, politics, and society, and the roots of international development and underdevelopment. Lecture weekly and tutorial fortnightly.

I. Elbl and staff

History 205

The mediaeval panorama: Selected topics (Christianity, sovereignty, lord and peasant, the marketplace, education, architecture, parliamentary government, famine, plague, and war) to illustrate the rise of the West European consciousness. Lecture and seminar weekly with films and video tapes.

J. T. Gilchrist and staff

History 211

United States history. Social, economic and political developments from the American Revolution through the Civil War to 1920. Lecture and tutorial weekly.

E. H. Jones, D. Sheinin and staff

History 220

Europe from the Enlightenment through World War II. A study of problems in the development of modern Western society from various perspectives, using a variety of modern and contemporary sources. One and one-half hour lecture weekly; two-hour tutorial fortnightly.

C.M. Greene

History-Canadian Studies 221

Modern Ontario. (See Canadian Studies)

History-Canadian Studies 235

Canada since 1914. This course examines the main currents in the development of Canada since 1914. The main theme is Canada's coming of age in such areas as foreign relations, Canadian-American relations, culture, an acceptance of multiculturalism and the profound effects of the two World Wars. Other important topics include immigration, regionalism, the development of the North, the Americanization of Canada and the role of women in our society. Lecture and tutorial weekly.

J.N. Jennings

History-Canadian Studies 254

Canada and the modern experience. The course explores some characteristics of modernity since 1890, with Canada as an example. Among the topics examined will be photography, travel, crime, new styles of business, government and educational organization, and changing attitudes toward sex, death and religion. Lecture and tutorial weekly.

K. Walden and staff

History-Native Studies-Canadian Studies 255

History of Indians of Canada. (See Native Studies)

History-Native Studies-Canadian Studies 270

History and politics of the Metis and non-status Indians of Canada. (See Native Studies)

History-Canadian Studies 300

Canada: communities and identities. (See Canadian Studies)

History-Canadian Studies-Politics 301

Canadian political culture, 1864 to the present. (Not offered this year.)

History-Canadian Studies 302

Quebec since 1867. (Not offered this year.)

History-Canadian Studies 303

Early French Canada. (Not offered this year.)

History-Canadian Studies 307

The Atlantic provinces. (Not offered this year.)

History-Canadian Studies 308

Business history: The Canadian experience in international perspective, 1650-1960. An exploration of the financial, technological, marketing, organizational and managerial strategies and structures which shaped the emergence of the modern corporation. Attention will be given to the interaction of Canadian companies with the changing international business system. Lecture and tutorial weekly.

K. Cruikshank

History 310

The American reform tradition, 1896-1941. (Not offered this year.)

History 311

Colonial and Revolutionary America, 1630-1800. An exploration of the social, economic, religious and intellectual aspects of political change in the thirteen colonies. Lecture weekly and tutorial fortnightly.

E.H. Jones

History 312

Contemporary United States. Social, intellectual, political and foreign policy developments from the 1929 Crash to the present. Lecture weekly and tutorial fortnightly.

J. Syrett

History-Canadian Studies-Women's Studies 316

Women in North America. Selected themes and topics about women from the seventeenth century to the present, with emphasis on the Canadian experience. Lecture weekly and tutorial fortnightly.

History 320

Modern British history, from the Industrial Revolution to the era of Margaret Thatcher. Special emphasis on the Victorians, culture, class and gender, and the making of modern British society. Lecture weekly and tutorial fortnightly.

History 330

Modern German history, 1815 to the present. The cultural, social, economic and political history of the modern German nation, including the recent developments leading to Germany's reunification. Lecture weekly and tutorial fortnightly.

C. Kay

History 335

The era of the First World War. (Not offered this year.)

History 336

The era of the Second World War.

Pairs of students meet the instructor every third week for a 90-minute class, to present and discuss brief research papers on topics of their choice concerning the war experience. Lecture weekly.

S.T. Robson

History-Comparative Development 340

The emergence of modern Africa.

Political, economic and social changes since 1800, with emphasis on internal and external factors. One-hour lecture weekly and two-hour seminar fortnightly.

P.T. Zeleza

History-Anthropology 345

Slavery in the Americas: the American South, West Indies, and Latin America. (Support course for Comparative Development Studies) (Not offered this year.)

History 350

Studies in the history of France 1750-1914. Tutorials will emphasize the use of literature as an historical source. Weekly one-and-one-half hour lecture and two-hour tutorial fortnightly.

C.M. Greene

History-French 351

La civilisation française. Offered in Nantes only. (See Modern Languages, French Section).

History 360

The Crusading Movement and the Crusading States from 1095 to the fall of Acre (1291). (Not offered this year.)

History 370

Russian history from the thirteenth century to the present. Special emphasis on the evolution of autocracy, the nature of the historic challenges to political authority, Russian attitudes towards the "West", and the paradox of great power ambitions and economic backwardness. Lecture weekly, tutorial fortnightly.

O. Andriewsky

History 380

Early modern Europe. Selected social, economic, institutional and cultural features of early modern Europe (1450-1789), with special emphasis on the uneven transition of various European countries to modernity. Lecture weekly and tutorial fortnightly.

History 380

Early modern Europe. Selected social, economic, institutional and cultural features of early modern Europe (1450-1789), with special emphasis on the uneven transition of various European countries to modernity. Lecture weekly and tutorial fortnightly.

History 395

Special topics. The following courses will be offered in 1992-93:

History-Women's Studies 3951

Special topic: European women's history.

The course begins with an introduction which draws upon women's experience in the pre-classical and classical periods as well as the Judaic and Christian traditions. The major focus of the course will be upon the medieval, renaissance and early modern periods. Lecture weekly and tutorial fortnightly.

D. Evenden

History 3952

Special topic: Survey of Latin American history from native communities in the generation before the Spanish Conquest to Central American revolutionary struggles in the 1980s. Topics will include native resistance, methods of colonial domination, slavery and other labour systems, the independence struggles, neo-colonialism, the formation of modern nation states, militarism, the roots of modern social unrest, and revolutionary change. Lecture and tutorial weekly.

D. Sheinin

History 3953

(Offered in Oshawa only)

Special topic: Ukrainian history, 1764 to the present. The political, social, economic and cultural history of Ukraine from the abolition of autonomy to independence. Lecture weekly and tutorial fortnightly.

O. Andriewsky

History 399

Historians and history. (Not offered this year.)

History-Native Studies 400

Research seminar in Indian history. (See Native Studies)

History-Canadian Studies 403

Canadian intellectual and cultural history.

The course emphasizes the variety of contemporary approaches being used to explore our intellectual and cultural traditions.

K. Walden

History-Canadian Studies 406
Upper Canada. (Not offered this year.)

History-Canadian Studies 407
The Canadian-American frontier. The Canadian West from first contact between Europeans and Native People to the end of the settlement period in the early twentieth century. Special emphasis on Indian-White relations, exploration, the fur trade, the two rebellions, government policies for the West, the ranching and farming frontiers and the influx at the end of the nineteenth century of many new immigrant groups. Comparisons in a number of areas are made with the American West. Weekly seminars.

J. Jennings

History-Canadian Studies 410
Social and political traditions and ideas in Canada and the United States since 1896. The Progressive Impulse in Canada and the United States; an examination of the reform movements which swept across North America from the 1890s to the 1920s, as various social groups responded to the emergence of modern urban-industrial society.

K. Cruikshank

History 415
The American South. (Not offered this year.)

History 418
The United States and the Vietnam War. Military, diplomatic, political and social developments from 1945 to 1975, including involvement of the Commonwealth countries. Seminar weekly.

J. Syrett

History-Canadian Studies 422
Canada: The North. The historical and contemporary Canadian North in both its arctic and sub-arctic contexts. Emphasis will be intellectual and social. Two-hour seminar and occasional lectures.

History-Canadian Studies-Native Studies 425
The evolution of the Settlement Commonwealth. (Not offered this year.)

History 440
Aspects of modern history. A combination seminar-reading course. Theme in 1992-93 will be the modern urban experience.

C.M. Greene, S.T. Robson

History 445
International history, 1919-1939. The relations between the major European states (including Britain) in the period from the Treaty of Versailles to the German invasion of Poland. Weekly seminar.

J.O. Stubbs

History 451
The Enlightenment in Britain, France and America. (Not offered this year.)

History 465
Reformation Europe. (Not offered this year.)

History-Canadian Studies 475
History of everyday life: a course in applied history. Theory, method and technique in research and interpretation of ordinary life in the past, with emphasis on Canadian themes. Weekly seminars and/or project meetings. Occasional field trips, one of which will be for two or three days during the Fall Reading Week. Field trip fee of \$75.

E. Jones, D. Standen

History-Canadian Studies 476
Studies in Canadian labour. (Not offered this year.)

History-Canadian Studies 477
Studies in Canadian social policy. (See Canadian Studies)

History 490
Reading course. Individual courses designed to provide opportunities for more intensive study of particular topics in Canadian, American and European history. Open to undergraduates in the fourth quarter of the Honours program in History or by special permission. Prior consultation with relevant tutors is essential. Regular consultation during the year.

History 490I
Reading course. Students will meet the instructor every third week for an hour, to present and discuss research papers on topics concerning World War I, World War II or modern Germany. Year essay follows from class papers.

S.T. Robson

History 495
Special topics. The following courses will be offered in 1992-93:

History 4952

Special topic: Social history of medicine. Special emphasis on the history of medicine as it relates to the British experience, to the lives of women and to social history as a whole. Fortnightly seminars.

D. Evenden

History 4954

Special topic: German cultural history, 1871-1945. Reading seminar on the cultural history of modern Germany, focusing on art, literature, theatre, film, intellectual thought, mass entertainment, and Nazi culture. Fortnightly seminar.

C. Kay

History 4955

Special topic: History of Mexico. From the tenth century Cult of Quetzalcoatl to the late twentieth century dynamics of industrialization and ecological disaster. Native communities in Pre-Columbian Mexico, the Spanish conquest, the long-range clash of native and non-native cultures, the Catholic Church, nation-building, foreign economic influences, ideologies of change, the Mexican Revolution, import substitution, and the entrenchment of authoritarian political structures. Weekly seminar.

D. Sheinin

History 4956

Special topic: African labour history. This course is concerned with the development of the labour process in African societies, and examines the nature of work and its transformation, the changing divisions of labour, the development of wage and non-wage labour, working class organization, conditions of employment and unemployment, and the relations between labour, capital and the state.

P. T. Zeleza

History 4958

Special topic: The origins of capitalism. An examination of the changes in European thought, economy, politics, social structures, values and attitudes associated with the emergence of capitalism in the Middle Ages and the early modern period, with parallels to world history.

I. Elbl

Mathematics

Professor and Chair of the Department
T.N. Murphy, B.Sc. (LIVERPOOL)

Professor Emeritus

T.E.W. Nind, M.A. (CAMBRIDGE), P.ENG.

Professors

C. Carter, PH.D. (LONDON); I.C. Chakravartty, M.Sc. (GAUHATI), PH.D. (SASKATCHEWAN); E.A. Maxwell, M.Sc., PH.D. (TORONTO) (on leave 1992-93)

Associate Professors

G.F. Hamilton, B.A.Sc., M.A., PH.D. (TORONTO), P.ENG.; J.P. Henniger, M.Sc., PH.D. (MCGILL); D.G. Poole, B.Sc. (ACADIA), M.Sc., PH.D. (MCMASTER)

Assistant Professors

S. Bilaniuk, B.Sc. (TORONTO), A.M., PH.D. (DARTMOUTH); B. Zhou, B.S. (SHANGHAI), PH.D. (SOUTH CAROLINA)

Required Courses

The single-major Honours program consists of twenty courses. Minimum eleven courses in Mathematics including

Mathematics 110 and 130

200, 205a and 206b
(see Special Notes)

260 or both 251a and 252b
300 and 330 (see Special Notes)

two four-hundred series courses
two additional three-hundred or four-hundred series courses.

Joint-major Honours program. Minimum seven and one-half courses in Mathematics including

Mathematics 110 and 130

200, 205a or 206b
(see Special Notes)

300 or 301 (see Special Notes)

330 or 260 or both 251a and 252b

one four-hundred series course
one additional three-hundred or four-hundred series course.

For more complete information on the Honours programs and requirements, students should consult as early as possible the Honours brochure obtainable from the departmental office.

Single-major General program. Minimum six courses in Mathematics, including *Mathematics 110* and *130*

200, 205a and 206b (see Special Notes)
300 or 301 (see Special Notes)

one additional Mathematics course at two-hundred level or higher.

Joint-major General program. Minimum five courses in Mathematics, including *Mathematics 110* and *130*

200, 205a or 206b
(see Special Notes)
300 or 301 (see Special Notes)

one half additional Mathematics course at two-hundred level or higher.

Special Proviso

Students not enrolled in an Honours program in Mathematics must receive permission from the instructor and Departmental Chair to enroll in four-hundred series courses in Mathematics.

Special Notes

The *Mathematics-Physics 205a* and *Mathematics 206b* requirements for majors apply to students entering the second quarter in 1992-93 or later.

It is proposed to discontinue *Mathematics 300* and *Mathematics-Physics 301* after 1992-93. Requirements for majors will be revised to include the replacements for these two courses. The revised requirements will apply to students entering the third quarter in 1993-94 or later. Details may be obtained by consulting the Department.

Mathematics-Physics 205a and *301* may not both be counted for credit.

Mathematics 100

Introductory calculus. A first course in calculus for those without a Grade 13/OAC calculus course. Functions, limits and continuity, differentiation and integration and related applications. Not to be credited towards a major in Mathematics. Prerequisite: Grade 12 Advanced Mathematics. Not available to students with 60% or better in Grade 13/OAC calculus or with credit for *Mathematics 110*. Three lectures weekly, tutorial fortnightly.

Mathematics 110

Calculus of one variable. An examination of the concepts and techniques of calculus, with applications to other areas of mathematics and the physical and social sciences. Prerequisite: Grade 13/OAC calculus with at least 60% or equivalent, or *Mathematics 100*. Three lectures and one seminar weekly.

B. Zhou and staff

Mathematics 130

Algebra. An introductory course with emphasis upon linear algebra. Prerequisite: A Grade 13/OAC mathematics credit with at least 60%. Three lectures and one seminar weekly.

D.G. Poole

Mathematics-Statistics 150

A non-calculus-based introduction to probability and statistical methods. Data summary, elementary probability, estimation, hypothesis testing, comparative methods, analysis of variance, regression, nonparametric methods, introduction to elementary applications of the SAS computing system. Not credited toward Mathematics major requirements, nor available to students enrolled in, or with credit for *Mathematics-Statistics 251a* or *Mathematics 110*. (See *Mathematics-Statistics 251a*) Three lectures weekly, two-hour problems session fortnightly.

G.F. Hamilton

Mathematics 200

Calculus in several dimensions. Vector geometry, curves, surfaces in three dimensions. Partial differentiation and applications, multiple integrals. Differential equations, elementary properties of complex variables and infinite series. Prerequisite: *Mathematics 110*. Two lectures and tutorial weekly.

S. Bilaniuk

Mathematics 205a

Differential equations. Separation of variables. Equations with homogeneous coefficients. Exact equations. Integrating factors. Linear differential equations with constant coefficients. Linear systems of equations. Power series solutions. Prerequisite: *Mathematics 110*. Corequisite: *Mathematics 200*. Recommended: *Mathematics 130*. Three hours weekly.

J.P. Henniger

Mathematics 206b

Analysis. Real number system. Limits. Continuity. Differentiability. Mean-value theorem. Convergence of sequences and series. Uniform continuity. Prerequisite: *Mathematics 110*. Corequisite: *Mathematics 200*. Three hours weekly.

D.G. Poole

Mathematics-Physics 211b

Classical mechanics. (See Physics)

Mathematics 225

Introduction to geometry. Elements of Euclidean and non-Euclidean geometries stressing links to modern mathematical methods. Projective geometry, including generation of conics and involutions. Prerequisite: Either *Mathematics 110* or *Mathematics 130*. Two lectures and one tutorial weekly.

I.C. Chakravartty

Mathematics-Statistics 251a

Probability and statistics I: A calculus-based introduction to probability and statistics. Prerequisite: *Mathematics 100* or equivalent. (Not offered in 1992-93.)

Mathematics-Statistics 252b

Probability and statistics II. A continuation of *Mathematics-Statistics 251a*. Prerequisite: *Mathematics 110* or equivalent, *Mathematics-Statistics 251a* or equivalent. (Not offered in 1992-93.)

Mathematics-Computer Studies 260

Discrete structures. Mathematics related to computer science including propositional logic, recursive functions, combinatorics, graphs and networks, Boolean algebras. Applications to languages, analysis of algorithms, optimization problems, coding theory, and circuit design. Prerequisite: *Mathematics 110* or *130*; or *Computer Studies 100* together with one Grade 13/OAC credit in Mathematics. Two lectures and one tutorial weekly.

B. Zhou

Mathematics 300 (See Special Notes)

Introduction to analysis. Real and complex number systems and elementary topological properties. Sequences and series. Differentiation, the Riemann integral and complex integration. Taylor's, Laurent's theorems and residue calculus. Conformal mappings. Prerequisite: *Mathematics 200*. Three hours weekly.

J.P. Henniger

Mathematics-Physics 301

(See Special Notes)

Analytic techniques for the solution of ordinary and partial differential equations occurring in the physical and social sciences. Laplace transforms. Fourier series and integrals, special functions, functions of a complex variable, complex integration, conformal mappings. Prerequisite: *Mathematics 200*. Two lectures and one seminar weekly.

G.F. Hamilton

Mathematics-Physics 311b

Advanced classical mechanics. (See Physics)

Mathematics 322

Number theory and related topics in algebra and analysis. Prerequisite: *Mathematics 110* and *130*. Three hours weekly. (Offered this year and in alternate years.)

I.C. Chakravartty

Mathematics 330

Algebra. An introduction to abstract algebraic structures with selection applications. Groups, rings, integral domains, fields, lattices and Boolean algebras. Prerequisite: *Mathematics 130*. (Excludes former *Mathematics 230*) Two lectures and tutorial weekly.

T.N. Murphy

Mathematics-Computer Studies 341

Linear and discrete optimization. Introduction to the concepts, techniques and applications of linear programming and discrete optimization. Topics include the simplex method, duality, game theory, shortest path problems, matchings in graphs, network flow theory, and combinatorial optimization with emphasis on integer programming. Prerequisite: *Mathematics 130* and *Mathematics-Computer Studies 260*. Two lectures and one tutorial weekly.

D.G. Poole

Mathematics-Computer Studies-Statistics 351

Linear statistical models. Prerequisite: *Computer Studies 100* or *202a*, *Mathematics 110* or *130*, *Mathematics-Statistics 251a* (or *Mathematics-Statistics 150* with permission of instructor). (Not offered in 1992-93.)

Mathematics-Science 380

History of mathematics. Prerequisite: *Mathematics 110* and *130* or *Mathematics 110* and permission of the instructor. Second-year students wishing to take the course must have permission of the instructor. (Offered in alternate years, but not this year.)

Mathematics 390

Reading-seminar course. Details may be obtained by consulting the Department.

Four-hundred Series Courses

An information meeting for students wishing to undertake the fourth quarter of the Honours degree will be arranged early in the Winter Term.

Mathematics 400

Analysis. Normed linear spaces and their topology, Stone-Weierstrass Theorem. Lebesgue integral and Fourier series. Optional topics in complex variable, distributions, etc. Prerequisite: *Mathematics 130* and *300*.

J.P. Henniger

Mathematics 411

Introduction to mathematical modelling. Partial differential equations. Pre- or co-requisite: *Mathematics 301*. (Excludes former *Mathematics 401*) Two to three hours weekly.

G.F. Hamilton

Depending on student demand and availability of instructors, other *four-hundred* series offerings from:

Mathematics 410

Function/measure theory.

Mathematics 422

Number theory.

Mathematics 425

Geometry.

Mathematics 430

Algebra.

Mathematics 435

Topology.

Mathematics 441

Numerical analysis.

Mathematics-Statistics 451a

Sampling theory.

Mathematics-Statistics 452b

Theory of inference.

Mathematics 460

Combinatorics and graph theory.

Mathematics 470

Dynamical systems, chaos and fractals.

Mathematics 490

Reading-seminar course.

Modern Languages and Literatures

Chair of the Department

Professor of Spanish and Associate Chair of Spanish

R.M. Garrido, LIC.DER., DR.DER.
FILOLOGIA (SEVILLA), M.A. (TORONTO)

Associate Chair of French

A.E. Franklin, M.A. (CAMBRIDGE, TORONTO), D.E.A. (MONTPELLIER)

Associate Chair of German

J.C. Fewster, M.A. (MANCHESTER)

Modern Languages 100

An introduction to the fundamental concepts of language. (Not offered this year.)

French Studies Section

Professor Emeritus

F.K. Harper, M.A. (MANITOBA)

Professor

P. Royle, M.A. (OXFORD), PH.D. (NATAL)

Associate Professors

A.E. Franklin, M.A. (CAMBRIDGE, TORONTO), D.E.A. (MONTPELLIER); H.B. Lapointe, B.A. (BALDWIN-WALLACE), M.A. (MCGILL) (Y.A.P. IN NANTES); J.-P. Lapointe, B.A. (R.M.C.), M.A. (MCGILL) (on leave 1992-93)

Assistant Professors

M. Joly, CAPES, AGRÉGATION DE PHIL., D.E.A. (TOULOUSE), PH.D. (RICE); Y. Thomas, B.A. (UQAM), M.A., PH.D. (MONTREAL)

Lecturer

A. Germain-Rutherford, MAÎTRISE, D.E.A. (PROVENCE-AIX-MARSEILLE I)

Required Courses

The single-major Honours program consists of nineteen courses. Minimum ten courses in French including

French 110

211

one full course equivalent of *French*

233a/234b, 312a/313b, 331, 361

one of *French* 250, 325, 383 (formerly 390)

four *four-hundred* series courses or their equivalent.

Joint-major Honours program. Minimum eight courses in French including

French 110

211

one full course equivalent of *French*

233a/234b, 312a/313b, 331, 361

one of *French* 250, 325, 383 (formerly 390)

two *four-hundred* series courses or their equivalent.

Single-major General program. Minimum six courses in French, including

French 110

211

one full course equivalent of *French*

233a/234b, 312a/313b, 331, 361

one of *French* 250, 325, 383 (formerly 390).

Joint-major General program. Minimum five courses in French

Same required courses as for single-major

Québec Studies Emphasis

Students who, in satisfying all of the current requirements for a degree, elect to take a total of three or more Québec courses, not counting *French 110* (Québec option), in their program, will be granted a B.A. in French (Québec Studies Emphasis).

Recommended courses for intending French majors: *Latin 100*, *Classical Literature 100*, *Philosophy 101* and courses in at least one other modern language.

Modern Languages 100

An introduction to the fundamental concepts of language. (Not offered this year.)

Year Abroad Program

Courses offered at Nantes in the Year Abroad Program are listed at the end of this section.

Note: In order to register in *two-hundred* and *three-hundred* series courses students must have attained a minimum grade of C- (60% or better) in the prerequisite indicated or in its equivalent.

Students who do not have prerequisite for courses listed below must have departmental permission to enrol in those courses.

French 100

An intensive course in oral and written French for students who do not have Ontario Grade 13/OAC French or their equivalent. Four hours weekly. Not credited toward French major requirements. (May not be taken concurrently with or subsequent to any other French course)

A. Germain-Rutherford and staff

French 105

A course in grammar review, comprehension, conversation and language laboratory practice for students who have Ontario Grade 13/OAC French or their equivalent. Four hours weekly. Not credited toward French major requirements. (May not be taken concurrently with *French 100* or *French 110*)

A. Germain-Rutherford and staff

French 110

A course in language and literature normally required of students intending to major in French. Each student will take a weekly one-hour language seminar, one-hour laboratory practice, and will opt for one lecture and one literature seminar involving the critical analysis of selected texts in French Metropolitan Literature. Prerequisite: Ontario Grade 13/OAC French or their equivalent or *French 100*. (Excludes *French 105* or its equivalent)

Y. Thomas and staff

Note: All *two-hundred* series courses may be counted as *three-hundred* series courses.

French 205

Advanced oral and written language study. Two hours weekly. Prerequisite: *French 105* or *French 110*, or their equivalent. (Excludes *French 200*)

French 211

Le théâtre classique français. Required for a major in French. Prerequisite: *French 110*. Lecture and seminar weekly.
M. Joly

French 233a

Le théâtre du dix-neuvième siècle. Lecture and seminar weekly. Prerequisite: *French 110*. (Not offered this year.)

French 234b

Le théâtre du vingtième siècle. Lecture and seminar weekly. Prerequisite: *French 233a*. (Not offered this year.)

French-Canadian Studies 250

La civilisation québécoise. A general survey of the social and cultural history of the Québec people, illustrated by readings on the arts, letters, religious, social and political life. It attempts to synthesize the history of ideas in Québec to promote a better understanding of contemporary Québec culture. Prerequisite: *French 110* or by permission of the instructor. Lecture, and one seminar weekly.

French 305

An introduction to the techniques of translation (theory and practice). Two hours weekly. Prerequisite: *French 205*. A.E. Franklin

French 312a

Le roman du dix-neuvième siècle. Prerequisite: *French 110*. Lecture and seminar weekly.

P. Royle

French 313b

Le roman du vingtième siècle. Prerequisite: *French 312a*. Lecture and seminar weekly.

P. Royle

French-Canadian Studies 325

Théâtre et poésie du Québec. Prerequisite: *French 110*. Lecture and seminar weekly. (Offered this year and in alternate years.)

French 331

La pensée française. (Offered only in Nantes.)

French-History 351

La civilisation française. (Offered only in Nantes.)

French 361

La poésie française. Prerequisite: *French 110* or permission of Department. Lecture and seminar weekly.

Y. Thomas

French-Canadian Studies 383

Le roman québécois. Prerequisite: *French 110*. Lecture and seminar weekly. (Offered in alternate years, but not this year.)

Four-hundred series courses are normally open only to students in the fourth quarter of the Honours program in French, or by permission of the Department.

French 400

Linguistique, stylistique et sémantique. (Not offered this year.)

French 401

Initiation à la recherche littéraire. Two hours weekly. (Single credit thesis course: Subject to be chosen in consultation with Section Chair.)

