





Notice:

Changes in some areas, including new faculty appointments, courses, regulations and fees, may occur.

The University reserves the right to make such changes subsequent to publication of the Calendar.

# Trent University Peterborough, Ontario

## Calendar 1975-76 The Twelfth Academic Year

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Autumn Term / 1975		Spring To	Spring Term		
Aug. 30	Saturday	Final date for payment of first	Mar. 29	Monday	Classes resume
		instalment of fees	Apr. 15	Thursday	Meeting of the Senate
Sept. 1	Monday	Labour Day	Apr. 16	Friday	Good Friday
Sept. 7	Sunday	Arrival of new students	Apr. 24	Saturday	Classes end
Sept. 8	Monday	Introductory seminar begins	Apr. 26	Monday	Examinations begin
Sept. 14	Sunday	Arrival of returning students	Apr. 30	Friday	Final date for receipt of
Sept. 15	Monday	Classes begin			applications for admission to
Sept. 25	Thursday	Meeting of the Senate			the Summer Session
Sept. 30	Tuesday	Final date for summer session	May 8	Saturday	Examinations end
0		appeals	May 9	Sunday	Summer vacation and
Oct. 10	Friday	Final date for changes in	3.5. 40		Reading Period begins
0.4.12	37 . 1	registration	May 18	Tuesday	Summer evening session
Oct. 13	Monday	Thanksgiving Day	<b>T</b> ,	m / 1	begins
Oct. 16	Thursday	Meeting of the Senate	June 4	Friday	Spring Convocation
Oct. 25	Saturday	Classes end	June 28	Monday	Final date for receipt of
0 + 07	3.6	Fall Convocation			applications from mature
Oct. 27	Monday	Residential Reading and			applicants.
0-4-31	17-14	Laboratory Week begins Final date for withdrawal	C	Ct	
Oct. 31			Summer Session		
Morr 2	Manday	from a half courses Classes resume	June 25	Friday	Final data for naumant of food
Nov. 3 Nov. 20	Monday		Julie 23	riday	Final date for payment of fees
	Thursday Thursday	Meeting of the Senate			for Summer Session day courses
Dec. 11 Dec. 13	Saturday	Meeting of the Senate Classes end	June 28	Mondon	
Dec. 13 Dec. 14	Saturday	Christmas Vacation and	July 1	Monday Thursday	Summer Session classes begin Dominion Day
Dec. 14	Sullday	Reading Period begins	July 15	Thursday	Normal closing date for
Dec. 25	Thursday	Christmas Day	July 13	Thursday	appeals b courses
Dec. 23	Thursday	Ciristinas Day	July 23	Friday	Final date for withdrawal
Winter Term / 1976		July 23	Tilday	without penalty from Summer	
					Session day courses
Jan. 1	Thursday	New Year's Day	July 28	Wednesday	Final date for payment of
Jan. 5	Monday	Classes resume			deposit against residence fees
Jan. 15	Thursday	Meeting of the Senate	Aug. 2	Monday	Civic Holiday
Jan. 31	Saturday	Classes end	Aug. 7	Saturday	Summer Session classes end
Feb. 2	Monday	Final date for payment of	Aug. 9	Monday	Summer Session examinations
		second instalment of fees.			begin
		Residential Reading and			
		Laboratory Week begins			
Feb. 9	Monday	Classes resume			
Feb. 19	Thursday	Meeting of the Senate			
Feb. 27	Friday	Final date for withdrawal without penalty			
Mar. 11	Thursday	Meeting of the Senate			
Mar. 13	Saturday	Classes end			
Mar. 14	Sunday to	March vacation and			
Mar. 28	Sunday	Reading period			
Mar. 15	Monday	Normal closing date for			
		appeals a half courses			

#### A

Adams, W.P. Geography
Aitken, G.D. Hispanic Studies
Alfred, L.C.R. Physics
Amyotic, M.L. Chemistry
Annett, R.G. Chemistry

#### B

Bagnani, G. Classical Studies
Barker, J.C. History
Barrett, P.F. Chemistry
Baumgaertel, G. German
Beach, B.L. English Literature, Psychology
Berkowitz, M.S. English Literature
Berrill, M. Biology
Bews, J.P. Classical Studies
Boote, M.J. Economics
Boundas, C.V. Philosophy
Bowles, R.T. Sociology
Brown, S.A. Chemistry
Brunger, A.G. Geography
Burbidge, J.W. Philosophy

#### C

Caldicott, C.E.J. French Studies Cameron, D.R. Politics Carter, C. Mathematics Carter, R.E. Philosophy Castellano, M.J. Native Studies Chakravartty, I.C. Mathematics Chambers, R.D. English Literature Chapman, I.D. Chemistry Chua, B.H. Sociology Cogley, J.G. Geography Cole, A.O.C. History Copeland, W.J. Geography Crowhurst, R. Classical Studies Cumming, P.A. Native Studies Currie, W. Native Studies Curtis, D.C.A. Economics

#### D

Dellamora, R.J. English Literature Doxey, M.P. Politics Downes, W. Education Dray, W.H. Philosophy

#### E

Earnshaw, J.W. Physics
Eathorne, G.D. English Literature
Edwards, R.L. Biology
Ernest, C.H. Psychology

#### F

Fewster, J.C. German Fisher, A.G. English Literature Franklin, A.E. French Studies Fry, M.G. Philosophy

#### G

Gallagher, S.F. English Literature
Gallop, D. Philosophy
Garrido, R.M. Hispanic Studies
Gilchrist, J. History
Glassco, D. English Literature
González-Martin, J.P. Hispanic Studies
Govier, T.R. Philosophy
Greene, C.M. History
Guinand, A.P. Mathematics

#### H

Hagar, F.A. History Hagman, R.S. Anthropology Hamilton, G.F. Mathematics Harper, F.K. French Studies Harrison, P.D. Anthropology Heeney, B. History Helleiner, F.M. Geography Helmuth, H.S. Anthropology Henniger, J.P. Mathematics Hillman, J. Sociology Hodgins, B.W. History Hodgson, B.J. Philosophy Hook-Czarnocki, B.D. Sociology Hubbell, L.J. Anthropology Hunter, W.T. Economics Huxley, C.V. Sociology

#### J

Johnson, C.D. Biology Johnson, R.G. Physics Johnston, G.A. English Literature Johnston, R.B. Anthropology Jones, E.H. History Jones, R. Biology Jury, J.W. Physics

#### K

Kane, S.H.W. English Literature Kettler, D. Politics Kinzl, K.H. Classical Studies Kitchen, H.M. Economics Krueger, A.A. German

#### L

LaPointe, J.-P. French Studies Lasenby, D.C. Biology LeDreff, J.M.A. French Studies Leithwood, K.A. Psychology Lewars, E.G. Chemistry Lewis, A.D. Sociology Lewis, P.J. Accounting Lockhart, R.A. Sociology Lodge, J.I. Physics Lowe, D.G. Psychology Lyon, K.R.V. Politics

#### M

MacAdam, J.I. Philosophy MacDonald, G.F. Anthropology MacMillan, D.S. History March, R.E. Chemistry Marsh, J.S. Geography Martin, J.D.P. History Matthews, T.R. Biology Maxwell, E.A. Mathematics McCalla, D. History McCaskill, D.N. Native Studies McCue, H.A. Native Studies McDonald, J.C. Sociology McKay, R.J. Native Studies McLachlan, I. English Literature McMullen, W.A. Philosophy Mellors, T. French Studies Mitchell, O.S. English Literature Montgomery, M. Native Studies Morris, R.B. Psychology Morrison, D.R. Politics

Morton, W.L. History Murphy, T.N. Mathematics Murthy, K.S.R. Economics

#### N

Nader, G.A. Geography Neufeld, J.E. English Literature Neville, W.F.W. Politics Nighswander, J.E. Biology Nind, T.E.W. Mathematics Nutch, F. Sociology

#### 0

Oldham, K.B. Chemistry Orenstein, A. Philosophy Orsten, E.M. English Literature

#### P

Paehlke, R.C. Environmental Studies, Politics Treadwell, J.M. English Literature Page, D.F.R. Classical Studies Page, R.J.D. History Peterman, M. English Literature Powles, P.M. Biology Puritt, P. Anthropology

#### R

Rautenkranz, K.R. Philosophy Rees, A.H. Chemistry Reker, G.T. Psychology Robertson, J.P.S. Psychology Robson, S.T. History Rooke, B.E. English Literature Roper, G. English Literature Royle, P. French Studies Rubinoff, M.L. Philosophy

#### S

Sandeman, I.M. Biology Schreuder, D.M. History Scott, E.D. Physics Seeley, M.P. Sociology Setterington, R.G. Psychology Slavin, A.J. Physics Smith, C.T. Psychology Smith, D.L. Hispanic Studies

Smith, S.G.D. Politics Sproule, C. Psychology Stairs, R.A. Chemistry Standen, S.D. History Stanford, H.J. Psychology Stewart, D.D. German Strong-Boag, V.J. History Symons, T.H.B. History Syrett, J. History Szathmary, E.J.E. Anthropology

Tamplin, M.J. Anthropology Tate, C. English Literature Taylor, C.H. Geography Todd, E.M. Anthropology Topic, J.R. Anthropology Topic, T.L. Anthropology Torok, C.H. Anthropology, Native Studies Tracey, K.A. Anthropology Tromly, F.B. English Literature

#### $\mathbf{v}$

Valverde, J.M. Hispanic Studies Vastokas, J.M. Anthropology Vastokas, R.K. Anthropology Von Graeve, B.W. Anthropology

#### W

Wadland, J.H. Canadian Studies Watson, P. Psychology Wearing, J. Politics Wernick, A.L. Sociology White, R.F. Sociology Wilson, A. Canadian Studies, History Winny, J. English Literature Winocur, G. Psychology Wong, P.T.-P. Psychology Worthington, A.G. Psychology

#### Y

Young, A.M. Classical Studies

Chairman
B.D. Sandwell, B.A.

Vice-Chairmen
T.J. Bata, c.c.
G.D.W. Cameron, o.c., M.D., c.M., D.P.H.,
F.R.C.P., LL.D., K.G.S.J.

Chancellor
The Honourable E.A. Forsey,
o.C., M.A., PH.D., LL.D., D.LITT., F.R.S.C.

President and Vice-Chancellor T.E.W. Nind, M.A.

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J.E. Leishman, B.COM., C.A.

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T.P.McMillan



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The Honourable E.A. Forsey,
O.C., M.A., PH.D., LL.D., D.LITT., F.R.S.C.

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Associate Dean of Science J.I. Lodge, M.A., PH.D.

Dean of Graduate Studies S.A. Brown, B.S.A., M.SC., PH.D., F.C.I.C.

Registrar and Secretary of the Senate A.O.C. Cole, M.A.

Master of Peter Robinson College I.D. Chapman, M.A.

Principal of Catharine Parr Traill College Mrs. Nancy Sherouse, B.A.

Master of Champlain College Brian Heeney, D. PHIL.

Principal of Lady Eaton College Mrs. Marjory Seeley, A.M., D.C.L.

Master of Otonabee College R.E. Carter, A.B., B.D., M.A., PH.D.

Principal of Julian Blackburn College H.G. Hooke, B.SC.F.

Librarian
Bruce Cossar, B.A., M.L.S.

Comptroller P.J. Lewis, B.A., C.A.

University Engineer A.E. Parker, P.ENG.

## **Administrative Personnel**

Office of the Registrar

Associate Registrar
Gordon D. Pollock, M.A.
Director of Admissions
Richard J. Bowman, B.A., M.ED.
Director of Academic
Records and Scheduling
A.P. Saxby, B.A.
Liaison Officer
Tina Goodes, B.A.

Office of the President
Assistant to the President
Paul Haefling, B.A.

Office of the Dean
Assistant to the Dean
Paul Scott, B.A.

Office of the Vice-President (Finance)
Assistant to the Vice-President (Finance)
J.M. Kennaley, B.A., C.A.
Conference Co-ordinator
Gary Ruona, B.A.

Office of the Comptroller
Assistant to the Comptroller
R.A. Watson, B.A., C.A.
Accountant
J.E. Moore
Supervisor of Personnel Services
Joanne Sandy

Office of the Engineer

Administrative Officer (Engineering)
G.A. Macdonald, B.A.

Operations Engineer
M.J. O'Brien, B.A.SC., P.ENG.
Planning and Development Engineer
George Ross, P.ENG.
Supervisor of Auxiliary Services
R.C. Johnston

Supervisor of Grounds H.N. Darling Purchasing Officer

A.F. Wells

Director of Information J.G. English, B.A.

Director of Athletics P.S.B. Wilson, B.A.

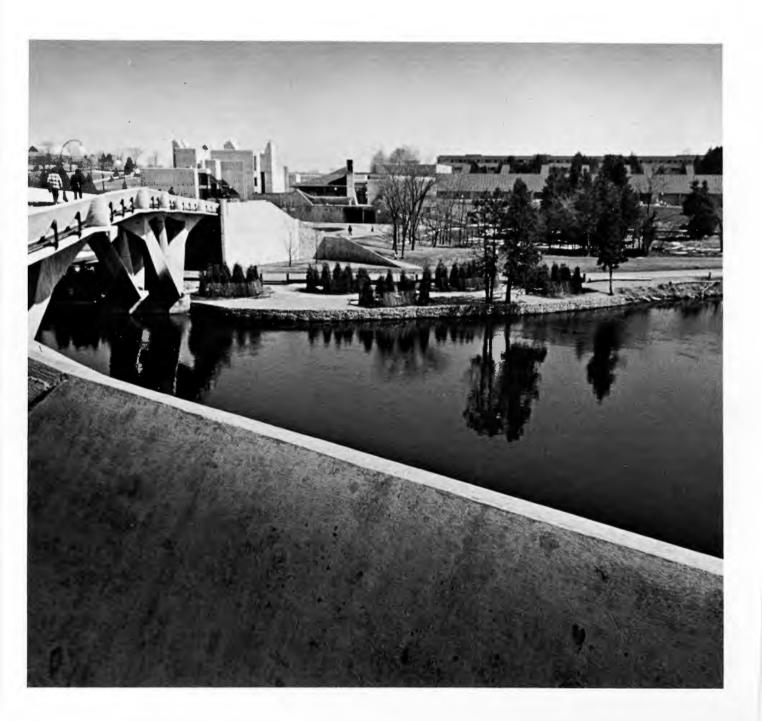
Director of the Health Service R.B. Pritchard, M.D.

Director of Counselling Services Garth Wannan, B.A., M.A.SC.

Co-ordinator of Audio-Visual Services
Peter Tighe

Master Planning Architect R.J. Thom, LL.D., F.R.A.I.C.

Manager of University Bookstore William Jordan



## History

Trent University stresses the importance of a liberal undergraduate education, which it looks upon as an education for the intelligent 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 intensively his fields of interest in close association with his academic seniors.

Trent is the smallest and one of the 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 twelfth teaching year, the University has close to 2,000 undergraduates in the full-time program, and about 1,850 in both the part-time winter and summer school programs. In addition, there are about fifteen Master's degree candidates in the four 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 a 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. The University was elected to full membership in the Association of Universities and Colleges of Canada in 1968.

In 1967, the late Leslie M. Frost, former Prime Minister of Ontario, was elected first Chancellor of the University, and he served until 1973. In that year, The Honourable Eugene Forsey was elected Chancellor.

Trent opened with two residential colleges and a teaching and administrative complex in the heart of Peterborough. The Canadian General Electric Company 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 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 some of the administrative offices, along with

recreational facilities, including a small art gallery, playing fields, track, tennis courts and temporary indoor athletic facilities, on the Nassau Campus. Recently Julian Blackburn College for part-time students was established. All colleges are coeducational.

Trent's master plan was devised on the twin foundations of the residential college and small group teaching. The collegiate 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.

Such small group meetings may consist of a seminar, of about fifteen members, or a tutorial, of about six or seven students. The assumption is that the University is a place of education and of learning, rather than of training and instruction, and therefore a special responsibility is placed on students to discipline their own work, to express themselves frequently and well, and to be open to constructive criticism by fellow students and teachers.

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 to cover prescribed material in detail. Lectures are normally open to anyone wishing to attend.

At registration each student is assigned to a supervisor of studies or counsellor who is responsible for advising on course selection and reviewing the student's progress at regular intervals. Students intending to return in the next academic

## Peter Robinson College

year are counselled on their programs in the spring to enable them to pursue a program of summer reading. The tutorial and seminar system demands that a student distribute the work evenly throughout the academic year. To accommodate this need, the formal academic year is somewhat longer than at most Canadian universities, but there are significant pauses from formal class studies for reading and assimilation. To this end, the academic year is divided in a distinctive way, with a two-week recess in December, two weeks in March, and one-week reading and laboratory recesses in November and February. Reading programs, which do not preclude summer employment, but which are of considerable value to the student, are suggested for most courses beyond first year, over the longer summer vacation. Such programs offer an introduction and a background to work that will be undertaken in the following year.

Master
I.D. Chapman, B.SC., M.A.

Senior Tutor John Syrett, M.A., PH.D. Senior Don vacant Assistant to the Master Eileen Allemang

Peter Robinson College was named to honour the founder of Peterborough, who played a major part in the development of this region. In the pioneering tradition of its namesake, Peter Robinson College was the first college at Trent, opening in September 1964 as a men's college, and in 1967 pioneering a new development in the University by becoming the first coeducational college. The smallest college in the University, it looks forward to a continuing pioneer role.

The College tends to attract students who prefer to live in the city, either in residence or in lodgings and apartments near the College. All students of the College, therefore, have an opportunity to make the College a centre for academic, cultural and social events. As well, Peter Robinson students have emphasized the need for student involvement in the larger community — the city of Peterborough — and a Social Action Committee has evolved to initiate projects bridging the College and the city. Besides the formal teaching that takes place in the College, faculty and students are encouraged to meet in informal gatherings—in common rooms, in dons' apartments, or in the dining room.

The members of the College prefer the informal atmosphere which is expressed by the adaptation of older houses for use as residences, teaching offices for the faculty, an 8,000-volume library, common rooms and dining room. The student-run snack bar and pub *The Jolly Hangman* is, for example, housed in converted garages. To provide new and alternative residence accommodation, the College built a townhouse complex for 100 students. The townhouses provide an opportunity for students to make their own living arrangements within the College setting. Each student has a study bedroom and shares the kitchen, dining and living rooms with three or five other students. All students can use the squash court, sauna and other recreational facilities attached to this complex.

## Catharine Parr Traill College

Principal
Mrs. N.J. Sherouse, B.A.

Senior Tutor J.W. Burbidge, M.A., B.D., PH.D. Senior Don A.P. Sherman Assistant to the Principal Mrs. Lynn Neufeld, B.Sc.

Catharine Parr Traill College, named in honour of the noted botanist, author and early settler in the Peterborough area, is the second of the town colleges. Situated in the middle of Peterborough in a quiet residential area overlooking the city, Traill College enjoys all the advantages of a central town location. The College has a self-contained campus with a number of fine old homes remodelled for college purposes, as well as a modern residential and teaching wing. Each building accommodates resident students in study bedrooms while also offering academic and recreational facilities. Members of faculty, both single and married, act as resident dons. Many members of the academic staff who are Fellows of the College teach in tutorial offices and seminar rooms located in the Traill complex.

Non-resident students are encouraged to contribute to all aspects of college life. They may use the College dining room, The Trend (snack bar) and the various common rooms, all of which have proved to be excellent settings for stimulating informal discussions and debates. On the recreational side, the dark room, the music listening room, the ping-pong table, the sauna and the tennis court are all very popular and the athletic and swimming facilities at the "Y" are in easy walking distance.

Kerr House accommodates the College library and some additional faculty offices. This library contains a very useful collection of reference books and basic texts, and the decor of the house provides a congenial atmosphere for studying.

## Champlain College

Master Brian Heeney, B.A., B.D., D.PHIL.

Senior Tutor Linda J. Hubbell, M.A., PH.D. Senior Don I.C. Chakravartty, M.SC., PH.D. Assistant to the Master T.F.R. Davidson, B.A.

Champlain College, the name of which 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, founded in 1966 as a men's college with a membership of about 450 undergraduates and 45 faculty Fellows, became coeducational in 1972.

It has residential accommodation for 209, and dining, library, common room and recreation facilities for all its members. The College endeavours to provide for its members a rich and stimulating intellectual environment. Through the Champlain College Society it undertakes an active program each year of visits from leading scholars and public figures, who take part in classes and informal discussion with students of the College beyond the regular curriculum. There is, in addition, a growing program of other College activities of many kinds.

The College buildings, designed by the Master Architect of the University, Ronald J. Thom, are distinguished both in style and utility, and seek to enhance the experience of university life. The staircase plan in the two residential courts and the single study bedrooms give ample opportunity both for study and a full college life. Tutorial offices for many of the Fellows of the College, accommodation for both single and married dons, and seminar rooms are interspersed through the residential courts.

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## Lady Eaton College

Principal
Mrs. Marjory Seeley, B.A., A.M., D.C.L.

Senior Tutor S. Dale Standen, M.A.
Senior Don Terence Mellors, M.A.
Assistant to the Principal Louis Taylor, 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 Omemee and one of the original sponsors of the University, the College provides a range of attractive facilities designed to encourage academic and social interchange for a community of 400 within the context of a residential teaching college.

The College buildings are divided into two separate residential and office wings and a central wing called the Commons Block. One residence wing is for women only. The other wing accommodates men in one section and women in another. There are 208 single study bedrooms and 15 double study bedrooms. On the first floor of the residence wings are the Principal's Lodge and six apartments for faculty and administrative staff of the University who live in the College as residential dons. There are also a number of offices for the Fellows of Lady Eaton College. Teaching takes place in these offices as well as in the College seminar rooms and in other university buildings.

Non-resident members of the College living at home or in lodgings in Peterborough are encouraged to participate in College activities and to use common rooms, music listening and music practice rooms, the art room, the sauna and exercise room, snack bar, browsing and reading rooms. The dining hall, a spacious and colourful room with small tables, has a warm and friendly atmosphere. Lady Eaton presented her library and a distinctive collection of Eskimo Art to the College. Though most of the books are in general circulation at Bata Library, some of the books and the Eskimo sculptures have a permanent home in the College.

The student government organizes and sponsors many College events in which students and faculty participate. One such event is the publication of the College newspaper Eaton's Catalogue. Fellows and students also serve on a number of joint committees which contribute to activities within the College. In addition, many members of the College join in university and community programs.

## Otonabee College

Master Robert E. Carter, A.B., B.D., M.A., PH.D.

Senior Tutor vacant
Senior Don Peter J. Northrop
Assistant to the Master Mrs. Magdalene Goodberry

The Indian name for the river flowing through the Nassau campus is Otonabee, which comes from the Ojibwa for fast water. The academic facilities adjacent to the College house the Native Studies Lounge and the offices and laboratories of most of the social science departments. The Trent Water Group, an association of scientists involved in water study and ecology, is also affiliated with Otonabee College.

The Science Complex forms one of the western entrances to the College, and the long residence building, one of the first in Canada specifically designed as a coeducational complex, fits comfortably into the cedar-lined ridge on the east side of the Otonabee River on the Nassau Campus. Each of the eight houses within the residence is a distinct unit joined by a pedestrian way which widens into communal areas, and links the residence, College offices, academic areas, dining and common rooms, theatre, coffee shop and Science Complex. Each house has student living rooms and kitchenettes. Most of the study-bedrooms face the river, library, and sister colleges and provide outstanding views of the campus. Cross-country skiing enthusiasts have easy access to the gentle slopes surrounding the College, and the University ski trail to the south. The "mountain", a freeform three-tiered carpeted platform, provides an informal meeting place for students. The Wenjack Theatre is the site for the Town and Gown concert series, the University Performing Arts Series, film festivals, and other major University, community and College events. The dining hall, common rooms, living rooms and study areas are available equally to residential and non-residential members.

The separate houses allow for innovative and traditional organizational structures. Those who enjoy involvement in student government, student and faculty interchange, and lively social and cultural activities in an academic milieu will find Otonabee a fulfilling and exciting place.

## Julian Blackburn College

Principal H.G. Hooke, B.SC.F.

Chairman of the College Academic Board M.L. Rubinoff, M.A., PH.D.

Counsellor Erika Pipher, B.A.; Assistant to the Director (Non-Credit Courses) R.J. Elford, B.A., MUS.G.PAED, A.MUS.; Assistant to the Director (Summer Session) Marian E. Hickey, B.Sc.

Julian Blackburn College was established in 1975 to serve parttime students at Trent University. The College was named in honour of the late Professor Julian Blackburn who provided counsel and advice in the planning of Trent University, and in its formative years contributed greatly to the development of a program of part-time studies.

The College is designed primarily for those students who are working toward a university degree on a part-time basis, and full-time students will be allowed membership only in special cases. There were approximately 950 part-time students enrolled in the past winter session.

The College is located on the fourth floor of the Bata Library Building and includes a student common room and the office facilities of the part-time studies program.

An academic board of twelve members—nine faculty, two part-time students and principal—guide the activities of the College in developing a program of activities that are particularly appropriate for part-time students, whose university interests may differ from those of the full-time university undergraduates.

For more information, see the section on Part-time Studies.













University Librarian
Bruce Cossar, B.A., M.L.S.

Associate Librarian John A. Wiseman, F.L.A.; Canadiana Librarian and Associate Professor of Bibliography J.D.P. Martin, B.A., B.L.S.; Reference Librarian Margaret E. Hargrove, B.H.S., B.L.S.; Assistant Reference Librarian (Government Documents) W.D.M. Robinson, B.A., M.L.S.; Assistant Reference Librarian (Maps) Anne L. Taylor-Vaisey, B.A., M.L.S.; Serials Librarian Anna McCalla, B.A., B.L.S.; Cataloguing Librarian Elma Lake, B.A., B.L.S.; Assistant Cataloguing Librarian Janice Millard, B.A., M.L.S.; Archivist K.W. Johnson, B.A.; Circulation Supervisor W. Avis.

The University's Thomas J. Bata Library is adjacent to the University Court and is the focal point of the Nassau campus. Four storeys high, it has room for more than 370,000 volumes and 800 readers. Bright, spacious and air-conditioned, it provides ideal study and research facilities for all student and staff requirements. The building also houses the Audio-Visual Centre and a number of administrative and faculty offices.

The Library contains a collection of over 225,000 volumes, 28,000 microforms, more than 2,500 serials subscriptions, over 70,000 maps and some 75,000 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. 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 gifts as the G.M. Douglas Arctic collection, the Shell Canada Fund for Canadian Literature, the Perkins Bull collection of prints, the Racey collection of newspaper cartoons, and the Floyd Chalmers collection of Canadian Explorations. The local collection of materials relating to the Trent Valley has been enriched by the acquisition of family and institutional papers and a wide variety of other archival materials.

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 Ford Foundation is providing direct support for Canadian Studies. The Map section is a major resource for students in

Geography and Anthropology.

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 telex communications and a daily courier service, expedites the delivery of materials between university libraries of Ontario and Quebec.

## **Admission Requirements**

1. Normal 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 Grade 13 program of studies or equivalent. Because of the diversity of programs offered in secondary schools in Ontario, a full program is defined as that which is deemed by the school principal satisfactory for the purpose of granting an Honours Graduation Diploma.

No minimum number of years taken to achieve this standing is specified. Applicants who have spent more than five years in secondary school may be required to present a higher level of

achievement.

With the exception of some language programs there are no specified subject requirements for admission to Arts programs. Applicants to Science programs are advised to consult the Grade 13 requirements of individual disciplines as shown in the Courses of Study section.

In lieu of Ontario Grade 13 Music, standing in one of the following examinations of the Royal Conservatory of Music of Toronto or equivalent is accepted: 1) Grade 8 Practical with Grade 2 Theory; 2) Grade 4 Theory. If the R.C.M.T. or equivalent examinations are offered, candidates must have the required overall average for the course sought on the academic credits offered. R.C.M.T. or equivalent examination marks are not included in the calculation of the overall average.

2. 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. Maturity and motivation will be taken into account. The Admissions Committee may require the candidate to be present for an interview. Any candidate who wishes to apply for admission and who does not possess the normal requirements should write to the Director of Admissions outlining academic qualifications, experience and the grounds on which admission is requested. Such candidates may be admitted outright or to probationary status for one academic session.

Applicants admitted on probation normally are eligible to enrol in a single course and are required to obtain a grade of C or higher. The standing of students admitted on probation will be reviewed by the Committee on Academic Standing.

### 3. Equivalents to Ontario Grade 13

Alberta, British Columbia, Manitoba, New Brunswick, Nova Scotia, Saskatchewan-Grade 12

Newfoundland-First Year, Memorial University

Prince Edward Island - First Year, University of Prince Edward Island

Quebec—Completion of Year 1 of a CEGEP program or equivalent.

England and Wales, West Indies, East and West Africa, Hong Kong—General Certificate of Education (or University of Hong Kong Matriculation Certificate), 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; or School and Higher School Certificate. (Credits on the School Certificate, and subsidiary passes on the Higher School Certificate are equated with ordinary level passes on the General Certificate of Education; principal or main subject passes on the Higher School Certificate are equated with advanced level passes on the General Certificate of Education.)

Scotland-The Scottish Leaving Certificate.

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.

Students from areas other than those listed above should submit full details and available certificates to the Director of Admissions for evaluation.

