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Brock

UNDERGRADUATE CALENDAR 2000 - 01

BROCK UNIVERSITY, ST. CATHARINES, ONTARIO, CANADA • www.brocku.ca



David W. Atkinson
PRESIDENT AND VICE-CHANCELLOR

Welcome to Brock!

This is a very exciting time for you to be a student at Brock University. The quality of our teaching and research continues to attract national and international attention. There are plans to expand our campus with new academic and recreational facilities and we will provide more services for students. We have maintained our commitment to providing an exceptional academic education, while continuing to lead the way with new and innovative programs and services to further broaden the possibilities for our students.

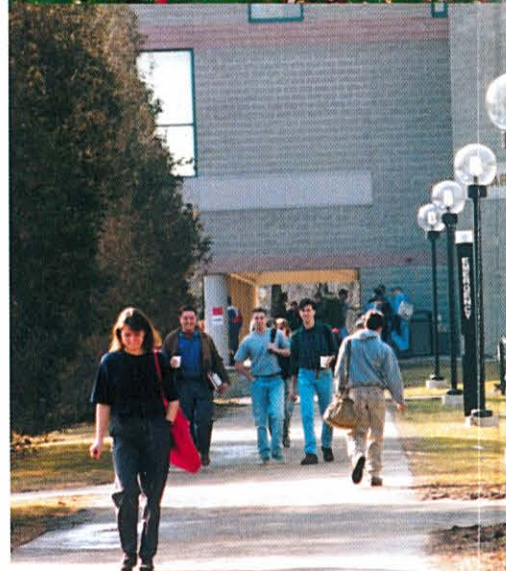
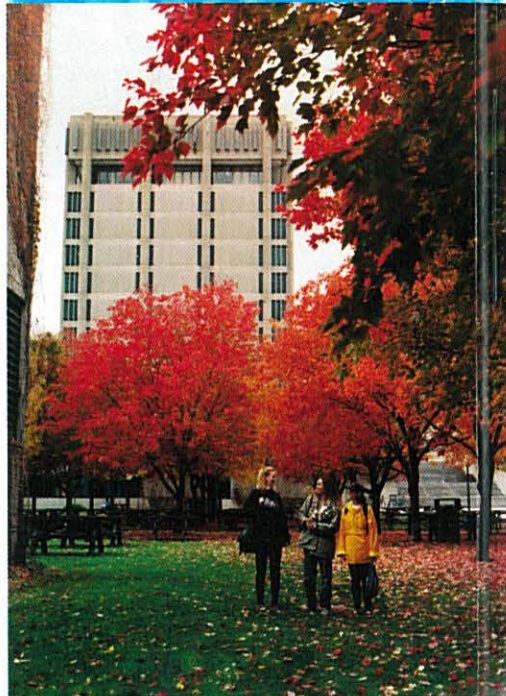
Our 38,000 alumni enjoy one of the highest employment rates among graduates from Ontario's 17 universities. While 97 per cent apply their Brock degree to careers throughout Canada and around the world, many others pursue further education. An education at Brock definitely offers promise for a very bright future!

Our students, both past and present, have consistently commented on the unique Brock experience and on our commitment to a student-centred environment. Explore the pages of this calendar and learn of all of the opportunities available to you at Brock University. I know your Brock experience will be both exciting and rewarding.



David W. Atkinson

David W. Atkinson
President and Vice-Chancellor



Your Career Begins Here!

Located at the centre of Canada's beautiful Niagara Peninsula, Brock offers strong undergraduate, graduate and inter-disciplinary programs that include co-op and other experiential learning opportunities to a student population of 11,000. A vigorous research, cultural and recreational centre, Brock's high quality facilities serve as a valuable resource to the community. Our commitment to the individual student and to the highest standards of teaching and research excellence are reflected in the growing numbers applying for a Brock experience.



Brock's commitment to a student-focused learning experience is demonstrated by the close, personal attention of a dedicated faculty. As well, the University places a strong emphasis on seminar-based teaching that provides you with the opportunity to develop your skills through open question and discussion of topics and issues.

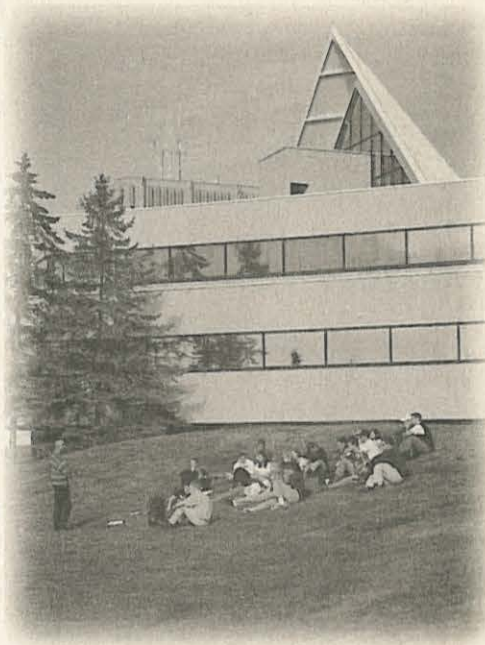
The University serves the Niagara area as a cultural, academic and recreational centre. In addition to unique programs and services, Brock offers the community excellent facilities such as the Physical Education Complex with the Eleanor Misener Aquatic Centre and the Leo LeBlanc Rowing Centre, The Corporate Adventure Training Institute, Centre for the Arts, and Conference Services.

Opened in 1964, Brock was named for Maj.-General Sir Isaac Brock, who lost his life at Queenston Heights in the War of 1812. His last words are said to be, "Surgite! Push on!" — which have become the University's motto.

Brock University is located on the Niagara Escarpment, overlooking the City of St. Catharines, Ontario. You will find the Brock campus a safe and friendly environment. The park-like setting of the University with its wide-open spaces offers a number of outdoor activities at any time of year.



Brock



www.brocku.ca

This Calendar is intended for the guidance of persons applying for and considering application for admission to Brock University and for the guidance of University students, staff and faculty. Nothing in this Calendar constitutes a representation or warranty on the part of the University. The Calendar is subject to change from time to time, without notice, as deemed appropriate by the University.



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UNIVERSITY CONTACTS

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	Location	Extension		Location	Extension
Aboriginal Studies	ED 126	4112	Great Books/Liberal Studies	MC 330	4752
Accounting and Finance	TA 233	3918	Health Services	Harrison Hall	3243
Applied Language Studies	MC A242	3374	History	MC C420	3500
Biochemistry	MC F234	3388	International Political Economy	TA 468	3476
Biological Sciences	MC F234	3388	International Studies	F242	4224
Biotechnology	MC E206	3406	Labour Studies	MC C330	4753
Book Store	THs 219	3237	Language Learning Centre	THe 269F	3102
Brock University Student Union	SC 313	3568	Library	Main Floor	3228
Business Economics	TA 465	3325	Management, Marketing and Human Resources	TA336	3944
Canadian Studies	F242	4029	Mathematics	MC J415	3300
Centre for the Arts	THw 131	3216	Music	TH 139	3817
Chemistry	MC E206	3406	Oenology and Viticulture	IH 206	4652
Child and Youth Studies	MC D332	3740	Office of the Registrar (http://www.BrockU.CA/registrar/)		
Classics (Greek and Latin)	ST 1121	3575	Academic Services	ST301	3430
Communications, Popular	MC A225	4290	Registration	ST301	4375
Culture and Film	MC A225	4290	Admissions	ST301	3431/3434/3745
Community Health Sciences	PE 290	4228	Financial Aid Office	ST 402	3252/3253/3958
Computer Science	MC J314	3513	Philosophy	ST 1128	3315
Computing and Business	MC J314	3513	Physical Education	PE 286	4358
Computing and Solid-State Device Technology	MC B210	3412	Physics	MC B210	3412
Dean, Applied Health Sciences	PE 287	3385	Political Science	TA 468	3476
Dean, Business	TA 313	4006	President and Vice-Chancellor	ST 1301	3322
Dean, Education	ED 104	3712	Psychology	MC B326	3542/3543
Dean, Humanities	ST 1110	3425	Recreation and Leisure Studies	PE 238	3259
Dean, Mathematics and Science	MC D408	3421	Residences (General Inquiries and Reception)	DRES 206	3370
Dean, Social Sciences	ST 1110	3425	Science	MC E206	3406
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Environment	MC F242	3292	Tourism Studies	PE238	3258
Environmental Sciences	MC D410	3526	University Switchboard	(905) 688-5550	0
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Mission Statement

I. Academic Focus and Environment

It is the mission of Brock University:

1. to provide a broadly-based liberal undergraduate education in the arts and sciences and in professional and interdisciplinary programs and to offer graduate studies in selected disciplines;
2. to maintain excellence in teaching, scholarship and other creative activity as interconnected components of the University's responsibility;
3. to permit carefully planned growth in student enrolments and academic programs provided that sufficient additional resources are available to the University for such growth and that any increase in the size of the University does not diminish those qualities that identify Brock's unique character.

These include:

- an emphasis on small classes and small-group learning in seminars, laboratories and studios to facilitate intellectual excitement, improved learning and academic interaction among students and between students, faculty and staff;
 - an open and accessible administration;
 - a unity of purpose among faculty and staff;
 - an atmosphere in which all members of the Brock community are treated with respect and valued as individuals;
4. to provide, through the conduct of the faculty, students and staff, and through its policies and administration, an atmosphere free from sexism, racism and all other forms of stereotyping, harassment and discrimination;
 5. to provide academic programs and a learning environment of the highest quality to attract academically qualified and gifted students;
 6. to enhance existing programs while developing additional innovative and relevant programs, at both the undergraduate and graduate level for full-time and part-time students;
 7. to develop the library, computing and other resources to support research, creative ability and learning;

8. to develop a campus with the academic space, facilities and amenities, both indoor and outdoor, conducive to effective learning and scholarship.

II. Students

It is the mission of Brock University:

1. to prepare students for advanced study, career success, community responsibility and a richer life by developing a passion for life-long learning and the abilities to think creatively and critically, to communicate clearly, to maintain high ethical standards, to exercise sound judgment and to address societal and environmental issues;
2. to foster an environment for students which encourages not only intellectual growth but also physical, social and spiritual well-being through a diversity of extracurricular activities and experiences designed to enrich their lives, develop their talents and provide opportunities to discover and pursue new interests;
3. to facilitate accessibility for lower-income students, mature students, part-time students, students from visible minority group, Canadian Native Peoples, international students, students with unrealized potential and students with disabilities;
4. to foster a continuing commitment to the University among graduates.

III. University Personnel

It is the mission of Brock University:

1. to support, encourage and nurture faculty and staff in their pursuit of personal growth and professional development, recognizing that male and female career patterns may differ;
2. to encourage wide-spread participation of faculty and staff in policy formation;
3. to implement fair and progressive employment policies for all University personnel;
4. to achieve equality in the representation of women and men in both academic and non-academic positions;
5. to increase the number of people from visible minority groups, Aboriginal Peoples and those with disabilities, in

both academic and non-academic positions;

6. to encourage and recognize the achievements and contributions of staff members to the service of students and the aims of the University;
7. to encourage and support faculty members in their pursuit of excellence in undergraduate and graduate teaching and in research and other creative activity.

IV. The Community

It is the mission of Brock University:

1. to serve as a learning, cultural, artistic and recreational centre and co-operatively address regional issues.
2. to welcome and support international students and faculty and to encourage exchange programs and collaboration with universities in other countries in order to promote international understanding and co-operation;
3. to serve the Niagara, Canadian and international communities by providing leadership and consultation on societal issues and concerns.

Undergraduate Academic Schedule of Important Dates

An academic timetable (BIRT Guide) giving the times and locations of all courses offered in any one session (Fall/Winter, Spring or Summer) is available from the Office of the Registrar prior to the beginning of the session.

NOTE: All dates refer to undergraduate studies unless otherwise specified.

2000 SPRING SESSION

Friday	April 28	Last day for penalty-free registration (Spring).
Monday and Tuesday	May 1 May 2	Confirmation of registration and first day of classes, Spring Session. Registrants pick up class timetables in accordance with the schedule published in the BIRT Guide.
Monday	May 8	Last day for duration 1 and duration 2 late registration and course changes without permission of the instructor. BIRT closes for duration 1 and duration 2 adds, drops and course changes. After this date, manual course change requests are required.
Monday	May 22	Victoria Day. University closed; library open. Classes will be held.
Friday	June 2	Last day of lectures, last day for withdrawal without the assignment of a grade and last day to change from credit to audit status for duration 2 courses. Last day to apply for admission to full-time studies in the Fall/Winter Session.
Friday and Saturday	June 2 June 3	Progress examinations for duration 1 courses and final examinations for duration 2 courses.
Monday	June 5	First day of classes for duration 3 courses.
Monday through Friday	June 5 June 9	Spring Convocation
Monday	June 12	Last day for duration 3 late registration and course changes without permission of the instructor. BIRT closes for duration 3 adds, drops and course changes. After this date, manual course change requests are required.

Friday and Monday	June 30 July 3	Canada Day closure. University closed; library open. Classes will be held.
Friday	July 7	Last day of lectures, last day for withdrawal without the assignment of a grade and last day to change from credit to audit status for duration 1 and duration 3 courses. Last day to apply for admission to part-time studies in the Summer Session.
Friday and Saturday	July 7 July 8	Final examinations for duration 1 and duration 3 courses.
2000 SUMMER SESSION		
Friday	July 7	Last day for penalty-free registration (Summer).
Monday	July 10	Confirmation of registration and first day of classes, Summer Session. Registrants pick up timetables in accordance with the schedule published in the BIRT Guide.
Friday	July 14	Last day for duration 1 and duration 2 late registration and course changes without permission of the instructor. BIRT closes for duration 1 and duration 2 adds, drops and course changes. After this date, manual course change requests are required.
Friday	July 28	Last day of lectures, last day for withdrawal without the assignment of a grade and last day to change from credit to audit status for duration 2 courses.
Friday and Saturday	July 28 July 29	Progress examinations for duration 1 and final examinations for duration 2 courses.
Monday	July 31	First day of classes for duration 3 courses.
Tuesday	August 1	Last day for receipt of applications to graduate at Fall Convocation.
Friday	August 4	Last day for receipt of applications for admission to part-time studies in Fall/Winter Session in order to ensure processing prior to normal registration period. Last day for duration 3 late registration and course changes without permission of the instructor.

Friday	August 4	BIRT closes for duration 3 adds, drops and course changes. After this date, manual course change requests are required.
Monday	August 7	Civic holiday. University closed; library open. Classes will be held.
Friday	August 18	Last day of lectures, last day for withdrawal without the assignment of a grade and last day to change from credit to audit status for duration 1 and duration 3.
Friday and Saturday	August 18 August 19	Final examinations for duration 1 and duration 3 courses.
2000 FALL TERM		
Friday	September 1	Last day to apply for admission to part-time studies for Fall Term entry.
Monday	September 4	Labour day. University closed; library closed.
Tuesday	September 5	First day of Fall/Winter Session, duration 1 and 2, Pre-Service Education Program.
Wednesday through Friday	September 6 September 8	Confirmation of registration. Registrants pick up class timetables and ID cards in accordance with the schedule published in the BIRT Guide for Fall/Winter full- and part-time studies.
Friday	September 8	Last day for penalty-free registration (Fall/Winter Session).
Monday	September 11	First day of Fall/Winter Session, duration 1 and 2, day and evening sections, undergraduate program.
Friday	September 22	Last day for duration 1 and duration 2 late registration and course changes without permission of the instructor. BIRT closes for duration 1 and duration 2 adds, drops and course changes. After this date, manual course change requests are required.
Monday	October 9	Thanksgiving Day. University closed; library closed.
Saturday	October 21	Fall Convocation.