French 402

Initiation à la recherche littéraire. Two hours weekly. (Double credit thesis course: Subject to be chosen in consultation with Section Chair.)

French 410

Langue et littérature du moyen âge français. *Modern Languages 100* highly recommended. (Offered this year and in alternate years.)

A.E. Franklin

French 420

La critique littéraire française. Two hours weekly.

Y. Thomas

French 440

La Renaissance française. Two hours weekly. (Offered in alternate years, but not this year.)

French 4951

Special topic in French linguistics. Topic for 1992-93: Didactique du Français Langue Seconde: La place de la phonétique et de l'oral dans la salle de classe.

A. Germain

French 4952

Special author or topic in French literature. Topic for 1992-93: Culpabilité et innocence dans la littérature existentialiste et quasi-existentialiste des années 1940-1960.

P. Royle

Year Abroad Program

Normally, in order to be eligible to study for a year at the University of Nantes, for Trent credits with a Trent/Waterloo professor, a student must achieve a minimum of a B- average on all Trent courses (or equivalent courses) and a B+ standing in *French 110* or equivalent. Enrolment is limited to 15 students from Trent. Honours candidates are especially encouraged to spend a year at Nantes. For further details, please consult the Section Chair.

Courses to be offered in 1992-93 at Nantes, either by a Trent University professor, or by the University of Nantes faculty are:

French 211: Le théâtre classique français
French 233a: Le théâtre du dix-neuvième siècle

French 234b: Le théâtre du vingtième siècle

French 305: Introduction à la traduction

French 312a: Le roman du dix-neuvième siècle.

French 313b: Le roman du vingtième siècle

French 331: La pensée française. French thought from the Renaissance on. Lecture and seminar weekly. Prerequisite: *French 110*.

French-History 351: La civilisation française. Lecture and seminar weekly. Prerequisite: *French 110*.

German Studies Section

Professor Emeritus

G. Baumgaertel, M.A. (BROWN), DR. PHIL. (TÜBINGEN)

Professor

D.D. Stewart, M.A., PH.D. (TORONTO)

Associate Professors

J.C. Fewster, M.A. (MANCHESTER);

A.A. Krüger, STAATSEXAMEN (MÜNCHEN)
 (Resident Director in Freiburg 1992-93)

Required Courses

The single-major Honours program consists of nineteen courses. Minimum nine courses in German including

German 105
205a
310a
316b
360a

and at least two full courses from the *four-hundred* series.

Joint-major Honours program. Minimum seven courses in German, including

German 105
205a
310a
316b
360a

and at least one full course from the *four-hundred* series.

Single-major General program. Minimum six courses in German, including

German 105
205a
310a
316b
360a

Joint-major General program. Minimum five courses in German, including

German 105
205a

and two of *310a*, *316b*, *360a*.

Year Abroad Program

Courses offered at Freiburg in the Year Abroad Program are listed at the end of this section.

Special Provisos

- More advanced students may enrol in *German 205a* after passing a placement test.
- *German 232a* and one of *233b* or *240b* may be counted towards a major in German.
- *Four-hundred* level courses are normally open only to students in the fourth quarter of the Honours program.
- To achieve a coherent combination, majors are urged to co-ordinate their studies in German with studies in related disciplines.

Modern Languages 100

An introduction to the fundamental concepts of language. (See Modern Languages and Literatures)

German 100

Designed for students with little or no knowledge of German. This course provides an introduction to spoken and written German with an integrated computer-assisted language learning program, language laboratory as well as an introduction to present-day Germany. Three lecture/seminars, one laboratory hour weekly. Not open to students with O.A.C. German or equivalent standing. Not credited toward a major in German.

J.C. Fewster and staff

German 105

Intermediate German language course with comprehensive grammar review, intensive language practice and access to computer-assisted language learning program. Introduction to German literature and culture in the Winter Term. Prerequisite: *German 100*, Grade 12 German, Grade 13 German

or equivalent. Four lecture-seminars, one laboratory weekly.

J. C. Fewster and staff

German 205a

Advanced language practice I with special emphasis on written and oral German using a variety of contemporary texts. Prerequisite: *German 105* or permission of the Department. Three lecture/seminars weekly.

D. D. Stewart

German 206b

German literature and thought from Nietzsche to Brecht. Modern writers and events. Prerequisite: *German 205a* or permission of the Department. One lecture, two seminars weekly.

J. C. Fewster and staff

German 220

Modern German literature in English translation. (Not offered this year.)

German 231

German civilization. (Offered only in Freiburg.)

German 232a

German civilization I. Taught in English. A survey of culture and society of German-speaking countries from their origins to the French Revolution, including literature, music, art, architecture, and political and scientific history, with the use of films, slides and music tapes. Prerequisite: None. May be counted towards a major in German. Two lectures, one seminar weekly.

J. C. Fewster

German 233b

German Civilization II. (Not offered this year.)

German 240b

Freud's Vienna from the Habsburgs to Hitler. Taught in English. An examination of a society in decline and its important contributions in its music, painting, architecture and intellectual life to the shaping of the modern mind, with the use of films, slides and music tapes. Open to all students. One of *German 233b* or *German 240b* may be counted towards a major in German. Two lectures, one seminar weekly.

J. C. Fewster

German 305b

Advanced language practice II with special emphasis on business German, conversational skills and instant translations. Prerequisite: *German 205a* or permission of Department. Three lecture/seminars weekly.

J. C. Fewster

German 310b

The Age of Enlightenment and "Sturm und Drang". A study of the beginnings of modern German literature, with special attention to Lessing, Goethe and Schiller. Prerequisite: *German 205* or permission. One lecture, two seminars weekly.

J. C. Fewster and staff

German 316b

Studies in German Romanticism in the European context. Prerequisite: *German 205a* or permission. One lecture, two seminars weekly.

J. C. Fewster and staff

German 330a

The German *Novelle* and *Erzählung* of the nineteenth and twentieth centuries. Prerequisite: *German 205a* or permission. One lecture, two seminars weekly.

J. C. Fewster and staff

German 340b

The German drama from Classicism to modern experimentation. (Not offered this year.)

German 351a

Studies in modern German poetry. One lecture, two seminars weekly. (Not offered this year.)

German 352b

The German novel from Grimmelshausen to the present. (Not offered this year.)

German 360a

Studies in German literature and cultural developments of the period 1780-1832 with special attention to Goethe, Schiller and Kleist. Prerequisite: *German 205a* or permission. Two lectures, one seminar weekly.

D. D. Stewart

German 401a

History of the German language and linguistics. (Not offered this year.)

German 402b

Medieval and late medieval German literature. (Not offered this year.)

German 405a

Advanced language practice III. Special aspects of German grammar. Written and oral exercises with an oral presentation and proficiency test. Prerequisite: *German 305b* or permission. Three lecture/seminars weekly.

J. C. Fewster and staff

German 410a

German Baroque literature. A survey of seventeenth-century literature in its European context. One lecture, two seminars weekly.

D.D. Stewart

German 420b

Studies in modern German literature. One lecture, two seminars weekly.

J. C. Fewster

German 430

Major paper.

German 440a

East German literature. (Not offered this year.)

German 490

Special topics.

German 491a

Special topics.

German 492b

Special topics.

Year Abroad Program

Normally, in order to be eligible to study for a year at Freiburg University, Germany, for Trent credits with a Trent/Brock professor, a student must achieve a minimum of a B— average on all Trent courses (or equivalent courses) and a B— standing in *German 105* or equivalent. Enrolment is limited to 13 students from Trent. Honours students are especially encouraged to spend a year at Freiburg. For further details please consult the Chair of the Section.

Courses offered in 1992-93 at Freiburg by Professor A.A. Krüger, Trent University.

Winter Semester**German 205a**

Advanced language practice.

German 206a

German literature and thought from Nietzsche to Brecht.

German 231

German civilization from the origins to the present.

Summer Semester**German 305b**

Business German.

German 310b

The Age of Enlightenment and "Sturm und Drang".

and/or further German or other courses as individually arranged with the University of Freiburg in consultation with the Resident Director.

Hispanic Studies Section**Professors**

R.M. Garrido, LIC.DER., DR.DER., DR. FILOLOGIA (SEVILLA), M.A. (TORONTO); J.P. González-Martín, LIC.DER. (OVIEDO), DR.DER. (ZARAGOZA) (on leave Winter Term 1993); T.A. Noriega, LIC.EN FILOLOGIA (COLOMBIA), M.A., PH.D. (ALBERTA), (Y.A.P. IN GRANADA); D.L. Smith, M.A., D.PHIL. (OXFORD) (on leave 1992-93)

Associate Professor

G.D. Aitken, B.A. (TRENT), M.A. (STANFORD)

Assistant Professor

F.B. García-Sánchez, B.A. (HAVANA), M.A., PH.D. (LAVAL)

Required Courses

The single-major Honours program consists of nineteen courses. Minimum ten courses in Spanish, including *Spanish 100* or *111*

201

211

300

Six additional courses at the *three-hundred* or *four-hundred* series level (excluding *324a*, *325b* and *326*).

Joint-major Honours program. Minimum seven courses in Spanish, including *Spanish 100* or *111*

201

211

300

Three additional courses at the *three-hundred* or *four-hundred* series level (excluding *324a*, *325b* and *326*).

Intending students are advised to consult the two departments involved as early in their university career as possible.

In exceptional cases students may take literature courses exclusively but will be expected to comply with the minimum number of courses required for the completion of each program.

Single-major General program. Minimum six courses in Spanish, including *Spanish 100* or *111*

201

211

300

Two additional courses at the *three-hundred* or *four-hundred* series level (excluding 324a, 325b and 326).

Joint-major General program. Minimum five courses in Spanish, including *Spanish 100* or *111*

201

211

300

One additional course at the *three-hundred* or *four-hundred* series level (excluding 324a, 325b and 326).

Special Provisos

- Students intending to major in Hispanic Studies are strongly recommended to take *Modern Languages 100*, as well as courses in at least one other modern language. Other related courses recommended are *Latin 100*, *Classical Literature 100* and *200*, *Anthropology 230* and *304*, *English 200* and *332*, *Comparative Development Studies 200* and *Cultural Studies-English 325*.
- Students with sufficient knowledge of Spanish may be admitted directly to *Spanish 201* and *210* or *211*, at the discretion of the Section.
- *Spanish 111* and *201* may be taken concurrently.

Year Abroad Program

*Courses marked with an asterisk are part of the Year Abroad Program detailed at the end of this section.

Modern Languages 100

An introduction to the fundamental concepts of language. (Not offered this year.)

Spanish 100

Beginners' course in Spanish. An introduction to Spanish language with emphasis on oral Spanish. Texts include a grammar and one reader. Three seminars, one conversation hour, and one laboratory hour weekly.

G. Aitken and F.B. García-Sánchez

Spanish 111

Continuing Spanish. Designed for students with some previous knowledge of Spanish. Language review, composition and conversation. Two seminars, one conversation hour and one laboratory weekly. Prerequisite: Grade 12 Spanish, *Spanish 100*, or permission of Section.

G. Aitken

*Spanish 201**

Intermediate Spanish. A general course of Spanish conversation, pronunciation, composition and reading. Two seminars, one conversation hour and one laboratory hour weekly. Prerequisite: *Spanish 100* (with 70% or better), *111*, or permission of Section.

F.B. García-Sánchez

*Spanish 210**

Introduction to Spanish and Spanish-American civilization. A study of civilization in the Spanish-speaking countries (history, art, ideas, social development). One lecture, one seminar weekly. Conducted in Spanish. Students enrolled in this course normally are also required to register in *Spanish 111* or *201*. (Offered only in Granada this year.)

*Spanish 211**

Introduction to Spanish and Spanish-American literatures. One lecture, one seminar weekly conducted in Spanish. Students enrolled in this course are also normally required to register in *Spanish 111* or *Spanish 201*.

F.B. García-Sánchez and
J.P. González-Martín

*Spanish 300**

Advanced oral Spanish and composition. An analytical study of the elements required in the use of Spanish, especially in writing. Lecture, two seminars weekly.

R.M. Garrido and J.P. González-Martín

*Spanish 311a**

Spanish contemporary literature since the generation of 1898. Prose and Theatre. Lecture and seminar weekly.

J.P. González-Martín

*Spanish 312b**

Spanish contemporary literature since the generation of 1898. Poetry, with special emphasis on the generation of 1927. Lecture and seminar weekly.

F.B. García-Sánchez

Spanish 322a*

Spanish-American poetry. A survey of Spanish-American poetry with special emphasis on the contemporary period. Lecture and seminar weekly. (Offered only in Granada this year.)

Spanish 323b*

Spanish-American prose. A survey of Spanish-American prose with special emphasis on the contemporary period. Lecture and seminar weekly. (Offered only in Granada this year.)

Spanish 324a

Modern Spanish-American literature in translation: Poetry. (Not offered this year.)

Spanish 325b

Modern Spanish-American literature in translation: Prose. (Not offered this year.)

Spanish 326

The contemporary Latin-American novel as aesthetic adventure and commitment: A socio-literary approach. (Not offered this year.)

Spanish 330*

Spanish literature of the Golden Age. An introduction to the literature and thought of the Renaissance and Baroque periods based on selected authors and topics. (Not offered this year.)

Spanish 401

Honours seminar leading to the completion of an undergraduate thesis, with problems of bibliography and literary criticism. (Subject to be chosen in consultation with Section Chair and instructor.)

Spanish 415a

History of the Spanish language. A historical survey of the formation and development of the Spanish language from preliterary times to the present day. Lecture and seminar weekly.

R.M. Garrido

Spanish 416b

Medieval Spanish literature. Studies of the Spanish literature from *El Cid* (twelfth-century) to *La Celestina* (end of the fifteenth century). Lecture and seminar weekly.

R.M. Garrido

Spanish 417

Cervantes and the novel. A detailed textual study of *Don Quijote* and the *Novelas Ejemplares*. (Not offered this year.)

Spanish 420

Contemporary Spanish-American novel: narrative structure and world view. Prerequisite: *Spanish 323b* or permission of the instructor. (Not offered this year.)

Spanish 4951

Special topic: A course on some period of Spanish or Spanish-American literature.

Spanish 4952

Special topic: A course on some author or topic of Spanish or Spanish-American literature.

Spanish 4951*, 496a, 497b

Special topics in Hispanic Studies. Prerequisite: permission of the Chair and the instructor concerned.

Year Abroad Program

Normally, in order to be eligible to study for a year at the University of Granada, for Trent credits with a Trent/Toronto professor, a student must achieve a minimum of a B- average on all Trent courses (or equivalent courses) and a B- standing in *Spanish 100, 111* or equivalent. Enrolment is limited to 15 students from Trent. Honours students are especially encouraged to spend a year at Granada. For further details, please consult the Chair of the Section.

The courses to be offered in 1992-93 by Professor T.A. Noriega, Trent University, or by University of Granada faculty are:

Spanish 201*: Intermediate Spanish.

Conversation, pronunciation, composition and reading.

Spanish 210*: Introduction to Spanish and Spanish-American civilization.**Spanish 211***: Introduction to Spanish and Spanish-American literatures.**Spanish 300***: Advanced oral Spanish and composition.**Spanish 311a***: Spanish contemporary literature since the generation of 1898.**Prose and Theatre.****Spanish 312b***: Spanish contemporary literature since the generation of 1898.**Poetry.****Spanish 322a***: Spanish-American poetry.**Spanish 323b***: Spanish-American prose.**Spanish 4951***: Special topic in Hispanic Studies.

Native Management and Economic Development Program

This Program offers an integrated approach to the development of management and economic and community development skills. The Program is offered by the Department of Native Studies in cooperation with the Administrative Studies Program, thus blending a study of native culture with management and economic development skills.

The Program offers:

- a. a two-year Diploma for students who have the equivalent of Ontario Grade 12 or qualify as mature students. Students are required to complete 1 1/2 Communications courses plus 7 university credit courses. Required courses in the NMED Diploma Program are: *Native Studies 100*, *Native Studies 150a*, *Native Studies 151b*, *Administration-Native Studies 190*, *Administration-Native Studies 205a*, *Administration-Native Studies 206b*, *Native Studies 290*, *Administration-Native Studies 370b*.

Native Studies 384a is highly recommended. *Economics 101a/101b* or *Philosophy 105* are recommended optional courses. *Administration 201a* may be taken in lieu of *Administration-Native Studies 205a* but both may not be taken for credit.

- b. a General Bachelor of Arts in Native Studies (NMED emphasis). 15 courses, including 6 courses in Native Studies and 4 courses in Administrative Studies are required. Required courses are: *Administration-Native Studies 190*, *Administration-Native Studies 205a*, *Administration-Native Studies 206b*, *Administration 340*, *Native Studies 100*, *Native Studies 200*, *Native Studies 290*. *Administration 202b* and *Economics 101a/102b* are recommended.
- c. an Honours (4 year) Degree Program
Option 1:
 Bachelor of Arts (Honours) in Native Studies (NMED emphasis). Same as b. above, plus an additional academic year and successful completion of a minimum of four additional credits of which three must be *four-hundred* series.

Option 2:

Bachelor of Administrative Studies (NMED Emphasis). A four year (20 course credits) program. Students intending to complete the B.A.S. degree should consult with the Director of the Program or designate before entering the second quarter.

Further details are available in the *Native Management and Economic Development Prospectus*.

Core Courses

Native Studies 150a

Introduction to community development. (See Native Studies)

Native Studies 151b

Community-based economic development. (See Native Studies)

Administration-Native Studies 190

Introduction to management. (See Administrative and Policy Studies)

Administration-Native Studies 205a

Financial accounting. (See Administrative and Policy Studies)

Administration-Native Studies 206b

Management control. (See Administrative and Policy Studies)

Native Studies 290

Aboriginal economic development. (See Native Studies)

Administration-Native Studies 370b

Organizational behaviour in aboriginal organizations. (See Administrative and Policy Studies)

Native Studies

Chair of the Department

To be named.

Professor Emeritus

K.E. Kidd, M.A. (TORONTO), F.R.A.I.

Professors

M.J. Castellano, B.A. (QUEEN'S), M.S.W. (TORONTO) (on leave 1992-93); D.N. McCaskill, B.A. (WINNIPEG), M.A. (CARLETON), PH.D. (YORK); J.S. Milloy, B.A. (ST. PATRICK'S), M.A. (CARLETON), D.PHIL. (OXFORD)

Associate Professor

D. Newhouse, B.SC., M.B.A. (WESTERN ONTARIO)

Assistant Professor

P. Kulchyski, B.A. (WINNIPEG), M.A., PH.D.
(YORK)

Lecturer

S.I. Williams, B.A. (TRENT) (on leave
1992-93)

Required Courses

The single-major Honours program consists of nineteen courses. Minimum nine courses in Native Studies including *Native Studies 100, 200, one of 280 or 310, 381a and one of 382a, 383b, 384a, 385b*

Three four-hundred series courses.

Joint-major Honours program. Minimum seven courses in Native Studies including *Native Studies 100, 200, one of 280 or 310, 381a and one of 382a, 383b, 384a, 385b*

Two four-hundred series courses.

Single-major General program. Minimum six courses in Native Studies, including *Native Studies 100, 200, one of 280 or 310*

Joint-major General program. Minimum five courses in Native Studies.
Same required courses as for single-major.

Special Proviso

Students will not normally be permitted to count more than two selections from *Native Studies 280, 380, 225 and 325* in the minimum five or six courses required for a major.

Native Studies 100

Introduction to Native Studies. The course examines the contemporary situation of native people in Canada in the context of their cultural traditions and the historical interactions between Indian and non-Indian societies. Case studies, documentary sources and contemporary social analysis are used in conjunction with oral traditions to define methods of inquiry in Native Studies. Seminar and two lectures weekly.

Native Studies 150a

Introduction to community development. An overview of the concepts of "community" and "community development" in the native development context. The course will examine the community planning process, including the preparation of a community profile. Current issues in native community development will also be discussed. Students are expected to undertake a major research project. Lecture and seminar weekly.

Native Studies 151b

Introduction to community-based economic development. The course provides an overview of the formal and informal economies of native and non-native communities within a traditional economics framework including concepts of supply and demand and the principles that influence the location of economic activities. Lecture and seminar weekly.

Native Studies-Administration 190

Introduction to management and decision-making in contemporary aboriginal organizations. (See Administrative and Policy Studies)

Native Studies 200

Politics and native communities. The course will focus both on the traditional political culture of native peoples and on the political structures of colonialism (Indian Acts, Treaties, etc.), viewed from legal and historical perspectives. Contemporary analysis will treat Indian self-government including models of development, cultural and ideological foundations, government policy and implementation strategies. Lecture and seminar weekly.

P. Kulchyski

Native Studies-Anthropology 201

Native societies of Canada. (See Anthropology)

Native Studies-Administration 205a

Introduction to financial accounting in contemporary aboriginal organizations. (See Administrative and Policy Studies)

Native Studies-Administration 206b

Management control and guidance systems in contemporary aboriginal organizations. (See Administrative and Policy Studies)

Native Studies 211

Native identity development. The course will examine the process of native identity development in various life stages. Formative experiences in traditional and modern settings, development of self-concept and problem solving strategies will be explored in seminars and workshops. Open to first year students with permission of the instructor. Two-hour seminar weekly.

Native Studies 220

Iroquois culture and traditions. A study of the political, economic, kinship and religious institutions of traditional Iroquois society including prehistoric background, establishment of the Six Nations Confederacy, the longhouse religion, and

contemporary situation. Lecture and tutorial weekly.

Native Studies 225

Oral Mohawk. An introduction to Mohawk designed for students with little or no knowledge of the language. This is a conversational course, emphasizing the use and understanding of Mohawk through the learning of the basic vocabulary and sentence patterns in class and in language laboratory. Four hours weekly.

Native Studies-Anthropology-Canadian Studies 253

Art of the Americas. (See Anthropology)

Native Studies-Canadian Studies-History 255

History of the Indians of Canada. A study of the "prehistoric" period to the present day. Emphasis will be placed on Indian involvement in the fur trade and imperial politics of the eighteenth century, the development of European "civilizing" policies, and the growth and ideology of the modern Indian political movement. Seminar and lecture weekly.

Native Studies 260

Social services and the native people. A study of tribal and contemporary approaches to meeting common human needs. The structure and impact of health, welfare, family and correctional services are examined, along with contemporary initiatives to establish community control of programs. Prerequisite: *Native Studies 100* or permission of instructor. Lecture and seminar weekly.

Native Studies-Canadian Studies-History 270

History and politics of the Metis and non-status Indians of Canada. (Not offered this year.)

Native Studies 280

Oral Ojibway. An introduction to Ojibway designed for students with little or no knowledge of the language. This is a conversational course, emphasizing the use and understanding of Ojibway through the learning of the basic vocabulary and sentence patterns in class and in the language laboratory. Three hours weekly.

Native Studies-Canadian Studies 285

Native people and the North. (Not offered this year.)

Native Studies 290

Native economic development. Provides an overview of the economic development process with specific reference to native

communities. The course examines types of economic activities, where they locate and why. Planning for community economic development as well as business feasibility studies will be covered. Such areas as conflict between community goals and business goals, impact assessment and plan evaluation will also be addressed. Prerequisite: *Economics 101a/b* and *102a/b* or *Native Studies 150a* and *151b*.

Native Studies-Comparative Development 305

Native community development. A study of various approaches to community development in native and Third World communities. The course will examine current initiatives in human resource, political and economic development, and critical issues relating to local control, values, gender, government policies, and roles in social change processes. Methods and techniques as applied in community development processes will be included. Practicum optional. Lecture and seminar weekly (three hours).

Native Studies 310

Culture and community. A study of cultural continuity, change and revitalization in native communities in Canada. The dynamic nature of cultural adaption and the significance of tribal language, spirituality and social responsibilities will be emphasized. Lecture and seminar weekly.

Native Studies 320

Urbanization and the native peoples. An analysis of migration, adjustment and integration of native people into urban areas, examining various assimilation and acculturation models as well as cultural interaction between native and white society in rural native communities. Lecture and tutorial weekly.

D.N. McCaskill

Native Studies 325

Advanced Mohawk language and culture. (Not offered this year.)

Native Studies 330

Education and the native peoples. The course will examine issues pertaining to the development of an appropriate educational system for native people including Indian control of Indian education, learning theories, Indian culture, values and identity, teaching and learning styles, pedagogy and curriculum planning. Seminar and lecture weekly.

Native Studies 340

Native law. An examination of contemporary legal issues affecting Native people in Canada. The concepts of aboriginal rights and aboriginal title will be explored and defined. The course will be divided into two parts: first, an examination of the documents that deal with aboriginal rights including treaties, BNA Act, Indian Act, etc.; second, an examination of how those rights have been interpreted in the courts. Emphasis will be placed on recent Supreme Court decisions. Lecture and tutorial weekly.

P. Kulchyski

Native Studies-Canadian Studies 360

Native peoples in literature. (Not offered this year.)

Native Studies-Administration 370b

Organizational behaviour in contemporary aboriginal organizations. (See Administrative and Policy Studies)

Native Studies 380

Advanced oral Ojibway. (Not offered this year.)

Native Studies 381a

Theory of community-based research. A practical introduction to research methods in the social sciences, including a critique of those methods in the context of Native development. The ideological base of participatory and action research is examined along with case studies exemplifying alternative methodologies. Normally taken as the foundation course for research methods in Native Studies. Lecture and seminar weekly.

Native Studies 382a

Community service methods. (Not offered this year.)

Native Studies 383b

Community-based oral history methods. A course in specific oral-history methods. Emphasis is upon the cultural and strategic approaches which enhance oral history methods in aboriginal communities. Topics include research design, community rapport, administration, community-based data collection and analysis, political-economic issues, and dissemination/materials development. A small-scale field project will be developed. *Native Studies 381a* recommended. Weekly lecture and seminar.