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

4. Special Requirements

a) Candidates from areas where English is not a common language will be required to provide evidence of a knowledge of English sufficient to enable them to profit from their university studies.

b) Candidates wishing to study Mathematics at the University should have Ontario Grade 13, or equivalent standing in that

subject.

c) Candidates who propose to proceed to another university for studies in Medicine or Dentistry should consult the Calendar of the university in which they are interested, and this Calendar's section on Pre-Professional Studies for details about the entrance requirements for faculties of Medicine and Dentistry.

### **Admission Procedures**

#### 5. Admission with Advanced Standing

The University will consider applications from students from other universities for admission with advanced standing. Applicants for advanced standing should consult the Academic Programs and Standings Required section of the Calendar. Applicants for advanced standing must arrange for the forwarding of official transcripts of their university record to the Director of Admissions of Trent University. Advanced standing will be assessed and the applicant informed of his advanced standings by the Committee on Admissions prior to the student's admission to the University. No requests for a reevaluation of a student's transcripts will normally be accepted after this time.

#### 6. Part-time Credit Studies

Candidates considering a program of part-time credit studies should consult the Academic Programs and Standings Required section of this Calendar and the Part-time Studies section.

#### 7. Debarment

The University reserves the right to refuse admission to any candidate and to refuse re-admission if it becomes apparent that a student is not profiting from University studies.

Applicants should also consult the Academic Programs and Standings Required section of the Calendar.

#### 8. Application Fee

Applicants for admission to this University who are not residents of Canada or who have obtained standing in educational jurisdictions beyond Canada are required to pay a fee of \$10 upon filing an application. This fee may be in addition to the \$6 fee for the Ontario Universities Application Centre.

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

By agreement between the universities, current Grade 13 candidates notified of acceptance by a university may not be required to make formal acceptance until June 13, 1975.

Candidates for admission from outside Ontario, or who are not currently in Grade 13 or are recent graduates, may obtain application forms from the Director of Admissions. Such candidates must submit the appropriate certificates or certified copies of these, showing their standing in each subject.

Candidates for admission may be asked to attend an interview with the Admissions Committee. Each admitted candidate will receive a medical form from the University which should be completed, preferably by the candidate's regular physician, and sent to the University Health Service before registration. Each candidate for admission will be notified of the University's decision concerning his or her application as early as possible, within the limits of the inter-university agreements cited above.

Because all full-time students in the University are members of a college, every applicant to the University must complete a college application form which may be obtained from the Director of Admissions.

## Registration

Entering students who have been offered and have accepted admission to the University will register in person during the Introductory Seminar. The College Admissions Committee will make every effort to meet the wishes of students for particular college affiliation but cannot guarantee to meet all requests.

Registration is complete when an undergraduate has been informed of his admission by the University, has met with the Head of his college, has paid at least the first instalment of his fees, has visited the Health Service, and after consultation with his supervisor of studies, is enrolled in an approved program of studies at the centralized course registration. During the Introductory Seminar, first-year students have the opportunity to sample first-year courses before selecting the five they will pursue. A fee of \$10 may be charged to those registering late.

Returning students are also required to place a \$50 deposit against residence fees before July 15 in order to guarantee a place.



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## **Scholarships**

Trent University has a generous scholarship program designed to reflect its insistence on high standards and to reward and encourage its leading students.

Through the generosity of private donors, several scholarships have been endowed; these scholarships will be awarded to students entering the University and during the course of their studies.

All University scholarships may be held in conjunction with other scholarships awarded by external agencies when their conditions permit. No student applying for admission to the University after August 1 will normally be considered for a scholarship.

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

Since all students with high standing will automatically be considered, no separate application for scholarships awarded by the University is necessary.

#### The Bata Scholarship

The scholarship, the gift of Thomas J. Bata, one of the original honorary sponsors of the University and a member of the Board of Governors, is of the value of \$550 for one year.

#### 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 Champlain Scholarships

Champlain Scholarships are available for students of exceptionally high academic achievement and promise, whether entering the University or in course. Each scholarship has an annual value of \$1,980 for students living in residence and of \$1,100 for non-residents, and will be renewed each year at full value so long as the holder's work is of high standard.

#### The Sylvia Cherney Scholarship

The Sylvia Cherney Scholarship, the gift of 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 Roscoe F. Downey Scholarships

Two scholarships, the gift of the late Roscoe F. Downey of Peterborough, each of the value of \$100 for one year, are available to entering students, one from Peterborough County and one from Victoria County.

#### **Faculty Scholarship**

A scholarship, the gift of a member of the founding academic staff of Trent University, of the value of \$650 for one year.

#### The Reginald R. Faryon Scholarships

These scholarships, the gift of the 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. Each Faryon Scholarship is of the value of \$400 for one year.

#### The Rufus Gibbs Scholarships

These scholarships, the gift of the late Rufus C. Gibbs, each of the value of \$500 for one year, 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

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

#### The Howson Scholarship

The George Henry and Jane Laing Howson Scholarship is the gift of the late Miss A. Howson and Mrs. M.H. Simpson, and is named in memory of their late parents. Of the value of \$350 for one year, the scholarship is available to a student with high academic standing who is proceeding to the degree of Bachelor of Arts.

#### The Francis Dean Kerr Scholarship

The 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, and is of the value of \$550 for one year.

#### The William Allan Newell Scholarship

The scholarship, the gift of Judson Newell of Prescott, is named in honour of his father, the chairman and founder of the Newell Manufacturing Co. Ltd. Of the value of \$550 for one year, it is available to an entering student proceeding to the degree of Bachelor of Science.

#### **Prizes**

#### The Peterborough Examiner Scholarship

The scholarship, the gift of Peterborough Examiner Co. Ltd., of the value of \$1,200 for one year, is available to an outstanding student entering first or a higher year and living in residence.

#### The Katherine E. Scott Scholarships

Two scholarships, the gift of Dr. C.M. Scott of Peterborough, are named in honour of his late wife. Each scholarship is of the value of \$550 for one year.

#### The H. Clare Sootheran Scholarship

The gift of the late H. Clare Sootheran, a citizen of Peterborough, this \$250 scholarship is awarded for excellence in the Faculty of Arts.

#### The Trent University Scholarships

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

#### 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.

#### The Ruth Benedict Prize

This prize, in honour of the first major female anthropologist, Ruth Fulton Benedict (1887-1948), is awarded to a student entering Honours Anthropology with high academic standing.

#### **Department of Biology Prizes**

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

#### Canadian Association of Geographers Undergraduate Award

Presented by the Canadian Association of Geographers to the Honours Geography student with the highest academic standing in specific courses.

## Chemical Institute of Canada (Peterborough Section) Prize

Awarded to a first-year student who has shown excellence in the field of General Chemistry.

#### 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.

#### **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 Honours Program in English Literature.

#### 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 History.

#### **Gadfly Prize**

This prize, the gift of the academic staff in Philosophy, is available for award to the leading undergraduate in Philosophy entering his or her graduating year. The prize commemorates Socrates' description of himself as one who rouses and reproves the society in which he lives just as a gadfly awakens a sluggish horse.

#### Governor-General's Medal

Awarded to the fourth-year student with the highest overall standing on graduation.

#### Harvey G. Greene Prizes in Native Studies

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

#### 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.

#### David N. McIntyre Conservation Award

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

#### Midwives' Prize

This prize is the gift of the 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; Dean Frank Stiling, 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.

### W.L. Morton Essay Prize in History

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

#### Peterborough Professional Engineers Wives' Association Prize

This prize, a gift of the association, is awarded to an undergraduate who shows excellence in the second-year courses in Physics or Chemistry.

#### **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.

#### **Essay Prize in Honours Politics**

This prize, the gift of the Department of Politics, 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.

#### 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. 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.

#### **President Symons Medals**

The President's 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 third and fourth year who achieve high overall standing on graduation.

#### Alan Wilson Prize in History

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

#### Bursaries

Each year a sum of money is available for bursary assistance to students who are currently enrolled at Trent University. Information is available from the Student Awards Office.

## A.T.A. Trucking Industry Educational Foundation Bursary Fund

Established by the Automotive Transport Association of Ontario. These bursaries may be awarded to deserving students who would be unable to continue their studies without financial assistance

#### **Beaver Foods Bursary Fund**

Established by Beaver Foods Limited to be awarded to deserving students in any undergraduate year.

#### **Philip 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. Value: \$50.

#### Reginald R. Faryon Bursary

The award is the gift of the Peterborough Branch of B'nai B'rith in memory of Reginald R. Faryon. Value: \$50.

#### Peterborough Chapter of Hadassah Bursary

The award is the gift of the Peterborough Chapter of Hadassah. Value: \$100.

#### 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.

#### **IBM Canada Bursary Program**

Established by IBM of Canada, these bursaries may be awarded to deserving undergraduates in any year of an Arts or Science program.

## 'In-course' Bursaries of the Atkinson Charitable Foundation

These bursaries may be awarded to meritorious Ontario undergraduates in second and higher years. Information is available from Student Awards Office.

#### 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.

#### **Native Studies Donner Bursary Fund**

These bursaries are available for students of native 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.

#### Part-time Students' Bursary Fund

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

#### **Ontario Student Awards**

The Province of Ontario and the Government of Canada provide a program of grants and loans to university students through the Province of Ontario Student Assistance Program. This program is not based on academic standing but is related to the established need of the student in the individual year of the university. Awards are made by the Ministry of Colleges and Universities, after assessment of need, and are divided between provincial grants and Canada Student Loans according to a formula established by the government. Students may obtain details of this program through school officials or from the Student Awards 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 United States are urged to consult with the State financial aid authorities. The University has limited bursary funds to assist needy students not eligible for government assistance.

#### **Tuition Fees**

#### Full-time Students

The tuition fee (allowable for income tax purposes) for fulltime undergraduates for the academic year is \$600.

#### Special Students

Special students, taking three-and-one-half or more courses, are considered to be full-time students and pay full tuition fees.

#### Part-time Students

Part-time students taking three or fewer courses during the regular winter session, or the summer session, pay tuition fees of \$120 per full course, \$60 per half course, or \$120 for two half courses. These fees are also allowable for income tax purposes.

#### **Ancillary Fees**

All students who are affiliated with one or other of the five residential colleges, whether resident or non-resident, full- or part-time, pay ancillary fees of \$60, of which \$30 is for student government, \$20 for Athletics and \$10 for Student Health Services.

Part-time non-resident students who are members of Julian Blackburn College pay ancillary fees of \$10; \$5 for Athletics, \$4 for student government, and \$1 for Student Health Services.

Ancillary fees are not refunded upon withdrawal from the University, and are not adjusted if a student changes college affiliation during the year.

#### Non-Resident Fee

Non-residents are encouraged to enter fully into the life of their colleges, and accordingly to make considerable use of college facilities. A non-resident fee of \$85, including \$10 to be applied against meals taken in college, is payable by all non-resident students (other than those who are members of Julian Blackburn College) in addition to the academic fee. Part-time non-residents who are members of Julian Blackburn College pay a non-resident fee of \$10.

#### Resident Fees

Fees in the 1974-75 academic year for room and board were \$1,320 for a single room and \$1,245 for a double room. In the 1975-76 year these fees may be reassessed and adjusted in relation to current economic conditions.

#### Waiver of Fees

The Senate and 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 courses offered by the University.

#### **Payment of Fees**

Fee payments in the form of cheques or other remittances should be made payable to Trent University and mailed to the Office of the Comptroller on or before August 31, 1975. If paid in instalments, the first instalment must be paid on or before August 31, and the second instalment, plus an instalment charge of \$5 for tuition fees and, if applicable, of a further \$5 for residence fees, paid on or before January 31, 1976.

Special arrangements may be made through the Head of College for students whose fees are paid by funds from scholarships and awards, or by loans, grants or other forms of assistance.

Charges are imposed on accounts remaining unpaid after the end of the month in which they become payable; the academic record of a student who has any accounts outstanding at the end of any academic session will not be released by the University.

#### Fee Refunds

Refunds of any fees payable are made only in special cases, on the written authorization of a student's College Head. Ancillary fees are not refundable; any refunds granted will be subject to a refund charge.

#### Books

Costs of required books and materials vary according to individual course requirements, with Science courses tending to be more expensive than Arts courses. Students should be prepared to spend between \$20 and \$50 per course for books and materials. Special fees may be required in some courses involving laboratory or field work.

Certain further fees may be charged in appropriate circumstances.

All fees are subject to change.

The Faculty of Arts and Science of the University offers at the undergraduate level both an Ordinary program leading to the degrees of Bachelor of Arts and Bachelor of Science upon successful completion of 15 courses, and an Honours program leading to these same degrees with Honours upon successful completion of an additional four- or five-course program. The degree programs are designed to be flexible so that the particular needs and interests of individual students may be satisfied. Each student chooses his program in consultation with his supervisor of studies or counsellor, who seeks to ensure that the program is coherent.

#### **Assessment of Performance**

Work done during term and in the reading periods, any midyear or other examinations, and any final examinations will be considered in determining an undergraduate's final standing in each course.

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

#### Residential Reading and Laboratory Weeks

During residential reading and laboratory weeks no formal class meetings or examinations are held, but students continue their studies at the University, under the guidance of their tutors. The library and laboratories are open to students during these periods. The value of the academic program to the student depends to a considerable extent on reading and study done during the vacations.

#### Grades

There are five passing grades: A, B+, B, C, D; and one failing grade, F. There are no numerical equivalents to these grades. Undergraduates are informed of their standing in each course. There are no supplemental examinations.

#### **Aegrotat Standing**

Petitions for special consideration because of sickness or misfortune at any time during the academic session should be sent to the Registrar 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 below.)

#### Withdrawal

With the exception of half courses completed before Christmas, any course confirmed by November 1 may be dropped prior to March 1 without academic penalty. A student dropping a course on March 1 or thereafter shall be deemed to have failed that course. The final date for withdrawal without penalty from a half course which is conducted in the Autumn term is October 31.

Students withdrawing from a half course, conducted during half of the year, are advised to consult the regulations governing half courses as outlined under Courses of Study.

A student withdrawing either from a course or from the University should consult his supervisor of studies and his College head and must notify the College head in writing.

If written notice of withdrawal is not received the student may be charged with an academic failure and is responsible for financial obligations.

If a student is ill for a period after March 1 and sends the Registrar medical certification or other appropriate evidence, he may be granted permission to withdraw without penalty.

#### **Probation**

A student whose performance has been unsatisfactory may be allowed to continue his studies on probation. The Committee on Academic Standing will review the progress of students on probation and may recommend that probation be lifted, or if no improvement occurs such students may be rusticated for one year.

#### **Rustication and Debarment**

The case of any student who has failed two courses will be automatically reviewed by the Academic Standing Committee, and that student's case will be reviewed following each subsequent failure. The Committee may decide upon rustication or debarment, subject to the student's right of appeal to the Special Appeals Committee.

#### Rustication

In general, rustication, i.e., refusal of permission to enrol for a year, will result from any one of the following circumstances (among others):

- a) three failures in the first five courses, the second five courses, or the third five courses attempted;
- b) five failures in total:
- c) failure to achieve at least one grade of C or better in a sequence of five courses attempted.

#### Debarment

Two further failures on return from such a year of rustication will lead to debarment from the University, and in this case the student will not be eligible for re-admission for a minimum of three years.

In interpreting these rules, a transfer student's record at the other university will be taken into account.

#### Transfer of Credits

Students are normally required to complete half of their degree program at Trent University. Students who transfer from another university will be granted advanced standing on an individual course basis for courses which are directly comparable to courses offered at Trent. Unassigned credit 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 this University. Students transferring credits will be governed by promotion regulations as outlined in this Calendar under the Ordinary Program section.

#### Study at Other Universities

#### **Letters of Permission**

A student may be permitted by the individual departments, and/or the Undergraduate Studies Committee, to take courses elsewhere for credit toward a degree program. A letter of permission to undertake such courses must be obtained from the Registrar's office before taking the course. Retroactive approval will not be granted. There is a \$10 per course fee normally charged for such letters of permission. Students wishing to undertake summer courses at another university on a letter of permission are advised to undertake only one and will not be permitted to attempt more than two full courses during the Summer Vacation and Reading Period.

The maximum number of whole courses for which credit may normally be given is five in either an Ordinary or Honours program. It should be noted that the last five courses offered by a candidate for a degree are normally to be completed at Trent. A registration and supervision fee of \$50 will be charged students granted permission to attempt five course credits from another university.

#### Study at Foreign Universities

Students, particularly in modern languages, wishing to take a full year of study at a foreign university or in French Canada must have the plan of study approved by the department(s) of major concentration before a leave will be granted. Courses in such programs should be roughly comparable to those which

would have been taken had the year been done at Trent. A letter of permission must be obtained in advance.

Normally, this year of study abroad should constitute the third year of an Honours program. Under special circumstances, and at the recommendation of the department(s) concerned, a student may be permitted to undertake the fourth or Honours year abroad, and so qualify for a Trent Honours degree.

A registration and supervision fee of \$50 will be charged students granted leave to study abroad for one year for credit towards a Trent degree.

#### **Appeals**

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 Chairman of the department.

Final grades in individual courses will be reviewed by the department concerned and submitted to the Registrar, countersigned by the department Chairman. All failing grades will receive special scrutiny by a departmental committee.

Before final release, the grades of each undergraduate will be reviewed by a committee of Senate. Every student has the right to appeal final standing in any course, regardless of grade, but in considering such appeals grades given for term work in the course of the year will not normally be reassessed. All appeals should be made in writing to the Registrar before July 15, or September 30 in the case of summer session. Appeals for a half courses should be made by March 15. A fee of \$15 will be charged for the handling of an appeal, refundable if the grade is raised.

Students enrolled at Trent University who believe that the application of University regulations has worked undue hardship on them should first appeal to the Chairman of the department or committee responsible for the adverse ruling; in many instances the Chairman may see fit to refer the appeal to the Undergraduate Studies Committee or the Committee on Academic Standing.

If, after exhausting all other areas of appeal, students still feel that undue hardship has been worked on them they may appeal to the Special Appeals Committee. Such appeals should be made in writing to the Chairman of the Special Appeals Committee, normally before July 15 or September 30 in the case of summer session. Appeals for a half courses should be made by March 15. All decisions of the Special Appeals Committee are final and take effect when issued.

Students wishing to take a program not outlined in this Calendar may, after consultation with their supervisor of studies or counsellor, make a petition to the Chairman of the Undergraduate Studies Committee.

#### Course Credit

Students retain credit for every course and every half course successfully completed. Two half courses count as the equivalent of one full course, and the student's grade in a half course will be announced as soon as it is known. The transcript will show each course and half course and the grade achieved.

#### **Course Sequence and Load**

The normal load in a regular session is considered to be the equivalent of five full courses for credit, and students will be permitted to take additional courses only upon successful petition to the Undergraduate Studies Committee. Such petitions must be endorsed by the supervisor of studies and presented to the Senior Tutor before they will be considered by the Undergraduate Studies Committee. It is expected that most students will take five one-hundred series courses, followed by five two-hundred series and then by five three-hundred series courses.

Under the Courses of Study section, it will be found that several departments permit freshman students to take two one-hundred series courses or a one-hundred and a two-hundred or three-hundred series course in one discipline. Students availing themselves of this opportunity may do so in one department only and thus are required to include courses from four different disciplines among their regular five-course selection.

If it is desired to take senior courses earlier in the sequence the student should consult tutors from the departments involved to ensure departmental permission and that no problem will arise concerning prerequisite status.

Students are permitted to register in a maximum of two courses (for credit) in any particular summer session, but it is advised that not more than one such course should be attempted.

Any student who wishes to enrol in six regular courses and two summer school courses in the same year whether the summer session immediately precedes or follows the winter session, is required to apply, through his supervisor, to the Undergraduate Studies Committee. The application must be accompanied by a supporting statement from the Chairman of the department in which the student is majoring or, in the case of a freshman student, by the Chairman of the Committee on Admissions.

#### **Program Changes**

Course changes must be made on a form available from the supervisor of studies, or in the case of part-time students from Julian Blackburn College.

A student wishing to change a course must have his form initialled by the instructor of the course which is being dropped, then by the instructor of the course being added and then endorsed by the supervisor of studies. Students wishing to change major programs, or to enter the general degree program, must do so not later than the Friday before Thanksgiving. Entry into a general degree program must receive approval from the Undergraduate Studies Committee.

A student wishing to drop a course must use the same form and have it initialled by the instructor of the course which is being dropped and endorsed by the supervisor of studies.

The student is responsible for making sure that all copies of the change form are received at the Registrar's Office in accord with the following deadlines. Both additions and changes of full or a half courses after the Friday before Thanksgiving are subject to a fee of \$10. No full or a half course additions or changes are permitted after October 31. Similarly, October 31 is the last date for withdrawal from a half courses without academic penalty. No b half course additions or changes are permitted after the third week of the second term. February 28 is the last date for withdrawing from full and b half courses without academic penalty.

If, as a result of program changes, a student changes his status from full-time to part-time or vice versa, the College Head must be notified in writing.

## **Ordinary Program**

An Ordinary Degree is awarded upon the successful completion of fifteen courses, or the equivalent where special arrangements have been approved, subject to qualifications a), b) and c) below:

a) Of the fifteen courses counted toward the Ordinary Degree not more than seven may be *one-hundred* series courses, and at least four full courses in the *three-hundred* series (or equivalent) must be included. Moreover, no student may count, for credit toward the Ordinary Degree, more than eight of the courses offered in any one subject.

b) For an Ordinary Degree, a student must obtain a minimum of C standing in at least twelve of the fifteen passed courses and a minimum of C in at least seven two-hundred or three-hundred series courses. A course may be repeated (for credit) only if the grade on the preceding attempt was either D or F; c) Of the minimum number of courses required for a major, not more than one with a D standing may be accepted.

Undergraduates may choose to pursue a single-major, a joint-major, or a general degree program.

#### Single-Major Program

This program is designed for the student who wishes a broad education, with concentrated work in a single subject to provide a focal point of study. A student is not normally permitted to major in a particular subject, unless he has received credit, with a C grade or better, in the one-hundred series course of that subject. Precise requirements for a major depend on departmental recommendations and regulations, but in no case will the total number of courses for credit in the subject of the major be less than five or greater than eight. Students wishing to undertake a single-major should consult their tutors in the discipline concerned.

#### Joint-Major Program

This program is designed for students wishing to take a fairly specialized education in two subjects. A student is not normally permitted to enrol in a joint-major program, unless he has received credit, with a C standing or better in the *one-hundred* series course in each of the disciplines concerned. Precise requirements for a joint-major depend on departmental recommendations and regulations, but in no case will the total number of courses for credit in each of the subjects of the joint-major be fewer than five or more than six.

Students wishing to undertake a joint-major program should consult their supervisors as well as their tutors in the two disciplines concerned.

#### **General Degree Program**

This program is designed for students wishing to take a broad range of courses, but without specialization in any particular discipline. Enrolment in such a program normally takes place after completion of the first five courses for credit.

Students considering the general degree programs must consult their supervisors, as well as the tutors from the disciplines concerned, to ensure that the program is cohesive, and also that prerequisites for individual courses have been met. All such programs must be submitted to the Undergraduate Studies Committee for approval not later than the Friday before Thanksgiving.

#### Bachelor of Science in the Ordinary Program

Students successfully completing single- or joint-majors in Biology, Chemistry, Mathematics or Physics will automatically qualify for a Bachelor of Science degree.

Students with joint-majors involving only one of these four or with single- or joint-majors in Anthropology, Economics, Geography or Psychology may petition to receive a Bachelor of Science degree. This petition will be made on the form for Application for Graduation to the Undergraduate Studies Committee, which will consult with the department(s) concerned. Normally a single-major in Anthropology, Economics, Geography or Psychology, without at least half of the courses outside the major being in one of the other disciplines listed, or a joint-major which includes any discipline not listed above will be granted a Bachelor of Arts degree.

## **Honours Program**

Honours-year programs, normally involving a single academic year of integrated study, are available to qualified students on completion of the fifteen-course Ordinary Degree program. The year may consist of a single-major, joint-major, or general degree Honours program.

Single-Major Honours Program

Single-major Honours programs are offered in Anthropology, Biology, Chemistry, Classical Studies, Economics, English Literature, French Studies, Geography, German, Hispanic Studies, History, Mathematics, Philosophy, Physics, Politics, Psychology and Sociology.

The structure of, and the individual courses to be taken in, a single-major Honours year are established by the department concerned (under the overall direction of the Academic Development Committee). The department recommends to Senate the awarding or withholding of the Honours degree at the close of the Honours year.

Students wishing to undertake a single-major Honours program should consult their supervisors and the Chairman of the department concerned before making application for admission to the Undergraduate Studies Committee.

**Joint-Major Honours Program** 

Joint-major Honours programs are offered by all departments offering a single-major Honours program.

The structure of, and the individual courses to be taken in, a joint-major Honours year are established by the departments concerned (under the overall direction of the Academic Development Committee). The departments concerned recommend to Senate the awarding or withholding of the Honours degree at the close of the Honours year.

Students wishing to undertake a joint-major Honours program should consult their supervisors or counsellor, and the Chairmen of the departments concerned before making application for admission to the Undergraduate Studies Committee.

**General Degree Program** 

Students considering a general degree Honours program should prepare a short statement of the work they hope to carry out during the program. This plan should be discussed with the supervisor or counsellor, and then with the Chairmen of the departments concerned. If agreement is reached on the program, a special advisory committee will be established to co-ordinate the program and to advise the student during his Honours year. This committee will make recommendation to

the Senate for the awarding or withholding of the Honours degree at the close of the Honours year.

Normally a student taking a general degree Honours program will be expected to complete four or five courses, at least three of which would be four-hundred series courses.

**Bachelor of Science in the Honours Program** 

Students successfully completing a single- or joint-Honours program in Biology, Chemistry, Mathematics, Physics or Psychology, or a joint-major including one of those subjects and one of Anthropology, Economics or Geography, will automatically qualify for a Bachelor of Science degree in the Honours program.

Students with joint-Honours involving only one of the above subjects, or with single- or joint-Honours in Anthropology, Economics or Geography, may petition to receive a Bachelor of Science degree. This petition will be made on the form for Application for Graduation to the Undergraduate Studies Committee, which will consult with the department(s) concerned.

## Procedures for Entry to and Completion of Honours Year

Application and Admission to Honours

- 1. Application to enter the Honours program should normally be made during the winter term of the academic year in which the student expects to qualify for an Ordinary degree.
- 2. Application shall be made after consultation with the supervisor of studies or counsellor and on a form available from the department Chairmen, and a tentative program should be worked out and recorded at that time.
- 3. There is no automatic admission to the Honours program; the decision rests with the individual departments, or with the designated advisory committee in the case of a general Honours program. However, a student who does not achieve B standing or better in at least five two-hundred or three-hundred series courses, and in at least eight courses altogether during the Ordinary program, will not normally be admitted to an Honours program.
- 4. Acceptance in the Honours program is not final until approved by the department(s) or by the designated advisory committee in the case of a general Honours program, after completion of qualification for an Ordinary degree. Departmental or advisory committee approval is subject to confirmation by the Undergraduate Studies Committee.

- 5. Admission to the Honours program is not complete until the department(s) of the major subject(s), or the designated advisory committee in the case of a general Honours program, have endorsed the program selected by the candidate. The program must be worked out in all details before Thanksgiving Day of the year in question. Alterations in an approved program require the endorsement of the departmental Chairmen and of the supervisor of studies or counsellor.
- 6. The Honours year is normally one year of integrated studies. Students wishing to undertake an Honours program on a part-time basis should consult the Chairman of the department concerned, or the designated advisory committee in the case of a general Honours program, to establish details of the program. Ratification of such a program by the Undergraduate Studies Committee is required.

Academic Standings Required for an Honours Degree
1. Upon completion of the Honours year program, the department(s) or the designated advisory committee in the case of a general Honours program, will recommend to the Committee on Academic Standing the granting, deferring or withholding of an Honours degree.

- 2. An Honours year may not be repeated.
- 3. A student may not repeat an individual Honours course, except by permission of the department(s) concerned or of the designated advisory committee of a student in a general Honours program.
- 4. All courses attempted in an Honours program will be entered on the student's transcript.
- 5. The description of the degree on the transcript granted a student who is unsuccessful in the attempt at an Honours year will be the same as that which would have been made at the time the student qualified for an Ordinary degree (with later date).







The University believes that there is considerable merit in studying at one university before proceeding to professional study at another. Trent University graduates have attended professional schools in Business Administration, Child Study, Criminology, Dentistry, Education, Law, Medicine, Social Work and Speech Therapy, to name a few. The curriculum has therefore been planned to offer attractive courses which meet the academic requirements of Ontario's professional faculties for students proposing to proceed to another university for professional studies. Trent offers courses in the areas of science most commonly recognized for admission to professional study in health sciences.

The academic requirements for admission to some professional faculties are summarized below:

#### **Dentistry**

The University of Western Ontario and the University of Toronto offer instruction in Dentistry in Ontario. The admission requirements for this course are successful completion of either a first-year Science program or a degree in Science or Arts. Possession of these requirements renders a candidate eligible for selection; it does not guarantee admission. Prospective students of Dentistry are advised to consult very carefully the calendar of the Faculty of Dentistry of the university in which they are interested.

#### Law

For admission to the study of Law, a minimum of two years of university study beyond the Grade 13 level is required. However, due to the large number of applications now being received at Law faculties in Ontario, students competing for admission normally possess a university degree.