Monday	December 4	Last day of classes, last day for withdrawal without the assignment of a grade and last day to change from credit to audit status for duration 2 courses. (See note 1.)
Tuesday and Wednesday	December 5 December 6	Snow day/reading period (see note 2).
Thursday	December 7	Last day of term, Fall Term, Pre-service Education Program
Thursday through Wednesday	December 7 December 20	Progress examinations for duration 1 courses and final examinations for duration 2 courses.
Friday	December 8	First day of term, Winter Term, Pre-service Education Program.
Friday	December 15	Last day to apply for admission to part-time studies for Winter Term entry.
Friday through Monday	December 22 (noon) January 1	Christmas and New Year holiday. University closed; library closed.
2001 WINTER TERM		
Tuesday	January 2	University reopens. <hr/> Winter Term resumes, Pre-Service Education Program.
Tuesday through Friday	January 2 January 5	Confirmation of Registration for students who have registered in Winter Term (duration 3) courses only.
Friday	January 5	Emergency examination date. (Fall examination period).
Sunday	January 7	Last day for penalty-free registration (Winter Term)
Monday	January 8	First day of Winter Term, undergraduate programs.
Friday	January 19	Last day for duration 3 late registration and course changes without permission of the instructor.

Friday	January 19	BIRT closes for duration 3 adds, drops and course changes. After this date, manual course change requests are required.
Monday through Friday	February 19 February 23	Reading Week. No classes will be held in undergraduate programs.
Friday	February 23	Administrative offices closed; library open.
Thursday	March 1	Last day for receipt of applications to graduate at Spring Convocation.
Monday through Friday	March 12 March 16	Spring break. No classes will be held in the Pre-service Education Program.
Friday	April 6	Last day of lectures, last date for withdrawal without the assignment of a grade and last day to change from credit to audit status for duration 1 and duration 3 courses.
Monday and Tuesday	April 9 April 10	Snow day/reading period (see note 2).
Wednesday through Wednesday	April 11 April 25	Final examinations. No examinations will be held on Good Friday, April 13.
Friday	April 13	Good Friday. University closed; library open.
Friday	April 27	Last day to apply for admission to part-time studies for Spring Session. <hr/> Last day of term, Winter Term, Pre-service Education Program.
<i>Notes:</i>		
<ol style="list-style-type: none"> 1. The extra day in the Fall Term will be used to replace Thanksgiving Day classes. The schedule will be that of a Monday. 2. A snow day will be used to cover classes missed because of adverse weather (if needed). Otherwise, it will be a reading day. The day of the week missed will determine the replacement schedule for classes. 		

General Information

For over 30 years Brock has welcomed and encouraged students in their pursuit of further knowledge. Over the years, challenge and enthusiastic are words that have been used many times discussing the founders, faculty, staff and students.

Scholarship is both encouraged and acknowledged. The University takes pride in commending those students who have been named to the Deans' Honours lists and those who have been given other scholastic awards.

While not all students can appear on the special honours lists, they can all benefit from the opportunity for intellectual and personal growth. Starting in year 1, emphasis is placed on individual participation by means of small group meetings in a seminar, laboratory or tutorial setting in addition to the more formal lectures.

I. Location

Brock University is located on Glenridge Avenue at St. David's Road (atop the Niagara Escarpment) at the southern city limits of St. Catharines. Most facilities at the University are wheelchair accessible.

The Office of the Registrar is located in Room 301 of the Schmon Tower. The reception area is open 8:30 a.m. to 5:00 p.m. (from 4:30 p.m. to 5:00 p.m. for picking up and dropping off forms or general questions only), Monday to Thursday and 8:30 a.m. to 4:30 p.m. on Friday during the Fall/Winter and Spring Session and 8:30 a.m. to 4:30 p.m. Monday to Friday during the Summer Session. Office hours are extended to 7:00 p.m. during the first two weeks of the Fall Term and for the first week of the Winter Term and Spring Session.

The Services for students with disABILITIES Office is located in Room 409 of the Schmon Tower and is open 8:30 a.m. to noon and 1:00 p.m. to 4:30 p.m.

II. Affiliated College

Concordia Lutheran Theological Seminary, an affiliated college of the University, prepares students for the Master of Divinity (four-year program) and Master of Theological Studies (two-year program) degrees. All degrees are granted by the University. The seminary is operated by The Lutheran Church - Canada and is an Associate Member of the Association of Theological Schools in the United States and Canada.

III. The Calendar

The Brock Undergraduate Calendar contains information about the University facilities and academic structure.

The following summary might be useful to prospective students.

In order to attend classes, you must apply for admission either through the Ontario Universities' Application Centre for enrolment in three or more credits (full-time) during the Fall/Winter Session or directly to Brock for fewer than three credits (part-time). Early application is encouraged so that admission can be granted prior to anticipated registration date; there is an additional fee for late registration. Application procedures and assessments are outlined in the Admission section.

In addition to the general rules, there are departmental regulations which pertain to their single or combined major programs. Details are given in the various departmental entries of the Calendar which are arranged alphabetically.

Descriptions are given for all of the courses in the Brock course bank. The selection of courses to be offered in any session will be listed in the BIRT Guide which is published prior to registration.

The Calendar is also available via the World Wide Web at: <http://www.brocku.ca/registrar/>

IV. Team Spirit

Extracurricular activities should be included in the university experience. Brock has facilities for sports (individual and team) as well as special interest clubs that allow students to be participants not merely spectators. Sir Isaac Brock, our namesake, provided active leadership for his troops in the War of 1812. The University could do no less for its students today. His famous last words to his troops, *Surgite* (push on), is our motto.

Degrees and Certificates

Degrees

Bachelor of Accounting (Honours)
Bachelor of Education in Adult Education
Bachelor of Arts (Honours and Pass)
Bachelor of Arts with a Major
Bachelor of Business Administration (Honours)
Bachelor of Business Administration
Bachelor of Business Economics (Honours)
Bachelor of Computing and Business (Honours)
Bachelor of Education
Bachelor of Music (Honours)
Bachelor of Physical Education (Honours)
Bachelor of Physical Education with a Major
Bachelor of Recreation and Leisure Studies (Honours and Pass)
Bachelor of Science (Honours and Pass)
Bachelor of Science with a Major
Bachelor of Science in Nursing
Bachelor of Sport Management (Honours and Pass)
Bachelor of Tourism Studies (Honours and Pass)

Concurrent degrees

Bachelor of Arts (Honours and Pass) and Bachelor of Education
Bachelor of Physical Education (Honours) and Bachelor of Education
Bachelor of Science (Pass) and Bachelor of Education

Certificates

Certificate in Adult Education
Certificate in Drama and Education
Certificate in Environment
Certificate in Grape and Wine Technology
Certificate in Great Books/Liberal Studies
Certificate in International Studies
Certificate in Labour Studies
Certificate in Public Administration
Certificate in Public Law
Certificate in Statistics
Certificate in Teaching English as a Second Language
Certificate in Women's Studies
Certificate in Writing
Professional Certificate in Enterprise Education

Admissions

Registrar
Robert J. Tiffin

Associate Registrar, Admissions
Barb Anderson

Telephone (905) 688-5550, extension 3434
Fax: (905) 988-5488
E-mail: admissns@brocku.ca
www.brocku.ca/registrar

All prospective students are encouraged to apply and will be considered on the basis of evidence of probable success in their chosen program. Enrolment has been limited in order that our students may continue to benefit from the University's traditions of personal contact and individual attention. Applicants must be formally admitted to the University before they can register in degree credit courses.

I. Policy Statement

Brock has had and will continue to have, a racially non-discriminatory policy and therefore does not discriminate against applicants and students on the basis of race, colour or national or ethnic origin. Such a non-discriminatory policy applies to staff and extends to non-discrimination on grounds of creed or sex.

It is the policy of Brock University that all students must therefore sign a declaration on their application for admission and on their confirmation of registration forms attesting to their citizenship. Each student should be aware that documentation of citizenship may be required and that a penalty for a false statement is deregistration. In addition, any changes in status, e.g., from visa student to permanent resident or Canadian citizen, requires proof of the new status with appropriate document(s).

II. Accessibility Admissions Policy

In order to give special consideration to applicants from specified groups, a number of spaces are provided for persons in the categories that follow. Eligible persons must be Canadian citizens or permanent residents and may apply to the first year of an undergraduate program from a high school or community college or to the one-year teacher education program.

A first year undergraduate applicant who has achieved the minimum acceptable average for admission to the University, but who does not have the required average for his/her chosen

program, may apply for consideration as a special student under the categories shown below.

A teacher education applicant who has met the minimum admissions requirements, including the completion of a bachelor's degree acceptable to Brock University, but who does not meet the higher admission standard established for the year of application, may apply for consideration under one or more of the following categories shown below.

This policy applies if:

- the applicant is of Aboriginal ancestry;
- the applicant is a member of a visible minority;
- the applicant is challenged by a disability.

Applications are reviewed on an individual basis and interviews may be required. The Senate Committee on Admissions may restrict the number of courses for which an applicant may register and may require that a certain average be required. Once this admission requirement has been satisfied, the student may register as a full-time student.

Students admitted under this policy and who have met initial admission requirements will then be required to meet the same standards for progression and graduation as other students.

Students with specific questions about this policy are encouraged to contact the Admissions office.

III. Application Deadline

Application for admission should be made as early as possible. Application forms must be received by June 1 for full-time studies and August 1 for part-time studies to ensure consideration for September registration. Students applying after this date, who are subsequently admitted, may be required to register late and pay the late registration fee.

IV. Application Procedures

1. Ontario secondary school applicants

OUAC 101 application forms are available at high school guidance offices. The completed form and interim grades are to be sent to the Ontario Universities' Application Centre. Applicants who wish to be considered on final marks should forward a copy of their final grades directly to Brock University.

2. Other full-time applicants

OUAC 105 application forms are available through the Office of the Registrar for previous high school matriculants, mature

Admissions

applicants, transfer, out-of-province and international students. The application form and appropriate fee must be forwarded to:

Ontario Universities' Application Centre, Box 1328,
Guelph, Ontario, N1H 7P4.

It should be noted that there is a \$15 fee for assessment of previous university or college transcripts for full-time applicants to undergraduate studies.

3. Second or subsequent undergraduate degrees

A university graduate must have completed the requirements for a first degree and normally offer the equivalent of an overall minimum 65 percent overall average with a higher average being required where enrolments are limited.

Brock graduates requesting admission to a subsequent undergraduate degree program must complete an internal application form available at the Office of the Registrar. Non-Brock applicants use the OUAC 105 form.

Students admitted to a 15 credit degree program will be granted advanced standing to a maximum of seven credits from the first degree. Students admitted to 20 credit degree program will be granted advanced standing to a maximum of 10 credits from the first degree.

Applicants should be familiar with second undergraduate degree requirements. For further information, see the "Academic Regulations" section of the calendar.

4. Part-time degree and certificate applicants

Part-time degree applicants, as well as those seeking admission to certificate programs should contact the Office of the Registrar to obtain the proper application form and to discuss their admission and program objectives.

It is the responsibility of all applicants to ensure that:

- all pertinent academic documentation is forwarded directly to the Office of the Registrar from institutions previously attended, such as secondary schools, colleges and universities;
- proof of change of name (i.e., marriage certificate, notarized statement or other legal document) is provided if academic documents show a name other than that under which application is made;
- evidence of proficiency in English is provided if English is the applicant's second language.

Applicants withholding, misrepresenting or failing to provide information regarding previous university or college records are liable to have their admission revoked and registrations cancelled.

5. Applications for residence

Students interested in residence should indicate this on the OUAC application form. Applications for residence will be included with offers of admission where interest in residence has been indicated.

V. Admission to Undergraduate Degree Studies

1. Ontario Academic Courses (OAC)

Ontario secondary school students must present the Ontario Secondary School Diploma (OSSD). An overall average of 60 percent on six Ontario Academic Courses is the minimum required for consideration but a higher average will be required for most programs since the number of qualified applicants normally exceeds the spaces available.

High school students are encouraged to achieve as much breadth of preparation as possible in the course of their studies leading to the OSSD while also meeting the stated admission requirements of the University program to which they intend to apply.

Applicants admitted to a Bachelor of Arts or a Bachelor of Science degree program will be offered entry into an honours program, where applicable, if their admission averages are sufficiently high.

2. Academic standing accepted as equivalent to OAC

A. Alberta, British Columbia, Manitoba, New Brunswick, Northwest Territories, Newfoundland, Nova Scotia, Nunavut, Prince Edward Island, Saskatchewan, Yukon

Grade 12 senior matriculation with high standing.

B. Quebec

CEGEP General 1 (minimum of 12 academic courses) or grade 12 with high standing. Advanced standing will be considered for applicants who have completed a two or three year CEGEP program with high standing, to a maximum of five year one credits.

C. United Kingdom, West Indies, East and West Africa, Hong Kong

The General Certificate of Education with passes in five subjects, of which at least two must be from distinct areas at the advanced level; or passes in four subjects, of which at least three must be from distinct areas at the advanced level. In consultation with the appropriate academic department, the

Office of the Registrar will consider transfer credit for those advanced level courses passed with a grade of 'C' or better to a maximum of three credits.

E. International Baccalaureate system

Applicants who have been granted the IB diploma and accumulate a grade total of 28 may be considered for admission and may receive up to three transfer credits on the basis of higher level subjects completed with a grade of five or better.

F. United States

Grade 12 diploma with high grades. For borderline cases, SAT scores are helpful in the evaluation process.

G. India, Pakistan and Bangladesh

Applicants are considered for admission on the basis of:

- grade 12 secondary school with Division 1 or "A" standing; or
- first year of a recognized university program with transfer credit being awarded for appropriate courses.

All applicants must meet the minimum TOEFL requirements, or equivalent, for international students whose first language is not English.

H. Other countries

Applicants from areas other than those noted above will be evaluated on an individual basis. Original or certified true copies of transcripts are required including official English translations (where required).

3. Transfer from other universities

A. Canadian universities

Applicants wishing to transfer to Brock from degree programs at other Canadian universities must normally offer the equivalent of an overall average of 60 percent as a minimum with a higher average being required where enrolments are limited. Applicants must also be eligible to reregister at their home institution. Normally, transfer credit will be granted only for courses passed which are appropriate to the chosen program. Transfer averages at the previous university will be recorded on the transfer students' records to place those students on an equal basis with those who take their entire undergraduate program at Brock.

The grades from other universities whose grading schemes differ from that of Brock University will be translated into equivalent Brock grades and admissibility and transfer credit assessed in these terms. Evaluation of all possible transfer credits available at the time of admission must be completed within one year of the date of admission to the University.

B. Colleges of Applied Arts and Technology

Graduates of a three-year diploma program with a 70 percent overall, or a 70 percent average in the last two semesters of a three-year diploma program, will be considered for admission, and may be awarded up to five credits. In some cases, where programs at the College and Brock are quite compatible, up to seven and one-half credits may be awarded.

Applicants who have completed two years of a three-year diploma program or graduates of a two-year program with a minimum 70 percent overall average will be considered for admission and may be awarded up to three credits. In some cases, where programs at the College and Brock are quite compatible, up to five credits may be awarded.

Applicants who have completed one year of a college program may be considered for admission to first year with no transfer credits, provided that an average of 75 percent has been achieved and the program is of an academic nature.

The awarding of transfer credit is based primarily upon:

- the compatibility of the previous college program with the Brock program;
- course content;
- grades achieved in courses.

C. CA, CGA, CMA

Individuals with CA, CGA, CMA designations may be granted up to five transfer credits, provided a minimum grade of 70 percent is achieved.

D. Bible colleges

Applicants who have completed a degree program at a bible college accredited by the American Association of Bible Colleges will be considered for admission and may receive transfer of up to five credits.

E. Former Brock students

Former Brock students seeking readmission after having attended another postsecondary institution in the interim, must complete the Brock Application for Readmission form and forward official transcripts of all postsecondary institutions attended for readmission consideration and possible transfer of credit.

4. Admission of mature students

Those who are not eligible for admission in any of the categories listed above, who have been out of school for at least two years and who are at least 21 years old, may be considered for admission as mature applicants.

Mature applicants selected for admission are normally limited

Admissions

to part-time study initially. They must achieve a minimum 60 percent overall average on their first two credits. Otherwise they will be placed on academic probation and be required to pass all and to achieve a 60 percent average on the courses taken, while proceeding on a part-time basis.