Native Studies 384a

Social survey research methods. This course will provide students with an introduction to conducting survey research

within a community-based research context. Topics will include issues in cross-cultural research, questionnaire design and administration, and data analysis. Research project required. *Native Studies 381a* recommended. Lecture and seminar weekly. (Support course for Comparative Development Studies)

Native Studies 385b

Program planning and evaluation. This course will examine the process of program development in a native community context, including goal setting, needs analysis, operational planning, budgeting and fundraising, program implementation, and evaluation. The essential roles of research, planning and evaluation will be emphasized. Research project required. Lecture and seminar weekly (three hours). *Native Studies 384a* highly recommended. (Support course for Comparative Development Studies)

Native Studies 386, 387a, 388b, 389c

Native Studies field work. This course will provide students with experience in applying the methodology learned in *Native Studies 381a, 382a, 383b, 384a* or *385b*. Research or service projects will normally be carried out in the field under the joint supervision of faculty and personnel in native agencies. Application is normally made by April 30 of the preceding academic year. Approximately 60 hours for a half course and 120 hours for a full course, plus fortnightly seminars. Prerequisite or corequisite: one of *Native Studies 381a, 382a, 383b, 384a, 385b*

Native Studies 390, 391a, 392b

Reading course. Intended for third-year majors and for second-year students, by application to the Department, who wish to carry out independent research. Details must be arranged before the end of the preceding academic year.

Native Studies 395, 396a, 397b

Special topic.

Native Studies-History 400

Research seminar in Indian history. The research seminar will examine the history of the Indian in the fur trade, reserve and modern periods and the nature of Indian historiography. Students will be required to produce one major paper based upon primary research material. Seminar weekly first term, individual tutorial supervising research project second term. *J.S. Milloy*

Native Studies 402

Thesis. A double credit in-depth study course in library or field-oriented research, for which a double fee is charged, supervised by the Honours Committee and a Research Project Committee. Students are to arrange all details with the Department Chair before the end of the preceding academic year.

Native Studies 410

Seminar on indigenous knowledge. (Not offered this year.)

Native Studies-Canadian Studies-History 425

The evolution of the settlement commonwealth. (Not offered this year.)

Native Studies-Anthropology-Canadian Studies 450

Native art of Canada. (Not offered this year.)

Native Studies 481

Selected topics. Aboriginal people of the Arctic. This course will examine the political, social, economic, and cultural development of the Arctic people of Alaska, Canada and Greenland. Each group will be studied separately and attention will be focussed on issues relating to their status as a distinctive cultural and racial minority.

P. Kulchyski

Native Studies-Comparative Development 482

Indian responses to cultural interaction. Focus will be on social and psychological processes involved when cultures meet, examining acculturation and conflict models, culture and personality, interaction perspectives and ethnic identity studies.

D.N. McCaskill

Native Studies 490

Reading course. Students may select an area of study under the direction of an adviser. Details are to be arranged through the Department Chair before the end of the preceding academic year.

Native Studies-Sociology 496a

Special topic: Human development in community context. (See Sociology)

Native Studies-Sociology 497b

Special topic: Community development in Native Canadian context. (See Sociology)

Diploma Program in Native Studies

This program is open to students who have the equivalent of Grade 12, or who qualify as mature students. Students of native ancestry are encouraged to enroll. Over a two-year period students are required to complete seven undergraduate courses, four of which must be drawn from Native Studies course offerings.

Students must enroll in *Communications 91*, a three-week summer pre-session prior to their first year. In their first year, students will also take *Communications 92c*. Both courses are required. For description of Native Studies course options see *Native Studies*.

On completion of the diploma requirements, students may apply for admission to the B.A. program. Undergraduate course credits earned in the Diploma program are transferable to meet requirements for a degree.

Application for admission to the Program should be made to the Office of the Registrar.

Inquiries should be directed to the Department of Native Studies.

Required Courses

Summer prior to Year 1

Communications 91 (Pre-session)

Year 1

Communications 92c

Native Studies 100

Two additional courses, one of which may be a *one-hundred* series course in a discipline other than Native Studies. Some *two-hundred* series Native Studies courses are available with permission of the instructor.

Year 2

Four courses selected from *two-* or *three-hundred* series Native Studies courses exclusive of *Native Studies 390*. A *one-hundred* series course from a discipline other than Native Studies may be substituted for any of these courses.

Communications 91 (Pre-session)

An intensive three-week summer course providing skill-development in study skills, writing, reading, speaking and listening. Focus is on native content. Successful completion leads to admission to the Diploma Program in the fall.

Communications 92C

A course to provide specific research skills for both Native Studies and Native Management and Economic Development streams. Class instruction, seminars and individual tutoring focus on content relevant to undergraduate course work of participants.

Northern and Polar Studies

Program Coordinator

W.P. Adams, B.A. (SHEFFIELD), M.SC.,
PH.D. (MCGILL), Department of Geography

The Emphasis in Northern and Polar Studies is designed to stimulate interest in the higher latitudes in all academic departments and programs at Trent. It is also designed to give students from the north an opportunity to extend and deepen knowledge of their home regions.

The Emphasis takes the form of an annotation on the transcript of students graduating in the General or Honours programs at Trent. It reads "... with an Emphasis in Northern and Polar Studies."

It can be earned in the following manner:

- Students must have completed at least one month of formal post secondary study in the north or south polar regions. Such study may take the form of course work or independent or supervised research. As an alternative, students may have lived in the north or south polar regions for more than one year during their teens or later years. Proof of polar experience must be submitted to the Committee on Northern and Polar Studies at least six months prior to graduation. The definition of "North polar regions" used here is that of the Northern Scientific Training Grants Program of Indian and Northern Affairs Canada. This definition includes northern parts of most provinces. In the South, the continent of Antarctica and the sub-Antarctic islands qualify. The Committee on Northern and Polar Studies shall rule where eligibility is in doubt.
- Credits from Yukon and Arctic Colleges, acceptable to Trent University, may be counted towards this emphasis

to a maximum of two-and-a-half courses. Students are encouraged to consult the Committee on Northern and Polar Studies about their selection of courses for the Emphasis at the start of their second year. They must do so at least six months prior to graduation. Early contact with the Committee has the advantage of putting the student in touch with others, students and faculty, with like interests.

Students must have successfully completed five full course equivalents selected, as indicated, from the following, before they graduate.

- (a) Two or more of the following:

CA/ES 341
GO/CA 364a
HI/CA 422
NS 285
NS 481

- (b) No more than three of the following in which consent of the instructor must be obtained, before the course begins, to ensure that a northern emphasis for the student in question will be provided.

AN 311
AN/NS 450
CA/ER 200
CA/CU 413
ER 250
ER 360
GO 342b
GO/CA 361
HI 370
HI/CA 402
HI/CA/NS 425
NS 200
PO/CD 440

- (c) No more than three of the following for which permission of the instructor and the Committee on Northern and Polar Studies must be obtained. Interested students must obtain a permission form from the Committee.

All reading/special topic/thesis courses for which acceptable subject matter can be arranged. There are approximately one hundred of these courses in the Trent Calendar, generally at the third and fourth quarter levels. One of the purposes of the Emphasis is to encourage interest in northern and polar studies throughout the University.

Philosophy

Professor and Chair of the Department
M.L. Rubinoff, B.A. (QUEEN'S), M.A., PH.D.
(TORONTO)

Professor Emeritus
D. Gallop, M.A. (OXFORD)

Professors
J.W. Burbidge, M.A. (YALE), B.D., PH.D.
(TORONTO) (on leave 1992-93); R.E.
Carter, A.B. (TUFTS), M.DIV. (HARVARD),
M.A., PH.D. (TORONTO) (on leave Winter
Term 1993); J.I. MacAdam, B.A. (NEW
BRUNSWICK), M.A. (QUEEN'S), PH.D.
(LONDON)

Associate Professors
C.V. Boundas, M.A., PH.D. (PURDUE);
B.J. Hodgson, M.A. (TORONTO), PH.D.
(WESTERN ONTARIO); R.M. Neumann,
B.A. (COLUMBIA), M.A., PH.D. (TORONTO);
C.W. Tindale, B.A. (WILFRID LAURIER),
M.A., PH.D. (WATERLOO)

Assistant Professors
F.C. McKinnon, B.A. (MCGILL), B.PHIL.,
D.PHIL. (OXFORD); B. Sassen, B.A.
(TORONTO), M.A., PH.D. (PENN STATE)

Required Courses

The single-major Honours program consists of nineteen courses. Minimum nine courses in Philosophy, including *Philosophy 101* or *105* strongly recommended
210 and 212 required,
both normally in the second year
240a required
Two four-hundred series courses required

Joint-major Honours program. Minimum seven courses in Philosophy, including *Philosophy 101* or *105* strongly recommended
210 and 212 required, one normally in the second year, the other normally in the third year
410 or 420 required

Single-major General program. Minimum six courses in Philosophy, including *Philosophy 101* or *105* strongly recommended
210 and 212 required, both normally in the second year

Joint-major General program. Minimum five courses in Philosophy, including

Philosophy 101 or *105* strongly recommended
210 or 212 required

Special Provisos

- *Philosophy 101* and *Philosophy 105*, although not formal prerequisites, offer a preparation for all other courses in the subject.
- *Philosophy 101* and *105* may not both be taken in the first year and only one of them may be counted towards a Philosophy major
- First quarter students will occasionally be permitted to enroll in two-hundred series courses after consultation with the Chair of the Department.
- All two-hundred series courses in Philosophy may be counted as fulfilling the university requirement for three-hundred series courses.
- The Logic requirement for a single-major Honours degree shall normally be completed prior to commencement of the fourth quarter of an Honours program. By special permission of the Department, *Philosophy 105* may be substituted for *Philosophy 240a*.
- The fourth quarter of the Honours program will normally consist of four courses, some of which may be three-hundred series courses.

Philosophy 101

An introduction to philosophy through a study of fundamental problems, such as the nature of moral right and wrong, the freedom of the will, the relation between mind and matter, and the existence of God, as presented in works of major philosophers: e.g., Plato, Descartes, Kant and Nietzsche. Weekly lecture, weekly tutorial.

Co-ordinator: C.V. Boundas

Philosophy 105

Practical reasoning. The study of the uses of statements and arguments in reasoning, as they occur in a variety of contexts. Emphasis will be placed on developing skills in recognizing, constructing and critically evaluating arguments. Three hours weekly.

Co-ordinator: C.W. Tindale

Philosophy 210

Ancient philosophy. The development of philosophical thought from the Pre-Socratics to Neo-Platonist and Christian thinkers of late antiquity. Special emphasis will be placed upon selected works of Plato and Aristotle. Two hours weekly.

C.W. Tindale

Philosophy 212

Early modern philosophy. A study of the important philosophies of the seventeenth and eighteenth centuries, including those of Descartes, Leibniz, Spinoza, Locke, Berkeley, Hume and Kant. Two hours weekly.

B.J. Hodgson

Philosophy 214

Introduction to existential philosophy. Themes will include consciousness as a source of meaning and interpretation, individuality, intersubjectivity and community, freedom, choice and responsibility, difference and repetition, and nihilism and creation. Texts will be selected from the writings of Nietzsche, Kierkegaard, Camus, Sartre, de Beauvoir, Merleau-Ponty and Heidegger. Two hours weekly.

C.V. Boundas

Philosophy 230

Moral issues. (Offered in alternate years, but not this year.)

Philosophy 232

Philosophy of law, justice and the state. A study of relationships amongst notions of the state and theories of justice and law. Special attention will be given to the relevant writings of major political and legal philosophers, e.g. Hobbes, Rousseau, Hart, and to current writings on rights and the Canadian constitution. A moot court, using an actual legal case, actual judges and stressing a philosophical issue will be included. Weekly two-hour seminar. (Offered this year and in alternate years.)

J.I. MacAdam

Philosophy-Computer Studies 240a

Symbolic logic. An introductory study of formal logical systems, together with their use in the analysis of various types of arguments. Two hours weekly. (Excludes *Philosophy-Computer Studies 240*)

R.M. Neumann

Philosophy 275

Philosophy of religion. An inquiry into the nature of religion and religious belief, the relations among faith, reason, knowledge and revelation, the analysis of religious language, the mystical claim to direct knowledge of God, and the nature of evil. Two hours weekly. (Offered this year and in alternate years.)

R.E. Carter

Philosophy 282

Oriental philosophy: China and Japan. (Offered in alternate years, but not this year.)

Philosophy 311

Medieval philosophy. (Offered in alternate years, but not this year.)

Philosophy 312

Nineteenth century philosophy. The main movements of thought as found in selected writings of Fichte, Hegel, James, J.S. Mill, Marx, Nietzsche, C.S. Pierce, and others. Prerequisite: *Philosophy 212* or permission of the instructor. Two hours weekly. (Offered this year and in alternate years.)

C.W. Tindale, B. Sassen

Philosophy 313

Analytic philosophy. An introduction to analytic philosophy and an examination of its commitment to the methodological tools of linguistic analysis. Philosophers studied will include Moore, Russell, Wittgenstein, Ayer, Ryle, Austin, as well as their more recent successors, both American and British. Prerequisite: *Philosophy 212* or permission of the instructor. Two hours weekly. (Offered this year and in alternate years.)

F.C. McKinnon

Philosophy 315

Descriptive and existential phenomenology. (Offered in alternate years, but not this year.)

Philosophy 316

Hermeneutics and deconstruction. Themes and texts will be selected from the writings of Heidegger, Gadamer, Ricoeur, Derrida, Deleuze, Foucault, Lacan, etc. Prerequisite: *Philosophy 214* or permission of the instructor. Two hours weekly. (Offered this year and in alternate years.)

C.V. Boundas

Philosophy 330

Moral and political philosophy. A study of some of the following: the relation between morality and rationality, the notion of freedom in morals and politics, the limits to utilitarianism, and the limits to rights. Weekly two-hour seminar.

R.M. Neumann

Philosophy-Computer Studies 341b

Logics and logical theories. A look at selected topics in logic, including some of: modal and 3-valued logics, the foundations of arithmetic, formal semantics, the theory of rational choice, completeness,

soundness, and truth. Prerequisite: *Philosophy-Computer Studies 240a* or permission of the instructor. Two hours weekly.

R.M. Neumann

Philosophy 370

Philosophy and the sciences. (Offered in alternate years, but not this year.)

Philosophy-Psychology 377a

Philosophy of mind. (Offered in alternate years, but not this year.)

Philosophy 378b

Philosophy of language. (Offered in alternate years, but not this year.)

Philosophy 379

Philosophy of art. The study of meaning and value in literature and the arts, which will explore the kind of reality they embody, the type of knowledge they communicate and the nature of aesthetic experience. Two hours weekly. (Offered this year and in alternate years.)

B. Sassen

Philosophy 390

Reading course. Students will be encouraged to pursue a special interest, largely through independent study, for full-course credit. Details must be arranged in consultation with the staff in Philosophy between April 15-30 of the preceding academic year. Periodic tutorials.

Philosophy 410

Major texts. The Philosophy of R.G. Collingwood. A critical examination of Collingwood's controversial theory of metaphysics as the science of absolute presuppositions and its application to the theory of philosophical method and the interpretation of history. Prerequisite: *Philosophy 210* and *212*, or permission of the instructor. Two hours weekly.

M.L. Rubinoff

Philosophy 420

Metaphysics and epistemology. "Foundationalism and its Critics": A study of the classic "foundationalist" account of knowledge and its implications for the "objectivity" of our belief systems, followed by an examination of recent rejections of this point of view in contemporary philosophy. Prerequisite: *Philosophy 210* and *212* or permission of the instructor. Two hours weekly.

B.J. Hodgson

Philosophy 490

Reading course. Students will be encouraged to pursue a special interest, through independent study, for full-course credit. Details to be arranged in consultation with the staff in Philosophy between April 15-30 of the preceding academic year.

Physics

Associate Professor and Chair of the Department

P.C. Dawson, M.Sc. (TRENT), Ph.D. (VICTORIA)

Professor Emeritus

J.I. Lodge, M.A. (QUEEN'S), Ph.D. (VIRGINIA)

Professors

L.C.R. Alfred, M.Sc. (BOMBAY), Ph.D. (SHEFFIELD); W.F.J. Evans, M.A., Ph.D. (SASKATCHEWAN); R.G. Johnson, M.Sc. (QUEEN'S), Ph.D. (LIVERPOOL); J.W. Jury, M.Sc., Ph.D. (TORONTO); A.J. Slavin, M.Sc. (TORONTO), Ph.D. (CAMBRIDGE)

Associate Professors

J.W. Earnshaw, B.A.Sc. (TORONTO), Ph.D. (CAMBRIDGE); K. DeBell, M.Sc., Ph.D. (LONDON)

Senior Demonstrator

J. Breukelaar, B.Sc. (YORK), M.Sc. (TRENT)

Demonstrator

D. Marshall, B.Sc. (WATERLOO)

Required Courses

The single-major Honours program consists of twenty courses. Minimum ten courses in Physics, including *Physics 100*

202a, 270a, 211b, 280b
302b, 321, 355a
400, 420, 461c*

Two other four-hundred series Physics courses.

*A student may substitute *Physics 460* for *461c* under exceptional circumstances and with approval of the Department.

Joint-major Honours program. Minimum seven courses in Physics, including *Physics 100*

202a, 270a, 211b, 280b
302b, 321
400

One other four-hundred series Physics course.

Single-major General program. Minimum six courses in Physics, including

Physics 100

202a, 270a, 211b, 280b
302b, 321

Joint-major General program. Minimum five courses in Physics including

Physics 100

202a, 270a, 211b, 280b
302b, 321

Special Provisos

- First quarter students may take *Physics 100* and *Physics 150* or *155* as courses counting as two different disciplines.
- Students electing no more than two courses in Physics will normally elect *Physics 100* and *Physics 202a*.
- Students wishing to deviate from programs outlined above, or to obtain exemption from course prerequisites, should consult the Chair.

Notes:

- Course prerequisites should be carefully noted by the student.
- See also under *Chemical Physics*.
- Mathematics 110* and *200* are required for Physics majors, and *Physics-Mathematics 301* for Honours Physics. *Mathematics 130* is strongly recommended for the Honours programs.
- Physics-Mathematics 301* will be replaced by *Physics-Mathematics 205a*, and a three-hundred level half-course to be introduced in 1993-94. Both courses can be taken in the third quarter and count as three-hundred level courses in Physics.
- Physics 325a* may be taken by students in second quarter.
- Physics 355a* may be counted as a four-hundred level course.
- The word "course" under "Required Courses" means one full-course or two half-courses.

Physics 100

Elementary physics. Particle dynamics, translational and rotational motion, electricity, magnetism, optics, special relativity. Prerequisite: OAC Calculus or Algebra, or equivalent, or permission of the Department. OAC credits in Physics and Calculus are recommended, and concurrent enrolment in first-year calculus is strongly recommended. *Mathematics 110* is required for upper-level Physics courses. Three class meetings and three-

hour laboratory weekly, tutorial fortnightly.

A.J. Slavin, K. DeBell

Physics 150

Introductory astronomy. The solar system, sun, and stars. Stars and stellar evolution, supernovae, neutron stars, black holes. Galaxies, quasars, introductory cosmology. The Big Bang. Astronomy vs. astrology, the search for extraterrestrial intelligence. No prerequisite. Not to be counted toward a major in Physics. Two lectures weekly plus periodic workshops for observations. (Excludes *Physics 155*)

P.C. Dawson, J.W. Earnshaw

Physics 155

Introductory astronomy. The solar system, sun, and stars. Stars and stellar evolution, supernovae, neutron stars, black holes. Galaxies, quasars, introductory cosmology. The Big Bang. Astronomy vs. astrology, the search for extraterrestrial intelligence. This course satisfies the quantitative science prerequisite for the Junior-Intermediate program option in Teacher Education. Prerequisite: Grade 12 advanced level mathematics. Not to be counted towards a major in Physics. (Excludes *Physics 150*) Two lectures weekly plus periodic workshops for observations.

P.C. Dawson, J.W. Earnshaw

Physics 202a

Introductory quantum physics. Special relativity, particle-like aspects of radiation, atomic structure, wave-like properties of matter, Schrödinger equation and applications to one-dimensional systems. Prerequisite: *Physics 100* and *Mathematics 110*. Three lectures and three-hour laboratory weekly, tutorial fortnightly.

R.G. Johnson

Physics-Mathematics 211b

Classical mechanics. Applied mathematics as found in the classical mechanics of particles. One-dimensional motion, vector differential operators, three-dimensional motion, moving and rotating coordinate systems, central forces, systems of particles. Prerequisite: *Mathematics 110* and *Physics 100* or permission of the instructor. Corequisite: *Mathematics 200*. Three lectures and tutorial weekly.

L.C.R. Alfred

Physics 270a

Thermal physics. First and second laws of thermodynamics and applications, heat transfer, blackbody radiation, kinetic

theory of gases, statistical thermodynamics. Prerequisite: *Physics 100*. Corequisite: *Mathematics 200*. Three lectures weekly, tutorial fortnightly.
W.F.J. Evans

Physics 280b

Wave theory. Simple oscillating systems, waves in solids and membranes, acoustic waves in gases, reflection and transmission at a boundary, electromagnetic waves in free space and at surfaces, waves in optical systems. Prerequisite: *Physics 100* and *Mathematics 110*. Corequisite: *Mathematics 200*. Three lectures weekly and tutorial fortnightly, three-hour laboratory weekly.

J.W. Earnshaw

Physics-Mathematics 301

Analytic techniques for the solution of ordinary and partial differential equations occurring in the physical and social sciences. (See Mathematics, and under Notes)

Physics 302b

Quantum physics. Quantum mechanics of one-electron atoms, magnetic dipole moments and spin, transitions and selection rules, identical particles, excited states of atoms, molecules, nuclear and particle physics. Prerequisite: *Physics 202a* and *Mathematics 200*. Three lectures and tutorial weekly, three-hour laboratory weekly.

P.C. Dawson

Physics-Mathematics 311b

Advanced classical mechanics. Applied mathematics as found in the classical mechanics of particles, rigid bodies and continuous media. Motion of rigid bodies, Lagrangian mechanics, Hamiltonian mechanics, dynamics of oscillating systems. Prerequisite: *Mathematics 200* and *Physics-Mathematics 211a/b*. Three class meetings weekly.

L.C.R. Alfred

Physics 321

Electricity and magnetism. Electrostatics, magnetostatics, electric and magnetic properties of matter, Maxwell's equations, electromagnetic wave propagation. Prerequisite: *Physics 100* and *Mathematics 200*. Three class meetings, laboratory or problems session weekly.

K. DeBell

Physics 325a

Electronics. A basic applied course in the electronic circuits most commonly used in laboratory sciences. Circuit theory, test instruments, operational amplifiers, semiconductor theory, measurement sensors, power control, digital circuits, AC circuit theory, filters, DC power supplies, RC timing circuits. Prerequisite: *Physics 100* and OAC Calculus or equivalent. Three class meetings weekly, three-hour laboratory weekly. (Excludes *Physics-Computer Studies 223a* and *Physics 224b*)

J.W. Earnshaw

Physics 355a

Relativity and tensor analysis. Special relativity-kinematics: events and spacetime, Minkowski geometry, four vectors, tensors in spacetime. Special relativity-dynamics: conservation of momentum and energy, covariant equations of motion. General relativity: geometry and space, the curvature tensor, equivalence principle and curved spacetime, principle of general relativity, metric form of spacetime, tests of Einstein's theory of gravitation. Prerequisite: *Physics 202a* and *Mathematics 200*. Three lectures weekly, tutorial fortnightly.

P.C. Dawson

Physics 400

Quantum mechanics. Review of elementary quantum mechanics. States and operators in Hilbert space, Dirac notation, interpretative postulates, representations, symmetry transformations, angular momentum theory, spherically symmetric potentials, approximation methods, scattering theory, identical particles. Selected special topics as time permits. *Physics 302a/b*, *Mathematics-Physics 301*. Three lectures, tutorial weekly.

R.G. Johnson

Physics 420

Electromagnetic theory. General methods for the solution of Laplace's and Poisson's equations. Advanced treatment of Maxwell's equations. Relativistic transformation of electromagnetic fields. Motion of charged particles in electromagnetic fields. Electromagnetic radiation. Radiating systems. Prerequisite: *Physics 321*, *Mathematics-Physics 301*. Corequisite: *Physics 355a*. Three class meetings weekly.

L.C.R. Alfred

Physics 431b

Solid state physics. Crystallography, crystal binding, lattice vibrations and thermal properties, band theory, electron transport. Prerequisite: *Physics 300* or *302a*, *321* and *470a* and *Mathematics-Physics 301*. Three class meetings weekly. A.J. Slavin

Physics 441a

Nuclear physics. Nuclear properties, inter-nucleon forces, nuclear models, radiation and decay, nuclear reactions, applications, accelerators and detectors. Prerequisite: *Physics 302a*. Three class meetings weekly.

J.W. Jury

Physics 442b

Particle physics. High energy physics phenomena, elementary particles and their interactions, quarks and gluons. Electroweak unification. Grand unified theories. Prerequisite: *Physics 355a*. *Physics 441a* strongly recommended. Three class meetings weekly.

R.G. Johnson

Physics 460

Project course. An experimental or theoretical project on some topic of advanced physics. Past projects have included construction of a laser, field emission electron microscopy, atomic potential theory, wind turbine testing, surface physics, high temperature superconductivity, etc. Projects are selected in consultation with members of the Department; students must obtain approval for the project on the form provided, by the preceding March.

Physics 461c

Advanced laboratory. This course provides the opportunity for advanced laboratory work in several areas of physics. Prerequisite: All required courses at the one-hundred, two-hundred and three-hundred levels.

Physics 470a

Statistical and thermal physics. Fundamental concepts. Thermodynamic quantities. Statistical thermodynamics and applications. Statistical mechanics and applications. Phase equilibrium. Quantum statistics. Phase transitions. Computer simulation. Prerequisite: *Physics 300* or *302a*. Three class meetings per week.

K. DeBell

Physics 490

Reading course. A course designed to allow advanced students in Physics to pursue independent study under the direction of departmental faculty. This course will be available only in exceptional circumstances, and with the approval of the Department of Physics.

Political Studies
Professor and Chair of the Department

J. Wearing, B.A. (WESTERN ONTARIO), M.A. (TORONTO, OXFORD), D.PHIL. (OXFORD)

Professors Emeriti

M.P. Doxey, B.SC., PH.D. (LONDON);
D. Kettler, M.A., PH.D. (COLUMBIA)

Professors

M. Gunther, B.A. (WITWATERSRAND), PH.D. (NORTH CAROLINA); K.R.V. Lyon, PH.D. (BRITISH COLUMBIA); D.R. Morrison, M.A. (SASKATCHEWAN), D.PHIL. (SUSSEX); R.C. Paehlke, B.A. (LEHIGH), M.A. (NEW SCHOOL FOR SOCIAL RESEARCH), PH.D. (BRITISH COLUMBIA) (on leave 1992-93)

Associate Professors

R. Campbell, B.A. (TRENT), M.A. (TORONTO), PH.D. (LONDON); J.D. Driscoll, M.A., PH.D. (QUEEN'S); D. Torgerson, A.B. (CALIFORNIA-BERKELEY), M.E.S. (YORK), M.A., PH.D. (TORONTO)

Assistant Professors

E. Helleiner, B.A. (TORONTO), M.A., PH.D. (LONDON); M. Neufeld, B.A. (WATERLOO), M.A., PH.D. (CARLETON); A. Pickel, B.A. (GUELPH), M.A., PH.D. (YORK); E. Stavropoulos, B.A., M.A., PH.D. (TORONTO)

Required Courses

The single-major Honours program consists of nineteen courses. Minimum nine courses in Politics, including *Politics 100*, at least two of *Politics 233*, *333*, *334*, *430*, *435*, at least two courses at the three-hundred level, and at least three courses at the four-hundred level.