#### Medicine

Faculties of Medicine normally require all candidates for admission to have completed a two-year science program which includes certain specified courses in Chemistry, Biology, Mathematics and Physics. So that students may take full advantage of the science courses at Trent University which will prepare them for the professional study of Medicine, they are advised to complete the secondary school program with two Mathematics credits, Physics and Chemistry.

All Canadian faculties of Medicine have many more applicants than they can admit, and possession of the entrance requirements does not guarantee admission. Prospective medical students are advised to consult very carefully the calendar of any faculty of Medicine in which they are interested.

#### **Chartered Accountancy**

The Institute of Chartered Accountants of Ontario has placed Trent University on the list of designated universities whose graduates are eligible for entry into the Institute's course of studies. Graduates of the University are, therefore, eligible for the course offered by the Institute.

#### **Applied Community Programs in Native Studies**

The Department of Native Studies offers a Social Services program for students who wish to develop a background in practical involvement in native communities.

#### Trent-Queen's Concurrent Teacher Education Program

The concurrent program will lead to two combinations of degrees: B.A., B.ED., or B.SC., B.ED. at the Ordinary or Honours level. Trent University will award the B.A. or B.SC. degree, and Queen's University will grant the B.ED. degree. The program is designed to prepare both elementary and secondary teachers.

The professional component of the program is arranged and co-ordinated by Queen's University, with students undertaking teacher education courses on the Queen's campus.

#### **Ontario Colleges of Education**

Interim High School Assistants' Certificate, Type B
Graduates of the Ordinary program of Trent University meet
the requirements for admission to the professional course
leading to the Interim High School Assistants' Certificate,
Type B. Endorsement of Certificate, Type B, is given to
candidates offering five university courses with an overall
average of second-class standing, in a subject taught in Ontario
schools. Students intending to qualify for admission to the
course leading to the Interim High School Assistants' Certificate, Type B, must include in their programs at least seven
courses in at least two subjects taught in secondary school.

Interim High School Assistants' Certificate, Type A
For admission to the course leading to Type A certificates in the
Ontario Colleges of Education, four years of university study
beyond the Grade 13 level are required. Students are expected
to study subjects that are taught in Ontario secondary schools.
Graduates of the Ordinary program, however, may become
eligible for admission to the course leading to Type A
certificates in a number of ways.

Further information for prospective teachers is available from the Registrars of the Colleges of Education.

## **Native Studies Diploma Program**

In accordance with the University commitment to respond to the special educational needs of native students, a two-year Diploma Program in Native Studies has been established. The program is open to students of native ancestry who have the equivalent of Ontario Grade 12, or who qualify as mature students. Over a two-year period students in the program are required to complete six courses selected from the Native Studies curriculum. Course requirements for a Native Studies diploma are identical to the required six courses for a Native Studies major in the Ordinary program.

During the month prior to formal registration students are required to attend an intensive communications course, Communications 90a, which continues through the first term concurrently with regular course participation. In the second year of the program a second half-course in communications media, Communications 91b, is required.

Application for admission to the program should be made to the Registrar's Office not later than June 30.

Inquiries should be directed to the Co-ordinator of the Diploma Program in the Department of Native Studies.

#### **Required Courses**

Year 1

Communications 90a

Native Studies 100

Any two two-hundred series Native Studies courses, one of which must be 201, 210 or 280.

Year-2

Communications 91b

Any three Native Studies courses exclusive of Native Studies 390.

For course descriptions, see Native Studies under Courses of Study

#### **Explanation of Course Identification**

In 1970, due to the growth in number of course offerings, along with the introduction of more half courses, Trent University had to establish a new system of course numbering, and the two-digit numbers were replaced with three-digit identifications.

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 Course Requirements** 

Half courses are indicated by the suffix a, b or c:

- a) indicating a half course taught in the Autumn Term.
- b) indicating a half course taught in the Winter-Spring Terms.
- c) indicating a half course taught throughout the year.

Every course attempted will be entered in the transcript and, where successful, will be given one-and-a-half credits (full courses equal three credits). Any two half courses equal one full course for credit purposes.

Students attempting a half course with suffix a will write a final examination, if required, on the Saturday concluding the Autumn Term and will be informed of the grade achieved not later than the first day of the Winter Term. Students attempting more than one half course with suffix a are therefore warned that they may face a heavy examination load at the conclusion of the courses.

Students wishing to alter a and b half courses must do so in accord with the deadlines outlined under Program Changes in section on Academic Programs.

Students withdrawing before November 1 from a half course which is conducted in the autumn will suffer no academic penalty. Students withdrawing from a half course conducted during the Winter and Spring Terms before March 1 will suffer no academic penalty.

Students must register in all half courses, regardless of suffix, during centralized course registration in September.

In-course students wishing to add half courses with suffix a or b may do so in accord with the regulations outlined under Program Changes in section on Academic Programs.

For half courses with suffix c, the same regulations as for full courses apply.

## Canadian Studies

The University believes that a dynamic academic community should be prepared to introduce innovations in approaches to learning that appear to have considerable merit but which do not fall within the rubric of the traditional disciplines. Grouped on these pages are programs and other offerings which express this philosophy. Although students cannot major in these areas at this time, they can, in several cases, earn a notation of these areas of concentration on their transcript by meeting the criteria indicated under the particular heading. These courses can also be taken separately.

Also listed here are courses such as Comparative Literature, Computer Science and Statistics, which support work in several disciplines. Courses offered under the direction of individual colleges but which are full university credits are also listed here.

General Degree programs are designed for students wishing to take a broad range of courses but without specializing in any particular discipline. Interested students should read carefully the regulations as outlined in the section Academic Programs and Standings Required.

## Accounting

Special Lecturer in Accounting P.J. Lewis, B.A. (TORONTO), C.A.

Accounting 200

Introduction to accounting. Fundamentals of accounting theory and practice, including basic concepts underlying generally accepted accounting principles and the preparation of financial records and statements. Six semester-hour credits in the educational program of the Institute of Chartered Accountants of Ontario; this course may also be taken as part of the programs of the FICB, FCIS and the FCVI. Weekly two-hour lecture. Not open to freshmen.

P.J. Lewis

An advanced course in Accounting for which Accounting 200 is a prerequisite may be offered during the coming year. Please see Calendar Supplement in the autumn for details.

Professor and Chairman of the Program
Alan Wilson, M.A. (DALHOUSIE), PH.D. (TORONTO)
(on leave Winter and Spring terms 1976)

Assistant Professor
J.H. Wadland, M.A. (WATERLOO)

#### Note

The Canadian Studies Program is not founded upon a single department, but is the product of co-operation by members of ten departments within the University. At least one member, and frequently several, assist in the Program's planning and instruction from the departments of Anthropology, Economics, English Literature, French Studies, Geography, History, Native Studies, Politics, Philosophy and Sociology and the Environmental and Resources Studies Program. At all levels the Program encourages the interdisciplinary examination of Canadian experience.

The Canadian Studies Program, introduced at Trent in 1972-73, will offer at least fifteen courses in 1975-76. Any student who has completed five university credits may register for the various courses offered under the auspices of the Program.

Students formally entering the Program undertake either a two- or three-year course. Students must undertake a major in a regular discipline. Canadian Studies is an emphasis added to a regular degree program. Students in the two-year program will be required to undertake the basic multi-disciplinary Canadian Studies 200 and 300, and at least one or two other Canadian Studies courses in each year. The balance of a student's courses is determined by agreement between the student, the department of his major, and his Canadian Studies advisors.

For his or her fourth university year, the student may apply to the Chairman of the Program for acceptance into the Honours year, when Canadian Studies itself becomes the student's major.

Students in the Honours Program will be required to take at least four courses which must include the Honours Colloquium and at least two other senior Canadian Studies courses.

Canadian Studies — Environmental and Resource Studies 200 Canada: The land. An interdisciplinary enquiry into the function and idea of the land in Canadian experience; concepts of the land in history, geography, literature and philosophy; the land in settlement, land policy, politics, and conservation. Prerequisite: none. Lecture weekly; tutorial weekly. J.H. Wadland and staff

#### Canadian Studies 210

History of art and architecture in Canada. An introductory investigation of the development of art and architecture in Canada from prehistoric times to the present, viewed in the perspectives of historical events and socio-cultural changes. Prerequisite: none. Two-hour illustrated lecture weekly; two-hour tutorial fortnightly. Field trips to significant architectural monuments and nearby art galleries and museums. J.M. Vastokas

#### Canadian Studies 230

Canada: Economic policy. Intended for students not majoring in Economics. Problems facing economic policy makers in Canada, principally at the federal level; some attention to historical development of Canadian economics. Prerequisite: none. Two-hour lecture and weekly seminar.

P. Krause

Canadian Studies 260
Geography of Canada. (See Geography 361.) Note: Second-year Canadian Studies students are eligible for this course without prerequisite.

#### Canadian Studies 300

Canada: The development of community and identity. Historical and sociological approaches to the nature and forms of community in Canada, from such varied perspectives as province, nation, region, city, cultural groups. Prerequisite: none. Lecture weekly; seminar fortnightly.

The staff

Canadian Studies — Environmental and Resource Studies 310 Public policy and the Canadian environment. Current issues in Canadian public policy relating to resource management, conservation, population and pollution control, approached in the context of world environmental problems and their special implications for Canadian politics, economics, and sociocultural values. Prerequisite: none. Lecture weekly; two-hour seminar fortnightly.

R.C. Paehlke

## Canadian Studies 320

Growth and identity of Ontario. (Not offered in 1975-76.)

#### Canadian Studies 330

Canadian-American relations. A historical survey of Canadian-American relations leading to special consideration of relations since 1940. Prerequisite: *History 100* or *Politics 100*. Lecture weekly; two-hour seminar fortnightly. S.G.D. Smith

#### Canadian Studies 340

Issues in Canadian education. Current controversies concerning the goals, values, and principles of education in the context of recent developments and policies within Canada. Models for analysis will be developed from the study of classical and contemporary texts in the philosophy, sociology, and politics of education and applied by documents like Living and Learning and The Learning Society. Two-hour seminar weekly. L. Rubinoff

#### Canadian Studies 350

English- and French-Canadian prose literature. A comparative study of English and French novels, reflecting varying aspects of the novel as a genre in Canada. Competence in French useful but not required. Lecture weekly; seminar fortnightly. G.A. Johnston and J.-P. Lapointe

#### Canadian Studies 400

Honours colloquium: Culture and communication. An examination and analysis of such themes as royal commissions on culture and nationalism; private and governmental aid to cultural development; the communications media, films, theatre, publishing; comparative interdisciplinary methods in regional studies; bibliographic resources. Two-hour seminar fortnightly.

#### J.H. Wadland and staff

#### Canadian Studies 410

Contemporary Canadian problems. (See Politics 400.)

#### Canadian Studies 420

Canada: The North. The historical and contemporary North in Canada in both its provincial and territorial contexts. Emphasis will be intellectual and social. Two-hour fortnightly seminars; occasional lectures.

B.W. Hodgins

#### D.W. Houghs

#### Canadian Studies 430

Canada in fiction. Definitions of Canada in fiction in English since 1945.

#### G.H. Roper

#### Canadian Studies 480

Reading course. Special topics, designed to provide an opportunity for more intensive study of particular topics. Open to Honours undergraduates in Canadian Studies. Regular consultation and direction throughout the academic year. Arrangements to be made through C.S.P. chairman.

## **Comparative Development Studies**

Students proposing to emphasize Canadian Studies may wish to consider some of the following courses in which methodology or content are considered by the departments to be especially significant for Canadian Studies:

French 100: French language in a Canadian context

Geography 101: Man in the environment

History 100: Introduction to Canadian history Politics 100: Introduction to the study of politics

Sociology 100: Introduction to the study of politics

Anthropology 201: Native societies of Canada

Anthropology 211: Field archaeology (summer only)

Economics 210: Public finance

French 250: Quebec civilization (given in French)

French 251: Quebec civilization (given in English)

Geography 230: Recreation geography

Geography 270: Urban geography History 230: Canadian urban history

History 250: Canadian urban history

Politics 200: Canadian government and politics

Sociology 211: Sociological enquiry: macro-sociology

Anthropology 311: Prehistory of North America Biology 311: Insects and man in Canada

English 360: Studies in Canadian literature

French 390: French-Canadian prose literature

Geography 330: Historical geography

Geography 364b: Geography of the Arctic

Geography 370: Planning

Geography 380a: Regional economic development

Geography 390a and b: Field course

History-Politics 300: Canadian history and politics

History 301: French Canada to 1840

Politics 310: Ontario politics

Politics 341: Party organization and elections

Sociology 340: Sociology of education

Sociology 362b: Social administration

Sociology 382a: Population and society

Sociology 386: Canadian social structures

Sociology 387a: Sociology of law

Sociology 388b: Selected topics in Canadian society

History 401: Growth of British North American provinces

History 402: Late Victorian Canada

History 410: Social and political traditions and ideas in the

U.S. and Canada since 1896

Politics 420: Foreign policy analysis (USA and Canada)

Note: See also descriptions of courses offered in Department

of Native Studies

The University plans to introduce a program in Comparative Development Studies, which will examine societies and cultures undergoing rapid change, and the complex global relations between industrialized countries and the developing areas of Africa, Asia, the Caribbean, and Latin America. The program will be multidisciplinary, enabling students to combine an emphasis in Comparative Development with a major in one or two regular disciplines. The following courses have been provisionally designated for inclusion in the program, which it is hoped will also offer a two-hundred level course on "Human inequality in global perspective" and a four-hundred level interdisciplinary colloquium.

Anthropology 221: Developmental anthropology

Anthropology 301: Peoples and cultures of Africa

Anthropology 303: Caribbean societies

Anthropology 304: Latin America

Spanish 321: Spanish-America through its literature (in

translation)

Economics 310: International economics

Economics 330: Development economics

History 340: Modern imperialism in Africa and Asia,

1850-1960

Politics 350: Political economy of underdevelopment

Politics 351: Politics and social change in Africa

Sociology 385: Comparative social structures

During 1975-76 an interdisciplinary lecture and seminar series will be run in conjunction with some of these courses. Questions concerning Comparative Development Studies may be directed to M.J. Boote *Economics*, J. Hillman *Sociology*, J.S. Marsh *Geography*, D.R. Morrison *Politics*, D.M. Schreuder *History*, K.A. Tracey *Anthropology*, J.M. Valverde *Hispanic Studies* 

## Comparative Literature

The courses in Comparative Literature are centred on two main areas: a) the development of certain literary and cultural themes within a historical and social context; and b) the relationship between literature and other disciplines or art forms. The works to be discussed will be studied in translation. Programs and preliminary reading lists are circulated in the spring. Enrolment will be limited.

#### Comparative Literature 200

Ideas and forms in the development of European literature. A discussion of such terms as Renaissance, Baroque, Enlightenment, Romanticism, Realism and Experimentalism in their historical and cultural contexts. Weekly lectures and seminars.

J.M. Valverde

Comparative Literature - Philosophy 272
Topics in the Philosophy of Art. (See Philosophy 272.)

Comparative Literature 300
Twentieth century drama. (Not offered in 1975-76.)

#### Comparative Literature 310

Film and literature. An examination of genre, theme, technique and theory in film and literature. Weekly films and seminars, and coloquia every third week.

O.S. Mitchell and staff

#### Comparative Literature 320

Politics and Culture. Comparative literary movements, 1900-1950. A study of writers, critics and individual works in the context of the major self-conscious cultural movements in the first half of the twentieth century (i.e. Futurism, Surrealism, the Expressionist and Epic theatres, Existentialist and Absurdist literature). Lecture and seminar weekly.

C. Tate

Comparative Literature - English 325 Literary Theory and Interpretation. See English 325.

#### Other related courses include:

Classical Literature 100: Greek Drama

Classical Literature 200: Mythological themes in Greek and Latin literature

English 332: Chivalry

English 390: Literature and Psychology

German-English 220: Modern German literature in translation Spanish 321: Spanish-American literature in translation

# Computer Science

#### Computer Science 200a

Introduction to computer science. Algorithmic approaches to problem solving using digital computers, flowcharting, programming languages, the science of computing, systems analysis, data manipulation. Course suitable for anyone using quantitative analysis. There are no mathematical or science prerequisites. Open to students in second year and above, and first-year students with permission of instructor. Two lectures weekly plus periodic workshops.

J.W. Jury

#### Computer Science 201b

Advanced topics in computer science. Language structures, data structures, computer operating systems. COBOL and ALGOL programming languages, Job Control Language, data communication, computer graphics. An extension of Computer Science 200a, suitable for those using quantitative analysis in a variety of disciplines. Prerequisites: Computer Science 200a or permission of the instructor. Two class meetings and a workshop weekly.

J.W. Jury

## **Environmental and Resource Studies**

Assistant Professor and Program Co-ordinator R.C. Paehlke, B.A. (LEHIGH), M.A. (NEW SCHOOL FOR SOCIAL RESEARCH)

The Environmental and Resource Studies Program allows interested students the opportunity to take an Ordinary degree by a combination of interdisciplinary core courses and departmentally-offered support courses.

The Program is offered through the co-operation of ten university departments and the Canadian Studies Program. It is strongly recommended that students entering first year who believe they might enter the Program consult the Program Co-ordinator to choose their first-year courses in such a way as to avoid later problems with prerequisites for upper-year courses offered by participating departments. Students in the Program are required to take Environmental and Resource Science 100 and it is recommended in addition that they also take Geography 101, a one-hundred series Biology course, and at least one of Economics 100: Politics 100 or Statistics 100.

In 1975-76, students who have already completed an accepted first-year course mix may enter the second year of studies in the Program. There will be, however, no third-year students in the Program until 1976-77. Those wishing to enter second year in 1975-76 must consult the Program Co-ordinator.

#### **Degree Requirements**

Bachelor of Arts

Single-Major Ordinary Program

Minimum six courses in Environmental and Resource Studies including *Environmental and Resource Science 100*, three additional core courses and two support courses. At least three core or support courses must be at the *three-hundred* level.

Bachelor of Science

Single-Major Ordinary Program

Minimum six courses in Environmental and Resource Studies including *Environmental and Resource Science 100*, three additional core courses at least one of which is a Science course, and two support courses from the Science side. At least three core or support courses must be at the *three-hundred* level.

Bachelor of Arts

Joint-Major Ordinary Program

Minimum five courses in Environmental and Resource Studies including Environmental and Resource Science 100 plus three other core courses and at least one support course in a discipline other than that of the joint-major. At least three core or support courses must be at the three-hundred level.

Bachelor of Science

Joint-Major Ordinary Program

Minimum five courses in Environmental and Resource Studies including *Environmental* and *Resource Science 100* plus three additional core courses at least one of which is an Environmental and Resource Science course and one science support course in a discipline other than the joint major. At least three core or support courses must be at the *three-hundred* level.

#### **Core Courses**

Environmental and Resource Science 100

Scientific bases of environmental problems. An interdisciplinary approach to environmental science stressing the socio-economic, physical, biological and technological foundations of environmental degredation and preservation; atmospheric and water pollution; solid wastes disposal and recycling; non-polluting energy resources; man's radiation and acoustic environments. Designed to provide both Arts and Science students with an understanding of aspects of modern science accelerating or alleviating environmental degredation. Two lectures weekly, fortnightly seminars.

J.W. Jury and staff

Environmental and Resource Studies-Canadian Studies 200 Canada: The land. (See Canadian Studies 200.)

Environmental and Resource Science 210

Science in society. An interdisciplinary course for both nonscience and science students. Study is directed toward areas of current societal concern in Canada with emphasis on the underlying science. Specific topics will be drawn from a list which includes: maintenance of environmental quality; resource conservation; energy production; growth and human population; scientific agriculture; transportation and communications systems; factors affecting the gross national product. Two lecture-discussions weekly; tutorial or laboratory fortnightly.

Environmental and Resource Studies 300 Topics in human survival. (Not offered in 1975-76.)

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

An additional three-hundred level course. Environmental and Resource Science 320, will be added in 1976-77.

#### **Support Courses**

#### Arts

History 230: Urban Canada, 1760-1920
Geography 230: Recreation geography
Economics 210: Public finance
Sociology 382a: Population and society
Sociology 383b: City and society
Canadian Studies 330: Canadian-American relations
Canadian Studies – Geography 360: Geography of Canada
Note: Before 1976-77, additional three-hundred series Arts
offerings will be designated.

#### Science

Biology 202: Ecology
Geography 240: Geology
Geography 250: Geomorphology
Statistics 100 or Chemistry 100 taken in second year
Biology 305: Limnology
Biology 314b: Fish biology
Biology 324a: Biology of the algae
Geography 340: Hydrometeorology
Biology-Geography 350a: Biogeography
Geography 364b: Geography of the Arctic

In addition to the above-mentioned courses, there is available from the Program Co-ordinator a longer list of related courses which are recommended as complementary to studies in the Program, but which may not be counted toward meeting degree requirements.

## **Fine Arts**

The University does not have a department of Art History. However, several courses are offered in various departments which deal specifically with visual arts. In addition, a cooperative arrangement with Sir Sandford Fleming College in Peterborough enables Trent students to register for credit in several art history and studio courses on an experimental basis.

Trent students may register in one ssFc course per year for a total of three course credits as part of their Trent degree program. It should be noted that *Fine Arts 100* is normally considered a prerequisite for all subsequent studio courses at ssFc. Enrolment in ssFc courses may be limited.

Students wishing to take any of these ssFC courses must register, as usual, through their supervisor of studies at Trent. All procedures with regard to the changing or dropping of these courses also follow the normal Trent pattern.

The following courses in Fine Arts are expected to be available to Trent students but the Fine Arts Program is under review. For further information write G.D. Pollock, Associate Registrar. After September 1 write the Registrar's Office for a Supplement to the Calendar.

First Year

Fine Arts 100: History of the arts (SSFC)

Second Year

Canadian Studies 210: History of Art and Architecture in Canada (Trent)

One of:

Fine Arts 105: Media of art history (SSFC)

Fine Arts 110: Printmaking (SSFC)

Fine Arts 115: Painting (SSFC)

Third Year

Anthropology—Native Studies 350: The Arts of Africa, Oceania, and the Americas (Trent)

Comparative Literature 310: Film and literature (Trent)

Philosopy 272: Philosophy of art (Trent)

One of:

Fine Arts 105: Media of art history (SSFC)

Fine Arts 110: Printmaking (SSFC)

Fine Arts 115: Painting (SSFC)

### Science

#### Science 101a

Medical science and man, designed for students with little or no experience in science, this course sponsored by the Departments of Chemistry and Biology and the University Health Service focuses on the chemical make-up of man, his nutrition and the impact of medical science in his life. It is hoped to clear up popular misconceptions of what constitutes health by subjecting them to some degree of scientific scrutiny. No prerequisite. One lecture and one small group meeting weekly. R.G. Annett

#### Science 102b

Origins of our world. An introduction to the known facts and theories concerning the formation of the universe, the chemical elements, and the earth. No prerequisite. One lecture and one seminar weekly.

T.E.W. Nind, R.A. Stairs

#### Science 200

Elementary astronomy. The earth and its motions; the celestial sphere; solar and sidereal time; the constellations; observational techniques; the solar system; stellar distances, motions, spectra and magnitudes; binary and variable stars; star clusters, nebulae, and galaxies. Elementary high school algebra and geometry will be used. Two lectures weekly plus periodic workshops for observations.

J.I. Lodge and staff

#### Science-Philosophy 201

The rise of modern science. A thematic approach to the development of scientific ideas from the early Greeks to the present. Emphasis will be placed on the basic concepts and theories used by the scientist to interpret and understand the world around him, and the ways in which these ideas have evolved with the progress of science. The influence of social and intellectual conditions on scientific attitudes, as well as the impact of science on intellectual thought, will also be discussed. No prerequisites. Two lectures and one seminar weekly. R.G. Johnson and K. Rautenkranz

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## Social Theory

These courses are jointly sponsored by the Departments of History, Politics, Philosophy and Sociology. They consider the interplay among these various disciplines and the tradition of intellectual speculation aiming at comprehensive, morally relevant social interpretation. In addition to general interest in the subject, students may find that these courses serve as a useful complement to majors in a number of disciplines. Some may consider using them as the core for a cohesive general degree program. See the section Academic Programs and Standings Required for information concerning this option. All questions relating to Social Theory should be addressed to Professor Lionel Rubinoff, Traill College.

Social Theory 200

An introduction to the field of modern social thought. The course will revolve around two major themes—the impact of scientific forms of reason on ethical and political theory, and the cumulative attempt to diagnose the cultural and social crisis which has attended the development of capitalist industrialisation in the West.

Social Theory 300

A critical evaluation of problems arising from the attempt to translate research in the social and historical disciplines into social theories and social policies and, ultimately, into social and political action. Among the issues to be analyzed are: logical connections between research and policy; the responsibilities of scholars; the fact-value relation in research and policy-formation. Prerequisite: Social Theory 200 or permission of instructor.

Social Theory 400

A reading course designed primarily for students enrolled in a general degree program with a Social Theory concentration. Prerequisite: Arrangement with Professor Rubinoff.

#### Other related courses include:

Sociology 210: Microsociology

Sociology 211: Macrosociology

Philosophy 214: Existentialism and phenomemology

History 220: Modern European history

Philosophy-Politics 233: Introduction to political philosophy

Philosophy 312: Philosophy in the nineteenth century

Sociology 321: Methods of research and analysis

Politics 335: Political ideology

Philosophy 374a: Philosophy of law

Philosophy 377a: Philosophy of science

Politics 410: Contemporary political analysis

History-Philosophy 470: Philosophy of history

## **Statistics**

#### Statistics 100

Elementary statistics. An introduction to statistics for students in the social sciences. Not intended for students with a background in Mathematics, nor to be credited toward a major in Mathematics. Two lectures weekly, two-hour problems laboratory fortnightly.

E.A. Maxwell

## **Reading Course Option**

The Academic Development Committee has approved on a trial basis a proposal to permit students to enrol in regular courses on a reading basis.

A student who has satisfactorily completed his first five courses of study may apply to take up to three regular courses a year independently on a reading basis. The option is offered to a limited number of students only in courses in which the subject material is appropriate for private study. Before the option is extended in any course, it must be approved by the tutor and his department. The deadline for registration is October 31.

## Anthropology

Associate Professor of Anthropology and Chairman of the Department

R.K. Vastokas, M.A. (TORONTO), PH.D. (COLUMBIA)

Professor Emeritus

K.E. Kidd, M.A. (TORONTO), F.R.A.I.

Professor

R.B. Johnston, M.A., PH.D. (INDIANA)

#### Associate Professors

P.D. Harrison, M.A. (TORONTO), PH.D. (PENNSYLVANIA), F.R.A.I. (on leave Autumn term 1975); H.S. Helmuth, D.SC. (KIEL); Evelyn M. Todd, B.A. (TORONTO), PH.D. (NORTH CAROLINA); C.H. Torok, M.A. (BRITISH COLUMBIA), PH.D. (TORONTO); K.A. Tracey, B.SC. (HOWARD), D.SC. (KIEL); Joan M. Vastokas, M.A. (TORONTO), PH.D. (COLUMBIA), F.R.A.I.

#### Assistant Professors

R.S. Hagman, B.A., PH.D. (COLUMBIA); Linda J. Hubbell, M.A., PH.D. (BERKELEY); E.J.E. Szathmary, B.A., PH.D.

(TORONTO); Morgan J. Tamplin, B.A. (TORONTO), M.A. (LONDON); J.R. Topic, M.A. (HARVARD); T.L. Topic, M.A. (HARVARD); B.W. von Graeve, M.A., PH.D. (TORONTO)

Conjunct Professor

George F. MacDonald, Ph.D. (YALE); (CHIEF, ARCHAEOLOGICAL SURVEY OF CANADA, NATIONAL MUSEUM OF MAN)

Visiting Professor

P. Puritt, M.A. (TORONTO), PH.D. (ILLINOIS)

**Required Courses** 

Single-major Ordinary program. Minimum five courses in Anthropology, including Anthropology 100

200 and two of 212, 230, 240

Joint-major Ordinary program. Minimum five courses in Anthropology, including Anthropology 100 two of 200, 212, 221, 230, 240

Single-major Honours program. Minimum eight courses in Anthropology

Anthropology 100

200 212

230

240 420

two other four-hundred series courses

Joint-major Honours program. Minimum six courses in Anthropology, including

Anthropology 100,

200

420

one of 212, 230, 240

**Special Provisos** 

- -To be eligible for admission to a single-major Honours program, a student must have obtained standing in the four sub-fields, namely in *Anthropology 200, 212, 230*, and 240, while qualifying for the Ordinary degree. A student in a single-major Honours program is expected to carry five courses.
- -Students who have taken Anthropology 200, 212, 230, and 240 may recognize one of these courses as equivalent to a three-hundred series course.
- -Course selection in any joint-major program must be approved by the department. Every student must discuss his

fourth-year program and complete his application with the department before April 15.

-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. A survey of the four fields of anthropology. Physical Anthropology, Archaeology, Cultural Anthropology, and Linguistics. Major topics of discussion will be human development, Old World and New World archaeology, patterns of culture among preliterate societies, and language and communication. Two-hour lecture weekly, fortnightly tutorials and a laboratory session.

R.S. Hagman and staff

Anthropology 200

Cultural anthropology. An analysis of the dimensions of culture in preliterate societies, considered in terms of technology, social organization and ideology, including a survey of current approaches to the study of culture. Prerequisite:

Anthropology 100 or Sociology 100 or the permission of the instructor. Two-hour lecture weekly, seminar fortnightly.