In support of the application, students will be asked to submit official copies of all pertinent academic records. In addition, students may be asked to submit a letter outlining:

- career ambitions;
- work experiences;
- why they may be successful at university.

An interview may also be required.

Mature student admission is only applicable to Canadian citizens and permanent residents.

5. Admission of senior citizens

Senior citizens (60 years of age or more) are encouraged to apply for admission to full-time or part-time studies as either credit or auditing students.

6. Concurrent secondary school/university enrolment

Students enrolled in less than a full-time load of Ontario Academic Courses, may be permitted to register concurrently for one credit, subject to the following provisions.

- The student must be registered in a sufficient number of OACs to complete requirements for an Ontario Secondary School Diploma (OSSD) which meets normal university requirements.
- They must have at least a 75 percent standing in the previous high school year in an advanced level program, be recommended by their school and be approved by the Brock department concerned.
- Credit will be granted upon successful completion of the course and fulfillment of Brock's admission requirements.
- Students registering for a course under the auspices of this admission category will have tuition fees for the course waived.

7. Readmission of students who were required to withdraw

A request for readmission shall be addressed to the Association Registrar, Admissions for referral to the Senate Committee on Admissions.

8. January entry

A student may begin first-year studies on a part-time basis in the Winter Term beginning in January. It should be noted, however, that the number and types of courses available then are limited.

9. Non-degree admission to undergraduate studies

A non-degree student is one who is not proceeding towards a Brock University degree. The non-degree students are identified as:

A. Post-degree students

Those with degrees who are taking courses to qualify for further study or for personal interest. Students will normally be limited to part-time studies except where departmental approval has been received to do qualifying work for admission to a masters or honours program at Brock.

B. Letter of permission students

Those authorized by their home universities to take courses at Brock.

10. Special admission

A special student is one whose course load has been restricted because of the student's academic standing. Such students would normally be permitted to register in a maximum of two credits per academic session.

VI. Admission to Other Programs

1. Faculty of Education

For information on admission requirements and procedures for the various programs, see the Faculty of Education Calendar entry.

2. Graduate studies

For information on the admission requirements for graduate degree programs, see the Graduate Studies Calendar. An undergraduate degree acceptable to Brock, normally an honours degree in the appropriate field, is the minimum requirement.

VII. Proof of Proficiency in English

All international applicants who will be studying on a student visa and whose first language is not English, must provide evidence of proficiency in English as demonstrated through one of the following:

- A minimum 70 percent average in English OAC 1 or Grade 12 English in another province in Canada.
- A minimum of three years of full-time study, with satisfactory academic standing, in an English

language school system.

- Completion of the International Baccalaureate diploma where English was the language of instruction.
- Achievement of a regular (R) placement category on the Carleton Academic English Language Assessment (CAEL) or completion of the York English Language Test (YELT) with an overall category of 1 or 2.
- TOEFL (Test of English as a Foreign Language), TOEFL CBT (Computer-based Test), MELAB (Michigan English Language Assessment Battery), or IELTS (International Language Testing System) scores. Normally, only those with TOEFL scores of 550 or greater, TOEFL CBT scores of 213 or greater, MELAB scores of 85 or greater and IELTS scores of 6.5 or greater will be considered for admission.
- Successful completion of Level 5 of the Brock Intensive English Language Program.

International students with scores below TOEFL 580, TOEFL CBT 237, MELAB 90, IELTS 7.0 are required as a condition of registration to enrol in APLS 1P80 and 1P81 in year 1 along with a maximum of four other credits.

Students from the Intensive English Language Program entering on the recommendation of the Director may be required to enrol in APLS 1P80 and 1P81 in year 1 along with a maximum of four other credits.

VIII. International Student Immigration Requirements

Students entering Canada from other countries are required to comply with Canadian immigration requirements. Student visas are issued abroad by Canadian diplomatic, consular or immigration officers. Where there is no Canadian representative, prospective students may apply to representatives of the British government. An original letter of acceptance from Brock University must be presented at that time.

Registration in co-operative programs is available only to students eligible for employment in Canada in their chosen field.

A pamphlet outlining immigration requirements is available from Canadian immigration officers, Canadian embassies, consulates, high commissioners' offices, British consular offices or directly from the Immigration division, Citizenship and Immigration department, Ottawa, Ontario, Canada.

ADMISSIONS CRITERIA - BROCK UNIVERSITY

Please check the following to ensure you will have the proper background for admission to Brock University. You must have six Ontario Academic Courses (OAC) and have completed the OSSD to be considered for admission to Brock.

<i>Program</i>	<i>Required OAC Subjects</i>	<i>Strongly Recommended OAC Subjects</i>	<i>Comments</i>
FACULTY OF BUSINESS Accounting (BAcc)	English OAC 1, one mathematics (calculus or finite preferred). <i>Required subjects will be included in average of 6 credits.</i>	A second mathematics.	Normally a minimum average of 75% on 6 credits, including required OACs, for consideration; Co-op Accounting normally 80% average on 6 credits including required OACs, for consideration*. Application deadline is April 1 for September entry.
Business Administration Co-op (BBA)	English OAC 1, one mathematics, (calculus or finite preferred). <i>Required subjects will be included in average of 6 credits.</i>	A second mathematics.	Normally a minimum average of 80% on 6 credits, including required OACs, for consideration.* Interview and application required.
Business Administration (BBA)	English OAC 1, one mathematics (calculus or finite preferred). <i>Required subjects will be included in average of 6 credits.</i>	A second mathematics.	Normally a minimum average of 70% on 6 credits, including required OACs, for consideration. Students with an 80% average on 6 OACs and Grade 12 mathematics are encouraged to apply for consideration by the Faculty of Business.
Computing and Business (BCB) <i>see Faculty of Mathematics and Science</i>			
FACULTY OF HUMANITIES Applied Language Studies, Canadian and European Union Studies, Canadian Studies, Classics, Contemporary Cultural Studies, Dramatic Literature, English, French, German, History, Italian, Great Books/Liberal Studies, Philosophy, Spanish	English OAC 1.	History and a second language.	Normally a minimum average of 70% on 6 credits for consideration. <i>For the Concurrent Bachelor of Arts (honours)/Bachelor of Education French program see the Faculty of Education</i>

*In accordance with the regulations of Employment and Immigration Canada, admission to the BAcc Co-op option is limited to students eligible for employment in Canada in their chosen field.

Music (BMus and BA)	English OAC 1.	History and a second language.	Theory placement test (Royal Conservatory Grade II level) and aural skills test must be passed. Audition required for applied music.
Theatre (BA)	English OAC 1.	History and a second language.	A successful audition or interview is required.
Visual Arts (BA)	English OAC 1.	History and a second language.	A satisfactory portfolio submission and interview are required.
FACULTY OF SOCIAL SCIENCES Child and Youth Studies, Economics, Environmental Economics, Environment, Film, Geography, Labour Studies, Political Science, Popular Culture, Psychology, Sociology, Women's Studies (BA)	English OAC 1.	For Economics and Environmental Economics majors, one mathematics (finite preferred). For Child and Youth Studies and Psychology majors, one mathematics.	Normally a minimum average of 70% on 6 credits for consideration for all programs within the Faculty of Social Sciences except for Child and Youth Studies which may be 80% for consideration.
Communication Studies	English OAC 1.		Normally a minimum average of 70% on 6 credits for consideration; Co-op in Business Communications normally 80% on 6 credits for consideration. Interview and application required.
Business Economics (BBE)	English OAC 1, one mathematics, minimum 65% required.		Normally a minimum average of 70% on 6 credits for consideration; Co-op BBE normally minimum 80% average on 6 credits for consideration. Interview and application required.
Physical Geography (BSc)	One mathematics (minimum 70% required); one from biology, physics, geology, or chemistry.	English OAC 1.	Normally a minimum average of 70% on 6 credits for consideration.
FACULTY OF MATHEMATICS AND SCIENCE Biological Sciences, Biochemistry, Biotechnology (BSc)	One mathematics (minimum 70% required), three OACs from biology, chemistry, another mathematics and physics.	English OAC 1.	Normally an overall average of at least 70% on 6 credits for consideration.

<p>Concurrent BSc/BEd Science program</p>	<p>Minimum average of 80% on four credits including two sciences, one mathematics and English OAC 1. (Calculus is required for Chemistry and Physics).</p>	<p>Calculus strongly recommended for Biology and Earth Sciences.</p>	<p>For teaching at the junior/intermediate level (grades 4 - 10): a personal letter, letters of recommendation and an interview may be required of applicants.</p>
<p>Concurrent BSc/BEd Mathematics program</p>	<p>Minimum average of 80% on two mathematics (four credits including calculus required), one science and English OAC 1.</p>		
<p>Chemistry and/or Physics (BSc)</p>	<p>Chemistry, physics and two mathematics including calculus (minimum 70% required on at least one mathematics required).</p>	<p>A third mathematics and English OAC 1.</p>	<p>Normally an overall average of at least 70% on 6 credits for consideration.</p>
<p>Computer Science (BSc)</p>	<p>One mathematics (minimum 70% required).</p>	<p>English OAC 1.</p>	<p>Normally an overall average of at least 70% on 6 credits for consideration.</p>
<p>Computing and Business (BCB)</p>	<p>English OAC 1, two mathematics averaging 75%.</p>		<p>Normally a minimum average of 80% on 6 credits for consideration.</p>
<p>Computing and Solid-state Device Technology (BSc)</p>	<p>A minimum 75% in physics and two mathematics, including calculus (minimum 70% on at least one mathematics required).</p>		<p>Normally an overall average of at least 70% on 6 credits for consideration.</p>
<p>Earth Sciences (BSc)</p>	<p>One mathematics (minimum 70% required), one from biology, physics or geology.</p>	<p>Mathematics and English OAC 1.</p>	<p>Normally an overall average of at least 70% on 6 credits for consideration.</p>
<p>Environment (BSc)</p>	<p>Chemistry and one mathematics (minimum 70% required), plus two of biology, geography and physics.</p>		<p>Normally an overall average of at least 70% on 6 credits for consideration.</p>
<p>Health Science (BSc) <i>see Faculty of Applied Health Sciences</i></p>			
<p>Mathematics (BSc)</p>	<p>Two mathematics including calculus (minimum 70% on at least one mathematics required).</p>	<p>A third mathematics and English OAC 1.</p>	<p>Normally an overall average of at least 70% on 6 credits for consideration.</p>

Academic Regulations

Registrar
Robert J. Tiffin

Associate Registrar, Records
Kevin J. Kiss

Telephone: (905) 688-5550, extension 3550
Fax: (905) 988-5488
E-mail: regist@brocku.ca
www.brocku.ca/registrar

I. Faculty Structure

The academic units at Brock University are grouped into six faculties. These are:

1. Faculty of Applied Health Sciences

Community Health Sciences
Physical Education
Recreation and Leisure Studies
Sport Management
Tourism Studies

2. Faculty of Business

Accounting and Finance
Management, Marketing and Human Resources

3. Faculty of Education

Graduate and Undergraduate Studies in Education
Pre-service Education
Continuing Studies

4. Faculty of Humanities

Aboriginal Studies
Applied Language Studies
Canadian and European Union Studies
Canadian Studies
Classics
English Language and Literature
Fine Arts
French, Italian and Spanish
Germanic and Slavic Studies
Great Books/Liberal Studies
History
International Studies
Music
Philosophy

5. Faculty of Mathematics and Science

Biochemistry
Biological Sciences
Biotechnology
Chemistry
Computer Science
Computing and Business
Earth Sciences
Environmental Sciences
Mathematics
Neuroscience
Oenology and Viticulture
Physics
Science

6. Faculty of Social Sciences

Business Economics
Child and Youth Studies
Communications, Popular Culture and Film
Economics
Environmental Economics
Environmental Policy
Geography
Labour Studies
Political Science
Psychology
Sociology
Women's Studies

II. Degree Requirements

1. Attendance

A student is expected to attend all lectures, discussion groups, seminars and laboratory periods of the courses in which registered. Instructors must inform their students about the relationship between attendance and their course grades early each session.

A student may not register in courses scheduled (in whole or in part) at the same time of day without written approval of each instructor.

2. Applicable Calendar

A student who has maintained enrolment in at least one credit in each calendar year may complete the degree program using the "Academic Regulations" section of the Calendar operative in the year in which that program was entered. Students who interrupt their studies for one or more years, however, become subject to the Calendar regulations in effect at the time of their re-registration.

Academic Regulations

3. Force Majeure

Brock University accepts no responsibility for the continuance of any class lecture, seminar, laboratory, tutorial or course of instruction which may not be completed as a result of an act of God, fire, riot, strikes, lockout or any cause beyond the control of Brock University.

4. General Information

It is the responsibility of each student to ensure that the courses selected meet the academic requirements for the degree being pursued.

An honours degree is awarded on the successful completion of an approved program with first- or second-class honours standing.

A 20 credit degree or a degree "with a major" is awarded on the successful completion of an approved program with a minimum 60 percent major average and a minimum 60 percent overall average.

Except in the BA General Studies, a 15 credit degree will be awarded upon the successful completion of an approved program with a 60 percent average in the courses designated by their Department/Program as major credits and a minimum overall average of 60 percent. A BA General Studies degree requires a minimum 60 percent overall average.

Students transferring from another university may earn a Brock 20 credit or 15 credit degree, as a first degree, with a minimum of five Brock credits or a Brock BEd Program II with a minimum of four Brock credits. Students transferring from another university seeking a Brock 20 credit or 15 credit degree as a second or subsequent degree will be granted transfer credit to a maximum of 10 credits for a 20 credit degree and a maximum of seven credits for a 15 credit degree.

In all 20 credit degree programs, at least 12 credits must be numbered 2(alpha)00 or above, six of which must be numbered 2(alpha)90 or above and of these, three must be numbered 3(alpha)90 or above. In all 15 credit degree programs, at least seven credits must be numbered 2(alpha)00 or above, three of which must be numbered 2(alpha)90 or above. (Note: BA General Studies students must complete eight credits numbered 2(alpha)00 or above, three of which must be numbered 2(alpha)90 or above.)

Among the first five credits, students must have completed:

- courses from at least four departments;
- at least one of the required three context credits.

Among the first 10 credits, students must have completed all three of the required context credits.

Students in four-year honours professional programs must complete the context requirements by the end of the third year of the program.

A maximum of seven credits toward a 20 credit BA or BSc and five credits toward a 15 credit BA or BSc degree, may be taken from any combination of courses taught in the Faculty of Applied Health Sciences, the Faculty of Business, and designated Faculty of Education courses. For course enrolment restrictions pertaining to General Studies, please see the General Studies entry.

Note: please refer to the Faculty of Education section of this calendar for a listing of courses which may be used for BA or BSc credit.

Year 1 in all programs provides a student with a broad choice of options. In year 2, students select a major field of study and program pattern.

After successful completion of five credits, a student will be expected to choose an area of major concentration. A student may major in any subject in which a grade of 60 percent or better was obtained in the required introductory course(s), provided that departmental prerequisites have been met. In the case where a grade of 50 to 58 percent was obtained in the proposed major subjects, the consent of the relevant department is required for the student to major in that subject.

5. Degree Categories

A. Honours standing terminology

First-class: A minimum average of 80 percent in all major credits and 70 percent in the remaining credits.

Second-class: A minimum average of 70 percent in all major credits and 60 percent in the remaining credits. To proceed to year 4 (as an honours degree candidate), a student must have obtained at least second-class honours standing and must have departmental approval. Applications are available in the Office of the Registrar and should be submitted by July 1.

B. Standing for graduation

First-class honours degrees are granted to students who have completed a 20 credit honours program with first-class honours standing. A transfer student must have completed a minimum of five credits at Brock, including all departmental honours requirements year 4 and have maintained a minimum 75 percent overall average and a minimum 80 percent major average (based on Brock courses only).