Joint-major Honours program. Minimum seven courses in Politics, including *Politics 100*

233 or 333 or 334

at least two courses at the three-hundred level, and two courses at the four-hundred level.

Single-major General program. Minimum six courses in Politics, including *Politics 100* and at least two courses at the *three-hundred* level.

Joint-major General program. Minimum five courses in Politics including *Politics 100* and at least two courses at the *three-hundred* level.

Special Provisos

Politics 100 or permission of the Department is a prerequisite for all *two-hundred* to *four-hundred* series courses.

- *Three-hundred* level courses normally require a *two-hundred* level prerequisite; where permission of the instructor or the Department is indicated, this must be acquired in the Spring by the time of pre-registration.
- A course in political theory (*Politics 233* or *333* or *334*) is a prerequisite to entry into the fourth quarter of the Honours program.
- Students entering the fourth quarter of the Honours program are encouraged to discuss their program with the Department Chair in order to ensure that their courses have some substantive and coherent linkage with one another.
- In exceptional circumstances, proposals for reading courses will be considered under *Politics 390* and *490* and proposals for an Honours thesis under *Politics 402*. These must be developed in consultation with tutors and they must be approved and initialled by the Department Chair on the preregistration form.
- Access to *four-hundred* level courses is normally restricted to students entering the fourth quarter of the Honours program.

Details of the program in Political Studies, which offers courses in Canadian politics, Comparative politics, Political Theory, International Relations, and Policy Studies, may be obtained from the office of the Chair of the Department.

Politics 100

Introduction. An introduction to the study of politics through an examination of the growth of the Canadian state since World War II in historical and comparative perspective. Students will be encouraged to experiment with a variety of analytical and ideological approaches to understanding the Canadian political process and current political problems. Two lectures and one tutorial weekly.

R. Campbell and staff

Politics-Canadian Studies 201

Canadian politics. A general introduction to Canadian political institutions and practices, with emphasis upon the federal constitution, parliament and cabinet, political parties, civil liberties, and the process of constitutional change. Regular lectures and tutorials.

J. Wearing

Politics 210

American politics. A review of the basic values underlying the American system and of its political institutions is followed by a study of interpretations of how the system functions and of reform proposals. At various points, aspects of the US 'pluralist' system are highlighted by comparing them with 'corporatist' Sweden. Regular lectures and tutorials.

V. Lyon

Politics 220

International politics. An introduction to the study of international politics including such topics as the Cold War, nuclear deterrence and the arms race, great power rivalry and crisis decision-making, North-South issues and aspects of Canadian foreign policy. Regular lectures and tutorials. (Support course for Comparative Development Studies)

M. Neufeld, E. Helleiner

Politics 233

Political theory. A survey of some classic texts in the history of western political thought with an emphasis on problems of interpretation and the ways in which a tradition of political discourse determines our conceptions of the political and legitimates political activity. Lecture and tutorial weekly.

J. Driscoll

Politics 240

Comparative politics. Political processes and policy-making in authoritarian and liberal democratic regimes. Countries studied are China, Soviet Union, Cuba, Japan and Britain, but combination varies from year to year. Emphasis on historical origins, institutions, the economy and contemporary problems. (Support course for Comparative Development Studies)

M. Gunther

Politics 260

An introduction to political analysis and public policy. A comparison and evaluation of competing approaches to the study of public policy with special emphasis on problems of analysis and applications to Canadian politics. Lecture and tutorial or seminar weekly.

J. Driscoll

Politics-Canadian Studies-History 301

Canadian political culture, 1864 to the present. (See History)

Politics-Canadian Studies 305

Politics and society in Quebec. (Not offered this year.)

Politics-Canadian Studies 309

Ontario politics. An analysis of the political system of Ontario. The way the views of Ontarians are represented in the system and its consequences in terms of government policy are analyzed. Proposals for making the province more democratic and its government more effective are considered. Regular lectures and tutorials.

V. Lyon

Politics 320

Conflict and co-operation in international relations. A study from theoretical and practical perspectives of the nature of the international system; the causes of conflict between states and ways of handling it; the role of international institutions. Prerequisite: *Politics 220*. Regular lectures and tutorials.

E. Helleiner

Politics 321

International law and organization. (Not offered this year.)

Politics-Canadian Studies 322

Canadian-American relations since World War II. (Not offered this year.)

Politics 333

Political theory. Theories of state revolution. Through a careful examination of texts we will look at differing conceptions of truth, ideology, human agency, the state and the possibilities of political change. Debates within Marxism, postmodernism, feminism, and radical democracy will be explored. Prerequisite: *Politics 233* or *334* or permission of the instructor. (Offered this year and in alternate years.)

E. Stavro-Pearce

Politics 334

Liberal democratic theory. (Not offered this year.)

Politics 340

Comparative European politics. A study of contemporary politics in Western, Central and Eastern Europe with special emphasis on dynamics of change and problems of political and economic reform. Prerequisite: A *two-hundred* level Politics course or permission of the instructor. Regular lectures and tutorials.

A. Pickel

Politics 341

Party organization and elections. Political parties in the electoral process and how they have been affected by new electoral technologies and changes in voting behaviour. The internal organization of parties and how this affects their performance in legislatures and in government. Prerequisite: A *two-hundred* level Politics course or permission of the instructor. Weekly lectures and fortnightly tutorials. (Offered this year and in alternate years.)

J. Wearing

Politics-Canadian Studies 362

Public policy and administration in Canada. An integrated study of the policy-making process in Canada, linking ideas, ideologies and interests with political and administrative structures and processes. (Not offered this year, but may be offered in Summer 1992.)

Politics-Canadian Studies 366

Canadian Political Economy. This course will introduce students to the Political Economy tradition in Canada. In the first term, methodological issues and the evolution of the tradition will be reviewed. In the second term, the course will examine selected themes and issues; students will pursue research in an area of their choosing. The focus of the course will be on the role of the Canadian state in economic life.

R. Campbell

Politics 390, 391a, 392b

Reading course in politics. Open only to students majoring in Politics and designed to provide an opportunity for more intensive examination of material studied in other politics courses. Periodic tutorials. Prerequisite: permission of the Department, but see Special Provisos.

Politics 3951

Special topics in political inquiry. (Not offered this year.)

Politics 402

Honours thesis. A scholarly project on a specific topic to be developed and carried out under the supervision of a member of the department and for which a double credit will be given. (See Special Provisos)

Politics-Canadian Studies 405

Contemporary Canadian problems. A critical study of selected Canadian political problems. Regular seminars.
R. Campbell

Politics 420

Contemporary problems in international politics. A critical study of selected problems and themes in international politics. Prerequisite: permission of the Department. Regular seminars.
M. Neufeld

Politics 430

Contemporary political analysis. An examination of contemporary debates within feminist theory. Weekly seminars.
E. Stavro-Pearce

Politics 435

Political ideologies. The problem of the relationship between theory and practice provides the backdrop for a consideration of ideologies in modern politics. A comparison of early modern concepts of counsel with the subsequent approach of the Enlightenment sets the stage for an examination of more recent technocratic, traditionalist, critical, and postmodernist positions. The changing role of the intellectual in political life is a particular theme throughout. Prerequisite: one course in political theory or permission of the instructor.

D. Torgerson

Politics-Comparative Development 440

Political economy and comparative politics. The course studies the link between economics and politics in capitalist and socialist states, and provides an introduction to theories of comparative, development and welfare politics. No previous background in economics needed. Weekly seminars.

E. Helleiner, M. Gunther

Politics-Comparative Development 450

Problems of underdevelopment: building democracy. A study of transitions from authoritarian rule in Eastern Europe, Southern Europe, and Latin America. Major themes include competing theories of democracy and democratization, the emergence of Western democracies,

capitalism and democracy; state and civil society. Prerequisite: A two-hundred level Politics course or *Comparative Development 200* or permission of the instructor. Regular lectures and tutorials. This course is also open to students in the third quarter of the Honours program.

A. Pickel

Politics-Environmental and Resource Studies 460

Public policy in comparative perspective. (Not offered this year.)

Politics 490, 491a, 492b

Reading course in politics. Open only to students in the fourth quarter of a Politics major program. Periodic tutorials. Prerequisite: permission of the Department, but see Special Provisos.

Politics 4951

Special topics in political inquiry. (Not offered this year.)

Psychology
Associate Professor and Chair of the Department

To be named.

Professor Emeritus

J.P.S. Robertson, M.A. (NEW ZEALAND),
PH.D. (LONDON), F.B.P.S.

Professors

C.H. Ernest, B.A. (SASKATCHEWAN), M.A.,
PH.D. (WESTERN ONTARIO) (on leave Winter
Term 1993); G.T. Reker, B.A. (MCMASTER),
M.A.SC., PH.D. (WATERLOO); C.T. Smith,
B.SC. (MANITOBA), M.A., PH.D. (WATERLOO);
Gordon Winocur, M.A. (MANITOBA), PH.D.
(WATERLOO); P.T.P. Wong, B.A.
(CARLETON), M.A., PH.D. (TORONTO)

Associate Professors

B.L. Beach, B.A. (ACADIA), M.A. (DAL-
HOUSE), PH.D. (MCGILL); F.A. Bleasdale,
B.A. (TORONTO), M.A., PH.D. (WESTERN
ONTARIO); D.J. Kennett, PH.D. (MCMASTER);
D.G. Lowe, B.A. (MCMASTER), M.A., PH.D.
(WATERLOO); R.B. Morris, B.A. (RED-
LANDS), M.SC. (WASHINGTON), PH.D.
(ALBERTA); R.G. Setterington, M.A., PH.D.
(TORONTO); C.F. Sproule, M.A. (TORONTO);
H.J. Stanford, M.A., PH.D. (QUEEN'S);
P. Watson, M.A., PH.D. (WESTERN ONTARIO)

Assistant Professor

J.B. Aubrey, M.SC. PH.D. (ALBERTA)

Conjunct Assistant Professor

G.A. Burkhart, B.A. (CALVIN COLLEGE, MICHIGAN), M.SC. (WATERLOO), PH.D. (WINDSOR)

Adjunct Faculty

J. Holt, M.A. (DALHOUSIE), ED.D. (TORONTO)

Required Courses

The Department of Psychology offers two Honours programs, one course-based (normally leading to the B.A.) and one thesis-based (normally leading to the B.Sc.). Students intending to do an Honours program should discuss their program with the Chair of the Department or the Chair of the Honours Committee before choosing their *three-hundred* and *four-hundred* level courses.

The single-major (or joint-major) course-based Honours program consists of twenty courses with a minimum of eleven full-course equivalents (or eight if joint-major) in Psychology, including

Psychology 101

215

One from 221, 235, 271, 280
315 or 333 (see Notes)

Two *Basic* full-course equivalents (or one if joint-major) from 302a, 306, 312b, 351, 375a, 376b, 470

Two *Specialized* full-course equivalents (or one if joint-major) from 301, 320, 330a (see Notes), 340, 371, 382, 480

Three additional *three-hundred* or *four-hundred* level Psychology courses (or two if joint-major)

The single-major (or joint-major) thesis-based Honours program consists of twenty courses with a minimum of eleven full-course equivalents (or eight if joint-major) in Psychology, including

Psychology 101

215

One from 221, 235, 271, 280
315

Two *Basic* full-course equivalents (one for joint-major) from 302a, 306, 312b, 351, 375a, 376b, 470 (see Notes)

Two *Specialized* full-course equivalents (one for joint-major) from 301, 320, 330a (see Notes), 340, 371, 382, 480

402 (option of 401 if joint-major)
410

The General program consists of fifteen courses with a minimum of six full-course equivalents (or five if joint-major) in Psychology, including

Psychology 101

215

One from 221, 235, 271, 280

One *Basic* full-course equivalent from 302a, 306, 312b, 351, 375a, 376b, 470

One *Specialized* full-course equivalent from 301, 320, 330a (see Notes), 340, 371, 382, 480

One additional *three-hundred* or *four-hundred* level

Psychology course (delete this sixth course if joint-major)

Notes:

- For students who have completed *Psychology 101* after August 1987, a standing of C– (60%) or higher is required in *Psychology 101* in order to register in any other Psychology course; no credit is given for any upper level Psychology course completed at another University before a standing of C– or higher is received in *Psychology 101* or its equivalent.
- For students who completed *Psychology 101* before August 1987, a standing of C– (60%) or higher is required in *Psychology 101* in order to complete a major in Psychology.
- For all courses listed below with a *Psychology 215* prerequisite, the former *Psychology 211a* is considered an acceptable alternative prerequisite.
- For students who have completed the former *Psychology 311a*, the *Psychology 315* prerequisite will be waived.
- Students contemplating taking a *reading course* must consult with the course coordinator prior to April 30 of the preceding academic year.
- In addition to a variety of relevant courses in cognate disciplines, the following courses are highly recommended to students majoring in Psychology: *Computer Studies 100*, *Philosophy 105*, and *Philosophy 370*.
- Students doing independent research involving animal subjects in any Psychology course must complete

satisfactorily the University's Animal Care Course as part of the Psychology course requirements.

- For students majoring in Psychology, *Psychology 215* fulfills the Mathematics requirement for the B.Sc.
- *Psychology 470* is excluded from the list of Basic prerequisites for *Psychology 401* and *402*.
- Combined enrolment for *Psychology 401* and *402* is limited to twenty students for 1992-93.
- *Psychology 330a* will become *Psychology 430: Human Abilities* in 1993-94.
- *Psychology 333* requirement will be waived for students who have completed the former *Psychology 332b*.

Psychology 101

Introduction to psychology. A survey of the major areas of psychology, including its historical development and the methods of the science, the development of behaviour, learning and memory, biological and perceptual processes, individual differences and personality, and social determinants of behaviour. Two lectures weekly; two-hour laboratory fortnightly.

H.J. Stanford and staff

Psychology 215

Basic experimental methods and statistics. An introduction to methodological and statistical techniques in psychological research and the application of these techniques to empirical research in the discipline. Prerequisite: C- or higher in *Psychology 101*. Three lectures weekly; workshop or laboratory weekly.

J.B. Aubrey, F.A. Bleasdale

Psychology 221

Introduction to physiological and comparative psychology. A consideration of the methods and techniques of physiological and comparative psychology, including neuroanatomy, sensory and motor systems, and physiological mechanisms of behaviour. Prerequisite: C- or higher in *Psychology 101*. Two lectures weekly; seminar fortnightly.

C.T. Smith

Psychology 235

Personality theory. An examination of significant personality theories including Freudian, Neo-Freudian, Behaviourist, Third Force, Existentialist and Phenomenological theorists. Prerequisite:

C- or higher in *Psychology 101*. Lecture and seminar weekly.

B.L. Beach

Psychology 271

Social psychology. A discussion of contemporary research in attitude formation and change; group structure and processes; social influence processes; and interpersonal relations, including liking, prejudice, aggression, and altruism. Prerequisite: C- or higher in *Psychology 101*. Two lectures weekly; seminar fortnightly.

C.F. Sproule

Psychology 280

Child psychology. The development of the normal child from conception to adolescence, with emphasis on the empirical research and theoretical issues pertaining to child development and behaviour. A major component of the course will involve execution of a group research project. Prerequisite: C- or higher in *Psychology 101*. Two-hour lecture weekly; laboratory fortnightly.

P. Watson and staff

Psychology 301

Educational psychology. An examination of the ways in which the methods and content of psychology may be applied in the search for solutions to problems of teaching and learning, with emphasis on the theoretical and empirical bases for decisions about what constitutes sound educational practice. Prerequisite: any two-hundred level Psychology course. Two lectures weekly; seminar fortnightly.

R.B. Morris and staff

Psychology 302a

Psychology of language. An examination of current theories and research relevant to the psychological aspects of language, including such topics as language development, mental representation, generation and comprehension of language, and the relation between cognition and language. Prerequisite: *Psychology 215*. Two-hour lecture or laboratory; one-hour seminar weekly. (Students may not count both the former *Psychology 302* and *Psychology 302a* for credit.)

P. Watson

Psychology 306

Human information processing. An intensive examination of selected aspects of human behaviour which are analyzed by an information processing approach. Specific topics include detection, discrimination, decision making, sensory coding, pattern recognition, attention, and memory. Prerequisite: *Psychology 215*. Three hours weekly consisting of lecture or laboratory. (After 1986 students may not count both the former *Psychology 302* and *Psychology 306* for credit.)

D.G. Lowe

Psychology 312b

Special topics in research methodology. A course designed to allow in-depth study of methods of empirical research involved in a specific area of the discipline. Also included will be an introduction to computer analysis of empirical data. A major component of the course is the completion of a group research project. Prerequisite: *Psychology 215*. Two-hour lecture; one-hour workshop weekly.

P.T.P. Wong

Psychology 315

Advanced statistics and research design. An intensive study of the application of statistical techniques to a variety of research questions and experimental designs. The course will prepare students for *Psychology 401* and *402* where they will be required to design, analyze and interpret their research. Focus is on the laws of probability, techniques of analysis of variance and covariance, correlation, regression, and multivariate procedures. Prerequisite: *Psychology 215*. Three lectures and workshop weekly. (Students may not count both the former *Psychology 311a* and *Psychology 315* for credit.)

D.J. Kennett

Psychology 320

Applied learning. The application of principles of learning and motivation to practical situations including teaching, child rearing, public institutions, and animal training. The two areas of concentration are: a) basic principles of learning and their application; b) applied projects. Prerequisite: any two-hundred-level Psychology course. Two-hour lecture weekly; tutorial fortnightly.

R.G. Setterington

Psychology 330a

Human abilities. Integrates non-experimental and experimental approaches to the study of human abilities. Topics include theories of the structure of intelligence, the differentiation of abilities, and current perspectives (e.g., information processing) on the nature of intelligence/abilities. Special topics address sex differences, aging, and heredity/environment issues. Prerequisite: any full (or equivalent) two-hundred level Psychology course. Recommended: *Psychology 215*. Two lectures weekly; seminar fortnightly.

C.H. Ernest

Psychology 333

Advanced psychometrics. A detailed, intensive examination of the principles of test construction, involving item writing, scaling, item analysis, reliability, validity, and validity checks. Advanced topics include factor analysis and multiple regression. Introduction to SPSS computer programming, test administration, and test evaluation. In the second half of the course, a number of educational, psychological, and clinical instruments will be examined in depth. Prerequisite: *Psychology 215*. Two lectures weekly; two-hour laboratory fortnightly. (Students may not count for credit both the former *Psychology 332b* and *Psychology 333*.)

G.T. Reker

Psychology 340

Abnormal psychology. A survey of deviations and disorders in behaviour as investigated by experiments and other systematic procedures. Prerequisite: any two-hundred level Psychology course. Two lectures weekly; seminar fortnightly.

F.A. Bleasdale, D.J. Kennett

Psychology 351

Learning. In the first half of the course, major findings and issues in animal learning will be examined with the focus on classical and instrumental conditioning. In the second half, emphasis will be on the higher cognitive activities involved in human (verbal) learning, memory, and related areas. Prerequisite: *Psychology 215*. Two lectures weekly; two-hour laboratory or problem session fortnightly.

C.T. Smith, J.B. Aubrey

Psychology 371

Social cognition. (Not offered this year.)

Psychology-Biology 375a

Principles of the nervous system. An intensive coverage of the central nervous system, its anatomy and physiological interactions. The course emphasizes sub-cortical and cortical brain structures and their functional characteristics. Prerequisite: *Psychology 221* or an upper-level Biology course (which requires permission of the Department.) Two lectures and two-hour laboratory weekly.
G. Winocur

Psychology-Biology 376b

Neuropsychology. An examination of the relationship between brain function and psychological processes, drawing heavily from contemporary research involving humans and animals, and describing the neural bases for such psychological processes as learning, memory, language, and emotion. Special attention is given to behavioural abnormalities resulting from brain pathology. Prerequisite: *Psychology-Biology 375a*. Two lectures and two-hour laboratory weekly.
Staff

Psychology-Philosophy 377a

Philosophy of mind. (See Philosophy) Not counted as part of the minimum requirements for the General or Honours degrees in Psychology.

Psychology 382

Exceptional development. An overview of the major areas of exceptional development, including mental retardation, giftedness, sensory impairments, specific learning disabilities, behaviour problems, autism, multiple impairments, and problems of aging. Prerequisite: *Psychology 280*. Three lectures/discussions weekly.
G.T. Reker and staff

Psychology-Biology 386a

Animal behaviour. (See Biology) Not counted as part of the minimum requirements for the General or Honours degrees in Psychology.

Psychology 390, 391a, 392b

Reading course. A course designed to allow advanced students in Psychology to pursue independent study under the direction of departmental faculty. Not counted as part of the minimum requirements for the General or Honours degrees in Psychology. Prerequisite: *Psychology 215* and permission of the department. (See Notes)

Department Chair

Psychology 401

Joint-major Honours thesis. This is the same course as *Psychology 402* with the exception of the thesis being jointly supervised by and given a single course credit by both participating departments. Prerequisite: same as *Psychology 402*. Corequisite: *Psychology 410*. For part-time students, *Psychology 401* and *410* are to be completed as the final requirements toward the B.Sc. degree. Combined enrolment for *Psychology 401* and *402* is limited to 20 students for 1992-93. Students must secure agreement of faculty for supervision before March 31, 1992.

Psychology 402

Single-major Honours thesis. A double-credit course, for which a double fee is charged, during which students will design and execute a major piece of psychological research under the supervision of departmental faculty. Prerequisite: *Psychology 315*, one *Basic* full-course equivalent from *302a*, *306*, *312b* (highly recommended), *351*, *375a*, *376b* (note that *Psychology 470* is excluded from this list). Corequisite: *Psychology 410*. For part-time students, *Psychology 402* and *410* are to be completed as the final requirements toward the B.Sc. degree. Combined enrolment for *Psychology 401* and *402* is limited to 20 students for 1992-93. Students must secure agreement of faculty for supervision before March 31, 1992.

Psychology 410

Honours seminar. A seminar course in which students discuss empirical and theoretical issues related to their Honours thesis research, colloquia topics, and current issues in psychology under the direction of departmental faculty. Prerequisites: same as *Psychology 401* and *402*. Corequisite: *Psychology 401* or *402*. Two-hour seminar weekly.
F.A. Bleasdale

Psychology 470

History and systems of psychology. A survey of the history and systems of psychology through a discussion of the work of various authors who may be considered important in the history of psychology because of their contribution to systematic theory, research, or the organization of the discipline. Not sufficient as the only Psychology *Basic* prerequisite for *Psychology 401* or *402*. Prerequisite: Any four Psychology courses as prerequisites or corequisites. Three hours weekly.
R.B. Morris

Psychology 480

Adult development and aging. A detailed examination of psychological processes associated with development in adulthood and old age. Topics include biological and psychological theories of aging; research methods; age changes in memory, intelligence, personality, attitudes; stress, coping and health; successful aging; psychopathology; senile dementia; methods of assessment; methods of prevention and intervention. Prerequisite: Any four Psychology courses as prerequisites or corequisites, plus Honours standing. Two lectures weekly; seminar weekly.

J.B. Aubrey, P.T.P. Wong

Psychology 490, 491a, 492b

Reading course. A course designed to allow students in the fourth year of their Psychology program to pursue independent study under the direction of departmental faculty. (See **Notes**) Not counted as part of the minimum requirements for the Honours degree. Prerequisite: any four Psychology courses as prerequisites or corequisites, Honours standing, plus permission of the Department.

Department Chair

Psychology 495, 496a, 497b

Special topics. Courses offered on an occasional basis, designed to explore areas of the discipline not regularly available through the department's course offerings. A list of topics will be published early in the Winter Term of the preceding year. Prerequisite: Any four Psychology courses as prerequisites or corequisites plus Honours standing.

Department Chair

Science

Assoc. Dean P.F. Barrett is responsible for the administration of all general science courses.

Physics 150/155

Introductory astronomy. (Formerly *Science 200*) See *Physics 150/155*.

Science 200

Discovering science. Focus is on the process of discovery and on the interconnectedness of science and society. Historical and philosophical perspectives on the major advances in the sciences. A study of contributions of famous scientists,

scientific method, science and technology, science communication. Two-hour lecture weekly and two-hour tutorial alternating with a two-hour workshop weekly. Prerequisite: Three university credits. Enrolment limited to 25. Permission of instructor required. (Offered this year and in alternate years.)

M. Havas

Science 220

Evolution. (Not offered this year.)

Science-Geography 240

Geology. (Not offered this year.)

Science 350

Communicating science. (Offered in alternate years, but not this year.)

Science-Mathematics 380

History of mathematics. (Offered in alternate years, but not this year.)

Sociology
Professor and Chair of the Department

R.T. Bowles, B.SC. (BRIGHAM YOUNG), PH.D. (OREGON)

Professor Emeritus

R.F. White, B.A., B.A.SC., M.COMM. (TORONTO), PH.D. (CHICAGO)

Professors

P. Bandyopadhyay, B.A. (CALCUTTA), M.A. (OXFORD, MANCHESTER), PH.D. (MANCHESTER); A. Heitlinger, B.A. (KENT), PH.D. (LEICESTER); J. Hillman, M.A. (OXFORD), PH.D. (SUNY, BUFFALO) (on leave Winter Term 1993); R.A. Lockhart, M.A. (SIMON FRASER), PH.D. (ESSEX)

Associate Professors

C.V. Huxley, B.A. (YORK, ENG.), M.A. (SIMON FRASER), PH.D. (TORONTO); F. Nutch, M.A. (HAWAII), PH.D. (YORK)

Assistant Professors

D.M. Clarke, B.A. (TRENT), M.A. (MCMASTER), PH.D. (CARLETON); J.R. Conley, B.A. (ALBERTA), M.A. (TORONTO), PH.D. (CARLETON); S. Katz, B.A. (YORK), M.A. (MCGILL), PH.D. (YORK); S. Arat-Koc, B.A. (BOGAZICI), M.A. (WATERLOO), PH.D. (TORONTO); B.L. Marshall, B.A., M.A. (GUELPH), PH.D. (ALBERTA); G.M. Thibault, B.A., B.ED., M.A., PH.D. (DALHOUSIE)

Required Courses

The single-major Honours program consists of nineteen courses. Minimum nine courses in Sociology, including *Sociology 100*

210

220;

at least two *three-hundred* series courses including *321a/b** and *322a/b**; at least three *four-hundred* series courses.