P. Puritt and L.J. Hubbell

Anthropology-Native Studies 201

Native societies of Canada. A study of the prehistoric background and groupings of native peoples in Canada at the time of historical contact, including observations on physical, economic, cultural and linguistic aspects. Prerequisite:

Anthropology 100 or Native Studies 100 or permission of the instructor.

C.H. Torok

Anthropology 211

Field methods and techniques in archaeology. An introduction to the removal, analysis, and interpretation of archaeological evidence in a field situation. (Summer only.) R.B. Johnston and staff

Anthropology 212

World prehistory. A survey of selected cultural histories of the prehistoric period. Emphasis on culture development and regional chronologies in the Old World and the New World. Prerequisite: Anthropology 100 or permission of the instructor. Lecture, tutorial weekly.

M.J. Tamplin, J.R. Topic and T.L. Topic

Anthropology 220

Anthropology of religion. This course will be concerned with making cross-cultural generalizations about the magico-

religious belief systems of societies. Prerequisite: Anthropology 100.
C.H. Torok

Anthropology 221

Development anthropology. An appraisal of the resources of anthropology in the study of cultural change, and a critical survey of conscious use of anthropological information and theory in the introduction of new ideas and techniques. Special areas to be studied will include Africa, the Caribbean, and Latin America. Prerequisite: Anthropology 100 or permission of instructors. Two-hour seminar weekly.

R.K. Vastokas, K.A. Tracey, B.W. von Graeve

Anthropology 230

Language and man. An introduction to the study of language; non-human vs. human communication; world-wide variations in sounds, word structures, and meanings; language learning; language change and the history of writing. No prerequisite. Lecture, seminar weekly.

E.M. Todd and R.S. Hagman

Anthropology 240

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

H.S. Helmuth

Anthropology-Biology 286
Population genetics and evolution. (See Biology 286.)

Anthropology 301
Peoples and cultures of Africa. (Not offered in 1975-76.)

Anthropology 302

Cultures of the Pacific basin. An introduction to the peoples, the cultures, and history of the Pacific areas of Polynesia, Melanesia, Micronesia and Indonesia. Topics include art and material culture, child-rearing and personality, matrilineal social organization, problems of development in emerging nations. Prerequisite: Anthropology 100 or permission of instructor. Two-hour seminar weekly. (Offered in 1975-76 and alternate years.)

E.M. Todd

Anthropology 303

Caribbean societies. The comparative analysis of Caribbean societies; historical, economic, demographic, racial and cultural conditions. Current problems, regional associations, develop-

ment, change. Prerequisite: Anthropology 100. Two hours of seminars weekly.

K.A. Tracey

Anthropology 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.W. von Graeve and L.J. Hubbell

Anthropology 305

Kinship and social organization. Comparative analysis of social structure in non-Western societies. Emphasis on kinship and its function, but including also age sets, network theory, kinship-based political systems, friendship, etc. Prerequisite: Anthropology 200 or permission of instructor. Two-hour seminar weekly. (Offered in 1975-76 and alternate years.)

Anthropology 306b Culture and personality. (Not offered in 1975-76.)

Anthropology 307

Political and legal anthropology. A cross-cultural examination of the political and legal institutions of different societies; their concepts of law and politics; and the nature of dispute settlement and political participation. Prerequisite: Anthropology 200 or permission of instructor. Two-hour seminar weekly. P. Puritt

Anthropology 310

Archaeological method and theory. Archaeological methods concerning practical problems in the field and laboratory; basic approaches to the subject matter of archaeology. Theoretical discussions include the history of archaeological thought and contemporary approach to the problems of organizing field data. Prerequisite: Anthropology 100. P.D. Harrison and M.J. Tamplin

Anthropology 311
Prehistory of North America. (Not offered in 1975-76.)

Anthropology 312a

Old World prehistory. Man in the Pleistocene. Pleistocene environments and the development of Paleolithic cultures in the Old World, from the first appearance of man to the beginnings of agriculture. Prerequisite: Anthropology 212 or permission of instructor. Two-hour seminar weekly. M.J. Tamplin

Anthropology 313b

Old World prehistory. Agriculture and urbanism. Prehistory from the origin of agriculture to the rise of urban civilizations. Prerequisite: Anthropology 212 or permission of instructor. Two-hour seminar weekly.

M.J. Tamplin

Anthropology 314

Archaeology and ethnohistory of South America. An examination of native populations of selected areas of South America with an emphasis on the Andean and Amazonian areas. The course will use both archaeological and ethnohistorical data to trace prehistoric-historic continuities among South American societies. Prerequisite: Anthropology 100 or permission of instructor. Two-hour lecture weekly, seminar fortnightly. B.W. von Graeve, J.R. Topic and T.L. Topic

Anthropology 315b

Underwater archaeology. An introduction to the aims and methods of archaeology under water and the special problems of recording, recovery, and preservation of archaeological evidence from an underwater environment. Prerequisite: Anthropology 100 and National Association of Underwater Instructors (NAUI) Certificate or equivalent certification. Four-hour seminar/laboratory fortnightly.

R.B. Johnston and staff

Anthropology 330a

Language history. Eyamination of the various ways in which languages may change; techniques for the reconstruction of extinct languages; inquiry into the economic, social, and ideological causes of language change. Prerequisite:

Anthropology 230 or permission of the instructor. Lecture and seminar weekly. (Offered in 1975-76 and alternate years.)

R.S. Hagman

Anthropology 331b

Languages of the world. The origin and diversification of language; the principles of language classification, both genealogical and typological; writing systems; linguistic approaches to prehistory; language universals; a survey of the languages of the world. Prerequisite: Anthropology 100 or 230. Lecture, seminar weekly. (Offered in 1975-76 and alternate years.)

E.M. Todd

Anthropology 332a Language in society. (Not offered in 1975-76.)

Anthropology 333b Cognitive anthropology. (Not offered in 1975-76.) Anthropology 334a

Linguistic analysis. An introduction to the scientific analysis and description of languages. Prerequisite: Anthropology 100 or 230. Two-hour lecture or seminar weekly. E.M. Todd

Anthropology - Biology 340 Primatology. (Not offered in 1975-76.)

Anthropology-Biology 341

Comparative osteology of man. The skull and the post-cranial 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. Lecture, one two-hour seminar in the laboratory fortnightly. (Offered in 1975-76 and alternate years.)

H.S. Helmuth

Anthropology-Biology 342

Social biology of man. Biological basis of man's unique capacities; genetic basis for the varieties of man living today in various natural and sociocultural environments; man's genetic and demographic prospects. Prerequisite: Anthropology 240 or permission of instructor. Lecture, seminar weekly. K.A. Tracey and staff

Anthropology-Biology 343

Human genetics. An introduction to human genetics. Mendelian genetics, cytogenetics and biochemical genetics of the human species are considered within an evolutionary framework. Prerequisite: Anthropology 240; Biology 286a is strongly recommended. Lecture, two-hour lab, and one seminar weekly.

E.J.E. Szathmary

Anthropology-Native Studies 350

Art of the Americas. A survey of the art and architecture of the native peoples of North, Central and South America. Prerequisite: Anthropology 200, Anthropology-Native Studies 201 or Anthropology 212, or written permission of the instructor. Two-hour weekly lectures and fortnightly tutorial sessions. (Offered in 1975-76 and alternate years.)

J.M. Vastokas

Anthropology 351

Art of Prehistoric Europe, Africa and the Pacific. (Offered in 1976-77 and alternate years.)

Courses in the four-hundred series are normally open only to students in the Honours program.

Anthropology 411a

Andean prehistory. A review of Andean culture history combined with an intensive examination of current problems in the area, including the pre-projectile point horizon, agricultural origins, the rise of civilizations, and contact with other areas of the New World. Prerequisite: Anthropology 212 or permission of instructor. Lecture, seminar weekly.

J.R. Topic and T.L. Topic

Anthropology 412b

Mesoamerican prehistory. From early man to European conquest, with emphasis on agricultural development and the growth of civilizations in various culture regions of the area. Prerequisite: Anthropology 212 or permission of instructor. P.D. Harrison

Anthropology 415

Prehistory of Ontario. A detailed examination of prehistory in Ontario, with particular reference to environmental, chronological, and regional developments in the context of general Northeastern archaeology. Prerequisite: Anthropology 212 or 311 or permission of instructor. Lecture weekly, seminar fortnightly.

R.B. Johnston

Anthropology 420

The history and theory of anthropological thought. A discussion of principal trends in anthropological thinking from the midnineteenth century to the present. "Schools" of cultural anthropology such as evolutionism, historicism, diffusionism, structural-functionalism, neoevolutionism and componential analysis will be treated in an exclusively tutorial setting. Prerequisite: Anthropology 200. Enrolment may be limited. C.H. Torok and B.W. von Graeve

Anthropology 423

Culture and communication. Analysis of the effects of culture on patterns of non-verbal communication. Discussion of kinesics, proxemics and paralinguistics. Prerequisite:

Anthropology 200 or 230 or permission of instructor. One two-hour seminar weekly.

R.K. Vastokas

Anthropology 430

Field methods in linguistics. (Not offered in 1975-76.)

Anthropology 431b

Algonkian linguistics. Principles of linguistic analysis and reconstruction applied to languages of the Algonkian family; detailed study of the phonology, morphology, and syntax of selected Algonkian languages spoken in Canada, especially

Ojibwa and Cree; including work with a native speaker. Prerequisite: Anthropology 230 and permission of instructor. Two-hour laboratory weekly, occasional lectures. Open to third-year students. (Offered in 1975-76 and alternate years.) E.M. Todd

Anthropology 432a

Linguistic theory of phonology. An examination of approaches to the study of sound systems in language. Articulatory and acoustic phonetics, autonomous phonemics, and generative phonology. Prerequisite: Anthropology 230 or permission of instructor. Two-hour seminar each week. (Offered in 1975-76 and alternate years.)

R.S. Hagman

Anthropology 433b

Linguistic theory of grammatical structure. An examination of traditional, structural and generative-transformational theories of language structure, emphasizing recent developments in linguistic theory. Prerequisite: Anthropology 230 or permission of instructor. Two-hour seminar each week. (Offered in 1975-76 and alternate years.)

R.S. Hagman

Anthropology 440

Advanced physical anthropology. Analysis of the microevolution of human populations. Methods and techniques used in the analysis of genetic markers, anthropometric and osteologic data. Prerequisite: Anthropology 240 or permission of instructor. Lecture, one seminar hour weekly. E.J.E. Szathmary

Anthropology-Biology 441

Comparative primate anatomy. Study of the soft tissue anatomy of members of the order primates. Emphasis is on the study, through dissection, of representatives of the major adaptive radiation of the primates (excluding hominids). Special emphasis is placed on the similarities and differences in the function of organ systems. Prerequisite: Anthropology 340. Enrolment is restricted to ten students. Lecture, three laboratory hours weekly. (To be offered in 1975-76 and alternate years.)

E.J.E. Szathmary

Anthropology 490

Reading courses. 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 by April 15 of the preceding academic year. A petition must be submitted to the department if more than one reading course is contemplated.

## **Biology**

Associate Professor and Acting Chairman of Department I.M. Sandeman, B.SC. (ST. ANDREWS), F.L.S.

#### Professor

R.L. Edwards, M.A., D.PHIL. (OXFORD), F.R.E.S. (on leave Winter and Spring terms 1976)

#### Associate Professors

Michael Berrill, B.SC. (MCGILL), M.SC. (HAWAII), PH.D. (PRINCETON); Roger Jones, B.SC. (WALES), M.SC. (KANSAS), PH.D. (WALES); J.E. Nighswander, B.SC.F. (TORONTO), PH.D. (WISCONSIN); P.M. Powles, B.A. (MCGILL), M.SC. (WESTERN ONTARIO), PH.D. (MCGILL)

#### **Assistant Professors**

D.C. Lasenby, B.SC. (TRENT), PH.D. (TORONTO); T.R. Matthews, B.SC. (SOUTHAMPTON)

#### Lecturer

Christine D. Johnson, B.SC. (WALES)

#### **Required Courses**

Single-major Ordinary program. Minimum six courses in Biology

Biology 110

Physics 100

120

Four other Biology courses at two-hundred or higher level

Joint-major Ordinary program. Minimum five courses in Biology

Biology 110 or 120

Four other Biology courses

Single-major Honours program. Minimum nine courses in Biology

Completion of single-major Ordinary program At least one of *Biology 400* and *490* 

A minimum of two additional three-hundred or four-hundred series courses in Biology

Joint-major Honours program. Completion of single-major or joint-major program. Program to be approved by the departmental committee.

#### **Recommended Additional Courses**

Single-major Ordinary program

Chemistry 100 or 101 (highly recommended)

210a, 230b.

Mathematics 100 or Statistics 100

Joint-major program
Chemistry 100 or 101
Mathematics 100 or Statistics 100

#### Note

-In some cases, with permission of the department, one of *Biology 110* or 120 may be taken along with *Biology 100* as part of a first-year program.

-All three-hundred and four-hundred series courses except Biology 400 and 490 can be taken in either third or fourth year, 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.

- Transfer students should consult the department 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.

#### Biology 100

General biology. An introduction to biology, investigating such diverse topics as ecology, physiology and evolution, particularly as they affect mankind. This is a course for students who have not had Grade 13 Biology, or do not intend to major in Biology. Two lectures and one three-hour laboratory period weekly; tutorial fortnightly. D.C. Lasenby, M. Berrill

#### Biology 110

The animal kingdom. A comparative study of the main groups of animals, their structure, development, physiology, life history, and phylogenetic relationships. Recommended: Grade 13 Biology or *Biology 100*. Lecture, three-hour laboratory period, and seminar or tutorial fortnightly. *I.M. Sandeman and staff* 

#### Biology 120

The plant kingdom. An introduction to plant biology which will include a comparative study of the main groups of plants, their structure, development, physiology, life histories, and phylogenetic relationships. Recommended: Grade 13 Biology or *Biology 100*. Two lectures, three-hour laboratory per week and a tutorial every three weeks.

## C.D. Johnson, R. Jones

#### Biology 202

Ecology, Relationships of plants and animals to their total environment; the study of populations and communities within various ecosystems. Prerequisite: *Biology 110* or *120*. Recommended: *Statistics 100*. Lecture, three-hour laboratory

and seminar or tutorial fortnightly. Field trips, which must be attended, will be held from September 8 to 12 inclusive. There will be no charge for these field trips, which will be run from the University campus, but students are expected to arrange their own accommodation in Peterborough.

R.L. Edwards, R. Jones

Biology 211

Vertebrate zoology. The evolution, taxonomy and functional morphology of the vertebrates. Highly recommended: *Biology 110*. Lecture, three-hour laboratory weekly and seminar or tutorial fortnightly.

P.M. Powles

Biology-Chemistry 230b Introductory biochemistry. See Chemistry 230b.

Biology-Anthropology 286

Genetics. Fundamental genetic principles, including classical and molecular aspects, as well as a study of the genetic basis of evolution at the population level. Prerequisite: At least one of *Biology 100, 110* or 120, or by arrangement with instructor. Recommended: *Statistics 100*. Lecture, three-hour laboratory, seminar or tutorial weekly.

J.E. Nighswander

Biology 303b Biological techniques. (To be offered in 1976-77.)

Biology 305

Limnology. Biology, geochemistry and physics of fresh water lakes. Highly recommended: Biology 202 and Chemistry 100 or 101. Lecture, seminar or tutorial weekly; six-hour laboratory fortnightly; field trips, for which there will be no charge. D.C. Lasenby

Biology 311

Insects and man in Canada. (To be offered in 1976-77.)

Biology 312a

Developmental biology. (Not offered in 1975-76.)

Biology 314b

Fish biology. The biology, ecology and physiology of marine and fresh water fishes. Management practice of fisheries. Prerequisite: Biology 110. Recommended: Biology 202. Lecture, tutorial, three-hour laboratory weekly, field trips, for which there may be a charge of about \$10. P.M. Powles

Biology 320b

Physiological ecology of plants. A study of the ecological behaviour of plants in terms of their physiology. Topics will include water relations, mineral nutrition, metabolism, growth and development. Recommended: *Biology 120*. Lecture, seminar or tutorial, three-hour laboratory weekly. *R. Jones* 

Biology 321a

Plant ecology. (To be offered in 1976-77.)

Biology 324a

Biology of the algae. An introduction to this important group 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 fresh water environments will be emphasized as well as their economic importance. Recommended: Biology-120. Lecture, three-hour laboratory and seminar or tutorial weekly. C.D. Johnson

Biology 325a

Microbiology. (Not offered in 1975-76.)

Biology 326b

Advanced microbiology. A consideration of subcellular components, antibiotics, toxins, and enzymes from a variety of microbial sources. The similarities and differences of representative organisms will be discussed in relation to selection of structure and products by the environment, and the mechanisms by which organisms adapt will also be included. Prerequisite: Biology 325a, Biology—Chemistry 230b, or by arrangement with instructor. Lecture, tutorial, three-hour laboratory weekly. M.P. Forsyth

Biology-Chemistry 330
General biochemistry. See Chemistry 330.

Biology-Anthropology 340
Primatology. See Anthropology 340.

Biology-Anthropology 341 Comparative osteology of man. See Anthropology 341.

Biology—Anthropology 342
Social biology of man. See Anthropology 342.

Biology—Anthropology 343
Human genetics. See Anthropology 343.

Biology-Geography 350a

Biogeography. Basic biological and geographical principles affecting the distribution of animal and plant populations. Recommended: Biology 110, 120 and Geography 101, or by arrangement with the instructor. Lecture, tutorial, three-hour laboratory weekly. There will also be field trips, for which a charge of about \$50 may be made.

M. Berrill, R. Jones

Biology 381 a

Comparative endocrinology. (To be offered in 1976-77.)

Biology 382

General physiology of animals. The general principles governing physiological processes in animals. Recommended: *Biology 110. Chemistry 210* or 230b. Lecture, tutorial and three-hour laboratory weekly. *T.R. Matthews* 

Biology 386b

Animal behaviour. An introduction to the ecological, physiological and evolutionary mechanisms which influence the behaviour of animals with particular emphasis on animal societies. Recommended: *Biology 110, 202, 286a*. Lecture, tutorial, three-hour laboratory weekly.

M. Berrill

Biology 390

Readings in modern biology. Special topics designed to provide an opportunity for more intensive or for broader study of particular fields of biology. Regular consultation and direction during the year. A student wishing to take this course must submit the topic to the departmental committee for approval preferably before the end of the preceding year.

Biology 400

Selected topics in biology. This 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 preferably before the end of the preceding year.

Biology 401a, 401b

Electron microscopy. The biological applications of the electron microscope. Recommended: *Biology 110* or *120*. Lecture, tutorial, three-hour laboratory weekly. This course is being offered in both the first and second terms. Enrolment may be restricted.

J.E. Nighswander

Biology 402b

Ecology of water pollution. (Not offered in 1975-76.)

Biology 404d

Marine biology. Life in the sea. Recommended: Biology 110 and 120. Highly recommended: Biology 202. Seminar and lecture fortnightly. Compulsory week-long field trip to the Huntsman Marine Laboratory during the Autumn reading week, for which an additional charge of about \$100 may be made. A field report will be required.

M. Berrill, and staff

Biology 410

Parasitology. The biology of animal parasites. Prerequisite: *Biology 110*. Lecture, tutorial, three-hour laboratory period weekly.

I.M. Sandeman

Biology-Chemistry 430
Advanced biochemistry. See Chemistry 430.

Biology-Chemistry 431a Advanced experimental biochemistry. See Chemistry 431a.

Biology – Anthropology 441
Comparative primate anatomy. See Anthropology 441.

Biology 490

Readings in modern biology. Similar to Biology 390 but restricted to students in their Honours year. A student wishing to take this course must submit the topic to the departmental committee for approval preferably before the end of the preceding year.

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## Chemistry

Professor of Chemistry and Chairman of the Department Keith B. Oldham, B.SC., PH.D., D.SC. (MANCHESTER), F.R.I.C. (on leave 1975-76)

Associate Professor and Acting Chairman Peter F. Barrett, M.SC. (QUEEN'S), PH.D. (TORONTO)

#### Professors

Stewart A. Brown, B.S.A. (TORONTO), M.SC., PH.D. (MICHIGAN STATE), F.C.I.C; Alun H. Rees, M.A., PH.D. (CAMBRIDGE), M.A. (OXFORD), PH.D. (LONDON), F.R.I.C; Robert A. Stairs, B.SC. (MCGILL), M.SC. (WESTERN ONTARIO), PH.D. (CORNELL)

#### Associate Professors

Ian D. Chapman, B.SC. (LIVERPOOL), M.A. (TORONTO); Raymond E. March, B.SC. (LEEDS), PH.D. (TORONTO)

#### **Assistant Professors**

Robert G. Annett, B.SC., PH.D. (WINDSOR); Errol G. Lewars, B.SC. (LONDON), PH.D. (TORONTO)

#### Special Lecturer

Mary L. Amyotte, B.SC. (IRELAND)

#### **Required Courses**

Single-major Ordinary program. Minimum six courses in Chemistry, including

Chemistry 100

200

210a

211b 300 or 310

Joint-major Ordinary program. Minimum five courses in Chemistry, including

Chemistry 100

200

210a

211b

Single-major Honours program. Minimum eleven courses in Chemistry of which four must be four-hundred series courses Chemistry 100

200

210a

211h

240 or 320

300

310

490

Joint-major Honours program. Intending students are advised to consult the two departments involved as early as possible in their university careers.

#### Special Provisos

-Since Chemistry 100 and Chemistry 101 cannot be taken concurrently, only one chemistry course is normally open to first-year students. However, students with a strong background in chemistry may petition to take Chemistry 210a concurrently with Chemistry 100; such permission will be granted on the basis of performance in a special examination held in the week preceding the autumn commencement of classes.

-Chemistry 101 is acceptable as a prerequisite to Chemistry 210a but for other two-hundred series courses only with permission of the department.

Special permission may be granted:

a) if a high standard is maintained in Chemistry 101, and b) if additional private study is undertaken during the summer preceding the second year. If such permission is granted, the Chemistry 101 credit is thereafter deemed equivalent to a credit in Chemistry 100.

-For the purpose of meeting the University's degree requirements, Chemistry 240 may be regarded as a three-hundred series course.

-Departures from the normal pattern of courses may sometimes be permitted. Apply to the Chairman.

#### **Notes**

-Students planning to major in chemistry should note that an adequate grounding in physics and mathematics is essential. Some background in biology and physical chemistry is recommended for those wishing to take courses in biochemistry. Note also the mathematical prerequisite to Chemistry 200.

- All students taking one or more laboratory courses in chemistry will be required to pay a laboratory deposit of \$20. Depending on breakages incurred during the year, the deposit will be returned wholly or in part at the end of the session. Interdisciplinary Courses

The attention of chemistry students is drawn to the listings under Interdisciplinary Science in this Calendar. Several of these offerings address topics of interest to chemists.

#### Chemistry 100

General chemistry. An introductory course in physical and inorganic chemistry. Atoms, molecules, crystals, chemical bonding, ions, electrolysis, reaction rate, equilibrium, inorganic and organic descriptive chemistry. Prerequisites: Grade 13 Chemistry or its equivalent. Two lectures weekly; one laboratory or problem session weekly.

P.F. Barrett

#### Chemistry 101

Introductory chemistry. An introductory course in chemistry open only to students who do not possess recent qualifications in Grade 13 Chemistry or its equivalent. The course will normally qualify students for later year courses in organic chemistry and biochemistry only. (See Special Provisos.) Chemistry 101 and Chemistry 100 cannot both be counted toward minimum course requirements for a major. Two lectures, and one three-hour laboratory or problem session weekly.

R.A. Stairs

#### Chemistry 200

Elementary physical chemistry. The theme of this course is the physical chemistry of physical and chemical processes. Kinetic and thermodynamic aspects of chemical reactions are treated. Prerequisites: Chemistry 100 and Mathematics 100; see also Special Provisos. Before Christmas: two or three lectures and one tutorial weekly; after Christmas: one lecture, one tutorial and one laboratory weekly.

I.D. Chapman

#### Chemistry 210a

Introductory organic chemistry. The structure and chemistry of those important classes of organic compounds which form the basis of both organic chemistry and bio-chemistry. This half course may be followed by either or both of Chemistry 211b and Chemistry-Biology 230b. Prerequisite: Chemistry 100 or Chemistry 101; see also Special Provisos. Lecture and laboratory weekly; fortnightly tutorial or additional lecture. A.H. Rees

#### Chemistry 211b

Continuing organic chemistry. Further grounding in important classes of organic compounds, with stress on the underlying principles involved in their reactions; introduction to physical methods of structure determination; qualitative organic analysis. Prerequisite: *Chemistry 210a*. Lecture and laboratory weekly; fortnightly tutorial or seminar.

E.G. Lewars

#### Chemistry-Biology 230b

Introductory biochemistry. Designed to interest both biologists and chemists, this course deals with the properties of biologically important compounds, the mechanisms and energetics of metabolic processes, and molecular genetics. Prerequisite: Chemistry 210a. Lecture weekly, laboratory or tutorial in alternate weeks.

S.A. Brown

#### Chemistry 240

Analytical chemistry. The theory and practice of classical and instrumental analytical chemistry, including volumetric, gravimetric methods, and chromatography. Applications to both inorganic and organic analysis. Emphasis is upon the physical and chemical principles, rather than on details of procedure. Prerequisite: Chemistry 100; see also Special Provisos. Laboratory weekly; two lectures, tutorials or seminars weekly. (Offered in 1975-76 and alternate years.)

#### Chemistry 300

Physical chemistry. Introduction to quantum chemistry, chemical bonding, statistical mechanics, spectroscopy and reaction rate theory. Prerequisite: *Chemistry 200*. Two lectures weekly, tutorials fortnightly, laboratory weekly. Seminars to be arranged.

R.E. March

#### Chemistry 310

Organic chemistry. A survey of organic chemistry with emphasis on theory and physical aspects, including spectrometry and modern methods of elucidating structures and reaction mechanisms. Prerequisite: Chemistry 211b. Two lectures or tutorials weekly; one laboratory weekly; seminars to be arranged.

E.G. Lewars

#### Chemistry 320

Inorganic chemistry. (Not offered in 1975-76.)

#### Chemistry-Biology 330

General biochemistry. An introduction to the chemistry of animals, higher plants, and micro-organisms, including composition of tissues, nature of enzymes and biocatalysis, energy relationships, formation and degradation of metabolically important compounds, and control of metabolism. Prerequisite: Chemistry 211b or Chemistry-Biology 230b. Lecture weekly, one tutorial and one seminar in alternate weeks, laboratory weekly.

R.G. Annett and S.A. Brown

#### Four-hundred Series Courses

Scant details of these offerings are provided because their content is determined, in part, by the interests of the students enrolled. Intending students should contact the department as early as possible.

## Classical Studies

#### Chemistry 400

Advanced physical chemistry. Prerequisite: Chemistry 300. Two lectures, tutorials or seminars weekly.

#### Chemistry 410

Advanced organic chemistry. Prerequisite: Chemistry 310. Two lectures, tutorials or seminars weekly.

#### Chemistry 420

Advanced inorganic chemistry. Prerequisite: Chemistry 300. Two lectures, tutorials or seminars weekly.

#### Chemistry-Biology 430

Advanced biochemistry. Current concepts in theory and methods of biochemistry, including enzyme kinetics and mechanisms, metabolic regulation, structure-function relationships of macromolecules, selected topics in metabolic pathways, applications of enzymological and isotopic techniques. Prerequisite: Chemistry-Biology 330. Lecture weekly, tutorial and seminar in alternate weeks.

#### Chemistry-Biology 431a

Advanced experimental biochemistry. A course involving six hours of laboratory work weekly during the first half of the session. Corequisite: *Chemistry-Biology 430*.

#### Chemistry 490

Experimental chemistry. Literature survey and practical work, normally including a project, in an area of chemistry according to the student's field of specialization. About eight hours per week.

#### Chemistry 492a

Extended project. Corequisite: Chemistry 490.

#### Chemistry 493b

Extended project. Corequisite: Chemistry 490.

#### Chemistry 499

A reading course on topics drawn from one of the following fields: analytical chemistry, biochemistry, inorganic chemistry, organic chemistry, physical chemistry, theoretical chemistry, and Canadian science policy. Project work outside the laboratory may be involved.

Associate Professor and Chairman of the Department Janet P. Bews, B.A. (QUEEN'S), M.A., PH.D. (LONDON)

Professor in Ancient History

Gilbert Bagnani, D. LITT. (ROME), F.R.S.C., LL.D. (TRENT)

#### Associate Professors

Roger Crowhurst, B.A., PH.D. (LONDON); Konrad H. Kinzl, PH.D. (VIENNA); David F.R. Page, B.A. (SHEFFIELD) (on leave 1975-76); A.M. Young, M.A. (MELBOURNE), PHIL.M. (TORONTO)

Courses are offered toward majors in the following three fields, which for the purpose of degree regulations are regarded as three separate subjects (see Special Provisos):

A. Latin Language and Literature

B. Greek Language and Literature

C. Classical Studies in Translation, comprising Classical History, Classical Literature; and Ancient Philosophy (offered by the Department of Philosophy). No knowledge of Greek or Latin is required in these courses.

Major programs are available in each of A, B and C, and also in combinations of A and/or B and/or C.