Second-class honours degrees are granted to students who have completed a 20 credit honours program with second-class honours standing. A transfer student must have completed a

Education	
Concurrent BA/BEEd	Students interested in the BA/BEEd concurrent program apply to the BA Child and Youth Studies common first year. Students who achieve a minimum of 75% overall academic average with a minimum of 4.0 credits and a maximum of 8.0 credits, are eligible to apply to the BA/BEEd program. All BA/BEEd applicants must have completed CHYS 1F90, PSYC 1F90 and SOCI 1F90 or equivalents.
Concurrent BA(honours)/BEEd French	Students interested in the BA/BEEd (French) program apply to the BA French common first year. Students who achieve a minimum of 75% overall academic average are eligible to apply. Program includes a one-year (total immersion) exchange in France or Québec.
Concurrent BPhEd (honours)/BEEd	Students must complete the common first year in the Physical Education program before applying for admission to the BPhEd(honours)/BEEd program. Admission will be based on a minimum of 75% overall average of a minimum of five credits, a minimum grade of 70% in both PHED 1P90 and 1P93 and the successful completion of PHED ON08.
Concurrent BSc/BEEd	Students in the BSc/BEEd program must be registered full time and follow the prescribed program. Any exceptions must have the approval of the director of the program. Students must maintain a 75% overall average in each year in all academic grade-marked courses.

Neuroscience (BSc)	Biology, chemistry and either one mathematics (minimum 70% required) or physics.	English OAC 1.	Normally an overall average of at least 70% on 6 credits for consideration.
Oenology and Viticulture	One mathematics (minimum 70% required); three from Biology, Chemistry, Physics and one other mathematics.		A personal letter may be required.
Physical Geography (BSc) <i>see Faculty of Social Sciences</i>			
FACULTY OF APPLIED HEALTH SCIENCES Physical Education (BPhEd)	English OAC 1.	Physical Education; for the kinesiology major, biology and one mathematics strongly recommended.	Normally a minimum average of 70% on 6 credits for consideration.
Recreation and Leisure Studies (BRLS)	English OAC 1.		Normally a minimum average of 70% on 6 credits for consideration.
Sport Management (BSM)	English OAC 1.		Normally a minimum of 75% on 6 credits for consideration; Co-op Sport Management normally a minimum average of 80% on 6 credits for consideration.
Tourism Studies (BTS)	English OAC 1.		Normally a minimum average of 75% on 6 credits for consideration.
Health Sciences (BSc)	English OAC 1, plus two from biology, chemistry, mathematics or physics.		Normally a minimum average of 75% on 6 credits for consideration.
Community Health (BA)	English OAC 1.		Normally a minimum average of 70% on 6 credits for consideration.
Workplace Health (BA)	English OAC 1.		Normally a minimum average of 75% on 6 credits for consideration; Co-op Workplace Health normally a minimum average of 80% on 6 credits for consideration. Interview and application required.

minimum of five credits at Brock, including all departmental honours requirements for year 4 and have maintained a minimum 65 percent overall average and a minimum 70 percent major average (based on Brock courses only).

A Bachelor of Business Administration (honours) degree is awarded to students as noted above. The requirement for graduation for a BBA is a minimum 60 percent major average and a minimum 60 percent overall average.

A Bachelor of Arts with a Major, a Bachelor of Science with a Major and a Bachelor of Physical Education with a Major is awarded upon the successful completion of an approved program with a minimum 60 percent major average and a minimum 60 percent overall average.

A degree with distinction is granted to students who have completed a non-honours degree of 20 or 15 credits with a minimum 80 percent overall average. Transfer students require, in addition, a minimum 80 percent overall average in all Brock courses.

Pass degrees are granted to students who have completed a 15 credit program with a minimum overall average of 60 percent and a 60 percent average in courses designated as major credits.

6. Major Requirements

A minimum of 60 percent in the required introductory course(s) of the desired major(s) is necessary in order to continue in that program (see individual departmental requirements). Additionally, students in all programs are required to maintain a minimum 60 percent major average in order to continue in that major. Only courses taken at Brock and courses taken elsewhere within a designated partnership program will be used in determining any student average. (At present, partnership programs include Freiburg, Perpignan and Summer Studies in Italy.) Courses taken on a Letter of Permission from Brock will not be used in determining a student's major average. All credits from the areas of concentration, and for some programs required courses from other departments, will be designated as major credits. In a BSc General Studies or Integrated Studies program, all credits from the areas of concentration will be designated as major credits.

Students in a single or combined major program who do not attain a minimum 60 percent average in their major credits should select another program of study.

A single major 20 credit degree program generally requires 10 credits in one department. Seven credits are normally required for a single major 15 credit degree. Specific course requirements for major programs are described in the individual department's section of the Calendar

Combined major degree programs permit a student to concentrate in two subject areas. A minimum of fourteen credits (seven from each) is required for a combined major honours

degree and a minimum of ten credits (five from each discipline) is required for a combined major pass degree. If a desired combined major program is not outlined in the calendar, students should consult the Chairs of those particular departments.

Integrated Studies programs are specifically constructed programs at the honours or pass level which span two or more departments and are designed for students whose unique interests cannot be satisfied by a single or combined major. A clear and predetermined plan of interdisciplinary study must be approved by the appropriate Dean.

Integrated Studies programs permit a student to pursue a pattern of studies which does not coincide with either a single or combined major arts or science program. A credit in Mathematics or Computer Science is required of students who choose a concentration of courses in Mathematics and Science or Social Science; a credit in a language other than English is required of students who choose a concentration of courses in Humanities.

A BSc General Studies is available as an honours and pass degree. While there are no specific course requirements, a student must include a minimum of seven credits in one subject and five in another for an honours degree; for a pass degree, five credits in one subject and three in another. All such programs must be approved by the appropriate Dean or designate.

A BA General Studies degree (pass only) has no major or specified areas of concentration. BA General Studies students are restricted in the maximum number of credits which may be taken from any one discipline. For further information, consult the General Studies entry of this Calendar.

If a simple majority (50 percent) of the credits taken during the program has been drawn from courses offered by the departments comprising the Faculty of Mathematics and Science, the degree awarded upon satisfaction of all graduation requirements will be the BSc (honours), a BSc with a Major or BSc as appropriate; if drawn from those courses offered by the departments comprising the faculties of Humanities and/or Social Sciences, the degree awarded shall be the BA (honours), BA with a Major or BA as appropriate.

7. Waiver of Requirements

Departments may waive prerequisite courses or required program courses for degree candidates who have considerable relevant work experience. Such candidates must, however, complete the required number of courses for a degree.

8. Language Requirement for Students in the Humanities

Students enrolling in a Humanities single major, combined major with one or both majors in the Humanities or an Integrated Studies program with a major concentration in the Humanities, are required to complete one credit in one language other than English to fulfil the Humanities language requirement. Where half credit courses are used to satisfy the require-

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ment, both half credits must be in the same language. The choice of the language is left to the student unless specifically designated by the program. Under special circumstances ENGL 3F92 may be used to satisfy the language requirement. Other languages currently offered by the University are: Cayuga, French, German, Greek, Italian, Japanese, Latin, Mandarin Chinese, Mohawk, Spanish and Russian.

Admission to language courses beyond the 1(*alpha*)00 level is dependent upon completing the prerequisite(s) for the course. Students who have acquired high school credit in the chosen language will be excluded from certain lower level courses depending upon their level of proficiency in the language. Questions should be referred to the language department concerned.

Students whose secondary school program was taught either entirely or to a significant extent in a language other than English and who would, therefore, qualify to enrol in a 2(*alpha*)00 level course or above are exempt from the language requirement. For example, such an exemption may be granted to OAC graduates of Français and French immersion programs. Other students seeking this exemption require the approval of the Dean of Humanities when the language of instruction is not one of the above group.

9. Writing Courses

University research over the past decade has shown a very strong relationship between the ability to write well and success in university and for this reason the University offers courses on writing which are available as electives to all Brock students. (See the Department of English Language and Literature for further details.)

A major goal of these courses is to improve the student's ability to express thoughts, to give thought an articulate form and to be able to organize language more efficiently. Success in these matters will give the student more confidence in the ability to control, analyse and present information, vital skills in every area of modern life. The courses aim to make the student a perceptive analyst of the writing of others and careful editors of their own writing.

10. Context Requirements

The context requirement is designed to permit a student to view the "core" of a particular major in a more general learning "context". All students must include one credit (or two half credits) from each of the three groupings during their first 10 credits.

Normally at least one of the context credits must be completed as part of the first five credits.

A. Humanities context courses:

CANA 1F91
CLAS 1P91, 1P92, 1P93, 1P95, 1P97
DRAM 1F93
ENGL 1F91, 1F95, 1F99
FILM 1F94
FREN 1F90
GBLS 1F90, 1P91, 1P92
GERM 1F90, 1P93, 1P94, 1P95, 1P96
*HIST 1F95, 1F96, 1P92, 1P93**
ITAL 1F90, 1P95
*LING 1F94
MUSI 1F50, 1P11, 1P12
PHIL 1F90, 1F91, 1F93, 1F94
SPAN 1F90
VISA 1F90

B. Social Sciences context courses:

CHSC 1F90
CHYS 1F90
ECON 1P91, 1P92
ENVI 1P90, 1P91
*GEOG 1F90
*HIST 1F95, 1P92, 1P93**
LABR 1P91, 1P92
*LING 1F91
POLI 1F90, 1P91, 1P92, 1P93
PSYC 1F90
SOCI 1F90
WISE 1F90

C. Sciences context courses

ASTR 1F00 (see Physics department)
BIOL 1F25, 1F90
CHEM 1P80, 1P81, 1P90, 1P91
ERSC 1F90, 1F95
*GEOG 1F91
PHYS 1F20, 1F25, 1F90
SCIE 1F30

*In cases where subjects are listed under two categories, only one of the requirements may be satisfied by that course (e.g., if GEOG 1F90 is taken to fulfil the requirement for the social sciences option, GEOG 1F91 may not be taken to fulfil the sciences requirement).

**History majors may not use a history credit to satisfy the social science context requirement.

11. Cross-listed Courses

The designation for a cross-listed course will be established by the student's initial registration in that course. Students may

elect to change the designation no later than the last day for withdrawal without the assignment of a grade.

12. Extra Courses

Students wishing to augment a regular degree program by taking extra courses because of personal interest may enrol in such courses and designate them as extra courses, not to be used for credit towards that degree.

Students must declare a course to be extra prior to the last day for official withdrawal.

Students changing degree programs may declare non-applicable passed courses as extra to their degree at the time of the program change.

Students may change the designation of passed major courses as extra to their program only with the permission of the Department Chair or Director.

13. Part-time Programs

The University provides an opportunity for formal education to be continued or resumed, through part-time studies.

Part-time applicants must satisfy the regular admission requirements of the University. They may take courses during the Fall/Winter (two credits), Spring (one credit) and Summer (one credit) Sessions.

The courses given in the evening or in the summer are equivalent to their counterparts in the regular day session.

In some cases it may be necessary for students registered in evening courses to write examinations during the day.

14. Academic Advising

Academic advising for both full-time and part-time students is available in the Registrar's Office as well as in academic departments and from the Deans. Students with special needs should contact the Services for Students with disABILITIES Office for information regarding academic advising procedures.

Applicants for admission who have questions regarding their programs, admission procedures or current admission status should consult the Associate Registrar of Admissions or the Admissions Officer.

Students currently enrolled at Brock who have questions regarding courses, programs or academic regulations should consult an academic adviser in their department, program or Faculty or the Senior Academic Adviser, Academic Services. Phone-in appointments can be arranged for part-time students.

III. Certificate Requirements

1. Certificate Programs

For persons wishing to acquire specialized knowledge without proceeding immediately to a degree, the University has established certificate programs in:

Adult Education (Faculty of Education)
 Drama in Education (Department of Fine Arts)
 Environment (Centre for the Environment)
 Grape and Wine Technology (Oenology and Viticulture)
 Great Books/Liberal Studies (Great Books/Liberal Studies Program)
 International Studies (Centre for International Studies)
 Labour Studies (Centre for Labour Studies)
 Public Administration (Department of Political Science)
 Public Law (Department of Political Science)
 Statistics (Department of Mathematics)
 Teaching English as a Second Language (Department of Applied Language Studies)
 Women's Studies (Centre for Women's Studies)
 Writing (Department of English Language and Literature)

Professional Certificate in Enterprise Education
 (Faculty of Education)

2. Requirements for a Certificate

Since the programs are composed of degree credit courses, admission requirements are the same as for degree programs. (Secondary school application, transfer application, mature student admission, non-degree admission and special admission - see the Admissions section of the Calendar.) Certificate programs are subject to the same academic regulations as those governing degree programs. Students admitted to a certificate program will normally be limited to part-time studies.

Registration will normally be limited to a maximum of two credits in the Fall/Winter Session, a maximum of one credit in the Spring Session and a maximum of one credit in the Summer Session. Exceptions to this regulation may be granted by the Dean of the appropriate faculty.

Students seeking admission to the certificate program following the completion of a degree or diploma program from a university, Colleges of Applied Arts and Technology will be limited in the number of transferrable credits. No more than one credit from all the courses included in the university degree or college diploma program may be used in the certificate program. With special permission of the Dean of the appropriate faculty, one credit may be taken on a Letter of Permission. A maximum of one credit may be obtained by Challenge for Credit.

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Students wishing to hold both a degree and a certificate must fulfil the course requirements for both the degree and the certificate. Students may not be concurrently registered in a certificate program and a degree program. All credits earned in a certificate program are transferrable to a degree program.

A certificate is awarded upon the successful completion of the courses required for the certificate program with a minimum overall average as determined by the offering department. Details appear in the relevant departmental entries of the Calendar. Transfer credits from another institution will not be included in the calculation of the overall average. Any credits transferred from a Brock degree program to a certificate program will be included in the calculation of the overall average.

IV. Registration

All students must register during the official registration period designated for each session or term. Late registration may be permitted, upon payment of a fee, during the same periods each session as course changes are permitted. Registration will not be permitted after those times. Students should ensure that they meet published restrictions and prerequisites.

Students are officially registered for courses only by completing registration according to procedures outlined in the BIRT registration guides published by the Office of the Registrar and by the payment of the appropriate fees. Students whose cheques are returned NSF (non sufficient funds) will be deregistered without further notice.

A student will register in one lecture section of each course and, where applicable, will select one tutorial, seminar and/or lab section per course as appropriate. Students are expected to attend all lectures, labs, tutorials and seminars of the sections in which they are registered. Students not registering for required labs, tutorials and/or seminars may be deregistered from the primary component of the course.

A student may not register in courses scheduled (in whole or in part) at the same time of day without written approval of each instructor.

Students with special needs should contact the Services for Students with disABILITIES Office for specific information about registration and confirmation of registration.

1. Course Changes

All course changes must be made through the Office of the Registrar. The BIRT system (telephone or Web-based) must be used during dates specified in the registration guides; course changes at other times must be made in writing using a *Course Change Form* and submitted to the Office of the Registrar.

Fall/Winter Session full credit courses may be changed during the two weeks following the registration period without penalty. Course changes will be permitted during a further one-week period with the permission of the instructor. No course changes will be permitted after this period.

Fall Term and Winter Term half credit courses and Spring Session courses may be changed during the first week following the registration period without penalty. Course changes will be permitted for a further one-week period with the permission of the instructor and upon payment of a course change fee. No course changes will be permitted after this period.

Summer Session courses may be changed during the first two days following the registration period without penalty. Course changes will be permitted during a further two-day period with the permission of the instructor and upon payment of a course change fee. No course changes will be permitted after this period.

2. Course Levels and Course Load

A. Course levels

Courses numbered 1(alpha)00 to 1(alpha)99, 2(alpha)00 to 2(alpha)99, 3(alpha)00 to 3(alpha)99 and 4(alpha)00 to 4(alpha)99 are normally year 1, 2, 3 and 4 courses respectively. Courses numbered 2(alpha)90 to 2(alpha)99 may be considered as year 2 or 3 courses; and 3(alpha)90 to 3(alpha)99 as year 3 or 4 courses.

B. Regular course loads

Regular course loads are as follows:

- Fall/Winter Session: five credits (for full-time students) and two credits (for part-time students);
- Fall Term (only) or Winter Term (only): two and one-half credits (full-time students) and one credit (part-time students);
- Spring Session: one credit (full- and part-time students);
- Summer Session: one credit (full- and part-time students).