Joint-major Honours program. Minimum seven courses in Sociology, including *Sociology 100*

210

220 (or 280 for SOC/CDS

Joint-major), plus three *three-hundred* or *four-hundred* series courses, including *321a/b** and *322a/b** and at least two *four-hundred* series courses.

*Required for admission to the fourth quarter of the Honours program.

Single-major General program. Minimum six courses in Sociology, including *Sociology 100*

210

220, plus two *three-hundred* series courses.

Joint-major General program. Minimum five courses in Sociology, including *Sociology 100*

210

220 (or 280 for SOC/CDS

Joint-major), plus one *three-hundred* series course.

Notes:

The program has two tiers: foundation courses in basic areas of Sociology at the 100 and 200 level and *Sociology 400* and *Sociology 321a/b*, *322a/b*; and other courses in more specialized areas of Sociology at the 300 and 400 levels.

The foundation courses aim to provide a basic grounding in the core theoretical and methodological aspects of the discipline. The specialized courses permit students to study in some detail particular substantive areas in sociology.

A standing of C- (60%) or higher is required in *Sociology 100* for registration in upper-year Sociology courses. Students enrolling in cross-listed courses have the option to substitute minimum 60% in *Sociology 100* with minimum 60% in the prerequisite for that particular Department or Program. The prerequisite is contained in the Calendar specification for the relevant courses.

Sociology 321a/b (Research Methods) and *322a/b* (Statistics), and *Sociology 400* (Contemporary sociological theory) are highly recommended for Honours majors and those wishing to enter graduate schools.

Students are advised to take *Sociology 389* if they are intending to enter professional or graduate schools in Canada.

Students intending to enter the fourth quarter of the Honours program will be expected to attend a meeting with the Department in the spring prior to their entry to discuss course selection.

Four-hundred series courses are open to Sociology majors who have completed ten university level courses including *Sociology 210* and *220*, and to those with Departmental permission.

Sociology 100

Introduction to social analysis. An introduction to the basic ideas of sociological analysis. Two-hour lecture, workshop weekly.

A. Heitlinger, F. Nutch and staff

Sociology 210

Classical sociological theory. An examination of the structure and scope of sociological theorizing. Conceptions of theory, method, and object of investigation will be explored with regard mainly to Marx, Weber and Durkheim. Prerequisite: C- or higher in *Sociology 100*.

Lecture, workshop weekly.

J. Hillman, B. Marshall

Sociology 220

Social inequality: class, gender, ethnicity. Introduction to the sociological study of social inequality, concentrating on class, gender, and ethnicity as relations of domination. The focus will be on first, the structural analysis of these social relationships, their links with each other, and their effects on societies and individuals, and second, the conditions for movements of resistance and change. Prerequisite: C- or higher in *Sociology 100*.

Lecture weekly, workshop fortnightly.

J. Conley

Sociology 230

Self and society. An examination of the relationship between the individual and society. The first term investigates interactionist, dramaturgical and ethnographic frameworks. Topics include the social construction of identity, body language, socialization, power relations and marginality. The second term explores the cultural contexts which shape the meanings of personal experience. Prerequisite: C- or higher in *Sociology 100*. Lecture, seminar weekly.

S. Katz

Sociology 241

Family and kinship. Application of sociological frameworks to the analysis of different family forms, internal family processes and the societal contexts which shape families. Canadian and comparative materials will be used. Prerequisite: C- or higher in *Sociology 100*. Lecture, workshop weekly.

R.T. Bowles

Sociology 245

Culture and society. An examination of the major forms of cultural experiences, products, and practices in contemporary societies. Topics include ideologies, cultural divisions, the culture industries, and their relation to broader social processes. Prerequisite: C- or higher in *Sociology 100*. Lecture, seminar weekly.

D. Clarke

Sociology-Comparative Development 280

Society and economy. Industrialization and development in different societies. The peasantry and economic growth. Social classes, social movements and social change. The role of the state. Comparative analysis of trends in the advanced societies. Prerequisite: C- or higher in *Sociology 100*. Lecture, seminar weekly.

Sociology 321b

Research methods. An introduction to the major research methods employed in sociological research. Pre- or co-requisite: *Sociology 210* or permission of the instructor. Lecture, seminar weekly.

F. Nutch

Sociology 322a

Statistics. An introduction to basic statistics and their application in sociological research. Pre- or co-requisite: *Sociology 210* or permission of the instructor. Lecture, seminar weekly.

F. Nutch

Sociology-Administration 333a

Social organization and bureaucracy. An overview of different approaches to the analysis of complex organization including classical theories of bureaucracy, the managerial tradition and perspectives drawn from contemporary sociology. Selected case studies are examined with special emphasis on the analysis of the modern enterprise. Prerequisite: C- or higher in *Sociology 100*, or *Administration 250*. Lecture, seminar weekly.

Sociology 334b

Industrial sociology. Work relations in Canada. Focus on the labour process, occupational roles and ideologies; innovation and technological change, industrial conflict, collective bargaining and state policy, trade union structure, and leadership, white-collar unionism and the professions. Prerequisite: C- or higher in *Sociology 100*, or *Administration 250*. Lecture, seminar weekly.

J. Conley

Sociology-Canadian Studies 340

Sociology of education. An examination of the role of schooling with particular emphasis on the relationship between family, education and society, education and inequality, the social organization of knowledge, education and social change, the politics of education. Prerequisite: C- or higher in *Sociology 100* or *Canadian Studies 200* or *300*. Lecture, workshop weekly.

G. Thibault

Sociology-Women's Studies 342

Women, men and society. An analysis of gender and gender relations. Issues examined include masculinity and femininity, domestic and paid labour, health and reproduction and the feminist movement. Prerequisite: C- or higher in *Sociology 100* or *Women's Studies 200*. Lecture, workshop weekly.

Sociology 347

Sociology of religion. Prerequisite: C- or higher in *Sociology 100*. (Not offered this year.)

Sociology-Cultural Studies 350

Modern social theory. (See Cultural Studies)

Sociology 361

Deviance and social control. This course examines major sociological theories and debates about deviant and criminal behaviour; informal modes of social control as they relate to gender and

deviance or youth subcultures; and formal modes of social control including crime, policing and the justice system. Prerequisite: C- or higher in *Sociology 100*. Lecture, seminar weekly.

Sociology 363

Sociology of health and illness. Prerequisite: C- or higher in *Sociology 100*. (Not offered this year.)

Sociology 366

Analysis of social policy. An examination of the expanding role of the state in shaping socio-economic conditions and social welfare. Policy formulation and implementation will be assessed with emphasis on education, health, housing and welfare. Prerequisite: C- or higher in *Sociology 100*. Lecture, seminar weekly.

R.A. Lockhart

Sociology 380

State and class. Prerequisite: C- or higher in *Sociology 100*. (Not offered this year.)

Sociology-Comparative Development Studies 382

Historical sociology. An introduction to the comparative study and analysis of past societies. Elements of social structure, economic practices, political authority and the cultural symbols, beliefs and products will be studied. This year the focus is on Ancient Israel and Medieval Islamic societies. Prerequisite: C- or higher in *Sociology 100* or *Comparative Development 200*.

P. Bandyopadhyay

Sociology 383a/b

Urban culture. Prerequisite: C- or higher in *Sociology 100*. (Not offered this year.)

Sociology 384a/b

Urban social structure. Prerequisite: C- or higher in *Sociology 100*. (Not offered this year.)

Sociology-Canadian Studies 389

The social structure of Canada. Topics to be covered include class and stratification, the national question, regional differences and tensions, state organization and the formation of culture. Prerequisite: C- or higher in *Sociology 100* or *Canadian Studies 200* or *300*. Lecture, seminar weekly.

R.A. Lockhart

Sociology 395

Special topics in sociological investigation. This year: *Sociology-Women's Studies 3952*. Immigrant women in Canada. (See Women's Studies)

S. Arat-Koc

Sociology 396a, 397b, 398c

Special topics in sociological investigation. (Not offered this year.)

Sociology 400

Contemporary sociological theory. Advanced analysis of major questions in contemporary sociological theory. This year, the focus will be on debates around modernity in sociological theory. A broad spectrum of issues (including appropriate methodologies, the conceptualization of subjectivity, the relationship of theory and politics, and the challenge of feminist and postmodern theories) flow out of these debates, and will be examined through an in-depth analysis of one or two key figures in contemporary theory. Prerequisite: *Sociology 210* or permission of the instructor. Two-hour seminar weekly.

B. Marshall

Sociology 402

Honours thesis. A specific scholarly project on a well-defined topic, for which double credit will be given, to be worked out in consultation with the student's Honours supervisor. Prerequisite: 75% (B) average in sociology courses. Regular meetings with students writing Honours thesis.

Sociology-Cultural Studies 440

Special topics in the sociology of culture and knowledge. This year the course explores the theme of culture and knowledge as social representation by examining the structuralist and Marxist traditions. In evaluating the relevance of these traditions to areas such as social order, Western imperialism, feminism and postmodern debates, the course develops the theoretical skills specific to the analysis of contemporary cultural politics. Prerequisite: *Sociology 210* or requirements of Cultural Studies Honours Program. Seminar weekly.

S. Katz

Sociology-Canadian Studies 445

The media and communications in Canada. An examination and analysis of the communications industries and policies of Canada. The growth and development of book, newspaper and periodical publishing, radio, television, telecommunications and film. Two-hour seminar weekly.

D. Clarke

Sociology-Women's Studies 461a

Women and deviance. A study of the ways in which women are labelled and treated as deviant by virtue of their gender. Topics include the body and reproduction, mental and physical health and crime. Prerequisite: *Sociology 342* or *361*. Two-hour seminar weekly.

G. Thibault

Sociology-Women's Studies 462b

Women and social policy. A study of policy in areas which implicate women; such as health care and family welfare, sexuality, corrections and pay equity. Prerequisite: *Sociology 342* or *461a*. Two-hour seminar weekly.

G. Thibault

Sociology 480

Comparative social analysis. This year the course entails a comparative study of social structure and policy implementation in the United Kingdom, Australia and Canada. Emphasis will be placed on such policy topics as provisions of welfare according to class and gender, women's equality programs, demographic trends, immigration and child care. Prerequisite: *Sociology 210* or permission of the instructor. Two-hour seminar weekly.

A. Heitlinger

Sociology 495

Special topics in sociological investigation. (Not offered this year.)

Sociology 4951

Special topics in sociological theory. Prerequisite: *Sociology 210* or permission of the instructor. (Not offered this year.)

Sociology-Native Studies 496a

Special topics in sociological investigation. This year: Human development in community context. A systematic review and critique of development theory and application models. The assessment of community needs, wants and capacities is emphasized in order to highlight the importance of cultural particularism and appropriateness as a critical variable in "alternative" forms of development plan-

ning and implementation. Both the positive and negative experiences of Indigenous communities will be used to exemplify the need for "alternative" theories and models of human development. Seminar weekly.

R.A. Lockhart

Sociology-Native Studies 497b

Special topics in sociological investigation. This year: Community development in Native Canadian context. The course will focus on the current research projects of Sociology and Native Studies faculty with respect to Native Canadian social, economic and political development. These research projects are particularly informative with respect to the current Native aspirations for special nationhood status and self-governmental institutions. Seminar weekly.

R.A. Lockhart

Reading Courses

Both full- and half-year reading courses are available as *Sociology 390, 391a, 392b, 393c, 490, 491a, 492b, 493c*. Registration in reading courses is contingent on instructor's permission and Departmental approval in advance of course registration.

Statistics
Mathematics-Statistics 150

A non-calculus-based introduction to probability and statistical methods. (See Mathematics)

Mathematics-Statistics 251a

Probability and statistics I. (See Mathematics)

Mathematics-Statistics 252b

Probability and statistics II. (See Mathematics)

Computer Studies-Mathematics-Statistics 351

Linear statistical models. (See Mathematics)

Mathematics-Statistics 451a

Sampling theory. (See Mathematics)

Mathematics-Statistics 452b

Theory of inference. (See Mathematics)

Vanier Chair

Vanier Professor

T.H.B. Symons, O.C., B.A. (TORONTO), M.A. (OXFORD), LL.D. (CONCORDIA, DALHOUSIE, LAURENTIAN, MANITOBA, MOUNT ALLISON, NEW BRUNSWICK, PRINCE EDWARD ISLAND, TRENT, WILFRID LAURIER, YORK), D.U. (OTTAWA), D.LITT. (COLOMBO), DIPLOME D'ETUDES COLLEGIALES (DAWSON), F.R.S.C.

The present occupant of the Vanier Chair is Professor T.H.B. Symons, founding President of Trent University. Professor Symons is perhaps best known for his two publications, *To Know Ourselves* (1975) and (with James Page) *Some Questions of Balance* (1984), both of which have sparked considerable interest and controversy within the Canadian university community. He is also the author of publications dealing with human rights, international relations, language policy, education, native and northern studies, cultural pluralism, and other aspects of public policy in Canada. Professor Symons has served as Chairman of the Commission on Canadian Studies (1972-1984), Vice-President of the Social Sciences and Humanities Research Council (1978-1984), Chairman of the National Library Advisory Board (1987-1990), Chairman of the Ontario Human Rights Commission (1975-1978), Chairman of the International Board of United World Colleges (1980-1986), Chairman of the Association of Commonwealth Universities, as a member of the Federal Cultural Policy Review Committee (1979-1982) and of the Canada Council (1976-1979), Chairman of the Canadian Polar Research Commission Study (1988), and Chairman of the Canadian Educational Standards Institute (1986-1991). Since 1978 he has been a member of the Advisory Committee on Academic Relations for the Department of External Affairs and, since 1982, Special Adviser on Human Rights to the Secretary of State. He is currently Chairman of the Historic Sites and Monuments Board of Canada, and of the National Statistics Council. During the academic year 1992-93, he will be a Visiting Fellow at the Centre of International Studies at Cambridge University while on sabbatical leave. See Vanier Seminar, *Canadian Studies-Cultural Studies* 413.

Women's Studies

Chair of the Program

B. Marshall, M.A. (GUELPH), PH.D. (ALBERTA)

Associate Professors

J. Sangster, B.A. (TRENT), M.A., PH.D. (MCMASTER); C. Verduyn, B.A. (TRENT), M.A., PH.D. (OTTAWA) (on leave Fall Term 1992); S. Arat-Koc, B.A. (BOGAZICI), M.A. (WATERLOO), PH.D. (TORONTO); W. Lem, M.A., PH.D. (TORONTO)

Associate Faculty

Anthropology, L. Hubbell; *Canadian Studies*, M. Lacombe; *English Literature*, J. Buckman; *Sociology*, G. Thibault; *History*, D. Evenden

The Women's Studies Program provides an opportunity for students to pursue a joint-major Honours degree by combining Women's Studies core and support courses with a joint-major in another discipline.

Required Courses

The joint-major Honours program consists of nineteen or twenty full courses, depending upon the number of courses required by the paired discipline. Minimum seven courses in Women's Studies including *Women's Studies 200*, *Women's Studies 300*, *Women's Studies 400* three other core courses. One other course, core or support.

Joint-major General program. Minimum five Women's Studies courses, including *Women's Studies 200*, *Women's Studies 300* two other core courses, one other course, core or support.

Please note that some Women's Studies core and support courses have prerequisites not listed here.

Students may include no more than one reading course in the minimum five Women's Studies courses required for the General joint-major, and no more than two in the minimum seven Women's Studies courses required for the Honours joint-major.

Core Courses***Women's Studies 200***

Introduction to women's studies. An interdisciplinary introduction to Women's Studies. Areas to be examined include feminist and anti-feminist perspectives on sex and gender; the roles of class, race and sexual orientation in shaping women's experience; women's subordination in the family, wage-work, popular culture; feminist approaches to contemporary issues like violence, poverty, pornography, reproductive technologies. Open only to students with a minimum of three university credits.

S. Arat-Koc and staff

Women's Studies-Classical Civilization 231a

The experience of Greek women in the Archaic and Classical Period (c. 700-300 B.C.). (See Classical Studies)

Women's Studies-Classical Civilization 232b

The role in society of Roman women in the late Republican and Imperial period (100 B.C.-A.D. 300). (See Classical Studies)

Women's Studies-Canadian Studies 275

Women in Canada. (See Canadian Studies)

Women's Studies-Canadian Studies 280

Canadian women's writing. (See Canadian Studies)

Women's Studies 300

Feminist theory. An examination of the development of feminist theory through classic texts and the debates those texts have inspired. The course focuses on key debates in Marxism and socialist feminism, literary theory, psychoanalysis, and feminist epistemology. Lecture, seminar weekly. Prerequisite: *Women's Studies 200* or permission of instructor.

Staff

Women's Studies-English 310

Gender and literature. (See English)

Women's Studies-Canadian Studies-History 316

Women in North America. (See History)

Women's Studies-Comparative Development 325

Women and development. An exploration of the theoretical and analytical issues in the study of women and development, using case material from the "Third World" as well as regions within the "First World." Prerequisite: *Comparative*

Development 100 or *200*, *Women's Studies 200* or permission of the instructor.

W. Lem

Women's Studies-Sociology 342

Women, men and society. (See Sociology)

Women's Studies 390, 391a, 392b, 393c

Reading course. Designed to pursue special research interests in women's studies largely through independent study. Details to be arranged in consultation with Women's Studies staff and proposal to be submitted to Program for approval.

Women's Studies 395.

Special topics: see Program Office.

Women's Studies-History 3951

Special topic. European women's history. (See History)

Women's Studies-Sociology 3952

Special topic: Immigrant women in Canada. An exploration of different groups of immigrant women, beginning with early French and British immigrants and continuing with more recent arrivals. Using both academic scholarly literature and material in women's own voice, the course will focus on the social, economic, and political and legal mechanisms which shape the status, conditions and lives of immigrant women in Canada. Prerequisite: *Sociology 100* or *Women's Studies 200* or permission of the instructor.

S. Arat-Koc

Women's Studies 400

Feminist praxis. Analysis of the issues, struggles, debates, conflicts and forms of organization which have shaped the first and second waves of feminism in North American and feminist movements in Third World today. The course will focus on the articulation of the feminist project with class and racial/national projects. Prerequisite: *Women's Studies 200* and *Women's Studies 300*.

S. Arat-Koc

Women's Studies 401

Honours thesis. Single credit. Consult Program Office for information and procedure.

Women's Studies-Anthropology 422

Women: an anthropological perspective. (See Anthropology)

Women's Studies-Sociology 461a

Women and deviance. (See Sociology)

Women's Studies-Sociology 462b

Women and social policy. (See Sociology)

Women's Studies 490, 491a, 492b, 493c
Reading course. Consult Program Office
for registration and procedure.

Support courses

Women's Studies Program Support
Courses are subject to yearly variation.
Contact Program Office for current year's
listings.



Graduate Academic Calendar

(See Undergraduate Academic Calendar for listing of observed holidays)

Spring Term 1992

May	4	Monday	Registration for Spring Term
May	29	Friday	Spring Convocation

Fall Term 1992

September	8	Tuesday	Registration for Fall Term
September	18	Friday	<i>Last date for oral examinations for Fall Convocation</i>
September	25	Friday	<i>Last date for submission of Master's theses to Office of Research and Graduate Studies for Fall Convocation</i>
September	28	Monday	<i>Last date for recommendations for Master's degrees for Fall Convocation</i>
October	24	Saturday	Fall Convocation

Winter Term 1993

January	11	Monday	Registration for Winter Term
April	16	Friday	<i>Last date for oral examinations for Spring Convocation</i>
April	23	Friday	<i>Last date for submission of Master's theses to Office of Research and Graduate Studies for Spring Convocation</i>
April	26	Monday	<i>Last date for recommendations for Master's degrees for Spring Convocation</i>
May	3	Monday	Registration for Spring Term
June	4	Friday	Spring Convocation

Graduate Study at Trent University

Postal Address:

Office of Research and Graduate Studies
Trent University
Peterborough, Ontario
K9J 7B8

Location:

Room 2.69, Otonabee College,
Nassau Campus

Telephones:

Office of Research and Graduate Studies
..... (705) 748-1245
C.H. Taylor, *Associate Dean of
Research and Graduate Studies*
..... (705) 748-1478
Mrs. P. Strode, *Graduate Studies
Officer* (705) 748-1346

E-Mail I.D.:

PSTRODE@TRENTU.CA

Facsimile:

(705) 748-1625

Telex:

06-962824

Administration

The Office of Research and Graduate Studies is responsible for the administration of graduate degree programs offered at Trent University and the coordination and promotion of research and scholarship within the University.

The Office is administered by the Associate Dean of Research and Graduate Studies and the Graduate Studies Officer and University Research Officer in co-operation with University committees for specific areas.

The Committee on Graduate Studies consists of members of faculty and graduate students from various disciplines, and this body makes executive decisions regarding graduate admissions and the application of general regulations, standards and procedures.

Graduate Academic Information

Programs of Study

Programs of graduate study are introduced at Trent on a selective basis. Each program has been approved by the *Appraisals Committee of the Ontario Council on Graduate Studies* to ensure that it meets the high standards required for graduate studies in Ontario universities.

The Master of Arts degree is offered in Anthropology, Canadian Heritage and Development Studies, and Methodologies for the Study of Western History and Culture, and the Master of Science in Watershed Ecosystems and Freshwater Science.

The Anthropology program stresses Archaeology. The program in Canadian Heritage and Development Studies involves study in one of three interdisciplinary areas: Native Studies; Environmental and Heritage Studies; Regions and Regionalism.

Graduates in Biology, Geography, or Environmental Science may enrol in Trent's Watershed Ecosystems Program. In addition, graduates in Chemistry, Environmental Science, Physics, Biology and Geography may enrol in Freshwater Science which is a special emphasis program administered by the Watershed Ecosystems Program. These students will receive a Master of Science in their specialities with a notation of Emphasis in Freshwater Science.

In addition to degree programs at Trent, an agreement with Queen's University at Kingston allows for selective enrolment at the Master's and Doctoral levels in programs at Queen's with actual study and research supervision under Trent faculty on Trent's campus.

Complete information on each program offered under the auspices of the Office of Research and Graduate Studies is presented in the Graduate Programs of Study section of this calendar. Prospective applicants should note particularly the admission requirements, the fields in which advanced study and research may be undertaken, and the program requirements, in addition to the regulations of the Graduate Studies Committee which are outlined in this calendar.

Application

Initial enquiries concerning graduate study at Trent University may be made to the departments which offer graduate programs. However, applications for admission to graduate studies must be made on the prescribed form and submitted to: Office of Research and Graduate Studies
Trent University
Peterborough, Ontario
Canada
K9J 7B8

The deadline for receipt of applications for fall admission to graduate study is February 15. In any case, students are urged to apply at an early date. Late applications from students who meet our minimum admission standards will be considered in the order received when vacancies remain in the chosen program.

Candidates must arrange to have submitted to the Office of Research and Graduate Studies by the appropriate officials of the university or universities they have attended, official transcripts showing the subjects studied and the standing received in all undergraduate and any graduate work so far undertaken. Normally, applications should be supported by letters of recommendation from at least two faculty members who are familiar with the work of the candidate. Letters of recommendation must be mailed directly by faculty members.

Applicants must list courses currently being taken and must arrange to have the final standings in them forwarded as soon as the results become available.

Admission

At least an upper second class standing (B+) in the final year at the Honours level in the department or interdisciplinary areas of the program in which the graduate degree is being sought at Trent, or its equivalent, will be required for approval of the admission of candidates for the Master's degree. Candidates who do not meet this requirement should consult the Graduate Program Director for guidance in developing a program which would make them eligible for consideration for admission to a graduate program. They will not become candidates for the Master's degree until their academic standing has been brought up to the Honours level.

All applications will be initially examined and evaluated by the appropriate programs. All supporting documents (transcripts, letters of reference, etc.) must

be received before any application can receive formal consideration. A program's recommendation for those students being recommended for admission will be forwarded to the Office of Research and Graduate Studies whereupon the completed applications will be considered by the Graduate Studies Committee. The Office of Research and Graduate Studies will officially notify each applicant of the action taken on his or her application.

Official letters of acceptance are only for the academic year indicated. Successful applicants must reply in writing indicating whether or not they accept the offer of admission. If they are unable to commence studies in the term agreed upon, the programs reserve the right to reconsider their acceptance.

Transfer of Credit

Graduate courses completed at another institution may be accepted in partial fulfilment of Trent's degree requirements. Credit for such work will be determined by the Graduate Studies Committee on the recommendation of the program concerned.

Qualifying Year

Students whose background is not sufficient for direct entry into a Master's program may be admitted to a make-up or *Qualifying Year*. Applicants possessing undergraduate degrees which are comparable to an Ordinary (3-year) degree from Trent University (rather than an Honours degree) will normally be admitted to a Qualifying Year. Successful completion of a Qualifying Year recommended by the program concerned will permit the student to compete for admission on an equal basis with other applicants. Admission to a Master's program is not, however, guaranteed.

Language Proficiency

The Graduate Studies Committee may require a test of proficiency in the English language for candidates whose mother tongue is not English, by means of one of the following:

- a) The English Language Institute, Testing and Certification Div., North Univ. Bldg., University of Michigan, Ann Arbor, Michigan 48104, U.S.A.
 - b) TOEFL, Educational Testing Service, Princeton, New Jersey 08540, U.S.A.
- Applicants are expected to make their own arrangements for taking this test by con-

tacting the centre in their locale or by writing to one of the above.

Where the language of instruction in the undergraduate program has been English, the Graduate Studies Committee is prepared to consider evidence of proficiency in the use of the English language other than that provided by the tests referred to above.