#### **Required Courses**

Single-major Ordinary program. Minimum of six or seven courses of which at least four must be beyond the *one-hundred* level and at least two at the *three-hundred level*:

A. six courses in Latin

B. six courses in Greek

C. either six courses in Classical History (including Classical Civilization 380) or seven courses chosen from Classical History, Classical Literature, and Ancient Philosophy.

A and/or B and/or C in combination. Minimum seven courses. Joint-major Ordinary program. Minimum of five courses, of which four must be beyond the *one-hundred* level and at least one at the *three-hundred* level.

Single-major Honours program, available in Latin and in Greek. Minimum of eight courses in Latin or in Greek, including two at the *four-hundred* level, plus two courses in Classical History.

Joint-major Honours program, available in Latin and in Greek. Fourth-year programs to be arranged in consultation with the department.

#### **Special Provisos**

The minima for majors are set out above; however, students are not limited to a maximum of eight courses within the Department of Classical Studies, but may take courses in each of its component subjects, subject to general regulations for degrees. A student in first year may take only two courses in the Department of Classical Studies. Students proposing to major in Classical Studies should consult the department.

Practice in prose composition and sight translation forms part of the program in all years in both Latin and Greek.

The content of Greek courses beyond *Greek 100* may be modified, at the discretion of the department, and the number of Greek courses offered beyond the *two-hundred* level in any given year will be limited; students wishing to study Greek beyond *Greek 100* should consult the department.

The number of Latin courses offered beyond the twohundred level may also be limited in any given year.

One course in Classical Literature in Translation may be counted for credit toward a major in English.

#### Recommended Courses

Students concentrating on non-linguistic courses should take at least one course in a classical language.

Students interested in a joint-major degree can plan integrated core programs in Classical Studies and French (e.g. French 110, 211, 300, 320), Philosophy (e.g. Philosophy 100, 210,214, 311), History (e.g. History 120, 200, 220, 360, 380) or English (e.g. English 120, 201, 280, 300, 332).

#### 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.

J.P. Bews

Latin 200

Studies in Latin language and literature. Selections from prose and verse writings, including Catullus, Cicero, Ovid and Medieval Latin. Prerequisite: Latin 100 or Grade 13 Latin. Three hours weekly.

J.P. Bews

Latin 210

Comedy and satire. Terence, Adelphi; Horace, Satires; Juvenal. Prerequisite: Latin 100 or Grade 13 Latin. Three hours weekly. A.M. Young

#### Latin 300

Studies in Augustan literature. Livy; Horace, Odes: Propertius. Prerequisite: Latin 200 or 210. Occasional lecture, two tutorials, language seminar weekly.

A.M. Young

#### Latin 310

Virgil, Aeneid, Georgics and Eclogues. Prerequisite: Latin 200 or 210. Occasional lecture, two tutorials, language seminar weekly.

J.P. Bews

#### Latin 320

Historical and philosophical writing. Tacitus, Annals; Lucretius, Cicero, Tusculan Disputations. Prerequisite: Latin 200 or 210. Occasional lecture, two tutorials, language seminar weekly.

A.M. Young

#### Latin 400

Reading course. Regular meetings.

#### Latin 410

Studies in Latin language and literature and Roman civilization, with some concentration on a special subject. Regular meetings.

#### **Greek Language and Literature**

#### Greek 100

Elementary Greek. For students with little or no previous knowledge of the language. No prerequisite. Four hours weekly.

R. Crowhurst

#### Greek 200

Studies in Greek language and literature. Selections from prose and verse writings: Plato, *Apology*; Herodotus; New Testament. Prerequisite: *Greek 100* or Grade 13 Greek. Three hours weekly.

#### Greek 210

Homer, Iliad and Odyssey. Prerequisite: Greek 100 or Grade 13 Greek. Three hours weekly.

R. Crowhurst

#### Greek 300

Tragedy. Aeschylus, *Prometheus Bound*; Sophocles, *Antigone*; Euripides, *Hippolytus*. Prerequisite: *Greek 200* or 210. Three hours weekly.

Greek 310

Prose. History, oratory, biography: Thucydides; Demosthenes, *Philippics*; Plutarch, *Lives*. Prerequisite: *Greek 200* or 210. Three hours weekly.

Greek 320

Verse. Lyric, elegiac, comic: selections in lyric poetry; Aristophanes, *Clouds*; Menander, *Dyscolus*. Prerequisite: *Greek 200* or *210*. Three hours weekly.

Greek-Philosophy 385
Greek philosophical texts. See Philosophy 385.

Greek 400

Reading course. Regular meetings.

Greek 410

Studies in Greek language, literature and civilization, with some concentration on a special subject. Regular meetings.

## **Classical Studies in Translation**

#### **Ancient History**

Classical History 100

Ancient society and institutions: an introduction to the study of ancient history, illustrated particularly by the history of Greece from Solon to Alexander (c. 600-323 B.C.) and Roman history from the Gracchi to Nero (133 B.C.-A.D. 69). In 1975-76 the emphasis will be on Greek history. Two lectures weekly, fortnightly seminar.

R. Crowhurst and K. Kinzl

Classical History 210

Greek history. The age of the tyrants. Prerequisite: Classical History 100 or permisison of the instructor. Lecture and seminar weekly.

K. Kinzl

Classical History 211

Themes in Greek society and civilization 700-350 B.C., as seen through archaeology. (Offered in 1976-77 and alternate years.)

Classical History 220

The Roman Empire in the period of the Principate. Three lectures per fortnight, fortnightly seminar. K. Kinzl Classical History 221

The Roman Republic. (Offered in 1976-77 and alternate years.)

Classical History 310

Greek history. The Age of Alexander. (Offered in 1976-77 and alternate years.)

Classical History 320

The Roman Empire in the period of the Dominate. The transition from classical to medieval culture, with special reference to the establishment of Christianity. Weekly lectures; fortnightly seminar.

K. Kinzl

Classical History 330
Roman law. (Not offered in 1975-76.)

#### Classical Literature

Classical Literature 100

Greek drama. Studies in fifth-century theatre in relation to its antecedents in epic poetry and its influence in later literature. Two lectures weekly, fortnightly seminar.

J.P. Bews and staff

Classical Literature 200

Mythological themes in Greek and Latin literature: gods and demi-gods; the hero, epic and tragic; myth, legend and saga; myth and society. Weekly lectures and seminars. Open to students beyond first year.

1.P. Bews and R. Crowhurst

Classical Civilization 380

Intensive study in the field of classical literature and civilization. For 1975-76 the principal topic will be ancient historiography; with permission of the department students may study a further topic. Open to third- and fourth-year students only. Prerequisite: two courses in Classical History or two courses in Classical Literature. Weekly meetings. K. Kinzl

Ancient Philosophy See Philosophy 210.

#### **Economics**

Professor of Economics and Chairman of the Department M.J. Boote, B.A. (WALES); PH.D. (MCGILL)

#### Associate Professors

D.C.A. Curtis, M.A. (QUEEN'S) PH.D. (MCGILL); W.T. Hunter, B.COM. (TORONTO), M.A. (TORONTO, OXFORD); H.M. Kitchen, M.A. (MCMASTER); K.S.R. Murthy, B.SC. (ANDHRA), M.SC. (KARNATAK), M.A. (DELHI, WESTERN ONTARIO), PH.D. (WESTERN ONTARIO)

Economics 100 is a prerequisite for all other courses in Economics. Two-hundred series courses in Economics are accepted as three-hundred level courses to meet the University requirement of a minimum number of third-year courses.

#### **Required Courses**

Single-major Ordinary program. Minimum six courses in Economics, including

Economics 100

200

300

Joint-major Ordinary program. Minimum five courses in Economics

Same required courses as for single-major

Single-major Honours program. Minimum nine courses in Economics, including

Economics 100

200

*240* 

*300* 

400 and at least two others at four-hundred level

Joint-major Honours program. Minimum seven courses in Economics, at least two of which must be at *four-hundred* level unless either *Economics 320* or *325* is substituted; same required courses as single-major Honours.

#### Economics 100

Introductory economic analysis. A course intended to provide a basic understanding of the major theoretical and policy areas in Economics. The main areas studied are: employment, unemployment, inflation and government fiscal policy, money, Canadian banking and monetary policy; market supply and demand and the behaviour of business firms, international trade, tariffs, the balance of payments and foreign exchange rates. Lectures and discussions three hours weekly.

D.C.A. Curtis and staff

#### Economics 200

Micro-economic theory and its applications. A theoretical analysis of conditions leading to an optimal allocation of all scarce resources by the market system. Detailed study of influences affecting the demand and supply of goods and services, market equilibrium, income distribution and economic welfare. Application of theoretical tools to current economic problems and policies of the Canadian economy. Two lectures weekly and one seminar fortnightly.

#### Economics 210

Public finance. Government expenditures structure (theoretical and practical); welfare economics of the public sector; tax structure, tax incidence and effects; fiscal federalism; fiscal policy. Two lectures weekly, tutorial fortnightly. H.M. Kitchen

#### Economics 220

Monetary economics. Theoretical and institutional aspects of money and their relationship to economic activities and policies. Two lectures weekly, seminar or tutorial fortnightly.

#### Economics 240

Introduction to quantitative economics. An introductory analysis of social accounting framework and inter-industry analysis. Problems of collection, measurement, interpretation and analysis of economic data; discussion of the availability and content of some official economic statistics. Two hours of lectures/discussion and one tutorial weekly.

#### Economics 300

Macroeconomic theory and policy. National accounting; determination of national income and output; IS-LM approach, Keynesian vs. Classical theory. Aims, techniques and limitations of monetary and fiscal policies; inflation, guidelines and trade-offs; external constraints; recent macroeconomic policy. Two seminars weekly, tutorial fortnightly.

## D.C.A. Curtis

#### Economics 310

International economics. Trade theory, tariffs and regional integration with special reference to Canada; foreign exchange markets and exchange rates; balance of payments and its adjustment; international financial institutions in historical perspective. Lectures and tutorials.

W.T. Hunter

## Economics 320

Introduction to econometrics. Problems of measurement and estimation in economics. Simple regression model, multiple regression (general linear model). Problems of estimation and testing of economic relationships under conditions of heteroscedasticity, autocorrelation, errors in variables. Introduction to distributed lags and simultaneous equations models. Two lectures, seminar weekly. Prerequisite: Statistics 100, or permission of instructor.

K.S.R. Murthy

#### Economics 325

Mathematical economics and economic models. (Not offered in 1975-76.)

#### Economics 330

Development economics. Economic policy and planning in low-income countries including population growth, agricultural productivity, transfer of technology, aid, trade, inflation, taxation, and income distribution. Weekly seminars, fortnightly tutorials.

## M.J. Boote

#### Economics 340

Industrial organization. Industrial market structure, conduct and performance. Examination of policies to facilitate competition, including: concentration; mergers; barriers to entry; product differentiation and advertising; technological change; patents and competition policy in Canada and the United States.

#### **Honours Program**

Individual programs are arranged in consultation with the department; as a year of specialized study, the program is intended to meet admission requirements for graduate work elsewhere. Economics 400 (Topics in Modern Economic Theory) is a required course; the remainder of the program is made up of full or half courses from among the following fields; monetary theory, public finance, urban economics, Canadian economic history, and trade and development with special reference to Latin America.

### Education

Co-ordinator, Trent-Queen's Teacher Education Program Walter Downes, B.A. (QUEEN'S), M.ED. (TORONTO), PH.D. (OTTAWA)

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 enrol in programs which qualify them for either a Bachelor of Arts or a Bachelor of Science degree and a Bachelor of Education degree. The first three years of the program are conducted at Trent while at least half of the fourth year is held at Queen's.

The design of this 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.

## **English Literature**

Professor of English Literature and Chairman of the Department
James Winny, M.A., PH.D. (CAMBRIDGE)

#### **Professors**

R.D. Chambers, B.A. (MCGILL), B.LITT. (OXFORD); Barbara E. Rooke, M.A. (QUEEN'S), PH.D. (LONDON); Gordon Roper, 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); A.G. Fisher, M.A. (SASKATCHEWAN); S.F. Gallagher, B.A. (IRELAND), M.A. (WESTERN ONTARIO), PH.D. (IRELAND); Ian McLachlan, M.A. (OXFORD); (on leave, Winter and Spring Terms 1976); O. S. Mitchell, M.A. (ALBERTA), PH.D. (LONDON); Elisabeth M. Orsten, M.A. (OXFORD), PH.D. (TORONTO); F.B. Tromly, B.A. (GRINNELL), M.A., PH.D. (CHICAGO), (on leave, 1975-76)

#### **Assistant Professors**

R.J. Dellamora, A.B. (DARTMOUTH COLLEGE), B.A. (CAMBRIDGE), M.PHIL., PH.D. (YALE); G.D. Eathorne, B.A. (NEW ZEALAND), M.A. (CANTERBURY) (on leave, 1975-76); D.K. Glassco, B.A. (QUEEN'S); Gordon Johnston, B.A. (TORONTO), M.A. (HARVARD); Sean Kane, B.A. (CARLETON), M.A., PH.D. (TORONTO); J.E. Neufeld, B.A. (TORONTO), M.A., PH.D. (CHICAGO); Michael Peterman, B.A. (PRINCETON), M.A. (TORONTO); Carolyn Tate, B.A. (BRITISH COLUMBIA), M.A. (MCGILL); J.M. Treadwell, B.A. (TORONTO), M.A. (CAMBRIDGE)

#### Note

The department is introducing a new curriculum, designed to give greater diversity to English studies by varying the field and scope of interest in the different courses. The main syllabus will include (i) literary periods dominated by an outstanding writer; (ii) literary topics or kinds associated with particular literary periods, though not confined to them; (iii) special subjects, special authors, and short periods of literary activity, and (iv) modern English, Canadian and American literatures. The department emphasizes this diversity of approach, and advises students to choose their courses, as far as possible, so that they divide their attention between the different kinds of study.

Some courses in English Literature are grouped generally in time periods. The groupings are:

A	В	C	D	E
1350 to	1500 to	1642 to	1750 to	1900 to
1550	1642	1750	1900	1970
331	251	201	210	340
332	252	202	211	341
	280	300	230	342
		302	320	350
			321	360
			370	371

#### **Required Courses**

Single-major Ordinary program. Minimum six courses in English. Four of these courses are to be chosen from different time periods listed above.

Joint-major Ordinary program. Minimum five courses in English. Three of these courses are to be chosen from different time periods listed above.

Single-major Honours program. Minimum ten courses in English. At least one course must be chosen from each of the

time periods listed above; in addition, at least two additional four-hundred series courses.

Joint-major Honours program. Minimum eight courses in English. Program to be established in consultation with the department.

#### **Special Provisos**

Students may elect to take one course in Classical Literature or in Comparative Literature or Spanish 321 or German 220 or Canadian Studies 350 as one of the optional courses required in the major and Honours programs in English. Students are not allowed to take both first-year courses in the same year.

#### English 105

Studies in literature. The course provides an introduction to a variety of critical approaches through the study of representative British and American works of the transitional period 1880 to 1930. For historical context, it looks back to the Victorian age and forward to more recent writing. Minimum of one lecture hour weekly and fortnightly tutorials. C. Tate and staff

#### English 120

The hero. A study of representative figures of English and American Literature who embody the particular ideals and human outlook current during the main literary periods from Beowulf to the present. Weekly lectures and fortnightly tutorials.

#### J. Neufeld and staff

Second- and Third-Year Courses: The first digit suggests the year of study in which the course might normally be taken, but any second- or third-year course is open to any second-, third-, or fourth-year student.

#### English 201

Milton and his age. (Offered in 1976-77 and alternate years.)

#### English 202

Literature and belief. The course traces, mainly through seventeenth-century writers including Donne, Herbert, Milton, Traherne and Bunyan, the expression of religious faith through literature during an age when spiritual fervour, mysticism and doubt figured in a prolonged controversy over belief. Fortnightly seminars and tutorials.

#### J. Winny and staff

#### English 210

Studies in romanticism. Attention will be divided between the work of a major figure of the Romantic Revival, and the work of other Romantic writers. Minimum of one lecture hour weekly and fortnightly tutorials.

A.G. Fisher and staff

#### English 211

Imagination, dream and vision. (Offered in 1976-77 and alternate years.)

#### English 230

Studies in nineteenth-century American literature. Minimum of one lecture hour weekly and fortnightly tutorials. M. Peterman and staff

#### English 232

American literature: The Gilded Age. (Offered 1976-77, and alternate years.)

#### English 240

Pastoralism. Studies in the relationships between man and nature, as reflected in the works of some English and American writers from the Middle Ages until the present day. Minimum of one lecture hour weekly and fortnightly tutorials.

M.S. Berkowitz and staff

#### English 251

Renaissance love poetry. (Offered 1976-77 and alternate years.)

#### English 252

The new learning. The course will consider the impact of intellectual rediscovery and new thinking upon literature and imaginative outlook during the Age of Shakespeare, and the ways in which new ideas both stimulated literary expression and unsettled established assumptions about man and his world. Authors to be studied will include Spenser, Donne, Nashe, Shakespeare, Bacon, Machiavelli and Montaigne. Weekly lectures, fortnightly tutorials.

S. Kane and staff

#### English 280

Studies in Shakespeare with emphasis on approaches to critical reading. Minimum of weekly lectures and fortnightly tutorials. B.E. Rooke and staff

#### English 300

Pope and his Age. Attention will be divided between the work of a major Augustan writer, and other literature of the period. Minimum of one lecture hour weekly and fortnightly tutorials.

R.D. Chambers and staff

#### English 302

London. (Offered in 1976-77, and alternate years.)

#### English 320

The Age of Dickens and Browning. A study of the development of grotesque realism in the work of Victorian writers, mainly novelists and poets, and especially Dickens and Browning. Social, psychological and aesthetic considerations will be discussed. Authors include Emily Bronte, Thackeray, George Eliot, Tennyson, Mayhew, Ruskin and Carlyle. Minimum of lecture weekly and fortnightly tutorial. R. Dellamora and staff

#### English 321

Literature and society. (Offered in 1976-77 and alternate years.)

#### English-Comparative Literature 325

Literary theory and Interpretation. A work-shop in critical approaches and the assumptions about the nature and purpose of literature which underlie them. Weekly lecture and seminar. S. Kane, R. Dellamora and staff

#### English 331

Chaucer and his Age. (Offered in 1976-77, and alternate years.)

#### English 332

Chivalry. A study of the chivalric tradition in English literature between 1350 and 1600. The syllabus will include works by Chaucer and other medieval writers, Spenser and Shakespeare. Minimum of one lecture hour weekly and fortnightly tutorials. E.M. Orsten and staff

#### English 342

The 1910s. Studies in the writing of the First World War period and in the development of modernistic literature and aesthetics. Fortnightly lectures and seminars.

D. Glassco and staff

#### English 350

Modern drama. Studies in the works of recent English, Irish and American dramatists. The Spring Term is devoted to the study of some Canadian plays. Minimum of one lecture hour weekly and fortnightly tutorials.

S.F. Gallagher

#### English 351

Drama to 1642. (Offered in 1976-77 and alternate years.)

#### English 360

Studies in Canadian literature. One seminar weekly. G. Johnston and staff

#### English 371

Studies in American fiction, 1900-1940. The course involves a detailed study of the major works in American fiction from the appearance of Dreiser's Sister Carrie to the outbreak of the Second World War. Writers to be considered include Wharton, Cather, Anderson, Lewis, Fitzgerald, Hemingway, Faulkner, Wolfe, West and Steinbeck. Minimum fortnightly lecture and weekly tutorial.

#### G. Roper and staff

#### English 390

Literature and psychology. This course will consist of an examination of some aspects of literature and psychology. Of particular importance will be the development of the writer's insight into personality, growth and variation as shown by the unfolding of personality development in his work. Use will be made of biographical and autobiographical material where it is available. The concept of creativity will also be examined. Minimum of one lecture hour weekly and fortnightly tutorials. Prerequisite: A first-year English course. Enrolment restricted to 30.

#### B.L. Beach

Fourth-year Courses: Fourth-year courses are normally limited to students in the fourth or Honours year of studies in English. Before the end of Winter Term of second year, students may petition the department for permission to enrol in a fourth-year course as part of a third-year program.

Note: The Honours Program is being revised to provide better co-ordination with the rest of the curriculum. Further courses are likely to be offered, details of which will be announced in the Calendar Supplement in September.

#### English 410

Theory and history of literary criticism.

#### J. Neufeld

# English 431 Studies in Old English language and literature. E.M. Orsten

#### English 440

Modern poetry. Pounds poetics and the poetry of Yeats, Eliot, Stevens, Auden, Williams and Pound.

G. Johnston

#### English 480

A student who wishes to pursue further study in any second-or third-year course may arrange in his third year, in consultation with the tutor, to take an *English 480* which extends the field of study of that second- or third-year course.

#### English 490

Special author or topic. A list of topics for selection will be circulated by the department to students who have been admitted to Honours.

#### English 491

Research study. The course allows the student to select, with the approval of the department, his own area for research study which he then pursues under the direction of a member of the department. Students are advised that calendar deadlines for registration in courses apply to English 491.

#### English 495

Honours thesis. A double credit course, for which double fee is charged, in which instruction in research methods leads to a thesis of 10,000 to 14,000 words. The department deadline for a thesis abstract and bibliography (signed by the thesis supervisor) is May 1 of the student's third year.

## French Studies

Professor of French and Chairman of the Department F. K. HARPER, M.A. (MANITOBA)

#### Associate Professors

C.E.J. Caldicott, M.A. (DUBLIN), D.E.S. (AIX-MARSEILLES), PH.D. (DUBLIN); J.M.A. LeDreff, M.A. (BRITISH COLUMBIA); Terence Mellors, M.A. (OXFORD); Peter Royle, M.A. (OXFORD), PH.D. (NATAL)

#### Assistant Professors

A.E. Franklin, M.A. (CAMBRIDGE, TORONTO) (on leave 1975-76); Jean-Pierre Lapointe, B.A. (R.M.C.), M.A. (MCGILL)

#### Required Courses

Single-major Ordinary program. Minimum six courses in French

French 110

200

211

Joint-major Ordinary program. Minimum five courses in French

Same required courses as for single-major

Single-major Honours program. Minimum ten courses in French

French 110

200

211

Four four-hundred series courses or their equivalent

Joint-major Honours program. Minimum eight courses in French

French 110

200

211

Five additional courses, two of which must be at the four-hundred series level

Students who declare for the first time a single- or joint-major Ordinary program, or a single- or joint-major Honours program in French must include in their program at least one course in French-Canadian Literature or Civilization.

Recommended courses for intending French majors: Latin 100, Classical Literature 100, Philosophy 100 and courses in at least one other modern language.

#### French 100

An intensive course in oral and written French. This course will be taught to homogeneous groups of about ten students each: a) beginners, b) those with some high school French, c) those with Grade 13 French or its equivalent, but with inadequate background to cope with *French 110*. No prerequisite. Five hours weekly.

H.B. LaPointe and staff

#### French 110

The basic freshman course in language and literature normally required of students intending to major in French. Each student will take weekly one hour of language seminar, one hour of laboratory practice, and will opt for one lecture and one literature seminar involving the critical analysis of selected texts in one of the two following areas: a) Metropolitan France, or b) French Canada. Prerequisite: Grade 13 French, its equivalent, French 100 or permission of department. Four hours weekly.

T. Mellors, J.-P. Lapointe and staff

French 100 and French 110 may not be taken concurrently without permission of department.

All two-hundred courses, with the exception of French 200, may be counted as three-hundred series courses.

#### French 200

Oral practice, prose translation, phonetics, and laboratory practice. Required for a major in French. Prerequisite: French 100 or French 110, or permission of department. Three hours weekly.

F.K. Harper and H.B. LaPointe

#### French 211

The classical French theatre. Required for a major in French. Prerequisite: French 110 or permission of department. Lecture and seminar weekly. C.E.J. Caldicott

#### French 231

Poetry and drama of the nineteenth century. (Not offered in 1975-76.)

#### French 250

Quebec civilization. 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. This course is an attempt to synthesize the history of ideas in Quebec in order to promote a better understanding of the determining factors in

contemporary Quebec culture. Prerequisite: French 100 or French 110 or permission of department. Lecture, and one seminar weekly.

J.-P. LaPointe

French 251

Quebec civilization. (Not offered in 1975-76.)

French 300

Translation, philology and laboratory practice. Prerequisite: French 200. Three hours weekly.

J.M. LeDreff

French 310

The nineteenth-century French novel. Prerequisite: French 110 or permission of department. Lecture and seminar weekly. (Offered in 1975-76 and alternate years.)

T. Mellors

French 320

Modern French theatre. Giraudoux, Anouilh, Sartre, Ionesco, Beckett, Genêt, Montherlant. Prerequisite: French 110 or permission of department. Lecture and seminar weekly. T. Mellors

French 321

Modern French theatre. (Not offered in 1975-76.)

French 325

French-Canadian poetry and drama. (Not offered in 1975-76.)

French 330

French prose and poetry of the eighteenth century. (Not offered in 1975-76,)

French 340

The contemporary novel. (Not offered in 1975-76.)

French 341

The contemporary novel. Gide, Camus, Sartre, Malraux, le nouveau roman. Lecture and Seminar weekly. Texts used will be in French, but the language of instruction will be English. Not open to French majors. No prerequisite. P. Royle

French 350

Contemporary French civilization. A broad survey of modern France following the evolution of its institutions, constitutions and cultural life from the end of *La Troisième République* to the present day. Illustrated by readings from contemporary

French authors, political commentators and newspapers. Prerequisite: French 100 or 110, and subject to interview in French. One lecture and two tutorials weekly. One class seminar fortnightly.

C.E.J. Caldicott

French 370

The 'libertine' tradition in French literature. Prerequisite: French 110 or permission of department. Lecture and seminar weekly.

J.M. LeDreff

French 390

French-Canadian prose literature. Prerequisite: French 110 or permission of department. Lecture and seminar weekly. J.-P. LaPointe

Four-hundred series courses are open only to students in the fourth or Honours year of studies in French, or by permission of the department.

French 400

Linguistics, Stylistics, and composition. Two hours weekly. H.B. LaPointe

French 410

Medieval French language and literature. (Not offered in 1975-76.)

French 420

French literary criticism. Two tutorials weekly. J.M. LeDreff

French 430

Initiation to literary research. Two tutorials weekly. (A list of subjects is available in department office.)

Staff

French 440

French Renaissance, sixteenth century, with intensive study of Rabelais, Montaigne, Marot, Ronsard, DuBellay and D'Aubigné. Two tutorials weekly.

J.M. LeDreff

French 450

Studies in modern French poetry. Two tutorials weekly. P. Royle

French 460

Studies in contemporary non-metropolitan French literature. (Not offered in 1975-76.)

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## Geography

Professor of Geography and Chairman of the Department W.P. Adams, B.A. (SHEFFIELD), M.SC., PH.D. (MCGILL)

Associate Professors

A.G. Brunger, B.Sc. (SOUTHAMPTON), M.SC. (ALBERTA), PH.D. (WESTERN ONTARIO) (on leave 1975-76); F.M. Helleiner, M.A., PH.D. (WESTERN ONTARIO); G.A. Nader, B.A. (LONDON), PH.D. (DURHAM)

Assistant Professors

J.G. Cogley, M.A. (OXFORD), M.SC. (MCMASTER); J.S. Marsh, B.A. (READING), M.SC. (ALBERTA), PH.D. (CALGARY); C.H. Taylor, M.A.(CANTERBURY), PH.D. (MCGILL)

Visiting Professor

W.J. Copeland, B.A.SC., M.A.SC. (TORONTO); one to be appointed

**Required Courses** 

Single-major Ordinary program. Minimum six courses in Geography

Geography 101

201

Statistics 100 and Geography 390b recommended

Joint-major Ordinary program. Minimum five courses in Geography

Same required and recommended courses as for single major

Single-major Honours program. Minimum eleven courses in Geography

Geography 101

201

301a

410 Statistics 100

Geography 390b is highly recommended

Joint-major Honours program: Minimum eight courses in Geography

Same required and recommended courses as for single-major Honours program

Course changes have been made in 1975-76 to improve the sequence and choice available to students. Those seeking further advice are directed to the Chairman of the department or individual faculty member.

#### Recommended Courses

The attention of students in Geography is drawn to Mathematics 100, Philosophy 377a, Computer Science 200a.

Students intending to teach are advised to include a regional course; the Geography of Canada is particularly useful. The Canadian Studies, Environmental and Resource Studies and Development Studies programs can complement a Geography program.

Geography 101

Man in the environment. Serves to indicate the scope and methods of geography. Attention centres on man's interaction with a variety of environmental systems (e.g. geomorphic, meteorological, ecological) and his use of distinctive areas (e.g. mountains, cities, the North and tropics). Emphasis on concepts, problems, research methods, and Canadian examples. Laboratory exercises and field work involve a variety of techniques including map and air photo interpretation, meteorological observation, land use mapping, computer and statistical methods. Approximately four hours weekly, lecture, films, laboratory exercises, field project.

J.S. Marsh and C.H. Taylor

Geography 201

Methods of geographical analysis. Retrieval, processing, and presentation of geographic data, including sampling methods and statistical and cartographic techniques. Much of the course applies the techniques to specific problems in physical and human geography. Prerequisite: Geography 101. Approximately three hours weekly, lectures, seminars, and laboratory classes.

F.M. Helleiner and staff

Geography 210a

Survey and remote sensing. Techniques of plane surveying and topographical mapping, horizontal and vertical distance and angle measurement, use of level, transit and theodolite. Interpretation and measurement of remote sensing media; including panchromatic aerial photographs and Earth resources technology satellite imagery. Lecture, laboratory and field work.