A student wishing to exceed the normal course loads stipulated above must first obtain permission from the appropriate academic Dean.

Students who are enrolled in three or more credits during the Fall/Winter Session are considered to be full-time; however, the regular course load for a full-time student is five credits. In the Spring or Summer Sessions, the regular load is one credit. Permission to take extra credits may be granted by the appropriate academic Dean. Such permission will normally be given only if a student has completed five credits with at least second-class (70 percent) standing.

The Office of the Registrar can verify full-time attendance if a student is registered in three credits over the Fall/Winter Session or three credits over the Spring and Summer sessions. Students registered in less than three credits over the Fall/Winter Session are considered part-time. Students registered in the Spring Session or Summer session only or less than three credits in the Spring and Summer sessions are considered to be part-time. (Co-op students should consult the Associate Registrar, Records regarding their status).

A student may not attempt five or more credits in any one department in a single session without the approval of the appropriate Dean.

Mature entry students must complete two credits with a minimum of a 60 percent overall average in order to be considered for full-time studies. Students should expect the required average to be higher.

Anyone admitted as a special student will normally be restricted to a part-time course load.

Non-degree students are students taking Brock courses but not proceeding towards a Brock degree. Students on letters of permission and post-degree students fall into this category. Non-degree students are restricted to a part-time course load.

3. Limited Enrolment Courses/Programs

All courses and programs are subject to enrolment limitations.

4. Auditor Status

Persons wishing to attend classes for interest only may be permitted to do so as auditors (listeners) provided space is available in the course. An auditor may not receive any assessment of performance in the course. Not all courses are available to auditors; the instructor's approval is required prior to registration. Permission will only be given after the first day of lectures. (Students are encouraged to discuss the extent of their involvement in the course with the instructor.) It is not necessary for auditors to have the standard qualifications for admission to the University, but they must make application and be formally admitted prior to registration. No credit will be granted for audited courses. A request to change from audit status to degree credit status must be received by the Office of the Registrar prior to the last day for course changes. For approval, the student would need to already hold the appropriate academic qualification as shown by documentation on file in the Office of the Registrar. Degree credit students may drop to audit status prior to the final date for withdrawal without academic penalty for the course.

5. Letters of Permission

To take a course at another university for credit towards a Brock degree, a student must apply for and be granted a Letter of Permission from the Office of the Registrar **before** registering at the other university. Application for the Letter of Permission

must include a calendar description of the course(s) to be taken and the Letter of Permission application fee. Normally, permission to take a course on a Letter of Permission is restricted to students who have successfully completed five credits at Brock with a minimum overall average of 60 percent. If the request is approved, the Office of the Registrar will send a Letter of Permission to the host university and a copy to the student.

It is the student's responsibility to send to the Brock Office of the Registrar an official transcript of grade(s) from the host university within eight weeks of the completion of the course. Upon receipt of the official transcript, the course will be entered as either pass or fail on the student's record at Brock. Failure to provide an official transcript will result in a grade of F being assigned to the course. A student who does not complete registration or who withdraws from a course for which a Letter of Permission has been issued must notify the Office of the Registrar by submitting verification from the host university.

Only courses taken at Brock and courses taken elsewhere within a designated partnership program will be used in determining a student's average. At present, partnership programs include Freiburg, Perpignan and Summer Studies in Italy. Courses taken on a Letter of Permission from Brock will be marked as Pass/Fail and will not be used in determining any student average. The Office of the Registrar should include, as a note on a student's transcript, the exact name and title of the course taken on Letter of Permission, including the grade received at the offering institution.

Except with the permission of the Dean of the student's faculty, a Letter of Permission is not issued for a student to take more than two of the last five credits elsewhere. This regulation does not apply to courses taken as part of an exchange program (e.g., Keele, Swansea), nor to Bachelor of Education in Adult Education (ADED) program students.

Students completing the last credit(s) for their degree on a Letter of Permission, must have their **official** transcript, from the host institution, sent to the Office of the Registrar prior to May 15 for Spring Convocation and prior to September 15 for Fall Convocation. Students not meeting these deadlines will have their application for graduation forwarded to the next Convocation.

In order to ensure that sufficient time is allowed for the processing of an application for a Letter of Permission, it is recommended that the application be received in the Office of the Registrar by August 1 for Fall classes; by December 1 for Winter classes; and, as deadlines vary from institution to institution, as soon as possible for Spring/Summer classes.

6. Challenge for Credit

Challenge for credit is designed to provide credit at the undergraduate level for skills acquired through learning and experience outside the University. It is not designed to give credit for skills or knowledge gained through high school, college or

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previous university instruction, nor is it expected that time would be required to upgrade or review the material prior to the examining process. Credit can only be granted for those courses listed in the current Brock Calendar. Not all courses in all disciplines are available for challenge. A list is available in the Office of the Registrar. It is the responsibility of the department concerned to evaluate the student who challenges for credit and to determine the types of work to be submitted.

A. General regulations

- Challenge for credit is available only to students formally admitted to and registered in, a program leading to a degree or certificate. Special admission students are not eligible to challenge for credit.
- A maximum of five credits towards a Brock undergraduate degree may be acquired by challenge at Brock or elsewhere. A maximum of one credit may be obtained toward a certificate. Challenges may not be included in the minimum number of Brock credits required for a Brock degree.
- A challenge credit may not be used as a substitute for grade raising or special examinations or to replace a failed course.
- A student may not challenge a course in which s/he is or has been previously registered or which s/he has already challenged.
- The passing grade for a challenge will appear on the transcript as CH. Challenge grades therefore are not computed in averages and are not used in evaluating honours or scholarship standing. Failures (F) will be noted on the transcript.
- A student may not withdraw the challenge once registration for a challenge course is completed.
- The grade for the challenge must be received in the Office of the Registrar within 60 days of acceptance of the challenge by the department.

B. How to challenge for credit

A student must fill out a challenge application form available from the Office of the Registrar. (The student may wish to discuss the challenge informally with the department prior to this step.) The Office of the Registrar forwards the application to the appropriate department which must decide whether to accept the challenge. The department may require documentary material from the student or an interview before making its decision. If the department accepts the challenge, the student is eligible to register for it through the Office of the Registrar and is required to pay the applicable fee. A student may not withdraw the challenge after this step; failure to sit for a challenge subsequent to registration represents a failed course. It is the student's responsibility to be fully informed, prior to registration, of the time and nature of the evaluation. This may include one or more of the following: a written exam paper or papers, an essay or essays, the submission of a substantial body of work or a portfolio, an oral examination or a laboratory test.

V. Required Academic Performance

1. Definitions

A. Academic Probation

Following a sessional review of academic performance, a student is placed on academic probation when minimum academic performance requirements are not met.

B. Academic Suspension

Students not meeting minimum academic requirements while on academic probation will be placed on academic suspension. Academic suspension will be for one calendar year. Students readmitted following academic suspension will be required to return to studies under the regulations and program of the calendar in effect at the time of their re-registration.

C. Academic Debarment

Students not meeting minimum academic requirements after readmission to the University following academic suspension will be barred from further studies for a minimum of two calendar years. Application is required and readmission is not guaranteed. Students readmitted following academic debarment will be required to return to studies under the regulations and program of the calendar in effect at the time of their re-registration; subsequent failure to meet minimum academic requirements will result in permanent debarment.

D. Sessional Review

A review of all undergraduate student performance will take place following the Fall/Winter Session, the Spring Session and the Summer Session prior to the release of grades.

2. Minimum Academic Requirements

Minimum academic requirements to continue studies at the University:

First-year students who have received grades in at least two credits or greater must have attained a minimum 60 percent overall average. Continuing students must maintain a minimum 60 percent overall average. (Some programs may require a higher average in order to be eligible to continue studies in that program. See individual departmental requirements.)

A. Academic Probation:

Students not meeting minimum academic performance requirements (60 percent overall average) will be placed on academic probation. Notice of academic probation will be

placed on a student's Statement of Standing (but not on a student's transcript). Students will be notified, in writing to the permanent address on the student's record, that they have been placed on academic probation.

Students registered in Spring Session courses prior to notification of academic probation will be permitted to continue in currently registered courses.

The academic record of students placed on academic probation will be re-evaluated following the next session.

Students must pass all courses in which they were registered while on academic probation and attain a minimum 60 percent overall average on these courses to be allowed to continue.

B. Academic suspension:

Students who do not pass all the courses in which they were registered while on academic probation or do not attain the minimum 60 percent required average will receive an academic suspension from studies for a minimum of one calendar year. Students readmitted following academic suspension will be required to return to studies under the regulations and program of the calendar in effect at the time of their re-registration.

Notice of academic suspension will be placed on a student's Statement of Standing and on a student's transcript. Students will be notified, in writing to the permanent address on the student's record, that they have been placed on academic suspension.

Students receiving academic suspension will be required to apply to the Senate Committee on Admissions for readmission to the University. Documentation with respect to the grounds for appeal, must be provided by the student in support of any appeal for readmission. Students who can demonstrate that there are extenuating circumstances which affected their academic performance while on academic probation may request that the Senate Committee on Admissions permit them to continue their studies without sitting out the required one-year academic suspension. Students granted their request will be readmitted to the University as if they had served the one-year suspension; that is, they will be placed on a second academic probation.

Students re-admitted to the University after academic suspension will be considered to be on academic probation

Students who pass all courses following readmission and attain a minimum 60 percent overall average on these courses will be allowed to continue.

C. Academic debarment:

Following readmission after academic suspension, students not meeting the academic performance requirements noted above will be barred from further studies for a minimum of two years.

Notice of academic debarment will be placed on a student's Statement of Standing and on a student's transcript. Students will be notified, in writing to the permanent address on the student's record, that they have been placed on academic debarment. Students will be required to apply to the Senate Committee on Admissions for readmission to the University following the minimum two year period of academic debarment. Application is required and readmission is not guaranteed. Documentation with respect to the grounds for appeal must be provided by the student in support of any appeal for readmission. Students readmitted following academic debarment will be required to return to studies under the regulations and program of the calendar in effect at the time of their re-registration; subsequent failure to meet minimum academic requirements will result in permanent debarment.

VI. Withdrawal

A student may voluntarily withdraw from the University and/or courses (except as noted below) without academic penalty by informing the Office of the Registrar, in writing, no later than the last date of lectures.

Project courses may be excluded from the last date for withdrawal noted above. In excluding project courses instructors must inform students, via the course outline, and the Office of the Registrar that withdrawals will not be accepted after the two-thirds point of scheduled classes.

The week of withdrawal from a course, following the course change period, will be recorded on the student's official transcript.

Grades will be recorded on students' transcripts for all courses in which they have officially registered and from which they have not officially withdrawn.

A student who withdraws in good standing may be entitled to a certain refund of tuition fees, but if holding any scholarship within University control will, on withdrawing, forfeit the total value of this award.

VII. Examinations

1. General Information

Written progress and final examinations shall normally be scheduled and administered by the Office of the Registrar and take place under formal conditions during a specially-scheduled examination period.

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The style and duration of a University examination (e.g., closed or open book; essay or multiple-choice questions) shall normally be at the discretion of the individual instructor. The duration in hours and minutes of a University examination shall appear at the top of the examination paper.

All University examinations being written concurrently in a given room should begin simultaneously. In addition, it is desirable that students writing examinations of different lengths should be segregated in different rooms. A student shall not be permitted to enter a room in which University examinations are being written if the student arrives more than 30 minutes after the commencement of writing, nor shall a student be permitted to leave such a room within the first 30 minutes or within the last 10 minutes of the examination.

When a course is given in more than one section in any given term, it is the responsibility of the Department/Centre/Program Chair /Director and the instructors involved to ensure that the sections are substantially the same in content. This means that the materials covered in the different sections, with some possible minor variations of emphasis, will be similar, and that all sections of the course will write comparable examinations. Tutorial courses, directed research courses and honours thesis courses shall be exempted from this regulation.

Although attempts will be made to minimize consecutive examinations or two examinations in one day, this possibility cannot be eliminated.

In some cases it may be necessary for students registered in evening courses to write examinations during the day or vice versa.

2. Class Tests and Examinations

An instructor may require a student to take a class test or examination, as opposed to an individual test or examination, only during:

- the regular class periods of his/her course;
- the formally scheduled examination period;
- a special examination period, scheduled in the academic timetable and not conflicting with regular class periods or other examinations.

No student may be required to write an examination or test in a time period which conflicts with any of his/her other classes.

Laboratory tests worth no more than 20 percent of a student's final grade may be scheduled, during a student's regularly time tabled laboratory period, in the last week of a term, but under no other circumstances will class tests or examinations worth more than five percent of the course grade be permitted in the final two weeks of each term.

3. Examination Rules

- Students should arrive at the examination room at least 15 minutes before the official start of an examination.
- Students should bring their own writing materials. None will be provided by the University.
- Students must bring their student ID cards and identify themselves at the request of the invigilator.
- Unless special permission has been given, no reference materials of any kind may be brought into an examination room.
- Materials authorized for use in an examination must not contain additional notes, formulas or other extraneous material.
- Students may not enter the examination room early.
- Students are not admitted to an examination room later than 30 minutes after the start of an examination.
- Students absent from an examination with just cause must first contact the instructor for permission to write a Deferred Examination. Any such application must be accompanied by required supporting documentation and must be submitted within seven days of the examination.
- Students not supplying a valid reason for absence from an examination will receive an automatic grade of "F" (failed).

4. Progress Examinations

Progress and final examinations are compulsory in all courses numbered 1(alpha)00 to 1(alpha)99. Final or progress examinations in courses numbered 2(alpha)00 or above may or may not be held, at the discretion of the instructor.

5. Failure to Write an Examination

In courses requiring a final examination, failure to write the examination will normally result in a failing grade.

6. Deferred Examinations

If a student is unable to write a formally scheduled examination, or having begun the exam, is unable to complete it, for reasons of ill-health, with supporting documentation, a deferred examination will be granted. Requests made on the basis of compassionate grounds or on the grounds of extenuating circumstances will be judged on a case by case basis.

Medical documentation supporting the request for a deferred examination must be written on the physician's letterhead (or show the physician's address and telephone number) and must include the student's name, and date the student was examined by the physician, must certify that the student was incapable of attempting the examination at the scheduled time and date, and must bear the physician's signature.

A student must first contact the instructor for permission to write a deferred examination. Any such application must be accompanied by required supporting documentation and must be submitted within seven days of the examination.

If the student is not able to contact the course instructor or if the course instructor is not willing to give the student permission to write a deferred examination, within ten days of the examination, application may be made to the Chair/Director of the Department/Centre/Program for permission to write a deferred examination.

If not satisfied with the outcome of the request, the student may then refer the matter to the Dean of the Faculty offering the course.

If the student is not satisfied with the decision of the Dean, the student may then appeal to the Senate Committee on Appeals.

If a student is unable to write a formally scheduled examination for religious reasons, application should be made to the Office of the Registrar at least two weeks prior to the examination period. Supporting evidence must be submitted.

Deferred exams for Fall Term courses will be written no later than the subsequent July 31; for Fall/Winter Session courses, no later than the subsequent August 31; for Spring and Summer Session courses, no later than the subsequent December 31.

7. Required Medical Documentation

It is the University's policy to accept medical certificates from qualified medical practitioners attesting to the student's inability to write a test, examination etc. due to an incapacitating medical condition at the time of the scheduled test, examination etc. University departments and programs may, at their discretion, request more detailed documentation in particular cases.

8. Part-time Students

In some cases it may be necessary for students registered in evening courses to write examinations during the day or vice versa.

9. Retention of Papers

University final examination scripts shall be retained in the University for a certain period after the examinations have been written. At the time when an instructor transmits the year's grades for a course to the Office of the Registrar, the examination scripts shall be turned over by the instructor to the Administrative Assistant for safekeeping for a period of not less than six months. After that time, they must be shredded.

Students have a right to inspect their final examination papers under faculty supervision.

10. Students with Special Needs

Special needs students requiring examination accommodations must consult the Services for Students with disABILITIES Office early in the academic term.