Graduate Record Examinations

Applicants for admission whose academic credentials are difficult to assess may be asked to take the Graduate Record Examination administered by the Educational Testing Service, Princeton, N.J. 08540, U.S.A. Students are expected to make their own arrangements and will bear the cost of taking the Graduate Record Examinations.

Master's Degree Regulations

Registration

Students whose applications for admission to graduate study have been approved for full- (or part-) time study should present themselves for registration on the dates recorded in the calendar. Graduate students, full- or part-time, proceeding to a degree must maintain continuous registration, either active or inactive, in each successive term from the time of initial admission until the end of term during which the requirements for the degree are completed.

Registration consists of the completion of a registration form which requires a statement of the program of studies to be followed for the current year, the name of the student's supervisor, the names of the members of the student's supervisory committee, and the thesis topic. If it is not possible to state the thesis topic at the time of registration the field of research should be indicated. The registration form must be signed by the director of the program and the Graduate Studies Officer.

A personal data form must be completed at registration and revised in subsequent years.

Full-time students beyond second year, and part-time students beyond third year, carry out registration on a per term basis.

Failure to Register

Graduate students who fail to register for any term and have not been given an of-

ficial leave of absence will be considered to have withdrawn voluntarily from their program.

For subsequent reinstatement, the student must make application to the Office of Research and Graduate Studies, after which the program must make a written recommendation, outlining any academic conditions which it deems necessary.

Full-Time, Part-Time and Inactive Status

A graduate student may be either full-time, part-time or inactive.

Full-Time

A full-time student is one who

- (i) is designated by the University as a full-time graduate student;
- (ii) is geographically available and visits the campus regularly;
- (iii) is not regularly employed on other work for more than an average of 10 hours per week for any period for which he/she is registered as a full time graduate student, and is not employed outside the University except by permission of his/her supervisor; and
- (iv) in the light of the foregoing identifies himself/herself as a full-time graduate student.

Note: It is understood that a graduate student may be absent from the University while still under supervision (e.g., visiting libraries, attending a graduate course at another institution, doing field work). If such periods of absence exceed four weeks in any term written approval must be obtained from the program director and the Graduate Studies Officer. Irrespective of this provision, a student conducting experimental work in an external laboratory would not normally be considered as a full-time student except by written permission of the Graduate Studies Officer upon recommendation of the supervisor.

If the student is employed on a Graduate Assistantship, the 10 hours per week should represent the *total time* spent by the student in connection with the appointment; that is, it includes time spent on preparation work, reading set assignments, marking examinations, etc.

Students who at any time cease to meet all of the criteria for full-time status, but are in good standing and wish to continue with their studies, must change to

part-time status. If this change in status takes place during a term, adjustments to time limits and fees are made effective from the start of the next term. Such a change requires the written consent of the student's supervisor and Graduate Program Director.

Part-Time

Any student is considered to be part-time who does not meet the conditions for a full-time student. Normally, a part-time student will be taking considerably less than a complete program each academic year.

If a student changes his/her status from part-time to full-time, he/she must re-register. Such a change requires the written consent of the student's supervisor.

Inactive / Leave of Absence

Students who have valid reasons for not registering for a term may apply for permission exempting them from registering by:

- 1) writing to the Graduate Studies Officer stating the reasons for an exemption; and
- 2) requesting a statement from their supervisor that they will not be on campus (involved in activities related to graduate courses or the thesis) for four months, will receive no supervision, and will not use any university facilities (i.e., library, laboratories, computer centre, or receive any type of supervision through correspondence). The statement, which must be forwarded to the Graduate Studies Officer, must confirm that *no thesis work of any kind will be pursued* during the term in question. Exemptions, if granted, will be for one term only.

Residence Requirements

Full-time Master's degree candidates shall spend a minimum of one year as full-time students after completion of an Honours program. A student may register as full-time off-campus provided that such an arrangement has been approved by the Graduate Studies Officer (see previous section). For part-time graduate students two years of part-time study shall be deemed equivalent to one year of full-time study, due adjustment being made for any time spent as a full-time student during the summer.

Time Limits

The maximum time allowed to complete all requirements for the Master's degree from initial registration is three years for a full-time candidate or five years for a part-time candidate. (Note: see regulations pertaining to full-time/part-time status.)

When students change status from full-time to part-time (or vice-versa) the time remaining to complete degree requirements will be adjusted with one term of full-time study being equivalent to two terms of part-time study. Such adjustments will take effect at the start of the next term. In all cases, the total time to complete all degree requirements will not exceed five years.

In the case of full-time students, the completion of course work is an absolute requirement by the end of two years in order to continue on in the program. After two and one-half years in the program a warning will be given regarding the three year limit.

Extension of Time Limits

No extensions of the prescribed time limits will be granted except under extraordinary circumstances. In such instances, a Time Limit Extension Request form must be completed by the student in consultation with the supervisor and submitted to the Graduate Program Director. If the Director supports the request, a recommendation will be referred to the Associate Dean for approval.

College Affiliation

Every student is required to have college affiliation at Trent. All graduate students (full- and part-time) will be assigned to Peter Robinson College where arrangements have been made for access to Common Room and other facilities.

Full-time graduate students may request to be assigned or transferred to another of Trent's five residential colleges (in particular for purposes such as accommodation in residence or donning). Part-time graduate students may request to be assigned or transferred to Julian Blackburn College.

The colleges sponsor a series of guest lectures, sports and social activities, and have common areas for resident/non-resident students.

Residence Accommodation

A limited number of residence spaces are reserved for first year graduate students. The rooms offered are in predominantly undergraduate residences and the time of occupancy is normally the undergraduate academic year. Graduate room allocations are made by the Office of Research and Graduate Studies. All rooms must be confirmed by July 10, 1992 by completion of a College Application Form and payment of a residence deposit in the amount of \$200.

Supervision

A supervisory committee for each graduate student shall be named by the graduate studies committee of the program to which the candidate is attached and shall consist of the thesis supervisor and two other members of the program, with the supervisor as committee Chair.

The role of the committee shall be:

- a) To ensure that reasonable progress is being made by the student in his/her research and course work. The supervisor shall submit a report on this progress to the Graduate Studies Officer at the end of each Winter Term.
- b) To approve the thesis topic and any prescribed work.
- c) To recommend to the Graduate Studies Officer appropriate action (withdrawal, further research or course work) in the light of the student's progress.
- d) To suggest the membership of the thesis examining committee when the final preparation of the thesis is in hand.

If a student's supervisor expects to be absent from the University for an extended period of time (*i.e.*, two months or more) it is his/her responsibility either to make suitable arrangements with the student and the program for the continued supervision of the student or to request the program to appoint another supervisor. Such arrangements should be communicated to the Office of Research and Graduate Studies before the supervisor leaves the University.

Guidelines for graduate programs, graduate students, faculty and graduate studies committees are available from the Office of Research and Graduate Studies.

Research and Thesis Requirement

Normally a candidate for a Master's degree will undertake research and write a thesis. In the thesis students should give evidence

that they have made a logical and intelligent approach to the selected problem, and the language of the thesis should be clear and precise. The thesis should be as original as possible. However, the goal of originality should not be stressed to the extent that it precludes the examination of old subjects in new ways; nor should it elevate the "undone" for its own sake, lest the obscure and trivial be emphasized.

In exceptional cases the thesis may be replaced by other appropriate course work. When the degree is taken by course work, a comprehensive examination may be required.

Although a thesis may be submitted at any time, candidates should note the thesis submission deadlines for the fall and spring convocations in the academic calendar.

Courses

Normally a student will be required to complete, with at least a second class standing (B-), no fewer than two graduate courses. This is the minimum course requirement for Master's students. A program may prescribe additional graduate courses and the student may be required or permitted by the program to take courses in addition to those prescribed for credit. Subject to a review of the candidate's competence in his/her major subject, a candidate may be permitted to take one course in another department/program.

Course Changes

A course change is the addition and/or deletion of one or more individual courses by a registered graduate student. A course change is the only acceptable procedure for revising a graduate student's registration. All course changes must be approved and authorized by the program director and forwarded to the Graduate Studies Officer by the last day in October.

Audit Courses

Upon the recommendation of his/her supervisor, and with the permission of the Graduate Studies Officer, a graduate student may register to attend a course without receiving a grade or credit. Details of the policy and regulations for audit students are available from the Office of Research and Graduate Studies. It should be noted in particular that no grade will be assigned, that permission must be obtained from the course instructor and that a fee is charged.

Grading System for Courses

The minimum passing grade for required graduate courses is second class (B-). Effective with the 1982 spring academic session, the letter grades and their numerical ranges are: A+ = 100-90; A = 89-85; A- = 84-80; B+ = 79-77; B = 76-73; B- = 72-70; F = 69-0.

In addition to alphabetical or numerical grades, the following symbols may also be used on grade reports. These symbols are also used on the academic transcript of students: AEG (Aegrotat Pass); DRP (Course Dropped); AUD (Audit Course); WDN (Withdrawn); INC (Incomplete).

Aegrotat Standing and Incomplete Standing

Petitions for special consideration because of sickness or misfortune at any time during the academic session should be sent to the Graduate Studies Officer as soon as possible, together with medical certificates or other evidence. The University may grant aegrotat standing, or permission to write special examinations, but because aegrotat standing must be based on the achievements of the student throughout the whole of the academic year, it is not appropriate to request such standing as a result of prolonged illness. (See also withdrawal section.)

Incomplete standing will be granted only in cases where a student is unable to complete in proper time the work requirement of a course for reasons beyond the student's control such as illness, physical or emotional disability, loss of or damage to work already completed or in progress, or adverse seasonal effects on field or laboratory projects. Failure by a student to organize the workload in a course will not in itself be considered an adequate reason. Students wishing temporary incomplete standing at the end of a course must petition through the program involved and, where possible, properly support and document the reasons.

Incomplete should not be confused with aegrotat which applies only in cases where students are unable, through similar physical or emotional disability, to write or perform in final examinations.

Courses at Other Universities

Under certain circumstances it is permissible for a student admitted to a degree program and registered at one Ontario university to enrol in approved credit courses at another university. Credit will

be granted only if written permission is received from the Associate Dean and the program director prior to registration for the course work. Application forms for inter-university co-operation are available in the Graduate Studies Office.

Language Requirement

Some programs may require a reading knowledge of a language other than English. Consult the program listings for specific language requirements.

Grade Reports

Program directors must submit a grade report on each student at the end of every academic year indicating grades received in course work. A copy of the report will be mailed to the student by the Graduate Studies Officer.

Unsatisfactory Work

On the recommendation of the program, approved by the Graduate Studies Committee, a student whose work is unsatisfactory may at any time be required to withdraw from the University.

Appeals

Appeals procedures for graduate students parallel those established for undergraduates (see Undergraduate section of calendar). In general, the procedures emphasize consultation and co-operation among the individuals most intimately concerned with any problem, while still allowing for an impartial review of difficult cases. Thus, problems concerning individual courses should first be discussed with the instructor, those concerned with course programs should be discussed with the student's supervisory committee, and problems concerned with the application of program or University regulations should be brought to the attention of the program director or the Graduate Studies Committee. Review is accomplished by the impartial body with the best knowledge of the particular problem, *e.g.*, the program director, the Graduate Studies Committee, or, in exceptional cases, the Special Appeals Committee.

Principles Governing Submission and Examination of Theses

The thesis will be defended by the candidate in an oral examination before a thesis examining committee. In the examination students will be required to give evidence that they have a thorough

knowledge of the field in which they have been working.

1. Submission of Thesis for Examination

- 1.1 Supervisory committee members shall review a complete typed version of the thesis and send a signed form to the Program Director verifying that the thesis should proceed to examination.
- 1.2 Depending on program requirements, at least 3-5 copies of the thesis shall be deposited with the Program Director not less than ten weeks before the convocation at which the candidate expects to receive the degree.

2. Examining Committee

- 2.1 After the supervisory committee has confirmed that the thesis can proceed to examination, the supervisor identifies three potential external examiners to participate in the thesis examination and defence. The Examining Committee is named by the Graduate Program Director, in consultation with the Associate Dean, and the date, place and time of the defence determined.
- 2.2 The Examining Committee consists of 3-5 members, of whom at least one must be from outside the university.
- 2.3 The candidate's supervisor is a member of the Examining Committee and any or all members of the supervisory committee may be named as members of the Examining Committee, subject to the policy of the program concerned.
- 2.4 The External Examiner must not have any affiliation with the university or the candidate that might be construed as creating a conflict of interest.

3. Thesis Examination

Copies of the thesis shall be distributed amongst the Examining Committee by the Program Director at least three weeks before the scheduled date of the oral, along with a covering letter from the Associate Dean explaining the status of the thesis and the range of options for its disposition. A form is supplied on which each examiner should verify whether they recommend that the oral examination should proceed. These forms must be returned to the Program Director at least one week before the scheduled date of the oral.

4. Defence

The thesis will be defended by the candidate in an oral examination before the Examining Committee. In the examination candidates will be required to give evidence that they have a thorough knowledge of the field in which they have been working.

- 4.1 The defence normally shall be scheduled within a period of no fewer than three, and no more than six weeks from the submission of the thesis. The parties concerned may agree upon a postponement.
- 4.2 The Examining Committee, and the thesis defence examination, will be chaired by a person appointed by the Graduate Program Director.
- 4.3 Subject to the policy of individual graduate programs, any member of the university is free to attend a master's oral thesis defence examination.
- 4.4 The Chair will give priority to questions from members of the Examining Committee, and will adjourn the examination when the Examining Committee decides that further questioning is unnecessary.
- 4.5 The deliberations of the Examining Committee are held in camera. That is to say, only appointed members of the Examining Committee are present at this stage.
- 4.6 It is the responsibility of the Chair to see that a report on the examination is prepared before the Committee adjourns.
- 4.7 Four decisions are open to the Examining Committee, voting to be based on a simple majority:
 - i) the thesis is approved as it stands, or
 - ii) the thesis is approved provided certain minor or major revisions are made, or
 - iii) the thesis is not approved as it stands but may be resubmitted, and re-examined by some or all of the Examining Committee (this may or may not involve another oral defence), or
 - iv) the thesis is not approved.
- 4.8 If revisions are required, each member of the examining committee must provide a written list of required revisions to the Program Director

immediately following the oral.

Minor revisions are defined as corrections which can be made immediately to the satisfaction of the supervisor. **Major revisions** are defined as corrections requiring structural changes, or other substantive revision. When a thesis is accepted with major revisions, a precise description of the modifications must be included with the Examining Committee's report. It is then the responsibility of the candidate's supervisor to demonstrate to the Examining Committee that the required revisions have been made.

- 4.9 If the Examining Committee is not prepared to reach a decision concerning the thesis at the time of the thesis defence, it is the responsibility of the Chair to determine what additional information is required by the Committee to reach a decision, to arrange to obtain this information for the Committee, and to call another meeting of the Committee as soon as the required information is available. It is also the Chair's responsibility to inform the candidate that the decision is pending.
5. **Final Submission**
 - 5.1 The Program Director, in consultation with the thesis supervisor, must verify that appropriate corrections have been made, and then submits a summary of the thesis defence and examination to the Office of Research and Graduate Studies.
 - 5.2 An approved thesis may be submitted at any time following the oral defence. However, for candidates wishing to graduate at a particular convocation, specific deadline dates are printed in the Graduate Academic Calendar section of the Graduate Studies Calendar. The general formula for establishing these dates is five weeks before Spring convocation and five weeks before Fall convocation. Candidates not meeting these deadlines are required to re-register until the thesis has been formally submitted and approved by the University.
 - 5.3 The formal submission of the thesis to the University is made to the Graduate Studies Officer, Room 2.69, Otonabee College. At this point, the thesis should be in its final typed version, but only the original copy should be submitted. The Graduate

Studies Officer checks through the thesis with regard to format and then seeks final approval from the Committee on Graduate Studies. If there are any discrepancies in format, the student will be contacted by the Graduate Studies Officer.

- 5.4 After the thesis has been formally approved, the candidate submits the required copies and pays the cost for binding and microfilming.

6. Microfilming of Thesis

When the thesis is submitted, the candidate is required to complete a "Non-Exclusive Licence to Reproduce Theses" (Form NL/BN91 [90-09]). This gives consent for the thesis to be microfilmed by the National Library of Canada. There is a fee for this service and the candidate is billed for this at the time the final approved theses are submitted.

7. Binding of Thesis

These must be bound in Trent Green with front cover and spine writing in gold. Binding arrangements are made through the Office of Research and Graduate Studies.

8. Copyright Regulations

For information concerning thesis borrowing and copyright law, please refer to Appendix IV of "A Handbook for Graduate Students of Trent University".

Note

1. Arrangements and expenses for typing the thesis are the responsibility of the student.
2. Subject to the approval of the program concerned, a candidate may write his/her thesis and be examined in French.
3. A Handbook for Graduate Students of Trent University including a detailed guide on the preparation of theses is available from the Office of Research and Graduate Studies.

Fees

The following regulations and fees apply to:

- (i) Canadian citizens within the meaning of the Canadian Citizenship Act;
- (ii) landed immigrants within the meaning of the Immigration Act;
- (iii) dependents of persons admitted to Canada under section 7(1)(a) of the Immigration Act (diplomatic, consular and other representatives of foreign countries, the U.N. and other international agencies, their dependents and suites);
- (iv) dependents of persons admitted under section 7(1)(h) of the Immigration Act for the temporary exercise of the profession, trade or occupation.



GRADUATE FEE SCHEDULE

(based on 1991-92 fees and subject to revision for 1992-93)

	Full-time \$	Part-time \$
TUITION		
Canadian/Landed Immigrant		
– 1st Year (3-terms)	2,326.00	1,163.00
– 2nd Year (3-terms)	1,163.00	1,163.00
– ensuing years	387.67/term	1,163.00 in 3rd Year then 387.67/term
Visa		
– 1st Year (3-terms)	9,712.00	n/a
– 2nd Year (3-terms)	4,905.11	
– ensuing years	1,635.04/term	
ANCILLARY		
– Student Health Service	28.00	2.50
– Athletics	100.00	50.00
– Graduate Student Activities	27.00	11.00
– Non-resident College Fee	58.75	25.00
– Convocation Fee	11.55	5.77
Optional		
– Transportation Fee	111.75	n/a

RESIDENCE (MEAL PLAN INCLUDED) \$4,887.00 (September-April)

Notes:

1. The University reserves the right to alter fees and fee structure.
2. Students enrolled under the Trent-Queen's agreement are assessed Queen's tuition fees and Trent's ancillary fees.
3. All students must register at the beginning of their program of study and must re-register annually until thesis and course work have been completed or until the program of study is otherwise completed. This regulation includes the year in which a student convokes.
4. Per term tuition and ancillary fees will be charged to full-time students beyond the 2nd Year (part-time students beyond 3rd Year) of a graduate program. Convocation and Transportation fees will be charged in full in the Fall Term; Health Service, Athletics, Graduate Student Activities and Non-resident College Fees will be divided between Fall and Winter terms.
5. Pro-rated "part-term" refunds of tuition, ancillary and other University fees may be available to those who a) withdraw from a graduate program, or b) complete degree requirements part way through the third or subsequent year.

Programs of Study

Anthropology

The focus of the M.A. program in Anthropology is on the Art and Archaeology of the Americas. In coursework students may concentrate on prehistoric societies of a particular region (North, Middle or South America), on analysis and interpretation of native art and architecture, or on theoretical and methodological issues in art or archaeology. Other areas of interest can occasionally be accommodated in collaboration with faculty from the undergraduate department.

Graduate Director

T.L. Topic, M.A., PH.D. (HARVARD)

Faculty

P.F. Healy, B.A. (CALIFORNIA-BERKELEY), M.A., PH.D. (HARVARD): Archaeology, New World Prehistory, Mesoamerica and lower Central America; H.S. Helmuth, D.SC., DR.HABIL. (KIEL): Physical anthropology, osteology; Germany, North America, Maya; S.M. Jamieson, M.A. (MANITOBA), PH.D. (WASHINGTON STATE): Northeastern North American prehistory and ethnohistory, Boreal Forest archaeology, complex societies, lithic analysis, locational analysis; M.J. Tamplin, B.A. (TORONTO), M.A. (LONDON), PH.D. (ARIZONA): Paleoecology, typology, computer applications; Boreal Forest, Europe, Africa; J.R. Topic, M.A., PH.D. (HARVARD): Archaeology, complex societies, spatial analysis; Peru, South America; T.L. Topic, M.A., PH.D. (HARVARD): Archaeology, ceramic analysis, prehistoric ideology; Central Andes, South America; J.M. Vastokas, M.A. (TORONTO), PH.D. (COLUMBIA): Anthropology of art, art and architecture of Europe and the Americas, Northwest Coast, Arctic, Northeast; R.K. Vastokas, M.A. (TORONTO), PH.D. (COLUMBIA): Visual anthropology, minority groups, culture and communication; Eastern Europe, eastern Woodlands

Chair of the Undergraduate Department

J.R. Topic, M.A., PH.D. (HARVARD)

Conjunct Professors

P.L. Storck, PH.D. (WISCONSIN); H. Saradi-Mendelovici, B.A. (ATHENS), M.A., PH.D. (MONTREAL); C.D. White, M.A. (TRENT), PH.D. (TORONTO)

Research Associate

G. Watson, M.A. (TRENT)

Regulations

The general regulations and requirements of Trent University for the M.A. degree apply to graduate study in Anthropology. Students are admitted into the program only in September. Normally, candidates who have fulfilled the admission requirements will be required to take at least three graduate courses, *normally including Anthropology 510*, from those offered by the program. In consultation with their supervisors students select a research problem in their area of interest, conduct research, and write a thesis. Candidates shall maintain at least a second class standing in their work and shall pass an oral examination in defence of their thesis. In addition, students will be expected to demonstrate capacity to read in the language or languages relevant to their field of research and may be expected to show adequate background knowledge in a related discipline, e.g. art history. For further information write to the Graduate Director of the Department of Anthropology.

External Funding

All students contemplating application to the M.A. program in Anthropology at Trent are urged to apply for an Ontario Graduate Scholarship as well as to additional external (non-University) funding agencies. Applications for OGS materials are available from the Office of Research and Graduate Studies at Trent University.

Graduate Assistantships

All students admitted will be placed in competition for graduate assistantships, which involve a maximum of four terms, normally spanning two consecutive undergraduate academic years, of teaching and related work within the department. In 1990-91, all eligible students received some form of financial assistance.

Courses Available to Graduate Students

Anthropology 510

Method and theory in archaeology (normally required). An examination and evaluation of major theories and methods and their relationship to problems in archaeological analysis. Emphasis will be placed on recent advances and their implications for the development of the discipline.

Staff

Anthropology 520

Selected themes in Canadian archaeology. Research-oriented investigations into the archaeological record of Central, Eastern, and Northern Canada and adjacent areas. Topics will vary according to interests of staff and students, but will include a review and analysis of regional methodological and theoretical approaches.
S.J. Jamieson

Anthropology 530

Problems in Mesoamerican archaeology. Review of the long and variegated history of human occupation in Mexico and Central America. Problems include the rise, the structure, and the fall of complex societies, cultural ecology, the nature of cultural frontiers, and other related issues of Mesoamerican prehistory.
P.F. Healy

Anthropology 540

South American archaeology. South American prehistory with focus on the evolution of social, political, and economic organization in a wide variety of environments. Factors such as warfare, trade, migration, craft production, subsistence, ritual and ideology are considered. Emphasis is given to Central Andean civilizations, though influence from and interaction with other regions is considered.
J.R. Topic and T.L. Topic

Anthropology 550

Problems in art and architecture of the Americas. The development and character of prehistoric, historic, and contemporary native art of the Americas constitute the focus of this research area. Included are problems of method and theory, especially with regard to meaning and interpretation, in the anthropological investigation of the visual arts and architecture.
J.M. Vastokas

Anthropology 555

Problems in Old World archaeology. Archaeological data and approaches from the Old World are employed to explore cultural problems common to all areas of the world. Research topics will vary from year to year.
M. Tamplin

Anthropology 560

Paleoecology of the Americas. This course examines the biology and ecology of prehistoric populations in various environmental and cultural settings.
M. Tamplin and H. Helmuth

Anthropology 570

Anthropology of art. Theoretical problems in the study and interpretation of visual arts
J.M. Vastokas

Anthropology 590

Special topics.
Staff

Biology

(See Watershed Ecosystems, Freshwater Science and Trent-Queen's Programs)

Canadian Heritage and Development Studies

This collaborative interdisciplinary M.A. program is offered by the Frost Centre for Canadian Heritage and Development Studies and involves faculty from Canadian Studies, Native Studies, Environmental and Resource Studies, and Administrative and Policy Studies in addition to the departments of Economics, English, French, Geography, History, Political Studies, and Sociology. Areas of concentration within this M.A. program are the following: Native Studies; Environmental and Heritage Studies; Regions and Regionalism.

In each of these three areas, there is an interest both in the North and Heritage Management. The main emphasis will be on the research and writing of the thesis to be complemented by two graduate courses: *CHDS 500* and one of *CHDS 510*, *CHDS 520*, *CHDS 530*, or *CHDS 531*.

Applications will be considered from candidates with an Honours degree in a relevant area and an interest in interdisciplinary research.

Program Director

To be named.

Faculty

W.P. Adams, B.A. (SHEFFIELD), M.SC., PH.D. (MCGILL); R.G. Annett, B.SC., PH.D. (WINDSOR); J.M. Bordo, B.A. (MCGILL, ALBERTA), M.A., M.PHIL., PH.D. (YALE); R.T. Bowles, B.SC. (BRIGHAM YOUNG), PH.D. (OREGON); A.G. Brunger, B.SC. (SOUTHAMPTON), M.SC. (ALBERTA), PH.D.