W.J. Copeland

Geography 220

Economic geography. A systems approach to the spatioeconomic organization of the world. Current methods of inquiry into the processes within the system and models for analyzing the processes. Prerequisite: Geography 101 or permission of instructor. Lecture weekly, tutorial fortnightly, seminar/ laboratory weekly.

F.M. Helleiner

#### Geography 230

Recreation geography. Examines environmental, behavioural and management aspects of recreation. Emphasis on outdoor recreation, recreation history, water-based recreation, Canada. Approximately three hours weekly; lectures, seminars, field exercises, project. Prerequisite: Geography 101 or consent of instructor. Background in statistical, sociological and ecological methodology desirable.

J.S. Marsh

Geology. (Not offered in 1975-76.)

#### Geography 245

Climatology. Study of the elements of weather and climate; global energy and water balance regimes; climate classification. Prerequisite: *Geography 101*. Three hours of lectures, laboratories and seminars per week, and field work. W.P. Adams and C.H. Taylor

#### Geography 250

Geomorphology. Geomorphic processes and landscape evolution. Running water, ice, wind and waves as landforming agents. Geometrical and mechanical explanation of forms and processes. The imprint of the Ice Ages on the earth's surface. The past and the future of the physical landscape; the physical landscape and its problems for historical and contemporary man. Prerequisite: Geography 101 or permission of the instructor. Approximately three hours weekly; lectures, laboratories, and field work.

J.G. Cogley

#### Geography 270

Urban geography. An examination of urban functions, the spatial arrangement of urban centres and the concept of hierarchies at the national and regional levels; analysis of the internal organization of cities in terms of function, movement and physical layout; the development and structure of the Canadian urban system; and future urban structure. Prerequisite: Geography 101 or permission of instructor. Lectures, tutorials and seminars.

G.A. Nader

Geography 272b
Canadian cities. (Not offered in 1975-76.)

#### Geography 301a

Philosophy of geography. Designed for reflection upon the reasons for studying geography, with attention to be given to the evolution of geographical ideas, particularly concepts of

place, region, environment, and organization of space by nature and by society; the ideas of some prominent philosophers about geographical space; philosophy of geography as philosophy of science, with an effort to clarify the meaning of words like "determinism," "stochastic," "measurement," "theory"; ethical issues, academic and social prejudice in geographical studies; radical philosophies of man and his environment. Prerequisite: Geography 201. Tutorials and lectures.

J.G. Cogley

Geography 330 Historical geography. (Not offered in 1975-76.)

Geography 332a
Settlement geography. (Not offered in 1975-76.)

#### Geography 335b

Geography of future environments. A critical examination of forecasting techniques, ranging from computer simulations to science fiction scenarios, and their applicability to geographic aspects of the physical and cultural environment. Approximately three hours weekly; lecture, seminar, computer workshop, field trip and project. Prerequisite: Geography 101 or consent of instructor. (Offered in 1975-76 and alternate years.)

J.S. Marsh

Geography 340 Hydrometeorology. (Not offered in 1975-76.)

Geography-Biology 350a Biogeography: See Biology 350a

#### Geography 351 b

Glacial and quaternary geomorphology. The principles of glaciology: mass and energy balances of glaciers, movement of ice over solid surfaces, erosion and deposition beneath glacier ice. Glacial landforms and landscapes, particularly that of Southern Ontario. The quaternary history of North America and the world, with illustrations of the principles and uses of radiocarbon dating, isotope ratio analysis and pollen analysis. Dynamics of ice masses and the causes of Ice Ages, including the next one. Prerequisite: a two-hundred or three-hundred series course in physical geography. Lectures, tutorials and exercises. (Offered in 1975-76 and alternate years.)

J.G. Cogley

#### Geography 353a

Hydrology. Study of the movement of water through the environment with emphasis on terrestrial aspects including interception, infiltration, soil moisture, groundwater, surface runoff and streamflow, also covering man's impact on hydrologic processes. Prerequisite: Geography 245 or permission of instructor. Lecture and tutorial weekly, field work. (Offered in 1975-76 and alternate years.)

C.H. Taylor

#### 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 geographic perspective: Canada's role in the world, human and natural resources, and efforts to cope with current and incipient problems. Three hours or more weekly including lectures, seminars, and tutorials. Occasional field trips. F.M. Helleiner

#### Geography 364b

Geography of the Arctic. Study of selected aspects of the Arctic with considerable reference to northern Canada but with the deliberate intention of developing comparisons between it and other parts of the north polar regions. Prerequisite: Geography 101 or permission of instructor. Two lecture hours, one seminar per week. (Offered in 1975-76 and alternate years.) W.P. Adams

#### Geography 370

Planning. (Not offered in 1975-76.)

#### Geography 380a

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. One lecture and one tutorial per week. Prerequisites: Geography 270 or Geography 272b. (Offered in 1975-76 and alternate years.) G.A. Nader

#### Geography 390a and 390b

Field course in geography. This course is recommended for all Geography majors, and may be taken in the third or fourth year. It involves an extended period in a selected field area with extensive preparation and follow-up. Prerequisites: Geography 101, 201. One lecture, seminar per week, minimum of seven days in the field. N.B.: This half course is offered separately

both in the Autumn Term and in the Winter and Spring Terms. Geography 390a involves field work in August and has a limited enrolment.

J.S. Marsh and staff

#### Geography 400

Dissertation. This course is seen as the culmination of the Honours degree in Geography. Corequisite, Geography 410. Throughout the final year, students will engage in a major research project entailing periodic meetings with faculty. A schedule for the submission of research proposals and for the completion of various stages of the project will be set out at the beginning of the year. Students taking this course must obtain full details of it and begin preparation at the end of third year.

G.A. Nader and staff

#### Geography 410

Advanced seminar in geography. Corequisite, Geography 400. Seminars will be discussion of theses and other related topics. G.A. Nader and staff

## German

Professor and Chairman of the Department G. Baumgaertel, M.A. (BROWN), DR. PHIL. (TUBINGEN) (on leave Winter term)

#### Associate Professor

D.D. Stewart, M.A., PH.D. (TORONTO)

#### Assistant Professors

J.C. Fewster, M.A. (MANCHESTER); A.A. Krueger, STAATS-EXAMEN (MUNICH)

#### **Required Courses**

Single-major Ordinary program. Minimum six courses in German

German 110

200

210

Three additional courses at a senior level

Joint-major Ordinary program. Minimum five courses in German

Same required courses as for single-major

Single-major Honours program. Minimum nine courses in German

Same required courses as for Ordinary program

Joint-major Honours program. Minimum seven courses in German

Same required courses as for Ordinary program

#### **Special Provisos**

Four-hundred level courses are normally open only to students in the Honours program. To achieve a meaningful combination, majors are urged to co-ordinate their studies in German with studies in related disciplines.

#### German 100

Designed for students with little or no knowledge of German. This course provides an introduction to spoken and written German with intensive practice in the language laboratory as well as an introduction to present-day Germany. Two lectures, one seminar, one laboratory hour weekly. D.D. Stewart and staff

#### German 110

Introduction to modern German literature, thought, and civilization; comprehensive language review. Designed for students with Grade 13 standing in German, or at least B standing in German 100 or Grade 12, or equivalent. Students with more informal previous experience of German are encouraged to consult the department. Two lectures, two seminars, one laboratory hour weekly.

G. Baumgaertel and A.A. Krueger

#### German 200

German literature and thought from Nietzsche to Brecht. Modern writers and currents. Oral and written practice in German. Prerequisite: German 110, or permission of department. One lecture, two seminars, one language hour weekly. G. Baumgaertel and J.C. Fewster

#### German 210

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. Composition. Prerequisite: German 110 or permission of department. One lecture, two seminars, one language hour weekly. J.C. Fewster

#### German-English 220

Modern German literature in English translation. Represenative German authors and their contribution to world literature. An examination of the aesthetic, moral, existential, social and political issues advanced by writers including Büchner, Mann, Kafka, Hesse, Brecht, Dürrenmatt, Frisch, Böll, Grass. Prerequisite: None. Open to students in second year and above or by permission of department. Enrolment limited to approximately 30. Majors in German may attend but may not count this course for credit toward their degree. One lecture, one seminar weekly.

J.C. Fewster

#### German 301

Studies in German literature and cultural developments of the period 1780-1832, with special emphasis on Classicism and Romanticism. Composition. Prerequisite: *German 210* or permission of department. Two lectures, one seminar weekly.

D.D. Stewart

#### German 330h

The German Novelle and Erzählung of the nineteenth and twentieth centuries. Prerequisite: German 200 or 110, or permission of department. One lecture, two tutorials weekly. J.C. Fewster

#### German 340a

The drama of social criticism. From classicism to contemporary experimentation: Realism, Naturalism, Expressionism, Epic Theatre, Documentary Theatre. Prerequisite: German 200 or 210, or permission of department. One lecture, two tutorials weekly.

G. Baumgaertel

#### German 351a

Studies in modern German poetry. Prerequisite: German 200 or 210, or permission of department. One lecture, one seminar weekly. (Offered in 1975-76 and alternate years.) D.D. Stewart

#### German 352h

The German novel from Grimmelshausen to the present, with emphasis on selected works of the nineteenth and twentieth centuries. Prerequisite: German 200 or 210, or permission of department. One lecture, one seminar weekly. (Offered in 1975-76 and alternate years.)

## A.A. Krueger

#### German 400

History of the German language; introduction to medieval and late medieval German literature. One lecture, two tutorials weekly.

A.A. Krueger

#### German 410h

German baroque literature. A survey of seventeenth-century German literature in its European context, with attention to the impact of Baroque themes and forms on later German literature. One lecture, one seminar weekly. D.D. Stewart

#### German 420a

Studies in modern German literature. One lecture, one seminar weekly.

G. Baumgaertel

German 430 Major paper.

Note: Students are encouraged to avail themselves of opportunities for study, travel and work in German-speaking Europe, information about which is available through the department.

## **Hispanic Studies**

Acting Chairman of the Department F. K. HARPER, M.A. (MANITOBA)

#### Professor

J.M. Valverde, LIC.FIL.Y LET., DR.FIL.Y LET. (MADRID), EX-CATEDRATICO (BARCELONA)

#### Associate Professor

Rosa Maria Garrido, LIC.DER., DR.DER. (SEVILLA), M.A. (TORONTO): J.P. González-Martin, LIC.DER. (OVIEDO), DR.DER. (ZARAGOZA)

#### Assistant Professors

G.D. Aitken, B.A. (TRENT), M.A. (STANFORD); Dawn L. Smith, M.A. (OXFORD)

#### **Required Courses**

Single-major Ordinary program. Minimum six courses in **Spanish** 

Spanish 100 or 111 201

210 or 211

300

Two of Spanish 310, 320, 330, 411

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Joint-major Ordinary program. Minimum five courses in
Spanish
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Spanish 100 or 111 201

> 210 or 211 300

One of Spanish 310, 320, 330, 411

### Single-major Honours program. Minimum ten courses in Spanish

Spanish 100 or 111

201

210 or 211.

300

310 320

330

A minimum of three other courses at the four-hundred level

Joint-major Honours program. Minimum seven courses in Spanish

Intending students are advised to consult the two departments involved as early in their university careers as possible.

#### Special Provisos

-Students with sufficient previous knowledge of Spanish may be admitted directly to Spanish 201 and 210 or 211, at the discretion of the department.

-Spanish 210 and  $\hat{2}11$  may be taken concurrently.

#### Spanish 100

Beginners' course in Spanish. This course consists of an introduction to grammar and reading, and practice in oral Spanish. Texts include a grammar and two readers. Three seminars, one language workshop weekly, and one-hour language laboratory weekly.

G.D. Aitken, R.M. Garrido, D.L. Smith

#### Spanish 111

Designed for students with some previous knowledge of Spanish. Grammar review, composition and conversation. Three seminars and one laboratory hour weekly.

Prerequisite: Grade 13 Spanish, Spanish 100, or permission of department.

G.D. Aitken and J.P. González-Martin

#### Spanish 201

Continuing Spanish. A general course of Spanish conversation, pronunciation, composition and reading. One two-hour

lecture, one-hour seminar and one laboratory hour weekly. Prerequisite: Spanish 111, or permission of department. Spanish 100 may be used as a prerequisite. D.L. Smith

#### Spanish 210

Introduction to Spanish and Spanish-American civilization. A study of civilization in the Spanish-speaking countries (history, art, ideas, social developments). One lecture, one seminar weekly. Conducted in Spanish. Students enrolled in this course normally are also required to register in Spanish 111 or Spanish 201.

J.P. González-Martin

#### Spanish 211

A survey of Spanish and Spanish-American literatures from the origins to the present. One lecture, one seminar weekly. Conducted in Spanish. Students enrolled in this course normally are also required to register in Spanish 111 or Spanish 201.

#### Spanish 300

R.M. Garrido

Advanced oral Spanish and composition. An analytical study of the elements required in the use of Spanish, especially in writing, with a consideration of the Spanish-American peculiarities. Lecture, two seminars weekly. R.M. Garrido

#### Spanish 310

Spanish literature, contemporary period. Spanish literature since the generation of 1898. Lecture, seminar weekly. J.P. González-Martin

#### Spanish 320

Spanish-American literature. The literature of the Spanishspeaking countries of Central and South America, with its historical and social background. Lecture, seminar weekly. J.M. Valverde

#### Spanish 321

Spanish-American literature in translation. The literature of the Spanish-speaking countries of Central and South America, with its historical and social background. Texts for this course will be in English and the language of instruction will be English. This course is not open to Spanish majors. Lecture, seminar weekly.

J. M. Valverde

#### 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. Two seminars weekly. D.L. Smith

#### Spanish 400

Honours seminar leading to the completion of an undergraduate thesis, with problems of bibliography and literary criticism. Staff

#### Spanish 411

History of the Spanish language and Spanish medieval literature. Mainly intended for Honours students, but also open to third-year students. Lecture, seminar weekly. R.M. Garrido

#### Spanish 412

A course on some period of Spanish literature.

#### Spanish 413

A course on some author or problem of Spanish literature.

#### Spanish 417

Cervantes and the novel. A study of the principal works of this major writer in relation to the period in which they were written. Two tutorials weekly. D.L. Smith

#### Spanish 420

A course on some author or problem of Spanish-American literature.

J.M. Valverde

## History

Associate Professor of History and Chairman of the Department.

F.A. Hagar, A.B. (HARVARD), M.A., PH.D. (CALIFORNIA), M.LITT. (CAMBRIDGE)

Vanier Professor of Canadian History W.L. Morton, O.C., B.A. (MANITOBA), M.A., B.LITT. (OXFORD), LL.D. (TORONTO), D.LITT. (NEW BRUNSWICK, MCGILL, MANITOBA), F.R.S.C., F.R. HIST.S. (on leave 1975-76)

#### **Professors**

John Gilchrist, B.A., PH.D. (LEEDS); B.W. Hodgins, B.A. (WESTERN ONTARIO), M.A. (QUEEN'S), PH.D. (DUKE); D.S. Macmillan, M.A. (GLASGOW), PH.D. (SYDNEY), F.R.A.H.S.; Alan Wilson, M.A. (DALHOUSIE), PH.D. (TORONTO) (on leave Winter and Spring terms 1976)

#### Associate Professors

J.C. Barker, M.A. (CAMBRIDGE, TORONTO), M.DIV. (YALE), PH.D. (TORONTO) (on leave 1975-76; C.M. Greene, A.B. (AMHERST), A.M. (COLUMBIA) PH.D. (HARVARD); Brian Heeney, B.A. (TORONTO), B.D. (EPISCOPAL THEOLOGICAL SCHOOL), D.PHIL. (OXFORD); E.H. Jones, B.A. (SASKATCHEWAN), M.A. (WESTERN ONTARIO), PH.D. (QUEEN'S); Douglas McCalla, B.A. (QUEEN'S), M.A. (TORONTO), D.PHIL. (OXFORD) (on leave 1975-76); R.J.D. Page, M.A. (QUEEN'S), D.PHIL. (OXFORD); S.T. ROBSON, B.A. (BRITISH COLUMBIA), D.PHIL (OXFORD); Deryck M. Schreuder, B.A. (RHODES), D.PHIL (OXFORD) (on leave 1976); T.H.B. Symons, B.A. (TORONTO), M.A. (OXFORD), LL.D. (WATERLOO LUTHERAN, NEW BRUNSWICK, YORK), D.U. (OTTAWA) (on leave 1975-76)

#### **Assistant Professors**

S.D. Standen, B.A. (BRITISH COLUMBIA), M.A. (OREGON); Veronica J. Strong-Boag, B.A. (TORONTO), M.A. (CARLETON); John Syrett, B.A. (COLUMBIA), M.A., PH.D. (WISCONSIN)

#### Lecturers

A.O.C. Cole, M.A. (TORONTO); J.D.P. Martin, B.A. (QUEEN'S), B.L.S. (MCGILL)

#### **Required Courses**

Single-major Ordinary program. Minimum six courses in History
History 100 or 120
Two of History 200, 211, 220, 230

Three three-hundred series courses

Joint-major Ordinary program. Minimum five courses in History

History 100 or 120
Two of History 200, 211, 220, 230
Two three-hundred series courses

Single-major Honours program. Minimum nine courses in History

Same requirements as for single-major Ordinary program plus at least three *four-hundred* series courses and one *three-hundred* series course.

Joint-major Honours program. Minimum seven courses in History.

Same requirements as for joint-major Ordinary program plus at least two *four-hundred* series courses.

#### **Special Provisos**

-Departures from patterns above must be authorized by the department through the Chairman.

-Except where otherwise indicated, courses are open to all qualified students, but students seeking admission to *four-hundred* series courses before qualifying for the Ordinary degree must apply to the instructor and be authorized by the Chairman.

History students, particularly freshmen, should be aware that a graduate student is regularly available to them for advice and assistance as a departmental tutor in history.

#### History 100

An introduction to critical history, illustrated by the Canadian experience. Weekly lectures and weekly group discussions examine major problems in historical development and interpretation in Canada. One tutorial stream will focus on the eighteenth and nineteenth centuries; the other on the nineteenth and twentieth centuries.

S.D. Standen and staff

#### History 120

The study of history today. An examination of leading approaches and interpretations, choosing topics from European and North American history for particular illustration. Weekly lectures and tutorials.

J. Gilchrist and staff

#### History 200

The expansion of Europe from 1400 to 1825. Selected topics concerning the background to European expansion, and the economic and political effects of this process in the world outside Europe. Lecture weekly, tutorial fortnightly. D.S. Macmillan

#### History 211

United States history. Social, economic and political developments from the American Revolution through the Civil War to the end of the nineteenth century. Lecture and tutorial weekly.

E.H. Jones and J. Syrett

#### History 220

Modern European history. Revolution, reform and industrialism in the nineteenth and twentieth centuries. Lecture weekly, tutorial fortnightly.

C.M. Greene and S.T. Robson

#### History 230

Urban Canada, 1760-1920. A course in economic and social history; the development of and responses to urbanization in nineteenth century Canada. Lecture, tutorial weekly. *E.H. Jones* 

#### History-Politics 300

Canadian history and politics. Selected topics in the development of Canadian federalism. Seminars and tutorials, with occasional lectures.

B.W. Hodgins

#### History 301

French Canada to 1840. Selected topics in the foundation and transformation of French Canadian society through the Revolutionary Age. Lecture weekly, two-hour tutorial fortnightly.

S.D. Standen

#### History 310

American history: the reform tradition since 1896. (Not offered in 1975-76.)

#### History 311

Colonial America. (Not offered in 1975-76.)

#### History 312

Contemporary United States. Social, intellectual, political and foreign policy developments from the 1929 Crash through Watergate. Lecture weekly, tutorial fortnightly.

J. Syrett

#### History 320

Modern British history since the Industrial Revolution. Selected themes in the making of modern British society, government and empire, with special emphasis on Victorian England. Lecture weekly; tutorial fortnightly.

D.M. Schreuder and B. Heeney

#### History 330

German history from 1848 to 1939. Selected problems concerning the political, social, and economic history of the Germans. Two lectures, two tutorial hours fortnightly. S.T. Robson

#### History 340

Modern imperialism in Africa and Asia, 1850-1950. Selected problems concerning imperial ideology, European expansion, colonialism, primary resistance and the origins of Third World nationalism. Lecture weekly, tutorial fortnightly. *R.J.D. Page* 

#### History 350

History of France from the death of Louis XIV to 1900. The course will focus on the French Revolution, its causes in the eighteenth century and its resolution in the nineteenth century. Weekly lecture and two-hour tutorial fortnightly.

C.M. Greene

#### History 360

Medieval Europe. A course of medieval studies with particular reference to the period 1048-1348. Selected topics concerning social, economic, cultural, and ecclesiastical developments. Lecture and tutorial weekly.

J.G. Gilchrist

#### History 370

Russian history. A study of the development of the Muscovite State and of the Tsarist Autocracy, with some attention to the development of the reform and revolutionary movements. Lecture weekly, two-hour tutorial fortnightly. D.S. Macmillan

#### History 380

British history in the early modern era: 1461-1783. The evolution of England from off-shore island to world power; the development of constitutional monarchy and parliamentary government. Lecture weekly, two-hour tutorial fortnightly. F.A. Hagar

#### History-Politics 400

Contemporary Canadian problems. (See Politics 400.)

#### History 401

The growth of the British North American provinces. (Not offered in 1975-76.)

#### History 402

Late Victorian Canada. An intellectual and social approach, 1870-1914.

R.J.D. Page

#### History 403

Canadian identities. An advanced study of selected topics in Canadian social, intellectual and cultural history in the twentieth century.

V.J. Strong-Boag

#### History 410

Social and political traditions and ideas in the U.S. and Canada, since 1896. Two-hour seminar fortnightly, occasional lectures. A. Wilson and B.W. Hodgins

#### History 415

The American South. (Not offered in 1975-76.)

#### History 420

The Industrial Revolution. (Not offered in 1975-76.)

#### History 440

Aspects of modern European history. A combination seminarreading course. Themes to be selected in consultation with students.

C.M. Greene and S.T. Robson

#### History 451

The Scientific Revolution. (Not offered in 1975-76.)

#### History 465

Reformation Europe. A course with particular reference to the first half of the sixteenth century. Selected topics related to the theological and socio-economic aspects of the period. (Formerly History 360.)

J.G. Gilchrist

### History-Philosophy 470

Philosophy of history. A study of history as a form of enquiry, with special reference to problems of explanation, objectivity and the historical individual; also an examination of some general interpretations of the historical process. Offered jointly by the staff in Philosophy and History. During the Spring Term, students majoring in History may elect individual work with members of the staff in History. Lectures and discussions in one two-hour session weekly.

W.H. Dray

#### History 480

Reading course. Special topics, designed to provide an opportunity for more intensive study of particular topics. Open to fourth-year honours undergraduates in History and to some third-year students by special application to the department. Regular consultation and direction during the academic year.

Associate Professor of Mathematics and Chairman of the Department

G.F. Hamilton, B.A.SC., M.A., PH.D. (TORONTO), P.ENG.

#### **Professors**

Cyril Carter, B.SC., PH.D. (LONDON); A.P. Guinand, B.SC. (ADELAIDE), D.PHIL. (OXFORD); T.E.W. Nind, M.A. (CAMBRIDGE)

#### Associate Professors

I.C. Chakravartty, M.SC. (GAUHATI), PH.D. (SASKATCHEWAN) (on leave Spring Term 1976); J.P. Henniger, M.SC., PH.D. (MCGILL); E.A. Maxwell, M.SC., PH.D. (TORONTO) (on leave Spring Term 1976); T.N. Murphy, B.SC. (LIVERPOOL)

#### **Required Courses**

Single-major Ordinary program. Minimum six courses in Mathematics, but variations in the normal program below may be allowed by permission of the department

Mathematics 100

130

200

220 or 230

300

Joint-major Ordinary program. Minimum five courses in Mathematics

Mathematics 100

130

200

300 or 301

Single-major Honours program. Minimum eleven courses in Mathematics

Same requirements as for single-major Ordinary programs plus Mathematics 220

230

401

Three additional three-hundred or four-hundred series courses in Honours year

Joint-major Honours program: Minimum seven courses in Mathematics

Same requirements as for joint-major Ordinary program plus: Mathematics 220 or 230

Two additional three-hundred or four-hundred series courses in Honours year

#### **Special Provisos**

-Students intending to proceed to Honours should consult the Chairman of the department as soon as possible after the end of their second year.

## **Mathematics**

- -Students with a suitable mathematics background may take *Mathematics 100* and *Mathematics 130* or *241* (but not both) in first year.
- -Normal prerequisites for other courses may be waived in appropriate cases by permission of the department.

#### Mathematics 100

Differential and integral calculus, selected topics from other areas of mathematics. Three hours weekly. The course will be divided into sections: a) one section with emphasis on theory; b) one or two sections with emphasis on applications. Transfer between sections is permitted up to November 1. Prerequisite: At least one Grade 13 Mathematics credit or equivalent. I.C. Chakravartty and staff

#### Mathematics 130

Set theory and logic, linear algebra, number systems. Two lectures weekly, tutorial fortnightly. T.N. Murphy and staff

#### Mathematics 200

General mathematics. Partial differentiation, multiple integrals, differential equations, elementary properties of a complex variable, infinite series, and the co-ordinate geometry of lines, planes and spheres in three dimensions. Prerequisite: Mathematics 100. Two lectures weekly, tutorial fortnightly. I.C. Chakravartty and J.P. Henniger

#### Mathematics-Physics 210

Applied mathematics as found in the classical mechanics of particles, rigid bodies and continuous media. Introduction to Lagrangian mechanics. Prerequisites: *Mathematics 100*. Two lectures weekly and tutorial fortnightly.

G.F. Hamilton

#### Mathematics 220

Linear algebra. Scalar products, eigenvectors and eigenvalues, the spectral theorem, tensor products. Prerequisite: *Mathematics 130*. Two lectures weekly, tutorial fortnightly. (Offered in 1975-76 and alternate years.) *T.N. Murphy* 

#### Mathematics 230

Modern algebra. (Offered in 1976-77 and alternate years.)

#### Mathematics 241

Computational methods. An introduction to the solution of mathematical problems on a computer. Solution of equations, linear systems, linear programming, statistical analysis, finite differences, numerical differentiation and integration, summation of series. Corequisite: *Mathematics 100*. Two lectures weekly, periodic computer workshop.

J. Jury and C. Carter

Mathematics-Statistics 250

Mathematical statistics. (Not offered in 1975-76.)

#### Mathematics 300

Analysis. The real and complex number system, sequences and series, Riemann integration, improper and infinite integrals, analytic functions, Taylor's, Laurent's and Liouville's theorems, Cauchy's theorem and the residue calculus, conformal mappings. Prerequisite: *Mathematics 200*. Two lectures weekly, tutorial fortnightly.

A.P. Guinand

#### Mathematics 301

Analytic techniques. Some of the techniques developed in the solutions of ordinary and partial differential equations, which include: Fourier Series and Integrals, perturbation techniques, orthogonal functions and the Sturm-Liouville problem, functions of a complex variable, special functions and the calculus of variations. Prerequisite: *Mathematics 200*. Two lectures weekly and tutorial fortnightly.

G.F. Hamilton

#### Mathematics 321

Geometry. Analytic, projective, and differential. Prerequisite: *Mathematics 200*. Two hours weekly. *A.P. Guinand* 

#### Mathematics 322

Number theory and related topics in algebra and analysis. Prerequisite: *Mathematics 100*. Two hours weekly. (Offered in 1975-76 and alternate years.)

A.P. Guinand

#### Mathematics 332

Topology. Elementary general topology, identification spaces, the fundamental group. Two hours weekly. T.N. Murphy

#### Mathematics 341

Mathematical programming. Classical optimisation theory, linear programming, Kuhn-Tucker conditions, non-linear programming, integer and dynamic programming. Prerequisites: Mathematics 200 and 241. Two seminars weekly. C. Carter

70

#### Mathematics 342

Numerical analysis. Linear computations, polynomial approximations, numerical solution of ordinary and partial differential equations, simulation methods. Prerequisites: *Mathematics* 200 and 241. Two seminars weekly.

C. Carter

Mathematics-Statistics 351

Experimental statistics. (Not offered in 1975-76.)

Mathematics-Philosophy 392

Reading-seminar course, or half course, on a topic linking Philosophy and Mathematics. Topic will be announced by the departments by April 15 of the preceding year. Prerequisite: Permission of either department. Second-year students not normally admitted.

#### Mathematics 400

Advanced analysis. Measure theory, Lebesgue integration, Fourier series and integrals. Prerequisite: Mathematics 300.

#### Mathematics 401

Special honours topic. Courses may be given in Function Theory, Number Theory, Topology, Geometry, Fluid Mechanics, Non-linear Programming, and Mathematical Statistics.

#### Mathematics 431

Algebra. Category and functor, universal elements, rings, principal ideal domains, modules, structure of groups, Sylow and Jordan-Hölder theorems. Prerequisite: Mathematics 230. T.N. Murphy

Statistics 100

See section on Interdisciplinary Studies at beginning of Courses of Study.

## **Native Studies**

Chairman of the Department (Vacant)

Professor

Walter Currie, B.A. (WESTERN ONTARIO), LL.D. (LAURENTIAN) (on leave 1975-76)

Professor Emeritus

K.E. Kidd, M.A. (TORONTO), F.R.A.I.