VIII. Evaluation

1. General Information

Evaluation of a student's performance in a course will be determined by employing such indices as examinations, seminar and classroom participation, papers, lab and studio activities, peer evaluation and any other normal class assignments. For each course, the grading scheme will reflect a reasonable diversity of these methods as is appropriate to the subject matter. (Different methods of evaluation for students with special needs are available. Contact the Services for Students with disABILITIES Office.)

When peer evaluation is used, that component cannot count for more than 25 percent of the final grade. Students' grades are reviewed at the end of each session and they are informed of their academic standing.

At the beginning of each course, students will be advised in writing of the proposed manner in which evaluation will be carried out in each course. A student is expected to attend all lectures, discussion groups, seminars and laboratory periods of the courses in which they are registered. Instructors must inform their students about the relationship between attendance and their course grades early in each session. This should be indicated on the course outline and on the Composition of Grade Sheet, which shall be deposited with the appropriate Dean no later than the last date for course change.

Any penalties to be levied for late submission of an assignment must be transmitted to students in writing well before the due date of the assignment.

To obtain standing in a course a student must complete the necessary term work and final examination, where the latter is required, to the satisfaction of the department. Details concerning how this will affect the final grade must be communicated to the student before the last date for deposition of grading schemes.

Students should be informed that the rounding of their roughly computed score to comply with the 0, 2, 5, 8 marking scheme to arrive at a final grade shall be at the instructor's discretion. Marks may be rounded either up or down between any pair, and need not necessarily be rounded to the closest number ending in 0, 2, 5 or 8.

2. Grades

The following grades are awarded for undergraduate courses:

A 90, 92, 95, 98, 100

Academic Regulations

Reserved for students where work is of outstanding quality that provides clear evidence of a rare talent for the subject and of an original and/or incisive mind.

A 80, 82, 85, 88

Awarded for excellent, accurate work in which evidence of a certain flair for and comprehension of the subject is clearly perceptible.

B 70, 72, 75, 78

Indicates competent work that shows a sound grasp of the course goals without being distinguished.

C 60, 62, 65, 68

Represents work of adequate quality which suffers from incompleteness or inaccuracy.

D 50, 52, 55, 58

Given where the minimum requirements of a course are barely satisfied.

F 45 or lower

Means that minimum requirements have not been met and no credit has been given for the course.

AG Aegrotat Standing

Aegrotat standing is the granting of credit for a course(s), based on the course work already completed, when no further assessment - for example, a deferred examination - is considered feasible because of illness or other extenuating circumstances beyond the student's control. Students may only be granted Aegrotat Standing with the approval of the Dean of the Faculty offering the course.

SP Deferred examination

If a student is unable to write a formally scheduled examination, or having begun the exam, is unable to complete it, for reasons of ill-health, with supporting documentation, a Deferred Examination will be granted. Requests made on the basis of compassionate grounds or on the grounds of extenuating circumstances will be judged on a case by case basis. (See "Examinations" section for more information.)

SA Satisfactory

Used for co-op work terms, internship options and non-credit courses.

UN Unsatisfactory

Used for co-op work terms, internship options and non-credit courses.

Wxx Withdrawn (where xx is the week of withdrawal)

IN Incomplete

A temporary grade granted only in exceptional circumstances to a student who has been unable to complete some part of the term work in a course. A final grade must be submitted within 56 days of the last day of the examination period.

IP In Progress

Used only for fourth-year thesis and project courses or graduate courses (the list of acceptable courses is available in the Office of the Registrar). An IP for undergraduate courses must be cleared within 12 months of the initial registration, otherwise the student must reregister in that course and pay the appropriate course fee.

NR Not reported

CH/F Challenge grading

Grade awarded to indicate a successful/unsuccessful challenge for a credit course.

NW Not withdrawn

Grades applicable to Continuing Studies and Pre-service Faculty of Education courses only:

P1

P2

P3

P/F Pass/Fail

Wxx (as above)

IN (as above)

NR (as above)

NW (as above)

Grades are mailed to students about four weeks after the end of the examination period. Final grades may be released only by the Office of the Registrar.

3. Calculation of Averages

The average which is used to determine academic standing is computed by dividing the sum of the numeric grades assigned to credits by the total number of credits attempted.*

$$\text{Average} = \frac{\text{The sum (credit weight x grades)}}{\text{Total number of credits attempted}*}$$

*See regulations on repeated courses.

Only courses taken at Brock and courses taken elsewhere within a designated partnership program will be used in determining a student's average. At present, partnership

programs include Freiburg, Perpignan and Summer Studies in Italy. Courses taken on a Letter of Permission from Brock will be marked as Pass/Fail and will not be used in determining any student average. The Registrar's Office should include, as a note on a student's transcript, the exact name and title of the course taken on Letter of Permission, including the grade received at the offering institution.

Note: for the purposes of calculating averages, a value of 45 percent is used for all "F" grades. Transcripts, however, bear the actual grade of the course.

4. Deans' Honours List

Students are placed on the Deans' Honours List if they have completed the normal maximum course load in their program in the preceding Fall/Winter Session with an overall sessional average of 80 percent.

5. Repeating a Course for which a Passing Grade has been Awarded

Students may repeat a course in which they have received a passing grade. With the approval of the Registrar's Office, under the following conditions and within the degree program for which the course is being taken, the grade awarded for a repeated course will supersede the grade from the first attempt at the course and regardless of whether it is higher or lower. Both grades will remain on the student's transcript but the second grade, whether higher or lower, will be used in the computation of the student's average. A student will be permitted to repeat passed courses constituting no more than three credits, but no course may be repeated more than once.

However, without prior permission of the Dean, 1(alpha)00 to 1(alpha)99 courses, or other courses listed as prerequisites, may not be repeated if credit has been received for higher level courses in the same subject.

6. Repeating a Failed Course

A student may repeat a failed course, but no course may be repeated more than once. Both grades will remain on the student's transcript but the second grade will be used in the computation of the student's average.

IX. Graduation

1. Application for Graduation

Application for graduation at Fall Convocation must be received in the Office of the Registrar by August 1. Application for graduation at Spring Convocation must be received in the Office of the Registrar by March 1. These are fixed dates. If

these dates fall on a Saturday or Sunday, the closing is 4:30 p.m. the next working day. (Consult the "Fees" section for the applicable Convocation fee.)

The convocation ceremony is physically accessible for both graduands and their guests.

2. Requirements for a Second or Subsequent Degree

With the exception of the BA/BEEd, BSc/BEEd and BPhEd(Honours)/BEEd degrees, students may not pursue two undergraduate degrees concurrently.

An individual who wishes to pursue a second undergraduate degree must:

- have successfully completed the first degree with a minimum 65 percent overall average;
- make application for admission and be admitted to the second degree program (see Admissions for further information);
- fulfil all the specific requirements of each degree program including prerequisites, co-requisites and honours standing requirements (where appropriate).

To obtain a second degree, students must have completed, with satisfactory standing, at least 50 percent more credits beyond the first degree. The minimum total of credits for both degrees are:

- for a 20 credit degree and a second 15 credit degree: 28 credits;
- for a 20 credit degree and a second 20 credit degree: 30 credits;
- for a 15 credit degree and a second 15 credit degree: 23 credits;
- for a 15 credit degree and a second 20 credit degree: 28 credits (exceptions exist for BAcc and BBA subsequent degrees. Please see the appropriate calendar entry).

An applicant who has a bachelor's degree from Brock or another institution may be allowed to pursue undergraduate studies leading to a second bachelor's degree of the same or another designation under the following conditions:

- the principal area of study or academic emphasis must be distinct from that of the first degree. Prior approval from the principal area of study of the second degree must be obtained from the Dean of the appropriate faculty;
- the student must complete, with satisfactory standing, at least 50 percent more credits beyond the first degree (see required number of credits above);
- the student must meet all program requirements for the second degree.

For any second degree, an individual may take only those 1(alpha)00 level courses specifically required to fulfil the requirements for the second degree. Electives must be at the 2(alpha)00 level or above.

Academic Regulations

3. Requirements for Holding a Degree and a Certificate

Students wishing to hold both a degree and a certificate must fulfil the course requirements for both the degree and the certificate. Students may not be concurrently registered in a certificate program and a degree program. (See "Certificate Requirements" section for more information.)

4. Replacement Diplomas

Diplomas and certificates are prepared for students who have completed degree or certificate requirements as prescribed by Senate. Diplomas and certificates are presented at Convocation to students graduating from a degree or certificate program. Degree and certificate program graduates who are not able to attend Convocation may request that their diploma or certificate be sent to them by mail. Diplomas and certificates will be held in the Office of the Registrar for five years after the date of graduation.

Graduates may request, with payment of the required fee, a duplicate or reprinted diploma or certificate. A "duplicate copy" of a student's diploma or certificate will be issued 1) when a student requires a second copy of their diploma or certificate; 2) when, on request for a new diploma, the first copy of the diploma is not returned; and 3) when a statutory declaration (stating that the diploma or certificate has been lost, destroyed etc.) is not submitted. A diploma or certificate will be "reissued" (noting the date of reissue) when the first diploma or certificate is returned or a statutory declaration is submitted. The words "duplicate copy" or "reissued" will be affixed to all diplomas and certificates requested in this manner.

Questions regarding this policy should be addressed to the Assistant Registrar, Publications and Convocation.

5. Withholding of Degree or Grades

Final grades may be released only by the Office of the Registrar. No student owing the University fees or fines will receive a diploma, certificate, transcript or a statement of final grades or have any such statements communicated to parties outside the University, until such time as the debts have been cleared to the satisfaction of the University.

X. Student Records

1. Access to Records and Disclosure of Information

A. Student access

Students have the right to inspect all documents contained in their own record, with the exception of evaluations and letters of reference supplied to the University with the understanding that they be kept confidential.

Students have the right to request that erroneous information contained in their records be corrected and that recipients of any information found to be in error be advised of the correction.

Students wishing to inspect their record must make an appointment with an authorized official of the Office of the Registrar.

All official transcripts will be complete and unabridged. Partial transcripts cannot be issued.

Transcripts issued directly to students bear the notation "Issued to Student".

Documents pertaining to a student's achievement at another institution, which may have been received by the University will not normally be released or redirected.

B. Employee and student organization access

Employees of the University are permitted access to information contained in student records, if they need to know the information in order to perform their official duties. As a general rule, only employees involved in some aspect of academic administration or student affairs are given access to the contents of student records. The Brock University Students' Union (BUSU), as well as constituent organizations authorized by them, may obtain listings of students with names, addresses and telephone numbers for purposes of communicating with their membership. Listings will be provided by the Office of the Registrar upon written request signed by an authorized officer of BUSU with the understanding that the information will not be disclosed to third parties (and returned to the Office of the Registrar when requested).

C. Third party access

It is University policy to make a minimum of information freely available to all inquirers. This includes the student's active registration status, current field of studies and degree(s) that have been conferred by the University and the date(s) of conferral. Except as specified below other information contained in the record will be disclosed only with the student's written consent. This restriction applies to requests from parents, spouses, credit bureaus and police. Specified records or portions thereof may be provided to persons or agencies pursuant to a court order, summons or subpoena directing the University to release information; to Statistics Canada and the Ministry of Education in connection with enrolment audits; or in accordance with the requirements of duly constituted professional licensing and certification bodies.

In emergency situations involving the health and safety of an individual, or in compassionate situations, the Registrar or designate may, if it is considered to be in the best interest of the student, authorize the release of information needed to contact the student.

2. Name Changes

As Brock is committed to the integrity of its student records, each student is required to provide, either on application for admission or in personal data required for registration, his/her legal name. Any requests to change a name, by means of alteration or deletion, substitution or addition, must be accompanied by appropriate supporting documentation. Upon making application for graduation a student may be asked to provide proof of his/her name.

3. Transcripts

Copies of student transcripts will be issued at the student's request, subject to reasonable notice. Requests should be submitted in person or by writing to the Office of the Registrar. In accordance with the University's Policy on Access to Student Records, the student's signature is required for the release of records. Transcripts issued directly to the student are stamped "Issued to Student". Partial transcripts cannot be issued. The Office of the Registrar cannot be responsible for transcripts lost or delayed in the mail.

XI. Academic Misconduct

1. Definitions

Academic misconduct may take many forms and is not limited to the following:

A. Exams and Tests

- Impersonation of a candidate in an exam or test.
- Copying from another student, or making information available to other students knowing that this is to be submitted as the borrower's own work.
- Use of unauthorized material.
- Submission of a take-home examination written by someone else.

B. Laboratories

- Copying a laboratory report, or allowing someone else to copy one's report.
- Using another student's data unless specifically allowed by the instructor.
- Allowing someone else to do the laboratory work.
- Using direct quotations or large sections of paraphrased material in a lab report without acknowledgment.
- Faking laboratory data.

C. Essays and Assignments

- Submission of an essay written in whole or in part by someone else as one's own.

- Preparing an essay or assignment for submission by another student.
- Copying an essay or assignment, or allowing one's essay or assignment to be copied by someone else.
- Using direct quotations or large sections of paraphrased material without acknowledgment.
- The buying or selling of term papers or assignments.
- The submission of the same piece of work in more than one course without the permission of the instructors.
- Submitting whole or part of a computer program with or without minor modifications as one's own.

Individual instructors or Departments/Centres/Programs will point out areas of specific concern not covered above. Students should be encouraged to consult instructors in case of doubt. Plagiarism means presenting work done (in whole or in part) by someone else as if it were one's own. Associate dishonest practices include faking or falsification of data, cheating or the uttering of false statements by a student in order to obtain unjustified concessions.

Plagiarism should be distinguished from co-operation and collaboration. Often, students may be permitted or expected to work on assignments collectively, and to present the results either collectively or separately. This is not a problem so long as it is clearly understood whose work is being presented, for example, by way of formal acknowledgment or by footnoting.

Instructors should inform students what constitutes acceptable workmanship, proper form of citation and use of sources.

2. Procedures

Students shall not be penalized for suspected academic misconduct. It is the responsibility of the instructor to demonstrate the accuracy of the charge.

If the instructor can document a case of academic misconduct, the instructor shall inform the Department Chair/Director and the Office of the Registrar; the latter will not process any application for withdrawal from the course pending the outcome of the investigation of the case. If a charge of academic misconduct is subsequently brought by the instructor, no withdrawal from a course shall be considered valid.

The instructor and the Chair/Director together will interview the student, inform the student that he/she is being charged with academic misconduct and attempt to discover whether there are any extenuating circumstances. If upheld by the Chair/Director, the case will then be referred to the appropriate Dean along with any necessary observations and/or recommendations from the Department/Centre/Program. The student may, if wished, be accompanied to any interviews by one of the departmental student representatives or faculty, staff or student member of Brock such as, but not limited to, a representative from the Student Development Centre or the Ombuds Officer.

Academic Regulations

If the Dean is satisfied that a case of academic misconduct has been proven, s/he should inform the Office of the Registrar who, in the case of first offenders, will insert a permanent note in the student's file. The Office of the Registrar will inform the student in writing, of the action taken and outline the possible penalties for future infractions. The Office of the Registrar will note the transgression on the student's transcript in the case of second offenders. The notation will be removed from the transcript when the student graduates or three years after the last registration.

3. Penalties

A Dean who is satisfied that academic misconduct has occurred may impose the following sanctions:

- a) oral or written disciplinary warning or reprimand;
- b) lower grade or failure on the assignment or examination;
- c) failure in the course;
- d) suspension from the University for a definite period;
- e) notation on student's official transcript;
- f) withholding or rescinding a Brock degree or certificate.

4. Appeals

Following a Dean's decision on the charge of academic misconduct, all appeals relating to the charge, penalties assigned, suspensions, notations on transcripts or withholding or rescinding of a degree or certificate will be heard by the Senate Committee on Appeals. Students must ensure that they follow the prescribed process and meet with required individuals prior to submitting an appeal to the Senate Committee on Appeals. Students who submit an appeal to the Senate Committee on Appeals without following the prescribed procedure will have the appeal returned without a decision. There is a fee charged for an appeal to the Senate Committee on Appeals. The fee will be refunded only if the appeal is successful.