(WESTERN ONTARIO); R. Campbell, B.A. (TRENT), M.A. (TORONTO), PH.D. (LONDON); M.J. Castellano, B.A. (QUEEN'S), M.S.W. (TORONTO); R.D. Chambers, B.A. (MCGILL), B.LITT. (OXFORD); D.M. Clarke, B.A. (TRENT), M.A. (MCMASTER), PH.D. (CARLETON); D.C.A. Curtis, M.A. (QUEEN'S), PH.D. (MCGILL); J.D. Driscoll, M.A., PH.D. (QUEEN'S); M. Havas, B.Sc., PH.D. (TORONTO); F.M. Helleiner, M.A., PH.D. (WESTERN ONTARIO); B.W. Hodgins, B.A. (WESTERN ONTARIO), M.A. (QUEEN'S), PH.D. (DUKE); L.J. Hubbell, M.A., PH.D. (CALIFORNIA-BERKELEY); M. Huberman, B.A. (MCGILL), M.A., PH.D. (TORONTO); C.V. Huxley, B.A. (YORK, ENG.), M.A. (SIMON FRASER), PH.D. (TORONTO); J.N. Jennings, B.A. (TORONTO), M.A. (CALGARY), PH.D. (TORONTO); E.H. Jones, B.A. (SASKATCHEWAN), M.A. (WESTERN ONTARIO), PH.D. (QUEEN'S); S.H.W. Kane, B.A. (CARLETON), M.A., PH.D. (TORONTO); K.E. Kidd, M.A. (TORONTO), F.R.A.I. (Emeritus); H.M. Kitchen, M.A. (MCMASTER); P. Kulchyski, B.A. (WINNIPEG), M.A., PH.D. (YORK); M. Lacombe, M.A., PH.D. (YORK); J.P. LaPointe, B.A. (R.M.C.), M.A. (MCGILL); R.A. Lockhart, M.A. (SIMON FRASER), PH.D. (ESSEX); J.S. Marsh, B.A. (READING), M.Sc. (ALBERTA), PH.D. (CALGARY); D. McCalla, B.A. (QUEEN'S), M.A. (TORONTO), D.Phil. (OXFORD); D.N. McCaskill, B.A. (WINNIPEG), M.A. (CARLETON), PH.D. (YORK); J.S. Milloy, B.A. (ST. PATRICK'S), M.A. (CARLETON), PH.D. (OXFORD); D.R. Morrison, M.A. (SASKATCHEWAN), D.Phil. (SUSSEX); G.A. Nader, B.A. (LONDON), PH.D. (DURHAM); R.C. Paehlke, B.A. (LEHIGH), M.A. (NEW SCHOOL FOR SOCIAL RESEARCH), PH.D. (BRITISH COLUMBIA); M.A. Peterman, A.B. (PRINCETON), M.A., PH.D. (TORONTO); R.D. Powell, LIC. EN HISTORIA (CORDOBA), PH.D. (MCGILL); S.T. Robson, B.A. (BRITISH COLUMBIA), D.Phil. (OXFORD); M.L. Rubinoff, B.A. (QUEEN'S), M.A., PH.D. (TORONTO); J. Sangster, B.A. (TRENT), M.A., PH.D. (MCMASTER); S.D. Standen, B.A. (BRITISH COLUMBIA), M.A. (OREGON), PH.D. (TORONTO); J.E. Struthers, M.A. (CARLETON), PH.D. (TORONTO); T.H.B. Symons (Vanier Professor); C.H. Taylor, M.A. (CANTERBURY), PH.D. (MCGILL); D. Torgerson, A.B. (CALIFORNIA-BERKELEY), M.E.S. (YORK), M.A., PH.D. (TORONTO); C. Verduyn, B.A. (TRENT), M.A., PH.D. (OTTAWA); B.W. von Graeve, M.A., PH.D. (TORONTO); J.H. Wadland, M.A. (WATERLOO), PH.D. (YORK); K. Walden, M.A., PH.D. (QUEEN'S); J. Wearing, B.A.

(WESTERN ONTARIO), M.A. (TORONTO, OXFORD), D.Phil. (OXFORD); A.L. Wernick, B.A. (CAMBRIDGE), M.A. (TORONTO); T.H. Whillans, B.A. (GUELPH), M.Sc., PH.D. (TORONTO); R.F. White, B.A., B.A.Sc., M. COMM. (TORONTO), PH.D. (CHICAGO) (Emeritus); A. Wilson, M.A. (DALHOUSIE), PH.D. (TORONTO) (Emeritus)

Regulations

The general regulations and requirements of Trent University for the M.A. degree apply to the Canadian Heritage and Development Studies Program. Candidates must submit a thesis on an approved topic within a maximum period of three years. Candidates must attain at least a second class standing in the course work and must pass an oral examination in defence of the thesis. Additional requirements appropriate to the candidate's field may be specified by the supervisory committee.

Courses

CHDS 500

The Frost Centre Colloquium: The diverse practicality, philosophy and methodology of interdisciplinary Canadiana research. Research component and weekly seminar. *Director*

CHDS 510

Native Studies: This course emphasizes community-based research perspectives which are sensitive to the cultural milieu in exploring the evolving relationship between native people and mainstream social economic and political structures. Approaches considered by faculty from a variety of academic disciplines will include cross-cultural relations, economic development, cultural aspects of personal and social identity, ethnohistory, adult education and social impact assessment. Fortnightly tutorial.

D.N. McCaskill

CHDS 520

Regions and Regionalism: A course in conceptual and methodological issues. How the ideas of a region can be understood and how multiple approaches permit better understanding of either one region or several within a regional system. Fortnightly two-hour seminars.

S.D. Standen, J.E. Struthers

CHDS 530

Environment and Heritage: Bioregionalism. This concept has received increasing attention from persons interested in ecological planning, appropriate tech-

nology, sustainable development, and related initiatives. The focus will be on the Haliburton section of the Otonabee watershed. This area is considered from both a historic and a contemporary perspective.

J.H. Wadland, T.H. Whillans

CHDS 531

Environment and Heritage: Heritage Resources Management. This course concerns heritage resources and their management. Heritage resources are deemed to include historical buildings, sites, parks and landscapes, archaeological sites, reconstructed historical sites, museums, artifacts, archives, historical documents and historical activities. The course approaches the subject of heritage resources from interdisciplinary, conceptual, practical, and mainly Canadian perspectives.

J.S. Marsh

Financial Support

Applicants are encouraged to seek external scholarships where available. All students admitted will be considered for teaching and research assistantships for a maximum of four terms, normally spanning two consecutive undergraduate academic years.

For further information write to the Director of the Frost Centre, Trent University.

Chemistry

(See Freshwater Science and Trent-Queen's Programs)

Classics

(See Trent-Queen's Program)

Freshwater Science

The Freshwater Science graduate program is a collaborative Master's program involving Biology, Chemistry, Environmental and Resource Studies, Geography and Physics and is a special emphasis segment of Trent's Watershed Ecosystems Program.

The major fields within this segment of the program are chemical-physical studies of the environment with particular reference to water. Included is research into trace-element identification, instrumentation for measurement of dissolved oxygen, detection of radioactivity in natural waters and climate change with emphasis on ice and water.

Applications will be considered from Honours graduates in any of the five collaborating disciplines. Experience in Environmental Science is an advantage. Graduates from the program will receive a degree in their own discipline with 'Freshwater Science' in parentheses, thus "M.Sc. Chemistry (Freshwater Science)" or "M.Sc. Physics (Freshwater Science)" etc.

Candidates will be required to undertake research on a topic in the area of Freshwater Science approved by a Supervisory Committee of faculty drawn from the disciplines concerned.

Faculty

Associate Director

W.F.J. Evans, M.A., PH.D. (SASKATCHEWAN), F.R.S.C.

Chemistry

P.F. Barrett, M.SC. (QUEEN'S), PH.D. (TORONTO); R.E. March, B.SC. (LEEDS), PH.D. (TORONTO), F.C.I.C.; K.B. Oldham, D.SC., PH.D. (MANCHESTER), F.R.I.C., F.C.I.C.; A.H. Rees, M.A., PH.D. (CAMBRIDGE), M.A. (OXFORD), PH.D. (LONDON), F.C.I.C.

Physics

J.W. Jury, M.SC., PH.D. (TORONTO); A.J. Slavin, M.SC. (TORONTO), PH.D. (CAMBRIDGE)

Biology

M. Berrill, B.SC. (MCGILL), M.SC. (HAWAII), PH.D. (PRINCETON); D.C. Lasenby, B.SC. (TRENT), PH.D. (TORONTO)

Geography

J.M. Buttle, B.A. (TORONTO), PH.D. (SOUTHAMPTON); J.G. Cogley, M.A. (OXFORD), M.SC., PH.D. (MCMASTER); C.H. Taylor, M.A. (CANTERBURY), PH.D. (MCGILL)

Environmental and Resource Studies

R.D. Evans, B.SC. (TORONTO), PH.D. (MCGILL); W.F.J. Evans, M.A., PH.D. (SASKATCHEWAN), F.R.S.C.

Regulations

The general regulations and requirements of Trent University for the M.Sc. degree apply to the Freshwater Science program. Candidates will be required to complete the course *Freshwater Science 500*, and one other graduate course, normally offered by the department (Biology, Chemistry, Geography, Physics) of the candidate's discipline. Candidates must submit a thesis on an approved topic within a maximum period of three years. Candidates must attain at least a second class standing in course work examinations and must pass an oral examination in defence of the thesis. Additional requirements appropriate to the candidate's field of enquiry may be specified by the supervisory committee. Attendance at general departmental lectures and research colloquia will be expected.

Courses Available to Graduate Students

Freshwater Science 500

An interdisciplinary course focusing on resource aspects of the environment with particular reference to water. A lecture-seminar program, involving chemical, biological, geographical and physical aspects of water. Also includes topics on statistical analysis and experimental design and philosophy of the scientific method. Students, faculty and visitors will develop and present papers stressing applications of freshwater science.

Freshwater Science 590: Advanced Reading Course

This course involves the study of an advanced level of a topic related to, but not directly in, the area of the candidate's thesis topic. In general, the course will be selected from the graduate course offers of the discipline of the candidate's first degree. The content and method of assessment in this course are arranged in consultation with the candidate's supervisory committee. This course often parallels similar courses at a graduate level in the traditional science departments (Biology, etc.) at other Ontario universities.

Thesis Supervision

Theses will be supervised by a committee of at least three faculty representing at least two of the departments involved in the collaborative program. The primary supervisor will be in the student's discipline, the second from the most appropriate of the other disciplines. External associates may be involved in thesis supervision.

Active supervision is the responsibility of the first two supervisors. The third plays a general consultative and monitoring role.

Graduate Assistantships

Assistantships may be available for assistance in the undergraduate teaching program to students who are admitted to a full-time M.Sc. program. These may be supplemented from other sources such as research grants. It is in a student's best interests to obtain any scholarships or bursaries on his/her own behalf.

Geography

(See Watershed Ecosystems, Freshwater Science and Canadian Heritage and Development Studies Programs)

Methodologies for the Study of Western History and Culture

Trent's M.A. program in Methodologies for the Study of Western History and Culture was established in 1988 as the result of an initiative from faculty in a range of disciplines, including Cultural Studies, Philosophy, History, English, Classics and Sociology.

Interdisciplinary in spirit and emphasis, the program focuses on contemporary issues concerning the interpretation/analysis of Western culture, past and present, using the term "culture" in its widest sense. It responds to a situation in which the human sciences, without having resolved traditional problems concerning strategies for (and the status of) their various kinds of inquiry, have been overtaken by new problems in which once foundational categories, assumptions and dichotomies have been radically challenged by deconstructionist, feminist, psychoanalytic, ecological and anti-Eurocentric critiques.

The aim of the program is to enable students to engage with these issues in the context of substantive projects of research. Particular areas of emphasis are: textuality, semiotics and discourse analysis; nature, culture and technology; gender and feminist theory; media and popular

culture; and the philosophy and history of science.

Student work centers on the thesis (to be supervised by faculty from two disciplines), and on the Methodologies Seminar which involves all students and faculty in the program.

The degree course is intended both as a preparation for doctoral studies, and as a qualification in itself for those (e.g. in teaching, media, law, or government service) pursuing a non-academic professional career.

Applications will be considered from candidates with an Honours degree in a relevant discipline or disciplines, and an interest in interdisciplinary research.

Faculty

Program Director

A.L. Wernick, M.A. (CAMBRIDGE), M.A. (TORONTO)

Program Committee

Z. Baross, B.A. (U.B.C.), M.A. (LONDON), PH.D. (AMSTERDAM); J. Bordo, B.A. (MCGILL, ALBERTA), M.A., M.PHIL., PH.D. (YALE); C.V. Boundas, M.A., PH.D. (PURDUE); R.E. Carter, A.B. (TUFTS), M.DIV. (HARVARD), M.A., PH.D. (TORONTO); J.A. Fekete, M.A. (MCGILL), PH.D. (CAMBRIDGE); J.T. Gilchrist, B.A., PH.D. (LEEDS); B.J. Hodgson, M.A. (TORONTO), PH.D. (WESTERN ONTARIO); S.H.W. Kane, B.A. (CARLETON), M.A., PH.D. (TORONTO); K.H. Kinzl, D.PHIL. (VIENNA); B.L. Marshall, B.A., M.A. (GUELPH), PH.D. (ALBERTA); S.B. Regoczei, M.SC. (TORONTO); L. Rubinoff, B.A. (QUEEN'S), M.A., PH.D. (TORONTO); E. Stavro-Pearce, M.A., PH.D. (TORONTO); D.F. Theall, B.A. (YALE), M.A., PH.D. (TORONTO).

Adjunct Faculty

P. Bandyopadhyay, B.A. (CALCUTTA), M.A. (OXFORD, MANCHESTER), PH.D. (MANCHESTER); F. Bleasdale, B.A. (TORONTO), M.A., PH.D. (WESTERN ONTARIO); R. Dellamora, A.B. (DARTMOUTH), B.A. (CAMBRIDGE), M.PHIL., PH.D. (YALE); R.A. Lockhart, M.A. (SIMON FRASER), PH.D. (ESSEX); F. Nutch, M.A. (HAWAII), PH.D. (YORK); R. Paehlke, B.A. (LEHIGH), M.A. (NEW SCHOOL FOR SOCIAL RESEARCH), PH.D. (BRITISH COLUMBIA); S. Robson, B.A. (BRITISH COLUMBIA), D.PHIL. (OXFORD); P. Royle, M.A. (OXFORD), PH.D. (NATAL); C. Smith, B.SC. (MANITOBA), M.A., PH.D. (WATERLOO); T.H.B. Symons, O.C., B.A. (TORONTO), M.A. (OXFORD), D.U., LL.D.; Y. Thomas, B.A. (UQAM), M.A., PH.D.

(MONTREAL); D. Torgerson, A.B. (CALIFORNIA-BERKELEY), M.E.S. (YORK), M.A., PH.D. (TORONTO); K. Walden, M.A., PH.D. (QUEEN'S); J. Wiseman, M.PHIL., PH.D., F.L.A. (LOUGHBOROUGH)

Regulations

The general regulations and requirements of Trent University for the M.A. degree apply to the Methodologies Program. Candidates are expected to submit a thesis on an approved topic within two years. At least two courses are required; the Seminar, and one other in a related field. Candidates must attain at least a second class standing in the course work and must pass an oral examination in defense of the thesis. Additional requirements appropriate to the candidate's field may be specified by the supervisory committee.

Courses

M500

Seminar on methodology. The seminar brings together all faculty and students enrolled in the program for an intensive exploration of competing contemporary theoretical perspectives bearing on the study of Western history and culture. The focus will be on problems of value, ideology, interpretive "prejudice," language and cultural forms and situations, in the context of a broadly defined theme which will vary from year to year.

A. Wernick and staff

M590

Reading Course.

Thesis Supervision

Theses will be supervised by two faculty representing at least two of the disciplines or programs involved, one of whom will be named the principal supervisor. It may be recommended that additional supervision be provided by adjunct faculty or other members of the program.

Graduate Assistantships

Applicants are encouraged to seek external scholarships where available. All students admitted will be considered for teaching and research assistantships for a maximum of four terms, normally spanning two consecutive undergraduate academic years.

For further information write to the Director of Methodologies for the Study of Western History and Culture, Peter Robinson College, Trent University.

Physics

(See Freshwater Science and Trent-Queen's Programs)

Trent-Queen's

Under the terms of an agreement between Trent University and Queen's University at Kingston, faculty of Trent University may undertake the supervision and instruction, at Trent University, of graduate students enrolled for M.Sc. or Ph.D. degrees at Queen's University. The Trent faculty members who participate in this arrangement will have been admitted to the Graduate Faculty and will have been appointed as adjunct faculty at Queen's University. Students who wish to enrol at Queen's University and pursue graduate study at Trent University must make application initially to Trent University.

Associate Director

R.E. March, B.Sc. (LEEDS), PH.D.
(TORONTO), F.C.I.C.

Trent Faculty Currently Holding Adjunct Appointments at Queen's

These are listed under the collaborating departments:

Biology/Environmental & Resource Studies

M. Berrill, B.Sc. (MCGILL), M.Sc. (HAWAII), PH.D. (PRINCETON); R.D. Evans, B.Sc. (TORONTO), PH.D. (MCGILL); C.D. Metcalfe, B.Sc. (MANITOBA), M.Sc. (NEW BRUNSWICK), PH.D. (MCMASTER); E. Nol, B.Sc. (MICHIGAN), M.Sc. (GUELPH), PH.D. (TORONTO)

Chemistry

R.E. March, B.Sc. (LEEDS), PH.D. (TORONTO), F.C.I.C.; K.B. Oldham, D.Sc., PH.D. (MANCHESTER), F.R.I.C., F.C.I.C.; J.M. Parnis, B.Sc., PH.D. (TORONTO)

Classical Studies

J.P. Bews, B.A. (QUEEN'S), M.A., PH.D. (LONDON); I.C. Storey, M.A. (TORONTO), M.Phil. (OXFORD), PH.D. (TORONTO)

Physics

J.W. Jury, M.Sc., PH.D. (TORONTO); A.J. Slavin, M.Sc. (TORONTO), PH.D. (CAMBRIDGE)

Psychology

P.T.P. Wong, B.A. (CARLETON), M.A., PH.D. (TORONTO)

Financial Support

All graduate students enrolled at Queen's University and resident at Trent are eligible for financial support from funds normally available at Queen's.

Financial support may be available to graduate students as compensation for assistance in teaching and research. Details are arranged individually by the supervisor of each graduate student.

For further information write to the Graduate Studies Officer.

Watershed Ecosystems

Applications will be considered from students with undergraduate Honours degrees in Biology or Geography, or Environmental Science and an interest in interdisciplinary study within the field of Watershed Ecosystems. In addition, degrees are offered for students with backgrounds in any of Chemistry, Physics, Biology and Geography in the Freshwater Science Program, which is a major emphasis program administered by the Watershed Ecosystems Program. (See separate listing)

Candidates will be required to undertake research on a topic that relates to the interests of some member of the faculty as outlined below. They will be encouraged to concentrate on interdisciplinary topics and to utilize the expertise and resources of each of the departments involved in the program.

Program Director

R.D. Evans, B.Sc. (TORONTO), PH.D. (MCGILL)

Faculty and Research Areas

P. Adams, B.A. (ENGLAND), M.Sc., PH.D. (MCGILL): *Hydrometeorology, snow and ice*; M. Berrill, B.Sc. (MCGILL), M.Sc. (HAWAII), PH.D. (PRINCETON): *Behavioral ecology*; J.M. Buttle, B.A. (TORONTO), PH.D. (SOUTHAMPTON): *Hydrology, fluvial geomorphology*; J.G. Cogley, M.A. (OXFORD), M.Sc., PH.D. (MCMASTER): *Fluvial Geomorphology, hydrology, Arctic*; R.D. Evans, B.Sc. (TORONTO), PH.D. (MCGILL): *Environmental biogeochemistry, trace metal cycling*; W. Evans, B.A., M.A., PH.D. (SASKATCHEWAN): *Ozone depletion, global warming*; M. Fox, B.A. (PENNSYLVANIA), M.E.D.S. (CALGARY), PH.D. (QUEEN'S): *Fish ecology, pond culture*;

M. Havas, B.Sc., PH.D. (TORONTO): *Acid precipitation, Toxicity of metals and acidification*; T. Hutchinson, B.Sc. (MANCHESTER), PH.D. (SHEFFIELD): *Forest decline, terrestrial impacts*; R. Jones, B.Sc. (WALES), M.Sc. (KANSAS), PH.D. (WALES): *Plant ecology, biogeochemistry, disturbed habitats*; P. Lafleur, B.Sc. (BRANDON, MAN.), M.Sc. (TRENT), PH.D. (MCMASTER): *Forest-atmosphere energy interactions, impacts of climatic change*; D.C. Lasenby, B.Sc. (TRENT), PH.D. (TORONTO): *Limnology; biological, physical and chemical aspects of lakes*; C.L. McKenna Neuman, B.Sc., PH.D. (QUEEN'S), M.Sc. (GUELPH): *Process geomorphology, mechanics of sediment transport, periglacial/coastal aeolian geomorphology*; C.D. Metcalfe, B.Sc. (MANITOBA), M.Sc. (NEW BRUNSWICK), PH.D. (MCMASTER): *Aquatic organic contaminants*; E. Nol, B.Sc. (MICHIGAN), M.Sc. (GUELPH), PH.D. (TORONTO): *Behavioural and evolutionary ecology of birds*; P.M. Powles, B.A. (MCGILL), M.Sc. (WESTERN ONTARIO), PH.D. (MCGILL): *Ichthyology, larval and reproductive ecology of fish*; J. Sutcliffe, B.Sc. (WATERLOO), M.Sc., PH.D. (TORONTO): *Ecology and sensory physiology of biting flies*; C.H. Taylor, M.A. (CANTERBURY), PH.D. (MCGILL): *Hydrology, fluvial geomorphology*; T.H. Whillans, B.A. (GUELPH), M.Sc., PH.D. (TORONTO): *Fisheries, wetland ecology, renewable resource management*

Conjunct Professors

Conjunct Professors have full academic appointments in the Watershed Ecosystems Program and are able to act as principal supervisor of graduate students.

M. Bardecki, PH.D. (YORK): *Wetland management and environmental impact assessment* (Ryerson Polytechnical Institute); J. Casselman, PH.D. (TORONTO): *Physiology and ecology of coolwater fish* (Ontario Ministry of Natural Resources); R.J. Cornett, B.Sc. (TORONTO), PH.D. (MCGILL): *Interactions of radioisotopes with groundwater and lakes* (Atomic Energy of Canada); P.J. Dillon, PH.D. (TORONTO): *Nutrient cycling, trace metals, acid precipitation studies* (Ontario Ministry of the Environment); R. Green, PH.D. (CORNELL): *Population statistics, Freshwater molluscs*. (University of Western Ontario); R.J. Hall, PH.D. (MINNESOTA): *Invertebrate ecology* (Ontario Ministry of the Environment);

B.E. Hickie, B.Sc. AGR. (GUELPH), M.Sc., PH.D. (WATERLOO): *Environmental toxicology, pharmacokinetic modelling* (Trent); M.L. Jones, B.Sc., PH.D. (U.B.C.): *Research; fisheries, ecology and modelling* (Ontario Ministry of Natural Resources); D.R.S. Lean, PH.D. (TORONTO): *Phosphorus cycling, nutrient dynamics* (Environment Canada); R. Norstrom, B.Sc., PH.D. (ALBERTA): *Analytical chemistry, pharmacokinetics* (Canadian Wildlife Service); T.D. Prowse, PH.D. (CANTERBURY): *Northern rivers, particularly ice jams* (Environment Canada); T. Scheuhammer, B.Sc., B.Ed., PH.D. (WESTERN ONTARIO): *Toxicology of non-essential metals in birds and mammals* (Canadian Wildlife Service); P. Welbourn, PH.D. (BRISTOL): *Cycling of metals in lakes, Algal toxicity, Lake acidification* (Trent)

Regulations

The general regulations and requirements of Trent University for the M.Sc. degree apply to the Watershed Ecosystems program. Candidates will be required to complete the equivalent of two full courses and to submit a thesis on an approved topic within a maximum period of three years (five for part-time students). Candidates must attain at least a second class standing in course work, and must pass an oral examination in defence of the thesis. *WF500a* is compulsory for all first-year students. Students without training in advanced statistics are strongly recommended to take *WF501a* as well.

Courses Available to Graduate Students

WF500a - Philosophical Approaches to Science

This course will challenge students to examine their philosophy of science with particular reference to their own research. Current paradigms in watershed research will be examined and students will be encouraged to develop their understanding of the systems within which their research is conducted. Other aspects of the course include the importance of presentation and communication of research results as part of the scientific process. Available technology for information transfer will be discussed with particular reference to the completion and presentation of graduate theses. Evaluation is on the basis of the presentation of a seminar on the student's thesis proposal and a written development of ideas presented during the seminar. This course ordinarily

will be compulsory for all new graduate students entering the program.

J. Cornett and staff

WF501a - Research Design and Data Analysis

The course will emphasize advanced statistical techniques of use in field and laboratory studies in watershed research, including applications of linear and non-linear models, analysis of variance and multivariate statistics. An effort will be made to assist graduate students in planning the statistical design of their own research projects. The course will rely heavily on workshops and tutorials. This course is highly recommended for students who have not taken an advanced statistics course (e.g. analysis of variance, multivariate statistics) as an undergraduate. An introductory statistics course is required as a prerequisite.

E. Nol

WF504b - Ecosystem Response to Changes in the Hydrosphere

The course will examine the responses of biological communities to changes in the physical, chemical and biological parameters of aquatic ecosystems. Discussions may include forest clear-cutting, water-level fluctuations, habitat rehabilitation, exotic species introductions, eutrophication, and acid rain. The course will be seminar-based, with an emphasis on examining case histories related to individual student's research. Not open to students who have taken *ES481a/b*.

P. Welbourn

WF505a - Measurement Techniques for Hydrochemical Fluxes

The course will examine techniques for monitoring hydrochemical fluxes within the hydrological cycle. The curriculum will cover problems relating to the measurement of variables such as discharge, soil moisture, organic and inorganic constituents in the saturated and unsaturated zones, atmospheric vapour fluxes, precipitation and snowcover. The focus of the lectures and labs will be on measurement, sampling techniques, and instrumentation. Course material will complement statistical concepts covered in *WF501a*. Not open to students who have taken *GO404a/b*.

J. Buttle, C. Taylor

WF506a - The Geochemistry of Natural Waters

The course will examine the chemical and physical properties of water, snow and ice. An emphasis will be placed on those parameters which influence the distribution of biota, nutrients and contaminants in the aquatic environment. Topics for discussion will include the hydrologic cycle, the carbonate system and pH control, weathering and water chemistry, redox equilibria, hydrologic transport, and the properties of snow and ice. Not open to students who have taken *BI/ES/GO406a*.