## Associate Professor

C.H. Torok, M.A. (BRITISH COLUMBIA), PH.D. (TORONTO)

Assistant Professors

M.J. Castellano, B.A. (QUEEN'S), M.S.W. (TORONTO); D.N. McCaskill, B.A. (WINNIPEG), M.A. (CARLETON); H.A. McCue, B.A. (TRENT); R.J. McKay, B.ED., M.A. (MANITOBA)

Special Lecturers

P.A. Cumming, M.A. LL.B. (MANITOBA), LL.M. (HARVARD); Malcolm Montgomery, Q.C., B.A. (QUEEN'S); F.E. Wheatley

**Required Courses** 

Single-major Ordinary program. Minimum six courses in Native Studies

Native Studies 100

One of 201, 210, 280

Joint-major Ordinary program. Minimum five courses in Native Studies

Native Studies 100

One of 201, 210, 280

#### Note

Honours programs are not yet offered in Native Studies.

**Recommended Courses** 

Intending majors are advised to consult the department and this Calendar for cognate courses in such disciplines as Anthropology, Canadian Studies, Geography, History, Politics, and Sociology.

**Special Proviso** 

Students will not normally be permitted to include both Native Studies 300 and Native Studies 385 in their program.

**Native Studies Diploma Program** 

For description, see Diploma Program section of this Calendar.

Native Studies 100

An introduction to the contemporary situation of native people in Canada. The course will examine the historical basis of contemporary issues and, using a variety of sources such as government documents, research studies and native writing, will develop a view of native affairs which includes the perspective of the native community. Lectures and seminars will be supplemented by films and guest speakers. Two-hour lecture and seminar weekly.

Staff

#### Native Studies 200

Politics and the native peoples. An analysis of political and administrative processes as they affect native peoples in Canada and the United States — historically and in the contemporary period. The course will examine such topics as treaties and "red power"; governmental policy as it affects native peoples; the James Bay power project; the status of native women; the occupation of Wounded Knee; and the ideology, organizational structure, strategies, and tactics of native political associations. Prerequisite: Native Studies 100 or permission of instructor. Lecture and tutorial weekly.

D.N. McCaskill

Native Studies – Anthropology 201 Native Societies in Canada. See Anthropology 201.

#### Native Studies 210

The Indian identity. A study of native values and personalities in the traditional and contemporary native setting. The course will concentrate on the Algonkian-speaking peoples which include the Ojibway, the Saulteaux, and the Cree in the examination of topics such as the Midewiwin, aggression, joking, child-rearing, Windigo and others. Prerequisite: *Native Studies 100* or permission of instructor. Lectures fortnightly and tutorials weekly.

H.A. McCue

## Native Studies 260

Social services and the native people. A study of the objectives and administrative structure of welfare, health, justice and children's services extended to native people. A major theme will be the nature and implications of parallel practices originating in the tribal situation and persisting in the contemporary setting. Prerequisite: Native Studies 100 or permission of the instructor. Lecture and tutorial weekly. Field trips to agencies serving native people will be arranged. M.J. Castellano

## Native Studies 270

History of the Métis and non-status native peoples of Canada. The origin and history of the Métis peoples of the Prairie Provinces and of the non-status native peoples of Canada from the early period to the twentieth century. Prerequisite: *Native Studies 100* or permission of instructor. Lecture and seminar weekly.

R.J. McKay

#### 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. Prerequisite: *Native Studies 100* or permission of instructor. Four hours weekly. Enrolment may be limited. *F.E. Wheatley* 

#### Native Studies 300

Native community development. An examination of community development programs which have been developed in Canada and abroad and their application to Canadian native communities. Special attention will be given to native authors including Vine Deloria Jr., Wilfrid Pelletier, George Manuel, and others. The course will include limited placements in native communities. Prerequisite: Native Studies 210 or permission of instructor. One two-hour lecture weekly, one two-hour tutorial fortnightly.

H.A. McCue

#### Native Studies 320

Urbanization and the native peoples. An analysis of the processes involved in the migration, adjustment and integration of native people into urban areas in Canada. Various assimilation and acculturation models will be critically examined and the urban experiences of the native migrant will be compared with those of members of other ethnic groups. The course will also examine the effects of forces in contemporary society on the economic, social, and cultural life of the rural native community. Prerequisite: Native Studies 100 or permission of instructor. Lecture and tutorial weekly.

D.N. McCaskill

#### Native Studies 330

Education and the native peoples. An examination through reading, field trips, and guest lecturers of the contemporary and historical background of the role and of the results of education upon the native peoples. Prerequisite: *Native Studies 100* or permission of instructor. Lecture fortnightly and two-hour seminar weekly.

Staff

#### Native Studies 340

Law and the Canadian Indian. An examination of the historical processes which have affected the legal status of the native population in Canada. Ample time will be devoted to examining contemporary legal issues, such as aboriginal rights, the Indian Act and treaties, as well as some case law. Lecture and seminar weekly.

M. Montgomery and P.A. Cumming

Anthropology-Native Studies 350
Art of the Americas. See Anthropology 350.

## Native Studies 380

Advanced oral Ojibway. A general course in advanced conversation and pronunciation using language laboratory and classroom participation. Four hours weekly. Enrolment may be limited. Prerequisite: *Native Studies 280* or permission of instructor.

F.E. Wheatley

#### Native Studies 385

Native Studies methodology. An introduction to methods of carrying out service or research roles in the native community. The first six weeks of the course will examine the structure and dynamics of native communities to develop insights necessary to service or research activity. During the next fourteen weeks students will participate in either Stream A, Community Service, which will study methods of working with individuals and small groups, community development and advocacy in the cross-cultural context; or Stream B, Community Research, which will examine the research methods of Anthropology, Sociology and History as they apply to Native Studies. The final two weeks will deal with the writing of briefs and budgeting. Prerequisite: Native Studies 100. Lecture and tutorial weekly. Staff

#### Native Studies 386

Native Studies field work. This course will provide students with experience in applying the methodology learned in Native Studies 385 in a field work setting relating to native people. Students in the Community Service stream will act as participant-observers in a community agency. Students in the Community Research stream will carry out a research project which will include research design, data collection and analysis. Field work may be carried out concurrently during the academic session or in a block at the end. Supervision will be shared by a supervisor in the field and Native Studies faculty. Enrolment will be limited. Application for admission must be made by April 30 of the preceding academic year. Approximately 120 hours plus fortnightly seminars. Prerequisite: Native Studies 100. Corequisite: Native Studies 385.

## Native Studies 390

Selected topics in Native Studies. This course is intended for third-year students majoring in Native Studies, and for some second-year students by application to the department, who wish to pursue a study program in an area not listed in the regular offerings, or who wish to carry out independent research. This will be carried out under the supervision of a member of the department. Details must be arranged through the department by April 30 of the preceding academic year.

## **Philosophy**

Professor of Philosophy and Chairman of the Department David Gallop, M.A. (OXFORD)

## **Professors**

W.H. Dray, B.A. (TORONTO), M.A., D.PHIL. (OXFORD), F.R.S.C.; J.I. MacAdam, B.A. (NEW BRUNSWICK), M.A. (QUEEN'S), PH.D. (LONDON); M. L. Rubinoff, B.A. (QUEEN'S), M.A., PH.D. (TORONTO)

#### Associate Professors

J.W. Burbidge, M.A. (YALE), B.D., PH.D. (TORONTO); R.E. Carter, A.B. (TUFTS), B.D. (HARVARD), M.A., PH.D. (TORONTO); Marion G. Fry, M.A. (DALHOUSIE), B.LITT. (OXFORD); W.A. McMullen, M.A., PH.D. (CAMBRIDGE); K. Rautenkranz, B.A. (OREGON STATE), M.A. (ILLINOIS)

### Assistant Professors

C.V. Boundas, M.A. (PURDUE) (on leave 1975-76); Trudy R. Govier, B.A. (ALBERTA), M.A. (CALGARY), PH.D. (WATERLOO); B.J. Hodgson, M.A. (TORONTO); Alan Orenstein, B.A. (YORK)

#### **Required Courses**

Single-major Ordinary program. Minimum five courses in Philosophy

Philosophy 100

210 or 212 strongly recommended

One three-hundred series course

Joint-major Ordinary program. Minimum five courses in Philosophy

Same requirements as for single-major

Single-major Honours program. Minimum nine courses in Philosophy Philosophy 100

210 or 212

One three-hundred series course

Two four-hundred series courses to be chosen from Special Topics in the History of Philosophy and Special Problems in Philosophy

Joint-major Honours program. Minimum seven courses in Philosophy

Same requirements as for single-major Honours

## **Special Provisos**

- -Philosophy 100, although not a formal prerequisite, offers a preparation for all other courses in the subject.
- -First-year students will occasionally be permitted to enrol in upper year courses after consultation with the Chairman.
- -Any two-hundred series course may be taken in third year.

-Any three-hundred series course may be taken in second year, with the permission of the instructor.

-The Honours year will normally consist of four courses.

Further details of the program in Philosophy are given in the departmental *Handbook*, which is obtainable from the office of the secretary to the Chairman.

Philosophy 100

Introduction to philosophy. A study of some fundamental problems and their treatment in a variety of philosophical writings: the existence of God, the relation of mind and body, freedom of the will, the foundations of moral judgment, and the role of reason and sense-perception in our knowledge of the physical world. Weekly lecture, weekly tutorial.

The staff in Philosophy

Philosophy-Science 201

The rise of modern science. (See Science-Philosophy 201 under Interdisciplinary Studies.)

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. Weekly lecture, weekly tutorial. D. Gallop

Philosophy 212

Early modern philosophy. A study of some seventeenth- and eighteenth-century writers, including Descartes, Leibniz, Spinoza, Locke, Berkeley, Hume, Kant. T. Govier

Philosophy 214

Existentialism and phenomenology. A systematic examination of philosophical problems in a) literature, art, and drama, b) philosophy and religion, c) philosophy, politics and society, d) metaphysics and epistemology. Texts will be chosen from among the writings of Dostoevsky, Kierkegaard, Nietzsche, Kafka, Hesse, Husserl, Scheler, Heidegger, Sartre, Camus, Merleau-Ponty, Berdyaev, Buber, Ricoeur. Weekly two-hour seminar.

M.L. Rubinoff and R.E. Carter

Philosophy-Psychology 223b

Philosophy of mind. A study of some mental concepts such as self-knowledge, intelligence, thought, imagination, choice, pain, and the unconscious; and of the logical possibility of surviving death. Weekly two-hour lecture/seminar.

W.A. McMullen and B.J. Hodgson

Philosophy 230

Moral issues. A study of such practical problems as sex and marriage, birth control, abortion, suicide, euthanasia, capital punishment, drugs, racial discrimination, revolution and non-violent resistance, with emphasis on their implications for ethical theory. Weekly two-hour seminar.

W.A. McMullen

Philosophy - Politics 233
Political Philosophy. (See Politics 233.)

Philosophy 240

Logic. An introductory study of formal logical systems, together with their use in the analysis of various types of arguments, and a discussion of certain problems in the philosophy of logic. Weekly lecture, weekly tutorial. K. Rautenkranz

Philosophy 271b

Philosophy of religion. (Not offered in 1975-76.)

Philosophy-Comparative Literature 272

Topics in the philosophy of art. Aesthetic problems of stage and screen; a comparative study of the two media. The views of such theorists as Aristotle, Hegel, Nietzsche, Bazin and Cavell will be considered, and several plays will be read. Weekly two-hour seminar, fortnightly film.

A. Orenstein

Philosophy 274a

Philosophy of religion (comparative). (Not offered in 1975-76.)

Philosophy 311

Medieval philosophy. The development, range and variety of philosophical thought in the Middle Ages, with special emphasis upon selected writings of St. Augustine and St. Thomas Aquinas. Weekly two-hour seminar. (Offered in 1975-76 and alternate years.)

M.G. Fry

Philosophy 312

The nineteenth century. The main movements of thought as found in selected writings of Fichte, Hegel, Schopenhauer, Marx, Kierkegaard, Nietzsche, Comte, J. S. Mill, Peirce, Bradley, Brentano. Weekly two-hour seminar.

J.W. Burbidge

Philosophy 313
The twentieth century. (Offered in 1976-77.)

### Philosophy 320

Metaphysics and epistemology. A study of some traditional problems such as the nature of space and time, causation, existence, universals, knowledge and belief, perception. meaning and truth. Weekly two-hour seminar.

T. Govier

## Philosophy 330

Ethical theory. A consideration of the role of emotion, will and reason in moral action and judgment. A variety of views will be examined in classical and contemporary philosophers, including some of Hume, Kant, Sartre, Baier and Prichard. Weekly two-hour seminar.

J.I. MacAdam

## Philosophy-Politics 333

Political philosophy. Statist and revolutionary theories in Hegel, Marx and Engels, and some more recent writers; critiques of liberal individualism, the state as necessary to freedom, problems of revolution. Offered jointly by Politics and Philosophy. Prerequisite: Philosophy—Politics 233 or Social Theory 200, or the permission of either department. (Offered in 1975-76 and alternate years.)

J.W. Burbidge

Philosophy – Politics 334

Political philosophy. (Not offered in 1975-76.)

Philosophy 370a

Philosophy of history. (Not offered in 1975-76.)

#### Philosophy 373a

Philosophy of education. An enquiry into the nature and aims of education through a study of selected classical and contemporary authors such as Plato, Rousseau, Dewey, Whitehead, Paul Goodman, B. F. Skinner and Ivan Illich. The Hall-Dennis Report will also be considered. Weekly two-hour seminar.

M.L. Rubinoff

## Philosophy-Politics 374a

Philosophy of law. An examination of theories of natural and legal justice, of the nature of law itself, of responsibility, mens rea and negligence and of the justifications of punishment. Special emphasis will be given to the relevant writings of Plato, Aristotle, Aquinas, Austin, Hart, Fuller and Rawls. Weekly two-hour seminar.

J.I. MacAdam

## Philosophy 375b

Philosophy of language. An investigation of the nature and structure of language, traditional theories of communication, the relation between language and thought, the significance of theories of language for traditional philosophic problems. D. Gallop

## Philosophy 376a

Philosophy of social science. (Not offered in 1975-76.)

## Philosophy 377a

Philosophy of science. The origins and development of science and the general nature of scientific method, with special attention to the concepts of law, theory and explanation employed in the physical, biological and social sciences. Weekly lecture, weekly tutorial. (Offered in 1975-76 and alternate years.) K. Rautenkranz

## Philosophy-Greek 385

Greek philosophical texts. A study of selected authors in the original Greek. Offered jointly by the staffs in Philosophy and Classics. Prerequisite: *Greek 200* and the permission of the departments. Weekly tutorial. D. Gallop

## Philosophy 390

Reading course. Students will be encouraged to pursue a special interest, largely through independent study. Details will be arranged in consultation with the staff in Philosophy between April 15-30 of the preceding academic year. Periodic tutorials.

## Philosophy 391b

Reading course. Similar to *Philosophy 390*, to be taken in conjunction with a half-course in Philosophy offered during the Autumn Term. Requires permission of the department.

## Philosophy-Mathematics 392

Reading-seminar course, or half-course, on a topic linking Philosophy and Mathematics. (See *Mathematics 392*.)

Four-hundred series courses are open to qualified third-year students with the permission of the instructor. The specific courses in Special Topics in the History of Philosophy and in Special Problems in Philosophy will vary from year to year.

# Special Topics in the History of Philosophy Philosophy 410

Special topics in ancient philosophy. (Not offered in 1975-76.)

## **Physics**

Philosophy 411

Special topics in the philosophy of Kant. Prerequisite: *Philosophy 212* or permission of the instructors. *J.W. Burbidge* 

Special Problems in Philosophy

Philosophy 420

Problems in metaphysics. Reference, identity and the nature of things. An exploration of some issues arising out of the work of Frege, Wittgenstein, Quine and Kripke. Two hours weekly. A. Orenstein

Philosophy 421a

Intersubjectivity. (Not offered in 1975-76.)

## Philosophy 422b

Action theory. An examination of causation; of the various senses of "possible" and "can"; of the concepts of reason and purpose, of motive and desire; of deliberation, choice and action. Weekly two-hour seminar.

W.A. McMullen

#### Philosophy 423a

Science and the concept of a person. An investigation of the clash between the commonsense image of the person as a moral agent and the scientific conception of man as nothing more than a complex physical object.

B.J. Hodgson

Philosophy-History 470

Philosophy of history. (See History 470.)

## Philosophy 490

Reading course. Students will be encouraged to pursue a special interest, largely through independent study. Details to be arranged in consultation with the staff in Philosophy between April 15-30 of the preceding academic year. Periodic tutorials.

#### Philosophy 495

Honours essay. For details see departmental Handbook.

Professor of Physics and Chairman of the Department J.I. Lodge, M.A. (QUEEN'S), PH.D. (VIRGINIA)

Associate Professors

L.C.R. Alfred, M.SC. (BOMBAY), PH.D. (SHEFFIELD); J.W. Earnshaw, B.A.SC. (TORONTO), PH.D. (CAMBRIDGE); R.G. Johnson, M.SC. (OUEEN'S), PH.D. (LIVERPOOL)

**Assistant Professors** 

J.W. Jury, M.SC., PH.D. (TORONTO); A.J. Slavin, B.A.SC. (TORONTO), PH.D. (CAMBRIDGE)

Senior Demonstrator

Elizabeth D. Scott, B.SC. (YORK)

### Required Courses

Single-major Ordinary program. Minimum five courses in Physics

Physics 100

Two two-hundred series Physics courses

Physics 300

One other three-hundred series Physics course

Joint-major Ordinary program. Minimum five courses in Physics

Same requirements as for single-major

Single-major Honours program. Minimum eleven courses in Physics

Physics 100

220 and one other two-hundred series Physics course

400

Joint-major Honours program. Minimum seven courses in Physics

Physics 100

Two two-hundred series Physics courses

Physics 300

One additional three-hundred series Physics course Two approved four-hundred series Physics courses

#### **Special Provisos**

-First-year students with three Grade 13 credits in Mathematics and one credit in Grade 13 Physics may take Physics 200 concurrently with Physics 100.

-Students electing no more than two courses in Physics will normally elect *Physics 100* and *Physics 200*.

-Students wishing to deviate from programs outlined above, or to obtain exemption from course prerequisites, should consult the Chairman.

#### Note

- -Course prerequisites should be carefully noted by the student.
- -Mathematics 100, 200, 210, 301 and Computer Science 200a are strongly recommended for the Honours programs. -Attention of Physics students is drawn to the various science courses found in the Interdisciplinary Studies section of the

Calendar.

## Physics 100

Elementary physics. Physical optics, particle dynamics, translational and rotational motion, special relativity, electricity, quantum physics (wave nature of matter). Prerequisites: One Grade 13 credit, or equivalent, in Mathematics, or permission of the department. Grade 13 credit in Physics and concurrent enrolment in Mathematics 100 is recommended. Two lectures and three-hour laboratory weekly, tutorial fortnightly.

J.I. Lodge

#### Physics 200

Introductory modern physics and thermophysics. Thermodynamics, kinetic theory of gases, photon theory of light, properties of electrons, X-rays, quantum mechanics, atomic structure, radioactivity. Prerequisites: Three Grade 13 credits in Mathematics and one Grade 13 credit in Physics or their equivalent, or *Physics 100*. Two lectures and three-hour laboratory weekly, tutorial fortnightly.

A.J. Slavin

Physics-Mathematics 210
Mechanics. (See Mathematics 210.)

#### Physics 220

Electricity and magnetism. Circuit theory, electrostatics, magnetostatics, electric and magnetic properties of matter, Maxwell's equations. Basic electronics. Prerequisites: *Mathematics 100, Physics 100.* Three class meetings, laboratory weekly.

J.W. Earnshaw

### Physics 300

Modern physics. Development of the foundations of modern physics emphasizing the quantum nature of radiation and matter: quantum mechanics, atomic physics, quantum

molecular dynamics, introductory nuclear physics. Prerequisite: *Mathematics 200, Physics 200* or 220. Two lectures, one laboratory weekly.

J.W. Jury

### Physics 320

Electronics. Introduction to linear circuit analysis and elementary solid state physics, theory of operation of thermionic vacuum tubes, semiconducting diodes and transistors. Analysis of power supplies and amplifiers. Prerequisite: *Physics 220*. Two lectures, three-hour laboratory or tutorial weekly.

J.I. Lodge

## Physics 330a

Quantum optics and wave theory. The theory of wave motion with examples from light and sound: reflection, refraction, interference, diffraction, laser physics, holography. Two class meetings weekly, tutorial and laboratory alternate weeks. Prerequisite: Mathematics 200, Physics 200 or 220.

J.W. Earnshaw

#### Physics 350b

Methods of mathematical physics. Linear operators. Diagonalization of matrices. Eigenfunctions and eigenvalue problems. Generalized curvilinear coordinate systems. Tensor analysis. Conformal mapping with applications. Prerequisites: Physics 210, Mathematics 200. Two class meetings weekly. L.C.R. Alfred

#### Physics 400

Quantum mechanics. Wave formalism, wave packets, the wave equation, interpretive postulates, energy and momentum eigenfunctions, spherically symmetric potentials, partial wave analysis of scattering matrix formalism. Heisenberg and Schrödinger pictures, rotation group and angular momentum, perturbation theory, variational method, WKB approximation. Dirac theory of electron. Prerequisites: Physics 300, Physics 350b or Mathematics 301. Three class meetings 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. Electromagnetic waves in various media. Motion of charged particles in electromagnetic fields. Electromagnetic radiation. Radiating systems. Prerequisites: Physics 220, Physics 320, Physics 350b. Two class meetings weekly. L.C.R. Alfred

## **Politics**

#### Physics 430

Solid state physics. Advanced statistical mechanics, crystallography, theory of electrical and thermal properties of metals, band theory, semiconductors, lattic vibrations, specific heat, imperfections in solids. Prerequisites: *Physics 200, Physics 300*. Two lectures and one tutorial weekly, laboratory.

A.J. Slavin

## Physics 440

Nuclear and particle physics. Production and detection methods, properties of subatomic particles, symmetries and conservation laws, interactions, models of particle and nuclear structure. Prerequisites: *Physics 300, Physics 350b* or *Mathematics 301*. Three class meetings weekly, laboratory. *R.G. Johnson* 

## Physics 460c

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, I.R. analysis of automobile exhaust, atomic potential theory, etc. Projects are selected in consultation with members of the department.

J.W. Jury

#### Science 200

Astronomy. See Interdisciplinary Studies.

#### Computer Science 200a

Introduction to Computer Science. See Interdisciplinary Studies.

#### Computer Science 201h

Advanced topics in Computer Science. See Interdisciplinary Studies.

Associate Professor of Politics and Acting Chairman of the Department

Margaret P. Davey, p. c., pub. (Laypon)

Margaret P. Doxey, B.SC., PH.D. (LONDON)

## Professors

David Kettler, A.B., M.A., PH.D. (COLUMBIA) (on leave 1975-76.); S.G.D. Smith, B.A. (MCGILL), M.A., B.LITT. (OXFORD)

## Associate Professors

D.R. Cameron, B.A. (BRITISH COLUMBIA), M.SC., PH.D. (LONDON); K.R.V. Lyon, B.A., PH.D. (BRITISH COLUMBIA); D.R. Morrison, M.A. (SASKATCHEWAN), D.PHIL. (SUSSEX); W.F.W. Neville, B.A. (MANITOBA), M.A. (OXFORD); Joseph Wearing, B.A. (WESTERN ONTARIO), M.A. (TORONTO, OXFORD), D.PHIL. (OXFORD)

## Assistant Professor

R.C. Paehlke, B.A. (Lehigh), M.A. (New school for social research)

#### **Required Courses**

Single-major Ordinary program. Minimum six courses in Politics

Politics 100

At least two courses at three-hundred level

Joint-major Ordinary program. Minimum five courses in Politics

Same required courses as for single-major

Single-major Honours program. Minimum nine courses in Politics

Politics 100

233 (or, with departmental approval, another course in Political Theory)

At least one of *Politics 333, 334, 335, 410*At least two courses at the *four-hundred* level

Joint-major Honours program. Minimum seven courses in Politics

Politics 100

233 (or, with departmental approval, another course in Political Theory).

At least one of *Politics 333, 334, 335, 410*At least one course at the *four-hundred* level

#### **Special Provisos**

-Freshmen may take *Politics 100* and/or one of *Politics 210* or 220, without special permission.

-After successful completion of Politics 100 with a C grade

or better, a student may enrol in two-hundred and three-hundred level courses without special permission, provided stated prerequisites have been met. Proposals for reading courses under Politics 360 and 460 should be developed in consultation with tutors and approved by the department, preferably in the Spring Term of the preceding year and in no case later than the Friday before Thanksgiving of the year in which they are to be taken. Further details of the program in Politics may be obtained from the office of the secretary to the Chairman of the department. Students who intend to major in Politics are advised to discuss their program of studies with the Chairman or a tutor in politics in their college.

#### Politics 100

An introduction to the study of politics. An examination of two major political themes which are particularly relevant to Canadian politics: nationalism and liberal democracy. Each theme is examined at both the theoretical level and through a study of contemporary political developments in Canada. Lecture weekly, occasional special class meetings, tutorials fortnightly.

D.R. Morrison and staff

#### Politics 200

Canadian politics. An intermediate course in which special attention will be given to Canadian political culture, regionalism and political parties; the institutions of decision-making at the federal level; an evaluation of the policy achievements of Canadian government. Prerequisites: Politics 100 or permission of the department. Regular tutorials and lectures. S.G.D. Smith and J. Wearing

#### Politics 210

Politics U.S.A. A study of American political attitudes and institutions set in the context of an evaluation of the ability of the American political system to cope with such problems as racial tension, violence, poverty and the deteriorating quality of urban life. Weekly tutorial and lecture.

K.R.V. Lyon

#### Politics 220

International politics. An introduction to the study of international politics giving special attention to the foreign policies of the major states and their interaction and to the consideration of selected problems, both practical and theoretical, relating to the development of the international system since 1945. Regular lectures and tutorials.

M.P. Doxey and W.F.W. Neville

## Politics-Philosophy 233

Political philosophy. An introduction to political theory through an examination of selected writings from Plato, Aristotle, Aquinas, Machiavelli, Hobbes, Locke and Rousseau; with reflection on questions of justice and law, sovereignty and power, liberty and equality, community and state. Offered jointly by Politics and Philosophy. Freshmen not normally admitted. Weekly lecture, fortnightly tutorial. D.R. Cameron and J. MacAdam

#### Politics 240

Introduction to comparative politics. An introduction to the various approaches and problems in comparative political enquiry. Empirical material will include mainly Western and Eastern European politics and some Third World politics where necessary. The course will examine: functional approaches and institutional alternatives in the performance and capabilities of various polities; systems approaches to inter-dependent phenomena; and some of the various typologies developed about different regimes and processes.

## Politics-History 300

Canadian politics and history. Selected topics in the development of Canadian federalism. (See *History-Politics 300*.)

#### Politics 310

Ontario: its politics and problems. (Not offered in 1975-76.)

#### Politics 320

Conflict and co-operation in international relations. (Offered in 1976-77 and alternate years.)

#### Politics 321

Perspectives on international law and organization. A policyoriented study of international law in the context of contemporary international society, emphasizing the development of law through international organization. Attention will be directed to a number of world problems which urgently require governments to co-operate in the establishment of international regimes. Examples from Canadian experience will be used wherever possible. Prerequisite: Politics 220 or permission of the department. Weekly lecture and seminar. M.P. Doxey

#### Politics-Philosophy 333

Political philosophy. Statist and revolutionary theories. (See *Philosophy-Politics 333*.)

Politics-Philosophy 334
Political philosophy. (Not offered in 1975-76.)

#### Politics 335

Ideology. The term ideology plays an important role in recent empirical and historical enquiries into political beliefs as well as in philosophical interpretation of political ideas. The course will examine representative literature from both contexts and consider relationships among them. An important theme will be the political roles of intellectuals. Regular seminars.

#### Politics 340

Comparative European politics. The course will deal primarily with the problem of divisions and cleavages within various Western European countries, their impact on the political parties and the whole political system of each country and the various mechanisms which have been developed in order to deal with these cleavages. Comparisons will be made with similar divisions within Canada. Prerequisite: any Politics course or a course in modern European history. Weekly lectures and tutorials.

J. Wearing

## Politics 341

Party organization and elections. (Offered in 1976-77 and alternate years.)

#### Politics 350

The political economy of underdevelopment. (Offered in 1976-77 and alternate years.)

#### Politics 351

Politics and social change in Africa. A study of pre-colonial societies, the impact of colonial and capitalist penetration, and post-colonial problems and development strategies in sub-Saharan Africa. Case studies are drawn from Francophone and Anglophone countries, particularly the Ivory Coast, Zaire, Kenya, Tanzania, and Zambia. Special attention is given to the politics of race and decolonization in southern Africa. Weekly lectures and fortnightly tutorials. D.R. Morrison

#### Politics 360

Special topics in politics. A reading course open only to students majoring in Politics, designed to provide an opportunity for more intensive examination of material studied concurrently in other politics courses. A reading course may be taken on a half-course basis as *Politics 361a* or *Politics 362b*. Periodic tutorials. Prerequisite: Permission of the department.

Politics-Philosophy 374a
Philosophy of law. (See Philosophy 374a.)