XII. Appeals

1. Types of Appeals

A. Appeal of grades

Students who have a question regarding the final grade in a course must first discuss the matter with the course instructor. (Failure in itself is not a valid reason for an appeal.) In the event of an unresolved disagreement, the student must refer the matter to the Chair/Director of the Department/Centre/Program. If not satisfied, the student must then refer the matter to the Dean of the Faculty. If the student is not satisfied with the decision of the Dean, the student may then appeal to the Senate Committee on Appeals.

Appeals of final grades, including the assignment of a failing grade for non-attendance in a course, must be made **within 180**

days of the mailing of grades by the Office of the Registrar. If the absence of the instructor, or other factors make an appeal within 180 days impossible, the intention to appeal should be indicated to the Chair/Director of the Department/Centre/Program **within 180 days of the mailing of grades** by the Office of the Registrar.

In circumstances which prevent the student from presenting information in a timely fashion, a student must present documentation of mitigating evidence, to the Registrar. Upon validation of the documentation, the appeal will be processed.

B. Appeals related to academic requirements/decisions

A request for an exemption to a departmental degree requirement must be directed to the Chair/Director of the student's major Department/Centre/Program. (Combined majors shall appeal to the Department/Centre/Program directly affected by the request for an exemption.) If not satisfied with the outcome of the request, the student will then refer the matter to the Dean of the Faculty. If the student is not satisfied with the decision of the Dean, the student may then appeal to the Senate Committee on Appeals.

A request for an exemption to a University or Faculty degree requirement must be directed to the Dean of the student's faculty. If the student is not satisfied with the decision of the Dean, the student may then appeal to the Senate Committee on Appeals.

C. Requests for retroactive registration and backdated withdrawal

Within 12 weeks of the last day of class, a backdated withdrawal will be considered upon the receipt of a request which is supported by documentation verifying medical reasons or compassionate grounds. Documentation must indicate the reason(s) the student was not able to withdraw on the last day for withdrawal or must note the medical reason(s) or compassionate grounds which will make it impossible for the course to now be completed. Requests submitted without supporting documentation will not be considered. Forms are available in the Office of the Registrar.

Prior to the last day of lectures, a request for retroactive registration will be considered upon the receipt of supporting documentation which outline the reason(s) why formal registration did not occur. This documentation must be accompanied by a *Request for a Retroactive Registration* and a *Course Change Form* signed and dated by the course instructor verifying that the student has been in continuous attendance. Forms are available in the Office of the Registrar.

Requests for retroactive registration or backdated withdrawal are considered and a decision rendered by the Registrar.

Students wishing to appeal the decision of the Registrar must refer the matter to the appropriate academic Dean. If the student is not satisfied with the decision of the Dean, the student may

then appeal to the Senate Committee on Appeals. Appeals to the Senate Committee on Appeals must be typed, must provide any additional documentation not submitted to the Dean and must be accompanied by the appeal fee. The fee will be refunded only if the appeal is successful. When appropriate, the grade NW (Not Withdrawn) may be assigned by the Senate Committee on Appeals within the specified appeal period and when supporting documentation is supplied by the student.

D. Appeals of changes of academic misconduct

Following a Dean's decision on the charge of academic misconduct, all appeals relating to the charge of academic misconduct, penalties assigned or notations on transcripts will be heard by the Senate Committee on Appeals.

2. Appeals Procedures

A. Method of appeal to the Senate Committee on Appeals

All appeals directed to the Senate Committee on Appeals must be received in type-written form. Submissions not received in this form will be returned to the student without decision. Appeals should be submitted to the Secretary of the Senate Committee on Appeals, in care of the Office of the Registrar.

Appeals must clearly state the arguments and expectations of the student. The onus is on the student to demonstrate the validity of their appeal and to provide full and appropriate supporting documentation. Dissatisfaction with University policy and ignorance or neglect of published deadlines will not constitute sufficient grounds for appeal.

Appeals of academic decisions must be made **within 30 days of the date of the letter** informing the student of the academic decision or within 30 days of the mailing date of the Statement of Standing which informs the student of the academic decision and/or final grade.

Appeals based on emotional or medical problems must be supported by a certificate from a licensed medical practitioner or other professional indicating specifically the student's inability to fulfil the requirements being appealed.

A student may abandon an appeal at any time during the particular process.

B. Required Medical Documentation

It is the University's policy to accept medical certificates from qualified medical practitioners attesting to a student's inability to write a test, examination etc. due to an incapacitating medical condition at the time of the scheduled test, examination etc. The department may, at its discretion, request more detailed documentation in particular cases.

Medical documentation must be written on the physician's letterhead (or show the physician's address and telephone

number) and must include the student's name and date the student was examined by the physician and must bear the physician's signature.

C. Hearings at the Senate Committee on Appeals

Meetings of the Senate Committee on Appeals are held *in camera*.

In accordance with the rules of natural justice, students appealing to the Senate Committee on Appeals have a right to a fair hearing. This includes the right to be notified of the date on which the student's appeal will be considered, the right to attend and present verbal arguments and the right to question the Dean (or the person designated by the Dean) or the Registrar.

Students must inform the Secretary of the Committee of their intention to attend the meeting.

Students are entitled to bring one faculty, staff or student member of Brock University while attending the meeting of the Senate Committee on Appeals.

If a student has asked to attend the meeting of the Senate Committee on Appeals, the Dean (or the person designated by the Dean) whose decision is being appealed will be invited to attend that meeting of the Senate Committee on Appeals.

The Senate Committee on Appeals may request the attendance of appropriate individuals to appear before the Committee to provide information pertinent to the appeal.

Where the appeal is against an assigned final grade, the faculty member named in the appeal will be invited to attend the meeting of the Senate Committee on Appeals.

In instances where a faculty member, Chair/Director is named in an appeal, the student's submission will be available to the individual named.

At the request of the student, the written response of the faculty member, Chair/Director or Dean to an appeal will be made available to the student.

The student and the Dean, and where applicable the Chair/Director and faculty member, will be informed in writing, of the decision of the Senate Committee on Appeals.

The decision of the Committee is final.

Life at Brock

I. Student Organizations

A. Brock University Students' Union

<http://www.brocku.ca/busu/> or www.BUSU.net

All registered undergraduate students are members of the Brock University Students' Union (BUSU). Each spring, union members elect a President, Vice-President of Finance and Administration, Vice-President of Student Services and a Vice-President of University Affairs to preside over BUSU and the Student's Administrative Council (BUSAC). BUSAC is comprised of student representatives from each faculty in the University, Concordia Lutheran Seminary, the residences including representatives for off-campus students, part-time students and students with diverse abilities.

BUSAC acts as a political lobby and social organizer and it is responsible for managing the affairs of the union and implementing policies for the students of the University.

Through students fees, BUSU sponsors and supports such programs as orientation week, the General Brock and Sophie's store, the Social Awareness Resource Centre (SARC), the Ombuds officer, the Brock *Press*, food bank, emergency student loan program, charity fund raisers, the Foot Patrol, as well as providing all the entertainment for Isaac's. BUSU also sponsors over 50 clubs a year, all of which are open for membership to all Brock students.

B. Ombuds Officer

There may be occasions which cause students to feel that they are victims of unfair treatment. For guidance in both academic and personal matters, students can contact the Ombuds Officer.

For assistance in getting through red tape, injustice, conflict and harassment, although not a lawyer, the Ombuds Officer has access to expert legal advice, should it be necessary. It is important that all students become familiar with their academic rights and responsibilities. Read the regulations found later in this calendar. The Ombuds office is located in the Alumni Students' Centre

C. The Alumni Students' Centre

This is the ninth year of operation for the Alumni Students' Centre. This building is a milestone in Brock's history as it is funded and operated solely by students. Some of the services found in the Students' Centre are: the BUSU offices, Isaac's Bar and Grill, Sophie's Variety store, the Brock *Press*, a travel agency, the Social Awareness and Resource Centre (SARC), the Foot Patrol office, Video Games and a photocopy service.

D. Ontario Public Interest Research Group (OPIRG - Brock)

OPIRG is a student-directed and funded organization that provides an outlet for Brock students to actively work on a variety of environmental, social justice and health issues. Through research, education and action, students will gain insight into the interrelationships between different social issues, while improving their skills and providing valuable information in the community.

All students are invited to participate in the activities of OPIRG. Students who do not wish to support the work of OPIRG are encouraged to get a refund of their student fees from the OPIRG office, located in Room 306 of the Student Centre.

II. Alumni Affairs

With your graduation comes a new relationship with the University. You will have joined the more than 39,000 members of Brock's Alumni Association. Full membership privileges (including special membership prices at the Physical Education Complex, the Brock Centre for the Arts and the James A. Gibson Library) are available to anyone who holds a degree or certificate from the University.

As part of a worldwide network, there are many ways to keep in touch with the University and your fellow graduates. The Alumni Affairs office is your main contact. The goal of the Alumni Office is to develop and foster programs that serve Brock graduates. The programs organized by the Alumni Office include Homecoming, affinity programs, networks of graduates across Canada and internationally, reunions, student alumni program and the Brock Ambassadors. The Alumni office also works closely with the volunteer members of the Alumni Association representing the collective interests of Brock's alumni.

Contact is maintained with our growing number of graduates through *Surgite* magazine, published four times a year. Also, Brock's TeleGrad Office contact all graduates to provide an update on what is happening at Brock and to invite support for the University's annual giving program, capital appeals or surveys. The students are the beneficiaries of the support from Brock's graduates.

III. Alumni Association

The mission of the Brock University Alumni Association is to foster a spirit of loyalty to the University among the graduates; to support the University by promoting its welfare and advancing its interests and influence; to maintain and promote unity and a spirit of friendship among graduates; to raise funds on behalf of the University; and to maintain a fund or funds

and to apply the interest from this for charitable purposes including making awards to individuals or organizations with the University to assist in the promotion of education, arts and recreation; and to develop and maintain strong links to the various bodies within the University, both academic and administrative, to foster a greater understanding of alumni issues and needs.

Each year, the Alumni Association presents a number of awards and scholarships for academic excellence. A \$500 Alumni Student Award is given to a third- or fourth-year student who has contributed to the extra-curricular life of the University while maintaining a satisfactory grade. The Badger Award is to honour a graduating student who has demonstrated outstanding leadership qualities by their involvement in the extra-curricular life of the University, while maintaining an above average academic standing. The Jim Gayman Bursary is presented to an outstanding residence student and the Alumni Award for Excellence in Teaching is presented to an outstanding faculty member. In addition, the Alumni Association has established a scholarship to support a student entering the Oenology and Viticulture program.

For information about the Alumni Association, contact the Alumni Office, Thistle 263, (905) 688-5550, extension 3816.

IV. Development Office

The aim of the Development Office is to develop and maintain programs which will attract maximum private sector support to advance the objectives of Brock University. The office is responsible for the co-ordination of all fund-raising activities at Brock.

Gifts can be made to one of three charitable organizations that have been created to serve the needs of Brock University; Brock University (a registered charity), The Brock University Foundation (a Crown foundation), and the Friends of Brock University Inc. (a foundation established to facilitate receiving charitable gifts from U.S. citizens).

Outright gifts of cash, either pledged over time or as a one-time donation, gifts-in-kind such as scientific or office equipment, departmental and library books and journals, and financial support for student awards, are some of the many ways donors support the work of Brock University.

Donations to Brock University are eligible for a charitable receipt for income tax purposes.

Your interest in the University can be perpetuated with a planned gift. A bequest is an example of a planned gift. It is expressed through your will by simply stating that Brock University is to receive a certain sum of money, a specified piece

of property (art, books, life insurance, real estate, etc.), a stated percentage, or residual interest in your estate after other obligations have been satisfied. Life insurance, annuities, residual/remainder interest and trusts are some of the other forms of planned gift arrangements available to a donor. These gifts are designed to meet the needs of the donor and Brock University by maximizing the potential of the value of the gift over extended periods of time. Deferred giving allows you the opportunity to provide the financial support for an endowed gift in honour of an individual.

The Development Office also maintains a list of those companies which will match your donation.

In these times of diminished tax based support, the contributions of individuals and organizations have never been more necessary. Donations large and small will make a great difference to the long term stability of Brock. Our donors help us to improve our programs and facilities and greatly assist our ability to continue to attract and keep deserving and excellent students, faculty and staff.

The Development Office welcomes the opportunity to consult with you. The University's Donor Recognition Policy will suitably acknowledge your support.

For further information please write or call:

The Office of External Relations
Brock University
St. Catharines, Ontario
L2S 3A1

Telephone: (905) 688-5550 ext. 4320
Fax: (905) 641-5216

Charitable Business Number R118819531 RR

Academic Support Services

I. University Library

Schmon Tower

<http://www.brocku.ca/library/>

The Library is central to the academic programs of the University. Its function is to provide access to information in a variety of formats to support both teaching and research programs. The library staff, aided by the University community, works to make the Library a base for teaching, study and research. The University Library comprises the James A. Gibson Library and the Map Library.

The James A. Gibson Library is housed on seven floors of the Schmon Tower, the focal point of the campus. All students have access to its collections, numbering over one million items. Individual study and specialized seating is available for 800 readers. The Library is open, including evenings and weekends, for over 90 hours each week; hours are extended during exam periods.

Detailed information on collections, services and hours can be found in a series of printed guides available in the Library and is also available on the Library's Web page.

Access to Resources

Access to the collections is available through an online catalogue which may be searched from computer work stations on each floor of the Library, elsewhere on campus or from any location off campus using a computer and a modem.

The Library home page (<http://www.brocku.ca/library/>) is designed to help Brock Library users locate information on the World Wide Web. It offers direct access to the on-line catalogue, a large number of electronic databases, electronic journals and a broad range of other subject resources.

Assistance in Using the Library

Librarians are available at the Reference Information Desk on the main floor to assist in the use of the collections and other resources. Individual and group orientation tours are provided at the beginning of term, while, library instruction and subject-related seminars are scheduled on request. Special services are provided for students who are taking courses at off-campus teaching sites; details may be obtained from the Reference Information Desk.

Services for Students with Disabilities

The Library is wheelchair accessible. Equipment for the use of special needs students has been installed in the Library, access to which must be arranged with the Services for Students with disABILITIES Office in the Student Development Centre (Schmon Tower, fourth floor). These students may also apply, in the Library, for the use of individual closed study carrels and lockers. The Brock catalogue is available at an adjustable work station which has voice-over and large print capabilities. The Library can also provide access to talking book material. Students with special needs are encouraged to ask Library staff for assistance in retrieving library materials or in using equipment. Further information is available at the Reference Information Desk.

Other Library Services

Debit card photocopy machines are located throughout the Library. One coin-operated machine is available on the main floor. Equipment is available for reading and for making paper copies from microforms and for printing from library work stations. Requests for special copying should be directed to staff in the Photocopy Office.

Library Collections

The Library maintains a number of separate collections. The Reserve Collection contains heavy-demand books and articles which are required course reading. The Government Documents Collection contains official publications of all levels of government and of international organizations and is an important source of information on a variety of economic, social and political subjects. The Library is a selective depository for Canadian federal publications and a full depository for Ontario provincial publications. The Niagara Regional Collection, located in Special Collections, contains materials published about or in the Niagara Region. The Sound and Video Collection contains recordings of music, plays, documentaries and lectures, and a collection of instructional and cultural videos. Players for records, compact discs and cassette tapes are provided, plus viewing stations for video cassettes and laser discs. The Microforms Collection is a major research resource and includes journals (especially extensive runs of major newspapers), books, theses and a complete collection of ERIC reports.

Borrowing from Other Libraries

Items not available in the Library's collections may be borrowed from other libraries through the Interlibrary Loan/Document Delivery Service. Students may also visit any other university library in Ontario to use its resources and while there, may borrow books which normally circulate (except from the University of Toronto). These books may be returned

directly to the library from which they were borrowed, or may be returned via the Circulation Desk at Brock.