D. Evans and staff

WF507b - The Fate of Contaminants in the Aquatic Environment

The course will emphasize the mathematical modelling of the fate and distribution of aquatic contaminants, including models for toxic metals, organic xenobiotics and groundwater contaminants. The course will examine the basic algorithms and assumptions of contaminants models, and will give the students hands-on experience in applying existing models (e.g. MINTEQ, QWASI). An emphasis will be placed on using models to determine the dominant pathways influencing the fate of inorganic and organic contaminants in the aquatic environment. Not open to students who have taken *BI/ES/GO407b*.

D. Evans, J. Buttle

WF590 (or WF590a/b) - Reading Course

This course option is available for graduate students who want to pursue their own academic interests or who wish to receive instruction in a more discipline-specific course. The exact format of the course is designed by the student in consultation with the supervisory committee. The reading course can be a literature review or a small research project. A student can also register under the *WF590* course number to take an upper-year undergraduate course for credit (e.g. Hydrology, Limnology, Aquaculture, Aquatic Toxicology), or to take a course from another academic institution for credit. In the case of an undergraduate course taken for credit, a graduate student would normally have to complete an additional graduate-level assignment. Students wishing to take this course should discuss their proposal with the Director of the program.

Financial Support

Full financial support is sought for a maximum of six terms, normally spanning two consecutive undergraduate academic years, for any student admitted to the Watershed Ecosystems program through teaching assistantships, research assistantships or scholarships. Candidates are encouraged most strongly to apply for scholarships on their own behalf.

Further Information

Enquiries should be addressed to the Director of the Program.

Financial Assistance

Financial assistance for individual full-time graduate students may be available from the following sources:

1. Scholarships, fellowships and other merit awards from governmental, industrial and other granting bodies in Canada.
2. Graduate assistantships for a maximum of four terms, normally spanning two consecutive undergraduate academic years, in teaching and demonstrating.
3. Research assistantships with staff members who hold research grants.
4. Non-competitive awards and loans from the Ontario Student Awards Program.

All student support received through awards, research or graduate assistantships is taxable according to the federal and provincial tax regulations. Tax will be deducted by Trent's accounting department from any payments made to students for assistantships.

Teaching assistantships and research assistantships administered by Trent University will be paid through the university payroll office, on a monthly basis.

Scholarships awarded for the calendar year are ordinarily paid in three equal instalments in September, January and May and may be picked up in the Office of Research and Graduate Studies.

Information on the more important scholarships and fellowships follows:

Ontario Graduate Scholarships

The Government of Ontario offers up to 1300 Ontario Graduate Scholarships per

year which are tenable at the Ontario university of the student's choice. The awards are tenable in all disciplines and the scholars must have a high level of academic achievement. The awards are intended primarily for Canadian citizens as well as those who hold permanent resident status at the time of application; however, up to 60 awards may be made to students who, by the application deadline, have been admitted to Canada as visitors with student authorization. Awards will be for two or three consecutive terms; one-term awards will not be made. Application deadline is normally 1st November. All eligible candidates who are interested in studying at Trent are urged to apply for one of these awards.

Natural Science and Engineering Research Council Awards

Awards from the Natural Science and Engineering Research Council (NSERC) are tenable in departments offering graduate studies in science. These awards are offered to assist students in undertaking graduate study and research leading to advanced degrees, and a limited number of postdoctoral fellowships for those wishing to add to their experience by specialized training. These scholarships are open to Canadian citizens or landed immigrants and are awarded on the basis of high scholastic achievement and evidence of capacity to do research. For further information write to: Postgraduate Scholarships Officer, Natural Science and Engineering Research Council of Canada, 200 Kent Street, Ottawa, Ontario, Canada K1A 1H5.

Commonwealth Scholarship and Fellowship Plan

The Commonwealth Plan provides opportunities for Commonwealth students to pursue advanced studies in other Commonwealth countries. The fellowships are awarded to graduates of recognized universities for a period of two academic years and the intervening summer, and are intended to cover the holder's travel, living, and study expenses during the period of tenure. Application forms and full information concerning details of the award may be obtained from the Canadian Scholarship and Fellowship Committee, c/o AUCC, 151 Slater Street, Ottawa, Ontario K1P 5N1, or through the Canadian High Commissioner in those countries. Persons intending to apply are advised to enquire not later than mid-October,

approximately one year prior to the date of tenure.

Note:

The Office of Research and Graduate Studies prepares a booklet annually for use by Trent undergraduates planning to apply to graduate schools and for scholarships and by graduate students planning further study. This includes a list of scholarships available and application deadlines. In the case of major scholarship competitions, students currently registered at Trent must meet an earlier deadline set by the University.

Graduate Assistantships

The Graduate Studies Committee, acting on the recommendations of the programs, awards a number of assistantships to full-time graduate students each year. In return for the stipend involved, the students are required to work for up to ten hours per week in the department, generally assisting with some aspect of the undergraduate teaching program.

A full-time graduate student may be eligible for support for a maximum of four terms, normally spanning two consecutive undergraduate academic years.

Graduate Awards**Trent University Graduate Entrance Awards**

Approximately fifteen (15) awards will be made annually to eligible students entering the first year of a full-time graduate degree program at Trent University. The awards are valued at \$300 each and are intended for students with an average of A – (80%) or better in their last two years of study.

Ontario Graduate Scholarship (OGS) Program “Institutional Awards”

The Province of Ontario provides up to ten (10) OGS institutional awards tenable only at Trent University. Only first and second year students may hold awards. In order to be eligible, a student must meet the eligibility criteria and fulfill all scholarship conditions applicable to candidates in the open OGS competition. Nominees can be those who were on reversion or unsuccessful in the open competition, or have not yet applied. Students who were unranked for an OGS are not eligible.

The recommended candidates from Trent are decided when results of the open competition are known.

The Governor-General's Academic Gold Medal

The Governor-General's Gold Medal will be awarded to the graduate student who achieves the highest academic standing in his/her Master's degree program. The medal will be awarded on the recommendation of the Committee on Graduate Studies who solicits nominations from the graduate program directors, and will be presented each year at Fall Convocation to a student among those who are graduating or who graduated in the previous Spring.

The R.B. Johnston Fund for Archaeology

The gift of an anonymous donor, this fund recognizes the contribution of the late Prof. Richard B. Johnston to Ontario archaeology. The fund supports thesis research by graduate students in the Anthropology program. Projects in the archaeology of northeastern North America are preferred, and one or more grants are awarded annually.

The David and Joyce Woods Graduate Scholarship

This scholarship, to honour David M. Woods, Chairman of the Board of Governors of Trent University from 1975 to 1980, and his wife, Joyce Woods, has been established by their children and friends and is to be awarded to a student in the Watershed Ecosystems Graduate Program. This is the first graduate scholarship to be established at the University.

International Graduate Students

In order to cover fees, books and living expenses, an international student in a graduate school in Ontario will need a minimum of \$20,000 per year. If this amount is not covered by independent means or financial support from his/her own country, and if he/she is therefore in need of fellowship support, he/she should be aware of the following facts. Because of government restriction on the money available, students from other countries entering Canada on student authorizations and proceeding to a

graduate school in the province of Ontario are restricted in most cases to teaching assistantships involving no more than ten paid hours per week. Eligibility for most scholarships and teaching assistantships from university and Canadian sources is restricted to Canadian citizens or permanent residents. However, as noted in the previous section, a small number of Ontario Graduate Scholarships are available to non-Canadian students.

Therefore if you are not a Canadian citizen or permanent resident, you will not be eligible for most of the awards. On the other hand, to obtain permanent resident status, a student who is not resident in Canada must have long range plans which include an intention to settle permanently in Canada. If the Canadian immigration authorities refuse permanent resident status, it is then extremely difficult to obtain a student authorization as an alternative means of permission to study in Canada.

Entry into Canada without either status will result in a deportation order, and if the deportation order is not successfully appealed, any further application for landed immigrant status will almost certainly be denied. Application for such status therefore should not be made simply in the hope of obtaining more fellowship support.

Note: Students who have been admitted to Canada on student authorizations must obtain a work permit from the Department of Immigration before taking on any type of work for which they receive payment.

Student Services

Graduate Students' Association

All registered graduate students, full- or part-time and including those enrolled under the Trent-Queen's Agreement become, by virtue of the fee paid, a member of the Graduate Students' Association (GSA). This association exists separate from the Trent Student Union (TSU). It has four elected officers (President, Vice-President, Treasurer and Secretary) who organize social and informal academic events. Elections take place yearly. Graduate students are also represented on the University Senate, and the Research, Graduate Studies, Animal Care,

Computer Services, Nature Areas, Status of Women Teaching Awards and Teaching Effectiveness committees. Those interested in serving either on the GSA executive or on one of the committees should contact the current GSA President.

The GSA publishes a newsletter throughout the year passing on information of direct concern to graduate students both from within the university and from other graduate associations or from the National Union of Students (NUS) newsletters. As well as organizing social events such as wine and cheese parties, Christmas parties, and end-of-the-year banquets, the GSA presents informal slide and talk shows presenting current research by graduate students or faculty at Trent.

Conference travel allowances are made available through the GSA to qualifying graduate students on a first come/first served basis.

The aim of these programs is to provide opportunities for graduate students to communicate with each other, and with the entire University community about issues and problems of particular concern to graduate students.

The current executive welcomes the interest and assistance of all graduate students.

Other Services and Facilities

Full descriptions on Colleges, Athletics, Health Service, Computing Facilities and the Thomas J. Bata Library are to be found elsewhere in this Calendar.

For further information please write to:

The Office of Research and
Graduate Studies
Trent University
Peterborough, Ontario, Canada
K9J 7B8

or telephone:

Area Code (705) 748-1245

Board of Governors

Chair

Robert W.F. Stephenson, M.A., LL.B.

Vice-Chair

Tod Willcox, B.Sc., P.ENG.

Chancellor

F. Kenneth Hare, C.C., B.Sc., PH.D., LL.D., D.LITT.
D.S.LITT., D.SC., F.K.C., F.R.S.C.

President and Vice-Chancellor

John O. Stubbs, B.A., M.Sc., D.PHIL.

Charlene E. Avon

Jalynn H. Bennett, B.A.

Michael E. Beswick, B.Sc.

Shannon M. Chace

David A. Galloway, B.A., M.B.A.

N.E. Goodman, B.Sc., M.B.A. C.F.A.

Merritt E. Gordon, B.A.Sc., P.ENG.

Alan P. Ingram, B.A., LL.B., M.S.W.

Barbara A. Johns

Lari C. Langford, B.A., M.L.S.

John A. McClelland, B.COM., F.C.A.

Jane Ann McGill

E. Arnold McLean, C.M.A.

Mary A. Mogford, B.A.

David T.C. Moore, B.A.

Michael Nolan, B.A., B.ED., M.ED.

M. Lionel Rubino, B.A., M.A., PH.D.

James A. Swanston, B.A.

Martha W. Whatley, B.A., B.ED.

Michael A. Whetung, B.A.

Thomas H. Whillans, B.A., M.Sc., PH.D.

Gary E. Wolff, B.A., M.B.A., C.A.

Secretary

Nancy Smith

Honorary Members

Thomas J. Bata, C.C.

Erica Cherney, B.COM.

John D. de Pencier

Sylva M. Gelber, O.C., LL.D., D.HUM.L.

Jon K. Grant, B.A.

R. Michael Grills, B.A.

John G. McCarney, B.A., Q.C.

Thomas P. McMillan

Henry Nokes

Keith C. Pilley, B.COM.

John J. Robinette, C.C., B.A., Q.C., D.C.L., LL.D.

Barney D. Sandwell, B.A., LL.D.

Hugh F. Waddell, B.A.

Walter G. Ward, B.ENG.

Helen M. Whiteside, B.A.

Judith R. Wilder, B.A.

Officers and Administrative Personnel

Chancellor

F. Kenneth Hare, C.C., B.Sc., PH.D., LL.D., D.LITT.,
D.S.LITT., D.SC., F.K.C., F.R.S.C.

President and Vice-Chancellor

John O. Stubbs, B.A., M.Sc., D.PHIL.

Provost and Dean of Arts and Science

David R. Morrison, M.A., D.PHIL.

Vice-President (Administration and Finance)

Nancy J. Sullivan, B.A.

Vice-President (University Services)

James E. Neufeld, B.A., M.A., PH.D.

Vice-President (Development)

Susan Mackle, B.A.

University Librarian

Murray W. Genoe, M.A., M.L.S., M.PHIL.

Master of Peter Robinson College

John S. Millroy, M.A., PH.D.

Acting Principal of Catharine Parr

Trail College

R.D. Chambers, B.A., B.LITT.

Master of Champlain College

James I. MacAdam, M.A., PH.D.

Principal of Lady Eaton College

H. John Stanford, M.A., PH.D.

Head of Otonabee College

Gordon Johnston, B.A., M.A.

Associate Dean and Principal of

Julian Blackburn College

George Nader, B.A., PH.D.

Office of the President

President and Vice-Chancellor

John O. Stubbs, B.A., M.Sc., D.PHIL.

Executive Assistant to the President

Nancy Smith

University Secretariat

University Secretary

Nancy Smith

Secretary of Senate

Dianne Choate, B.A.

Assistant University Secretary (Board)

Susan Bartsch, B.A.

Communications Office

Director of Communications

Susan Wheeler, B.A.

Publications Officer

Anne Hoover, A.O.C.A.

Communications Officer

Joy Manson, B.A.

Office of the Provost and Dean of Arts and Science

Provost and Dean of Arts and Science

David R. Morrison, M.A., D.PHIL.

Assistant to the Provost and Dean

Margaret Sanders, M.A.

Associate Dean of Science

Peter F. Barrett, M.Sc., PH.D., M.C.I.C.

*Associate Dean of Research and
Graduate Studies*

Colin H. Taylor, M.A., PH.D.

Graduate Studies Officer

Pat Strode

University Research Officer

Joseph Muldoon, B.SC., B.AG., M.SC.

*Associate Dean and Principal of Julian
Blackburn College*

George Nader, B.A., PH.D.

Director, International Program

Karanja Njoroge, B.COM., B.D.A.

Academic Skills Centre

Co-ordinator Teaching Program

Heather Avery, M.A.

Co-ordinator Writing Program

Lucille Strath, M.A.

Registrar

Alan P. Saxby, B.A.

*Associate Registrar (Enrolment
Reporting Officer)*

Lynda Smith

Assistant Registrar (Admissions)

James Riva, B.A.

*Assistant Registrar (Scheduling and
Registration)*

Don Giles, B.SC.

Manager, Schools Liaison

Jeff Macnab, B.A., B.ED.

Admissions Counsellor

Martin Boyne, B.A.

**Office of the Vice-President
(Administration and Finance)**

Vice-President (Administration and Finance)

Nancy J. Sullivan, B.A.

Director of Human Resources

To be named

Associate Director of Human Resources

E.A. (Ted) Bartley, B.A., LL.B.

Assistant Director of Human Resources

Joanne Sandy

Employment Equity Co-ordinator

Yolanda Smith, B.A.

Director of Financial Services

A.A. (Tony) van Hoeckel, C.G.A.

Chief Accountant

To be named

Manager of University Bookstore

Ralph Colley, B.A.

Purchasing Officer

Lorraine Hayes, B.SC.

University Printshop Manager

William M. Bowers

Director of Physical Resources

Stephen J. Dantzer, B.I.D., A.M.C.T.

Operations Engineer

Colin Campbell, B.SC., P.ENG.

Manager of Facility Services

Robert van Dompsele

**Office of the Vice-President
(University Services)**

Vice-President (University Services)

James E. Neufeld, B.A., M.A., PH.D.

Heads of College:

Peter Robinson College

John S. Milloy, M.A., PH.D.

Catharine Parr Traill College

R.D. Chambers, B.A., B.LITT.

Champlain College

James I. MacAdam, M.A., PH.D.

Lady Eaton College

H. John Stanford, M.A., PH.D.

Otonabee College

Gordon Johnston, B.A., M.A.

University Librarian

Murray W. Genoe, M.A., M.L.S., M.PHIL.

Director of Student Services

Theron Craig, B.A., B.PH.E., M.A.

Director of the Health Service

To be named

Co-ordinator of Counselling Services

Ada Meecham, M.A.

Financial Aid Officer

Yvonne Del Mastro

Director of Athletics

Paul S.B. Wilson, B.A.

Director of Computer Services

Lorine E. McHardy, B.A., M.SC.

**Office of the Vice-President
(Development)**

Vice-President (Development)

Susan Mackle, B.A.

Director of Alumni Affairs

Anthony Storey, B.A.

Academic Staff

- Adams, W.P. *Geography*
 Ahlstrand, B. *Admin. St.*
 Aitken, G.D. *M.L. &L. (Spanish)*
 Alfred, L.C.R. *Physics*
 Andriewsky, O. *History*
 Annett, R.G. *Chemistry*
 Arat-Koc, S. *Women's Studies*
 Arvin, M. *Economics*
 Aubrey, J. *Psychology*
 Bandyopadhyay, P. *Comp.Dev./Sociology*
 Barker, J.C. *History*
 Baross, Z. *Cultural Studies*
 Barrett, P.F. *Chemistry*
 Baumgaertel, G. *M.L. &L. (German)*
 Beach, B.L. *Eng. Lit./Psychology*
 Berkowitz, M.S. *English Literature*
 Berrill, D. *Education*
 Berrill, M. *Biology*
 Bews, J.P. *Classical Studies*
 Bilaniuk, S. *Mathematics*
 Bishop, J. *Admin. St.*
 Bleasdale, F.A. *Psychology*
 Bordo, J. *Cultural Studies*
 Boundas, C.V. *Philosophy*
 Bowles, R.T. *Sociology*
 Brown, S. *English Literature*
 Brunger, A.G. *Geography*
 Buckman, J. *English Literature*
 Burbidge, J.W. *Philosophy*
 Buttle, J. *Geography*
 Campbell, K. *Admin. St.*
 Campbell, R. *Political Studies*
 Carter, C. *Mathematics/ERS*
 Carter, R.E. *Philosophy*
 Castellano, M.J. *Native Studies*
 Chakravartty, I.C. *Mathematics*
 Chambers, R.D. *English Literature*
 Chapman, I.D. *Admin. St.*
 Chittick, K. *English Literature*
 Choudhry, S. *Economics*
 Clark, L. *English Literature*
 Clarke, D. *Sociology/Canadian Studies*
 Cogley, J.G. *Geography*
 Conley, J. *Sociology*
 Cormier, J. *Chemistry*
 Curtis, D.C.A. *Economics*
 Dawson, P.C. *Physics*
 Declerck, L. *Librarian*
 De'Bell, K. *Physics*
 Dellamora, R.J. *English Literature*
 Dodge, B. *Archivist*
 Drewes, T. *Economics*
 Driscoll, J.D. *Political Studies*
 Earnshaw, J.W. *Physics*
 Eathorne, G.D. *English Literature*
 Eddy, C. *English Literature*
 Elbl, I. *History*
 Ernest, C.H. *Psychology*
 Evans, D. *Env. & Res. S.*
 Evans, W. *Env. & Res. St., Physics*
 Evenden, D. *History*
 Fekete, J.A. *English Literature*
 Fewster, J.C. *M.L. &L. (German)*
 Field, K. *Librarian*
 Fisher, A.G. *English Literature*
 Franklin, A.E. *M.L. &L. (French)*
 Gallagher, S.F. *English Literature*
 Garcia-Sanchez, F., *M.L. &L. (Spanish)*
 Garrido, R.M. *M.L. &L. (Spanish)*
 Genoe, M. *Librarian, History*
 Germain-Rutherford, A. *M.L. &L. (French)*
 Gilchrist, J. *History*
 Glassco, D. *English Literature*
 González-Martín, J.P. *M.L. &L. (Spanish)*
 Green, M. *Computer Studies*
 Green, R. *Cultural Studies*
 Greene, C.M. *History*
 Gunther, M. *Political Studies*
 Hagman, R.S. *Anthropology*
 Hamilton, G.F. *Mathematics*
 Havas, M. *ERS/Science Ed.*
 Healy, P.F. *Anthropology*
 Heitlinger, A. *Sociology*
 Helleiner, E. *Political Studies*
 Helleiner, F.M. *Geography*
 Helmuth, H.S. *Anthropology*
 Henniger, J.P. *Mathematics*
 Hillman, J. *Comp.Dev./Sociology*
 Hodgins, B.W. *History*
 Hodgson, B.J. *Philosophy*
 Holdsworth, D. *Env. & Res. St.*
 Hollinger, V. *Cultural Studies*
 Hubbell, L.J. *Anthropology*
 Huberman, M. *Economics*
 Hurley, R. *Computer Studies*
 Huxley, C.V. *Sociology/Comp.Dev.*
 Jamieson, S. *Anthropology*
 Jennings, J.N. *History*
 Johnson, R.G. *Physics*
 Johnston, G.A. *English Literature*
 Joly, M. *M.L. &L. (French)*
 Jones, E.H. *History*
 Jones, R. *Biology*
 Jury, J.W. *Physics/Computer Studies*
 Kane, S.H.W. *Eng. Lit./Cult. St.*
 Katz, S. *Sociology*
 Kay, C. *History*
 Kennett, D. *Psychology*
 Kinzl, K.H. *Classical Studies*
 Kitchen, H.M. *Economics*
 Krüger, A.A. *M.L. &L. (German)*
 Kulchyski, P. *Native Studies*
 Lacombe, M. *Canadian Studies*
 Lafleur, P. *Geography*
 Lapointe, H.B. *M.L. &L. (French)*
 Lapointe, J.-P. *M.L. &L. (French)*
 Lasenby, D.C. *Biology*
 Leith, B. *Economics/Env. & Res. St.*
 Lem, W. *Comp.Dev./Women's Studies*
 Lewars, E.G. *Chemistry*
 Lockhart, R.A. *Sociology*
 Lowe, D.G. *Psychology*
 Lyon, K.V.R. *Political Studies*

- MacAdam, J.I. *Philosophy*
 March, R.E. *Chemistry*
 Marsh, J.S. *Geography*
 Marshall, B. *Sociology/Women's Studies*
 Matthews, T.R. *Biology*
 Maxwell, C.D. *Biology*
 Maxwell, E.A. *Mathematics*
 McCalla, A. *Librarian*
 McCalla, D. *History*
 McCaskill, D.N. *Native Studies*
 McKinnon, C. *Philosophy*
 McLachlan, I. *Eng.Lit./Cult.St.*
 Metcalfe, C. *ERS/Biology*
 Millard, J. *Librarian*
 Milloy, J.S. *Native Studies/History*
 Mitchell, O.S. *English Literature*
 Morris, R.B. *Psychology*
 Morrison, D.R. *Pol.St./Comp.Dev.St.*
 Morton, P.M. *History*
 Muldoon, J. *Economics*
 Murphy, T.N. *Mathematics*
 Murthy, K.S.R. *Economics*
 Nader, G.A. *Geography*
 Neufeld, J.E. *English Literature*
 Neufeld, M. *Political Studies*
 Neumann, R.M. *Philosophy*
 Newhouse, D. *Native Studies/Admin.St.*
 Nol, E. *Biology*
 Noriega, T.A. *M.L.&L. (Spanish)*
 Nutch, F. *Sociology*
 O'Connor, A. *Cultural Studies*
 Oldham, K.B. *Chemistry*
 Orsten, E.M. *English Literature*
 Pahlke, R.C. *Pol.St./Env.&Res.St.*
 Page, D.F.R. *Classical Studies*
 Parnis, M. *Chemistry*
 Peterman, M. *English Literature*
 Pickel, A. *Political Studies*
 Pollock, Z. *English Literature*
 Ponce-Hernandez, R. *Env.&Res.St./Geography*
 Poole, D. *Mathematics*
 Popham, E. *English Literature*
 Powell, D. *Comp.Dev./Anthropology*
 Powles, P.M. *Biology*
 Quaid, M. *Admin.St.*
 Regoczei, S. *Computer Studies*
 Reker, G.T. *Psychology*
 Robson, S.T. *History*
 Roesch, O. *Anthropology*
 Royle, P. *M.L.&L. (French)*
 Rubinoff, M.L. *Philosophy*
 Sandeman, I.M. *Biology*
 Sangster, J. *History/Women's Studies*
 Sassan, B. *Philosophy*
 Scigliano, M. *Librarian*
 Setterington, R.G. *Psychology*
 Sheinin, D. *History*
 Slavin, A.J. *Physics*
 Smith, C.T. *Psychology*
 Smith, D.L. *M.L.&L. (Spanish) Cult.St.*
 So, J. K.-F. *Anthropology*
 Solomon, S. *Education*
 Solway, J. *Comp.Dev./Anthropology*
 Sproule, C. *Psychology*
 Standen, S.D. *History*
 Stanford, H.J. *Psychology*
 Stavro-Pearce, E. *Political Studies*
 Stewart, D.D. *M.L.&L. (German)*
 Storey, I.C. *Classical Studies*
 Struthers, J.E. *Canadian Studies/History*
 Stubbs, J.O. *History*
 Sutcliffe, J. *Biology*
 Symons, T.H.B. *Vanier Professor*
 Syrett, J. *History*
 Tamplin, M.J. *Anthro./Comp.Stud.*
 Taylor, C.H. *Geography*
 Theall, D.F. *English Literature/Cult.St.*
 Thibault, G. *Sociology*
 Thomas, Y. *M.L.&L. (French)*
 Tindale, C. *Philosophy*
 Todd, E.M. *Anthropology*
 Topic, J.R. *Anthropology*
 Topic, T.L. *Anthropology*
 Torgerson, D. *Admin.St.*
 Treadwell, J.M. *English Literature*
 Tromly, F.B. *English Literature*
 Vastokas, J.M. *Anthropology*
 Vastokas, R.K. *Anthropology*
 Verduyn, C. *Can.St./Women's Studies*
 von Graeve, B.W. *Anthropology*
 Wadland, J.H. *Canadian Studies*
 Walden, K. *History*
 Watson, P. *Psychology*
 Wearing, J. *Political Studies*
 Wernick, A.L. *Cultural Studies*
 Whillans, T. *Env.&Res.St.*
 Winocur, G. *Psychology*
 Wiseman, J. *Librarian/Can.St.*
 Wong, P.T.-P. *Psychology*
 Wylie, P. *Economics*
 Young, A.M. *Classical Studies*
 Zeleza, P. *History*
 Zhou, B. *Mathematics*
 Znamirovski, B. *Librarian*





Trent University
Peterborough,
Ontario, Canada
K9J 7B8