## Politics-History 400

Contemporary Canadian problems. A study of the policy-making process in Canada. Attention will be directed to both the formal structures of decision-making and the forces in contemporary Canada which are having a major influence on these decisions. The constraints on and opportunities for autonomous Canadian policy-making will be examined. Regular seminars.

K.R.V. Lyon and S.G.D. Smith

## Politics 410

Contemporary political analysis. A critical examination of a wide variety of recent approaches to the study of politics. The course involves students in the design and execution of a research project. Prerequisite: permission of the department. Weekly tutorials.

D.R. Morrison

#### Politics 420

Foreign policy analysis. A study of the processes of formulating and executing foreign policy, with emphasis on internal and external constraints on decision-making. Examples will be drawn from Canadian and United States experience. Students in this course will be responsible for a major research paper on an aspect of Canadian foreign policy. Fortnightly seminars.

M.P. Doxey

Politics 440
Politics of planning.

#### Politics 460

Special topics in politics. A reading course for Politics Honours students, or for students in the final year of a Politics major program. A reading course may be taken on a half-course basis as *Politics 461a* or *Politics 462b*. Prerequisite: permission of the department. Periodic tutorials.

Politics 470 Honours thesis.

## **Psychology**

Professor of Psychology and Chairman of the Department A.G. Worthington, B.COM. (QUEENSLAND), PH.D. (LONDON), F.A.PS.S.

Professor

J.P.S. Robertson, M.A. (NEW ZEALAND), PH.D. (LONDON), F.B.Ps.S.

Visiting Professor

K.A. Leithwood, B.A. (TORONTO), B.P.E. (MCMASTER), M.P.E. (BRITISH COLUMBIA), PH.D. (TORONTO) (on leave 1975-76)

#### Associate Professors

B.L. Beach, B.A. (ACADIA), M.A. (DALHOUSIE), PH.D. (MCGILL); R.G. Setterington, M.A., PH.D. (TORONTO); H.J. Stanford, M.A., PH.D. (QUEEN'S) (on leave 1975-76); Peter Watson, M.A., PH.D. (WESTERN ONTARIO); Gordon Winocur, M.A. (MANITOBA), PH.D. (WATERLOO); P.T.-P. Wong, B.A. (CARLETON), M.A., PH.D. (TORONTO)

## Assistant Professors

C.H. Ernest, B.A. (SASKATCHEWAN), M.A., PH.D. (WESTERN ONTARIO); D.G. LOWE, B.A. (MCMASTER), M.A., PH.D. (WATERLOO); R.B. MOFFIS, B.A. (REDLANDS), M.SC. (WASHINGTON), PH.D. (ALBERTA); G.T. REKER, B.A. (MCMASTER), M.A.SC., PH.D. (WATERLOO); C.T. Smith, B.SC. (MANITOBA), M.A., PH.D. (WATERLOO)

Lecturer

Catherine Sproule, B.A. (TORONTO)

#### **Required Courses**

Single-major Ordinary program. Minimum six courses in Psychology

Psychology 101

210

At least one additional two-hundred series Psychology course At least three three-hundred series Psychology courses

Joint-major Ordinary program. Minimum five courses in Psychology

Psychology 101

210

At least one additional two-hundred series Psychology course At least three three-hundred series Psychology courses

Single- and joint-major Honours program. Entry into and arrangement of the Honours program in Psychology is contingent on an interview with members of the department; candidates will not normally be considered for the Honours

program unless Psychology 310 has been included in their Ordinary degree program. Students considering entry into Honours Psychology are encouraged to consult the department following the completion of second year.

#### **Recommended Courses**

Biology 286, 381a; Mathematics 100, 130; Statistics 100; Mathematics-Statistics 250, 351; Computer Science 200a; Philosophy 240, 377a; English 390.

## Psychology 101

Introduction to psychology. A survey of the major areas of psychology, including its historical development and the methods of the science. The course includes material on the development of behaviour, learning, memory, motivation and emotion, the biological bases of behaviour, perceptual processes, individual differences, personality, abnormal behaviour, and the social determinants of behaviour. Two lectures weekly throughout the year; one-hour statistics lecture and one-hour statistics workshop weekly until Christmas; two-hour laboratory session fortnightly after Christmas.

C.H. Ernest and P.T.-P. Wong

#### Psychology 200

Individual development and the social context. Selected topics discussed from the orientation of developmental psychology, personality, and social psychology. Consideration is given to the definition of these areas within psychology, the research methods of these areas, the biological background and its influences, the socio-cultural context, and the development and definition of abnormalities. Two lectures weekly, seminar fortnightly, occasional tutorials. Prerequisite: *Psychology 101*. *C. Sproule* 

## Psychology 210

Intermediate experimental psychology. A course on experimental methods in psychology, dealing with the design and execution of experimental studies and techniques of statistical analysis. The course will focus on work in the areas of psychophysics, perceptual processes, learning, memory, and complex human behaviour. Two lectures weekly, two-hour laboratory or seminar fortnightly. Prerequisite: *Psychology 101*. *D.G. Lowe* 

#### Psychology 221

Introduction to physiological and comparative psychology. A consideration of the methods and techniques of physiological and comparative psychology. Content of the course

includes topics relating to neuroanatomy, sensory and motor systems, physiological mechanisms of behaviour, innate vs. learned behaviour, individual and social behaviour of animals, etc. Two lectures weekly, one seminar fortnightly. Prerequisite: Psychology 101.

C.T. Smith

Psychology—Philosophy 223b
Philosophy of mind. See Philosophy—Psychology 223b.

## 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. Teaching method will be equivalent to one lecture and one seminar or tutorial weekly and at least one major assignment per term. Prerequisite: *Psychology 101*.

Psychology 302 Psychology of language. (Not offered in 1975-76.)

Psychology 305

Psychology of innovative school programs. (Not offered in 1975-76.)

### Psychology 310

Advanced experimental psychology. An intensive study of experimental methods in selected areas of psychology, and advanced statistical analysis. The course will consist of seminars and experimental projects. One two-hour lecture weekly; seminar fortnightly; three-hour laboratory weekly. Prerequisites: Psychology 101 and 210.

A.G. Worthington

## Psychology 321

Industrial psychology and human factors. (Not offered in 1975-76.)

#### Psychology 331

Individual differences and personality theory. An examination of the principles of the construction of various types of psychological tests and measures of individual differences. Concepts of reliability, validity, item analysis and standardization will be explored in detail. The Winter and Spring Terms will be concerned with a number of strategies for the study of man as exemplified by the personality theories of Kelly, Freud, Allport, Murray, Rogers, the Behaviourists and the Humanists.

Emphasis will be placed on the correspondence between theory development and the methodology used for empirical validation. One lecture weekly; two-hour laboratory/seminar weekly. Prerequisite: *Psychology 101* or permission of instructor. Recommended: *Psychology 200*.

G.T. Reker

## Psychology 335

Contemporary trends in personality. A discussion of certain current approaches to the study of personality. Emphasis will be placed on the contributions of Third Force, Existentialist and Phenomenological theorists through an examination of their conceptual and creative works. The dynamics of abnormal behaviour as related to contemporary movements in personality will be discussed. Lecture weekly; tutorial fortnightly. Enrolment may be limited. Prerequisite: Psychology 101. Recommended: Psychology 200. B.L. Beach

## Psychology 340

Experimental abnormal psychology. A survey of deviations and disorders in behaviour as investigated by experiments and other systematic procedures. The application of psychological research to medical and allied problems. One two-hour lecture weekly, one tutorial fortnightly, various laboratory and demonstration sessions. Prerequisite: *Psychology 101* and permission of the instructor.

#### Psychology 351

J.P.S. Robertson

Learning and motivation. In the Autumn Term, the main theme is behavioural adaptation. Concentration will be on concepts, paradigms, empirical findings and issues in animal learning and motivation. Emphasis in the Winter and Spring Terms will be on the higher cognitive activities involved in human learning, particularly theoretical issues and empirical findings in verbal learning, memory, and other related learning areas. One three-hour seminar/lecture weekly. Prerequisite: Psychology 101. Recommended: Psychology 210. C.H. Ernest and P.T.-P. Wong

## Psychology 362a

Sensory processes. A study of the sensory aspects of human information processing. Selected aspects of sensory behaviour are discussed within the context of various approaches which have been employed to investigate sensory behaviour: psychophysics, scaling, neural information processing, etc. One two-hour lecture/seminar weekly. Prerequisite: Psychology 101. Recommended: Psychology 210. D.G. Lowe and A.G. Worthington

## Psychology 363b

Perception. The perceptual processes underlying an individual's apprehension of his environment. The organization and interaction of patterns of stimulation, and ways in which expectancies, memories and frames of reference enter into the structuring of the percept are discussed within the context of major theories which have been developed. Detailed consideration is also given to the issue of hereditary vs. environmental factors as determinants of human perception. One two-hour lecture/seminar weekly. Prerequisite: Psychology 101. Recommended: Psychology 210 and 362a. D.G. Lowe and A.G. Worthington

Psychology 364a

Cognitive processes. (Not offered in 1975-76.)

Psychology 365b

Language and thought. (Not offered in 1975-76.)

## Psychology 371

Social psychology. An intensive examination of contemporary research problems and theories in social psychology including attribution theory, communication and attitude change, social power and group dynamics. Students will be expected to design and conduct a major project. This project may involve experimental research, an extensive review of the literature, or the application of the methods and principles of social psychology in an applied setting. One lecture and seminar weekly, occasional tutorials. Prerequisite: Psychology 101; Recommended: Psychology 200.

C. Sproule and P.T.-P. Wong

#### Psychology 375a

Principles of the nervous system. An intensive coverage of the central and peripheral nervous system, their anatomy and physiological interactions. Particular emphasis will be given to sub-cortical and cortical brain structures and their functional characteristics. Students will have the opportunity through laboratories to gain practical experience in the use of physiological techniques. Lecture/seminar weekly, three-hour laboratory fortnightly. Prerequisite: permission of the instructor.

G. Winocur

#### Psychology 376b

Neuropsychology. An examination of the relationship between brain function and psychological processes. The course will draw heavily from contemporary research involving humans and animals, in attempting to describe the neural bases for such psychological processes as learning, memory, perception, and emotion. Consideration will also be given to behavioural abnormalities as a result of brain pathology. Lecture/seminar weekly, three-hour laboratory fortnightly. Prerequisite: *Psychology 375a*.

G. Winocur

## Psychology 380

Child psychology. A discussion in depth of research methods and findings in child psychology. Topics covered include sensory and perceptual development, learning, the development of social motivation, and cognitive processes in children. One two-hour seminar weekly, occasional tutorials. Prerequisite: Psychology 101. Recommended: Psychology 200 and 210. P. Watson

## Psychology 385

Exceptional children. An overview of the major areas of exceptionality in children, including sensory and physical handicaps, learning disabilities, mental retardation, giftedness, autism, behaviour problems, juvenile delinquency, and the socially disadvantaged. Emphases will be placed on definition, classification, etiology, assessment, and treatment of the exceptional child. Two one-hour lectures weekly; two-hour seminar fortnightly. Prerequisite: *Psychology 101* or permission of the instructor.

G.T. Reker

#### Psychology 390

Behaviour modification. The application of principles of learning and motivation to practical situations including teaching, child training, public institutions, and animal training. There will be two areas of concentration: a) basic principles of behavioural analysis; and b) practica — projects involving the application of basic principles to practical situations of the student's choice. Two-hour tutorial weekly. Prerequisite: Psychology 101. Recommended: Psychology 200 or 210. R.G. Setterington

## Psychology 395

History and systems of psychology. A survey of the history and systems of psychology. The work of various authors that may be considered important in the history of psychology because of their contribution to systematic theory, research, or the organization of the discipline will be discussed. Two-hour lecture, two-hour seminar weekly. Prerequisite: Psychology 101. Recommended: Psychology 200, 210, or 221. R.B. Morris and J.P.S. Robertson

## Psychology 399

Reading course. A course designed to allow pursuit of special interests in advanced topics in psychology, largely through

independent research under the direction of departmental staff. Prerequisite: Psychology 101 and permission of the department. A.G. Worthington

**Honours Program** 

An intensive program normally completed within a single academic year, but also available to qualified students on a part-time basis. Individual programs are arranged in consultation with the department to meet the needs and interests of each student, primarily to ensure meeting the admission requirements of graduate schools upon successful completion of the program. Each student will complete an Honours thesis - Psychology 400 - based upon empirical research under the supervision of a faculty advisor. In addition, two research seminars or reading courses - Psychology 490 and Psychology 495 - will normally be arranged to allow the individual student to fill gaps in background, or to pursue particular interests. An additional course may be required if the student's background in psychology makes it necessary. Requirements for the Honours degree are normally: Psychology 400, a double credit course for which double fee is charged, and two other courses. Prerequisites: Psychology 101, 210, 310 and permission of the department.

Program Co-ordinator: A.G. Worthington

## Sociology

Associate Professor of Sociology and Chairman of the Department John Hillman, M.A. (OXFORD)

Professors

John C. McDonald, B.A. (TORONTO), M.SOC.SC., PH.D. (BIRMINGHAM); R.F. White, B.A., B.A.SC., M.COM. (TORONTO), PH.D. (CHICAGO)

Associate Professor

Roy T. Bowles, B.SC. (BRIGHAM YOUNG), PH.D. (OREGON)

Assistant Professors

B. Dan Hook-Czarnocki, B.A. (MCMASTER) (on leave 1975-76); Christopher V. Huxley, B.A. (YORK, ENG.), M.A. (SIMON FRASER) (on leave 1975-76); Alan D. Lewis, M.A. (LEICESTER); R.A. Lockhart, M.A. (SIMON FRASER); Frank Nutch, M.A. (HAWAII); Andrew L. Wernick, M.A. (TORONTO, CAMBRIDGE) (on leave 1975-76)

Associate Professor of Social Administration and Special Lecturer in Sociology Mariory P. Seeley, B.A. (MANITOBA), A.M. (CHICAGO), D.C.L. (ST. JOHN'S, MANITOBA)

Lecturer

Beng Huat Chua, B.SC. (ACADIA) M.A. (YORK)

The core elements of Sociology are social organization, comparative social structures, socialization and social interaction, and methodology of sociological inquiry. Sociology 100, 210 and 211 provide an introduction to this core; Sociology 332, 386, 385, 343, 321, 423 develop these core elements. Other courses will use this core in the analysis of specific issues.

**Required Courses** 

Single-major Ordinary program. Minimum five courses in Sociology Sociology 100

210

211

Joint-major Ordinary program. Minimum five courses in

Same requirements as for single-major

Single-major Honours program. Minimum eight courses in Sociology

Sociology 100

210

211

410

Joint-major Honours program. Minimum seven courses in Sociology

Same requirements as for single-major Honours program

**Special Provisos** 

-Majors considering Honours should include two of Sociology 321, 332, 343, 385, 386.

-These courses require the kind of theoretical and methodological preparation provided in Sociology 210 and 211.

-Sociology 210 and 211 may be counted in either the twohundred or three-hundred series.

-Honours students should include an additional methodology course: Sociology 321, 422, or 423.

Sociology 100

Introduction to social analysis. An introduction to the basic ideas and methods of sociological study. An examination of

the elements of social structure and social behaviour — social relations, social groups, cultural norms and values — against the background of both simple and complex societies. Two lectures, one seminar weekly.

Staff

Sociology 210

Sociological enquiry. Microsociology. A critical examination of the contribution of sociological thinkers to our understanding of various aspects of social reality: consciousness, roles, institutions. Monographs from different perspectives will demonstrate the variety of theories, strategies of enquiry and techniques of research that have been used in this task. Lecture, seminar weekly.

B. Chua, A.D. Lewis

Sociology 211
Sociological enquiry. Macrosociology. A companion course to Sociology 210 in which the reciprocal problems of social structure, religion and ideology are examined. One area of enquiry is the Canadian community. Lecture, seminar weekly. B. Chua, A.D. Lewis

Note: Sociology 210 and 211 are offered jointly and must be taken together.

Those who have Social Theory 200, or other theoretical work in cognate disciplines may make special arrangements to waive the requirement of Sociology 210 or 211, but not both.

Sociology 241

Family and kinship. An examination of the contemporary family and kinship structure. Themes to be explored: the general relation between economy, class, and culture; the stages of the family life cycle; family life styles of ethnic minorities and indigenous populations; male-female relations; sexuality; socialization; the special status of women; the problems of incomplete families, relationships between generations, the psychodynamics of the family, and emerging alternatives to the contemporary nuclear family. Two-hour seminar weekly.

J. McDonald

Sociology 261

Deviance and social control. Examination of various major theories of deviance, aiming at exploring the taken-for-granted commitments — moral, ideological and political — that inform each theory, and the impact these have on the politics of social control and social change. Lecture, seminar weekly.

B. Chua

Sociology 280

Class and race. A comparative analysis of the processes whereby wealth, power, and prestige are allocated in various societies.

Sociology 321

Sociological methods. An introduction to the concepts and practices of research analysis. The emphasis is placed on the basic ideas underlying various procedures, and on the question of fit between obtainable data, appropriate procedures, and the existing forms of sociological theory. One three-hour lecture-laboratory session weekly.

R. Bowles and staff-

Sociology 332

Social organization and bureaucracy. An analysis of simple and complex social organizations, with particular emphasis on the structuring and functioning of large-scale bureaucracy and post-bureaucratic forms. The course will examine both industrial and service organizations, and will be concerned with work relations, occupational development, etc. Lecture, seminar weekly.

R.F. White

Sociology 340

Sociology of education. An examination of the structure and functions of education and their relationship to those of other social institutions, with particular reference to socialization and social control, ability and opportunity, social mobility, social and cultural factors in achievement and the teaching profession. Lecture, seminar weekly.

R.A. Lockhart

Sociology 343

Self and society. An examination of the dialectics of social structure, culture, individual action and growth. A thematic approach is used in developing a critical analysis of this dialectic. Themes include jazz and mutual understanding, the role of sociology and contemporary society, the problem of reification, the politics of seduction, and role distance and role making. Lecture, seminar weekly.

F. Nutch

Sociology 362b Social administration. (Not offered in 1975-76.)

Sociology 363b

Sociology of health and illness. An examination of the organization and ideology of medical services, quality and

distribution of health care facilities, origins and conceptions of health, sickness and death. Particular attention will be given to the formation and assessment of health policy in Canada, U.K., U.S.A., and U.S.S.R. Prerequisite: Sociology 366a R.F. White

Sociology 366a

Social policy. An examination of the expanding role of state and governmental institutions in affecting several aspects of socio-economic conditions and well-being. Policy formulation and implementation will be assessed with emphasis on social sectors such as education, health, housing and welfare. R.F. White

Sociology 370

Political sociology. (Not offered in 1975-76.)

Sociology 382a

Population and society. Nature and scope of demographic analysis, its concepts and methods. Growth, composition and movement of populations. Major determinants and social consequences of demographic phenomena. Comparative analysis of population trends. Canadian population in the world context. Population and resources — contemporary public issues and prospects. Lecture, seminar weekly.

Sociology 383b

City and society. Evolution of the nature and social functions of the city from its pre-industrial to its "megalopolis" forms. Perspective of human ecology; study of the development and structure of human communities in their environments. Spatio-temporal approaches: patterns of settlement, urban growth, transformation and decay in various societies and periods. Canadian cities and rural settlements in comparative perspective. Current urbanization trends and prospects. Lecture, seminar weekly.

Sociology 385

Comparative social structures. An historical and structural analysis of the social organization of selected Asian complex pre-industrial societies. Aims both at a systematic method of comparative analysis of large-scale social formations and at an explanation of forms of pre-capitalist societies and their histories.

A. Lewis

Sociology 386

Canadian social structures. A sociological examination of the basic continuities, conflicts and changes in Canada. An attempt will be made to situate Canada concretely in a world context, as well as to analyze particular trends within a broader Canadian framework. Lecture, seminar weekly.

Sociology 387a

Sociology of law. (Not offered in 1975-76.)

Sociology 388b

Selected topics in Canadian society. (Not offered in 1975-76.)

Sociology 395

Special topic in sociology. In 1975-76 an experimental course will be offered on the sexual division of labour in industrial society. Among the themes to be discussed will be the political and cultural conflict between women and men, the dynamics of sexual liberation and repression, and the relation of these social processes to the history of the women's movement and the organization of work and the family. Prerequisite: Sociology 100 or Anthropology 100 and a second-year Sociology or Anthropology course, or permission of the instructor.

Sociology 410

Honours seminar. A reading course and discussion seminar to supervise the work of Honours students in selected areas of sociological analysis. Students in this course will be responsible for a major research paper. Fortnightly seminars.

Sociology 412

Sociology of knowledge. An examination of the relationship between social structure and social consciousness. The course will investigate this general problem in terms of one of the major types of systems of thought and ideas — religion, science, ideology, artistic culture, etc., by examining the mode of its production and transmission, and the relation of the idea-complex to other levels of social reality in different types of society.

Sociology 422

Research practicum. This course will provide the student with direct research experience on a research project directed by a faculty member and will include research design, data collection, and various analytical approaches. Open to third-and fourth-year students. Prerequisite: permission of instructor.

Sociology 423

Inference and verification. An examination of how theory is constituted and elaborated, looking particularly at concept formation, theoretical fields, issues of scope and consistency, and the relations of explanation and description to theory. While concentrating on sociology, the logical structure, scope, etc. of theory in other areas will also be considered.

Reading Courses

Both full-and half-year reading courses are available as Sociology 390, 391a, or 392b; Sociology 490, 491a or 492b. Registration in reading courses is contingent on instructor's permission and departmental approval in advance of course registration.



The Part-time Studies program provides citizens of Peterborough and the Trent Valley with an opportunity to pursue a wide variety of courses leading to an Arts or Science degree, as well as general interest and professional continuing education courses. The latter, while not recognized for university credit, may lead to certification by co-operating organizations.

Part-time courses for credit are available during the regular academic session at both the University and at a number of off-campus centres. Summer courses are also given. The introduction of the course credit system in 1970 eliminated almost all differences between part-time and full-time students. Part-time students may enrol in any course given at the university for which they have the prerequisite. Please consult the appropriate sections of this Calendar for details of requirements for Ordinary and Honours programs.

To accommodate part-time students whose schedule does not permit attendance during the day, a limited number of regular courses are held late in the afternoon, and a number in the evening. A long-range timetable of courses scheduled in the late afternoon or evening and during the Summer Session is available on request from the Julian Blackburn College office.

Applicants without the normal secondary school require ments may be admitted to a program of part-time studies at the University. These applicants should consult the Blackburn College Counsellor for further information. Counselling for applicants and in-course part-time students is available through the Blackburn College office.

Applicants for advanced standing must send their Ontario Grade 13 certificates or equivalent with the application and must arrange for forwarding of official transcripts of their university records to the Director of Admissions.

#### **Summer Session**

The University's Summer Session follows as closely as is practical the format of regular Winter Session courses, by including small-group teaching as well as lectures.

In addition to the classroom work, students enrolled in the summer courses may be assigned pre-course reading and assignments. Pre-course seminars are also scheduled in a number of courses for Saturday mornings in late May or early June. Summer Session is available in two sections — a six-week daytime program in July and August and a variety of evening courses starting in mid-May.

Students enrolled in the Summer Session are not permitted to take more than two courses during any one Summer Session, and in some cases only one course is allowed.

See also information under Julian Blackburn College listing in this Calendar.

The Master of Arts degree is offered in Anthropology and History, and the Master of Science in Chemistry and Physics. Additional graduate programs are being planned for introduction on a selective basis. All graduate programs at Trent University were submitted to the Appraisals Committee of the Ontario Council on Graduate Studies and accepted by the Council; this ensures that graduate studies at Trent meet the high standards required by Ontario. The same standards will be met by all new programs.

Graduate students are integrated as much as possible into the departments and colleges. They may be engaged in laboratory demonstration, and in various forms of preparation in support of undergraduate teaching; some serve as resident dons in the colleges. Both in these functions and during frequent informal contacts, interaction with undergraduates is encouraged. In addition, graduate students make important contributions to the University's research effort.

Further details about graduate programs are given in the Graduate Studies Calendar. This Calendar and additional information can be obtained on request from the Dean of Graduate Studies, Trent University, Peterborough, Ontario, K9J 7B8.



**University Bookstore** 

The University operates a bookstore at 224 Charlotte Street, which is easily reached from the University buses. With some 5,000 square feet of floor space, the bookstore is well suited to meet the wide range of needs and interests of the students, faculty and the Peterborough community.

All 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, records, both classical and popular, a wide range of periodicals, 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.

**University Student Health Service** 

The University Student Health Service is located in Otonabee College and provides both medical and counselling services for full-time students and for part-time students by arrangement. Hours are 9 a.m. to 5 p.m., Monday to Friday. Emergency treatment is available 24 hours a day.

The University requires all students to carry both medical and hospital insurance. Students from Ontario must carry Ontario Health Insurance, the Government-sponsored plan that provides benefits for both medical and hospital care and for the services of certain health practitioners. Students under 21 may be covered by their own family plans.

For Canadian students from outside Ontario, coverage should be obtained from their own province. For students from outside Canada special arrangements may have to be made at the time of registration.

Students seeking medical treatment are charged a fee for service which is normally recoverable from their medical insurance.

**Athletic Program** 

The University has developed a diversified athletic and recreational program which makes use of both the facilities developed on the campus and those available in the city and surrounding area. Located on the campus are a full-size flood-lit playing field, a quarter-mile track, tennis and squash courts, and a small ski slope with rope tow. The University also has its own sailboats, canoes and rowing shells. Arrangements are made within Peterborough for the use of rinks and swimming pools.

In the autumn of 1969 the University erected a temporary air-supported structure on the Nassau campus that provides during the winter months heated indoor facilities for such activities as badminton, basketball, fencing, judo, tennis,

track, volleyball, karate and indoor soccer. Planning has been undertaken for the development of a permanent athletic field-house that will include a gymnasium, squash courts, multipurpose area, swimming pool and locker rooms.

The athletic program is organized to meet the varying interests of the students with competition for both men and women available at the inter-university, intramural, and recreational levels. For the purpose of inter-university competition, Trent University is a member of the Ontario Universities Athletic Association and the Ontario Women's Intercollegiate Athletic Association.

Inter-university and intramural competition is undertaken in badminton, basketball, curling, fencing, golf, hockey, cross-country, judo, rowing, rugby, skiing, soccer, sailing, softball, squash, tennis, track, touch football, field-hockey, and volleyball.

The University Resources Centre lends equipment to enable interested students to undertake regular camping and canoeing expeditions into the Kawartha hinterland.

## **Career Planning and Placement**

Students seeking assistance in finding employment are invited to use the facilities of the Placement Office. A principal concern of this office is the career planning of graduating students and their eventual employment. On-campus interviews are arranged with representatives of business, industry and government agencies. Students seeking information about teaching, professional schools, and graduate study also find this office useful.

#### **Undergraduate Activities**

The University community has fostered and developed a rich and varied program of social and cultural activities. Participation is invited in the numerous student organizations and activities. The early years of the University have seen the establishment and lively growth of literary magazines, a yearbook, a community action program, and of dramatic, art, music, debating and film societies, plus a student newspaper and many other activities and events. Each of the college governments sponsors a wide variety of formal and informal activity.

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

#### **University Lodging Service**

Students coming to Trent University who are not resident in a college may obtain addresses of accommodation known to be available in Peterborough from the University's lodging service. Those students wishing to make use of this service should write to The Secretary, Committee on Colleges, Trent University, in advance of the Autumn Term.

#### **Bus Service**

The University operates a free bus service linking the Nassau Campus with the two town colleges and the bookstore.

## Counselling

In keeping with the philosophy that individual and personal growth are as important as intellectual development, Counselling offers a wide range of programs designed to help students with their personal and vocational concerns. This is a voluntary and confidential service aimed at helping the student develop strengths and resources rather than providing ready-made solutions.

Counselling may be of assistance to students in a variety of areas including: interest, aptitude and intelligence testing; career selection; interpersonal relationships; study skills, and personal feelings and attitudes.

Further information Office of the Registrar Trent University Peterborough, Ontario

Phone (705) 748-1215

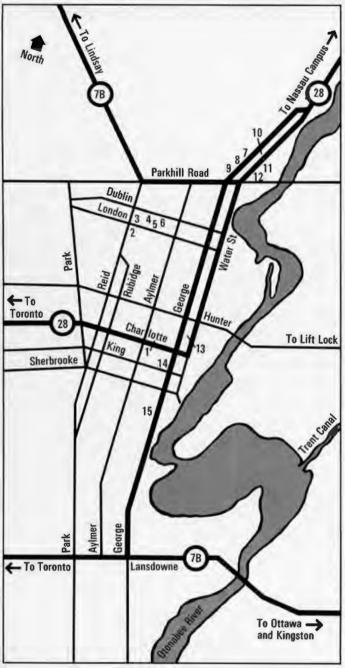
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## **Trent University**

## **Downtown Campus**



#### 1 Bookstore

Catharine Parr Traill

- College 2 Langton House 3 Wallis Hall
- 5 Stewart House 6 Kerr House
- **4 Scott House**
- Peter Robinson College Sadleir House
- 8 Reade House 9 Denne House
- 10 East Lodge 11 Stratton House 12 Abbott House
- City Landmarks 13 Peterborough Square
- 14 Bus Station 15 CPR Station

- 4 Science Complex 5 Otonabee College
- Registrar's Office Archaeological Centre Mackenzie Gallery

- 9 The Commoner 10 Biology/Geography Building