II. Map Library

Colleen Beard, Map Librarian
Mackenzie Chown C306
<http://www.brocku.ca/maplibrary/>

The Map Library is located in the Mackenzie Chown Complex, Room C306. It contains 54,000 map sheets, including a complete set of Canadian federal topographic maps, geologic maps, hydrographic charts, local trails and many other special-purpose maps, 1,000 atlases and 16,800 airphotos of the Niagara Region dating from 1921 to the present. The Map Library carries an extensive collection of digital geospatial data, including Niagara topographic, soil, agriculture and census data, outline maps, as well as a selection of electronic world atlases. A PC cartographic workstation is available for accessing digital map products and also supports GIS (Geographic Information Systems). A description of the collection, an electronic census atlas of Niagara, and digital outline maps are accessible through the web site at <http://www.brocku.ca/maplibrary/>

A color DeskJet printer and a photocopier with enlargement and reduction features are available.

The Map Library is wheelchair accessible. Students with special needs who require assistance in retrieving library materials or in using equipment should ask Library staff.

The Map Library resources and facilities are available to the general public for reference purposes. Orientation tours are available on request.

III. Instructional Resource Centre

Joanne Smith, Manager
Faculty of Education
<http://www.ed.brocku.ca/departments/irc.html>

The Instructional Resource Centre provides specialized library, media and computer services for the Faculty of Education. The IRC curriculum libraries are located on Floor 2 of Robert S. K. Welch Hall (St. Catharines Campus) and in Room 6/7 at the Hamilton Campus (1842 King Street East, Hamilton). The curriculum libraries offer a variety of curriculum resources to support elementary and secondary teaching as well as a special collection of Master of Education projects and theses.

IRC Media Services are located on Floor 2 of Robert S. K. Welch Hall (St. Catharines Campus) and in Room 6/7 at the Hamilton Campus. In addition to providing classroom audio-visual equipment, Media Services has production areas with laminating presses, lettering systems, transparency makers, video editing facilities and other equipment to assist in the production of teaching aids.

IRC Computer Services offers three computer laboratories in Robert S. K. Welch Hall (ED205, ED311A and ED319). Two computer laboratories are located at the Hamilton Campus in Room 8 and Room 14.

The IRC is wheelchair accessible. Students with special needs are welcome to ask library staff for assistance in retrieving library materials or in using equipment.

Although focusing on the specialized needs of the Faculty of Education, all members of the University community may use the IRC's library and media facilities.

IV. Information Technology Services

Jim Lennard, Director
Mackenzie Chown F301
<http://www.brocku.ca/compservices>

The University's Computing Centre, which services both the academic and administrative needs of the University, is located in F block of the Mackenzie Chown Complex. It houses a Unisys Clearpath NX4600 enterprise server and several NT servers to support administrative computing and 4 large Silicon Graphics UNIX servers to support academic teaching and research. Information Technology Services also supports many departmental UNIX machines placed throughout the University. All of these machines are networked via the campus-wide fiber optic backbone which is also connected to the Internet.

Computing facilities are available to all faculty, staff and students. Students requiring the use of specific pieces of software on the servers are supplied with a user code by their instructor, otherwise general Internet access and electronic mail accounts are freely available via an automated system in any of the general computer labs on campus.

The academic systems support standard programming languages such as FORTRAN (77/90), PERL, C and C++, together with a number of application packages which include SAS, SPSS, IMSL, Gaussian94 and MATHEMATICA.

The University supports scheduled micro labs and drop-in labs for general purpose academic use. The scheduled facilities are located in rooms A203, F316, F317, J201, J202 and TA304.

Academic Support Services

the Windows operating system on 46 Pentium microcomputers; F316 contains 24 Power Macintosh computers; F317 is a Windows lab with 20 Pentium computers installed with colour monitors; J201 supports 48 Pentium microcomputers; J202 supports 41 Pentium colour microcomputers. During the Fall and Winter terms, some micro computing labs are open from 7:30 a.m. until 1:00 a.m. All computer labs are networked and have Internet access. Each year the technology is reviewed and upgraded as required in order to have the necessary equipment for academic needs. All computer labs have a wheelchair accessible work station.

Communications and Network Services, a division of Information Technology Services, provides multiple services for Faculty, Staff and Students. Located in the west corridor of the Thistle Complex, the Media Services section supplies portable computers for teaching and student presentations. Other equipment available for classroom use includes overheads, flip-charts, slide projectors, video cassette recorders, portable stereo systems, and video projection systems. Equipment requests must be at least 24 hours in advance and can be scheduled by calling extension 3588.

Our technical support team services Brock University's microcomputers and associated network infrastructure. Additionally, Communications Services ensure telephone, network access and cable television is available to all on campus residential students. During the academic term staff may also assist students with configuring their personal computers for network access and when appropriate, repair computers. The network centre staff is responsible for network operations and assigning network addresses to student computers. Student photo identification cards are produced during normal working hours.

Office hours are: Monday to Thursday, 8:00 am to 9:00 pm and Friday, 8:00 am to 4:00 pm. Communication and Network Services can be contacted by dialing extension 3260.

We hope that you do not experience any type of harassing behaviour during your time at Brock. If, however, you feel upset or confused by any behaviours similar to those given above, please come and talk to me about it. All visits are confidential. I can help you clarify the situation so that you can decide on a course of action or I can act on your behalf.

For more information, drop in or call (905) 688-5550, extension 4019.

V. Sexual Harassment Adviser

Ann Bown, Adviser
Decew Residence 221, extension 4019

Sexual harassment is unwanted behaviour in the form of sexual advances, requests for sexual favours or physical or verbal conduct of a gender- or sexually-oriented nature that interferes with your studies or academic performance by creating an intimidating, hostile or offensive academic environment.

Facilities and Services

I. Athletics and Recreational Services

*Administrative Assistant, extension 3384
Physical Education 215*

1. Athletics

Paul Dupré, Director
Physical Education, 213

Brock University's Department of Athletics provides students with the opportunity to take part in athletics both as participants and fans. Interuniversity activities are available to all students and cater to those interested in the pursuit of excellence.

As a member of Ontario University Athletics, women's teams compete with other universities in basketball, fencing, rowing, volleyball, cross-country running, soccer, curling, wrestling, rugby, badminton, figure skating and swimming. Club programs are available in field hockey and lacrosse.

As a member of Ontario University Athletics the men's teams compete in basketball, cross-country running, curling, fencing, hockey, rowing, rugby, soccer, golf, tennis, swimming, badminton and wrestling. Club programs are available in baseball and lacrosse.

Brock Badgers Athletics is a member of the Canadian Intercollegiate Athletic Union (CIAU). The CIAU is the governing body for university sport in Canada. Each year 10,000 student-athletes across Canada participate in a competitive schedule of approximately 300 events starting in September and continuing to March.

The Brock University Athletic Therapy Clinic provides prompt sport medicine care to varsity athletes, full-time students, staff, and high school athletes.

Brock's team of sport medicine specialists has a wealth of experience to draw on from various major international competitions such as Olympic Games, Pan American and Commonwealth Games and World Championships. This experience allows the teams to focus on whatever needs an athlete may have and help facilitate a quick recovery.

2. Campus Recreation

Karen McAllister-Kenny, Director
Physical Education, 215A

The Campus Recreation Department offers a wide range of recreational, competitive and instructional activities for all levels of ability. The aim of the program is to provide an opportunity for physical activity through competitive leagues, recreational leagues and instructional programs that can enrich student life.

Recreation: For those who prefer not to participate in structured programs, squash, racquetball and tennis courts may be booked in advance; gymnasium, pool and strength training facilities are available as posted.

Competition: Team and individual leagues are offered on a scheduled basis, with officials, league standings and playoffs. Different levels of play are available. Men's, women's and co-ed programs are offered. Leagues include slow pitch, flag football, ball hockey, ice hockey, basketball, volleyball, soccer, inner tube water polo, curling, squash, tennis, badminton and broom ball.

Instructions: If you want to be introduced to a new activity or want to improve existing skills, join one of the instructional programs. Non-credit courses are offered including ballroom dance, swing dance, fitness, squash, tennis, strength training, fencing, rock climbing, yoga and tai chi. Numerous levels of fitness classes are offered including Tae Box, step and interval training and more. Certification programs including CPR, First Aid, fitness leadership, Sports Injury Care and National Coaching Certification are available.

3. Facilities and Aquatics

Herb deBray, Manager
Physical Education, 301

Programs and facilities are designed to involve as many members of the University community as possible, with all levels of ability, as participants and as fans in the Physical Education Complex.

Facilities include two gymnasiums, combative room, fencing/dancing studio, strength and fitness centre, squash courts, racquetball courts, a card room and a 50 metre eight-lane swimming pool. Facilities also include an indoor training centre for rowing complete with rowing tanks, ergometers, and weight room area. Classrooms, the Badger Shop (clothing store), a food court and offices are also included.

Facilities and Services

Four outdoor all-weather tennis courts and numerous fields compliment the indoor facilities.

As the largest assembly area on campus the complex is also used for examinations and convocation.

All activity areas within the Physical Education Complex are fully accessible to students with special needs. The activity level area is accessible by the elevator from the lobby area or directly from the ground entry level. Specific aquatic needs will be provided upon request through Aquatics staff.

In Spring of 2000 the University started the construction of a Health and Fitness Centre which will add the following facilities to the existing ones: 4 gymnasias, an indoor 200m running track, a climbing wall, a fitness centre, 2 multi-purpose studios, a food court and a student lounge. The Health and Fitness Centre will open in September of 2001.

II. Book Store

Trudy Lockyer, Manager
Thistle 219

The Book Store, conveniently located in the Thistle Corridor, is the primary source of required textbooks (new and used) and recommended reading materials. It also stocks a wide selection of academic and general books including dictionaries, study and essay writing guides. A special order service is available at any time. The Book Store also stocks stationery, cards, magazines, clothing and memorabilia, computer hardware, software and computing supplies. Help is readily available, on request, for persons with special needs.

Book Store hours: September to June: Monday - Thursday 9:00 a.m. to 7:00 p.m., Friday to 4:30 p.m.; July and August: Monday - Friday 10:00 a.m. to 4:30 p.m.

III. Parking Services

Sam Cusick
Schmon Tower 1220, extension 4309
<http://www.brocku.ca/parking>

At a busy university the demand for parking facilities is great, and Brock is no exception. However, unlike many other universities, Brock offers some free parking. There is, of course, great demand for the free spaces and students will often

find this lot full by 8:15 am. There is plenty of other parking options available at the University. For a detailed list of options, please visit our website: www.brocku.ca/parking.

During the 2000-2001 year, there will be a large quantity of construction taking place across the campus, which will hinder some of our convenient parking. Please bear with us during these times of change.

IV. Day-care Centre

Leah Lautenbach, Director
Day-care Centre, extensions 3515 and 4433

The Rosalind Blauer Centre for Child Care offers licensed day care for 56 children from three months to five years, 12 months per year. A school age program for six to 12 year old children is available during the summer months. The centre offers full- and part-time programs and is open to Brock students, staff and faculty of the University and community members. Hours of operation are Monday through Friday 7:30 a.m. to 6:00 p.m.

The Centre is a non-profit charitable, parent co-operative and is operated by a volunteer board of directors. All the staff are qualified Early Childhood Educators. The Day-care is located in a large, well equipped building that was completed in 1995. Subsidies are available for those families who qualify.

Student Services

I. Office of the Associate Vice-President

Bonnie G. Neuman, Associate Vice-President,
Student Services

Schmon Tower 401, extension 3418

Monday to Friday: 8:15 – 4:30

Wednesday: 8:15 – 6:00

Closed: 12:00 – 1:00

Administrative Assistant, extension 3418

The Associate Vice-President (Student Services) has two central mandates. The first mandate is the development, enhancement and integration of student services, policies and programs to support a high quality student life at Brock, and improve students' success in their academic experiences.

The second mandate is the development and implementation of enrollment management policy and programs to build an entering class with excellent and diverse backgrounds through recruitment initiatives, and retain students through the completion of their degrees, by implementing advising and support services to increase student success.

Students are encouraged to engage in and support student affairs on campus through participation in volunteer activities, paid work placements and committee involvement. Opportunities for student participation in Student Services include residence life staff, residence advisory council, residence security, residence dons, campus tour guides, health peer educators, financial peer assistants, career services assistants, the student peer advisory committee on non-academic discipline and student representation on other Student Services committees. The Associate Vice-President's office co-ordinates several committees which provide a forum for student input on issues such as student affairs, campus accessibility, equity, race relations, non-academic discipline and campus alcohol policy and education.

The Associate Vice-President is available to assist students with their concerns. Students are invited to contact the Administrative Assistant, to arrange an appointment. The Associate Vice-President provides leadership and direction to the following Student Services administrative units:

Student Development Centre

Aboriginal Student Services

Learning Skills Services

Personal Counselling Services

Services for Students with disABILITIES

Student Non-Academic Discipline

Campus Ministries
Career Services
Health Services
International Services
Office of the Registrar
Academic Services (Advising)
Academic Appeals
Admissions
Examinations and Scheduling
Financial Aid and Awards
Student Records and Registration
Recruitment and Liaison Services
Residence and Food Services

Student Development Centre

Administrative Assistant, extension 3240

Schmon Tower 400

1. Aboriginal Student Services

Sabrina Redwing Saunders, Adviser, *extension 4273*

Schmon Tower 400

Monday - Wednesday: 8:30 – 4:30

Closed: 12:00 – 1:00

Our goal is to help Native, Inuit and Metis students make a smooth transition to life at Brock. We offer services in a culturally sensitive manner and encourage students to maintain or even increase their cultural identity while in the university setting. Services include:

- liaison and referral services for students to both the Brock campus and the local communities;
- providing programming and campus wide Aboriginal events;
- promoting awareness of Aboriginal culture on campus;
- advocating on behalf of Aboriginal students within the University community;
- providing information on Native, Inuit and Metis specific scholarships;
- maintaining an Aboriginal resource library including newspapers, texts and CDs;
- providing training to Brock faculty and staff.

2. Learning Skills Services

Fran Young, Contact Person, *extension 3114*

Schmon Tower 400

Learning Skills Services helps Brock students improve their academic success at university. Assistance is available to help you with any study or writing issues that arise while you are a student at Brock. These issues may range from the challenges

Student Services

of transition from high school to university, to preparing for upper-year exams or writing your honours thesis. Learning Skills Services will help you develop the study strategies you need to reach your full learning potential.

A variety of workshops is available throughout the year for a nominal fee. Workshops will address students' study skills needs in areas such as: managing your time, managing stress, taking notes, reading, writing university essays and preparing for exams. Collaborate with a group of your new Brock friends: any group of five students can "order a workshop" at a time convenient to them. In addition, *Study Write!*, our drop-in service, is available to assist you with your studying or learning issues. Check at ST400 for days and times.

3. Personal Counselling Services

Les McCurdy-Myers, Manager, extension 4750
Schmon Tower 400

Personal Counselling Services provides three key areas of service to the Brock community:

- group and individual services to students who are experiencing social/personal difficulties while studying at Brock;
- leadership development; and
- consulting with students, faculty and staff.

Personal Counselling Services assists Brock students with personal concerns in a number of ways. Many students seek help with specific concerns about relationships, self-confidence, weight preoccupation, loneliness, loss, stress management, sexuality, academic difficulties etc. Others ask for our help on less clearly defined issues such as low motivation or a feeling that things just are not right. If something is bothering you, there is someone objective who can help with:

- professional, confidential, individual counselling, at no cost to you. Individual counselling is typically short-term, averaging three to five sessions and builds on students' strengths;
- multiple session group programs developed to meet students' interests;
- responding to crises situations throughout the Brock community;
- self-help materials in our resource area.

Personal Counselling Services provides leadership development by:

- designing and facilitating training workshops for student and staff groups in areas such as basic listening skills, meeting/group skills, stress management and team building; and
- providing on-going clinical supervision with student groups such as the residence life staff and

the financial peer assistants.

- offering the Foundations in Leadership practica series.

Our Manager acts as a consultant to the Brock University community in a number of areas by:

- providing psycho-educational programming on topics such as anger management, grieving and assertiveness;
- advising students, faculty and staff who are concerned about the behaviour of someone they know;
- assisting with student projects, theses and seminars; and
- fostering and assisting in the development of self help groups.

To meet with a Counsellor/Therapist to see if we can help, just call extension 4750 or drop in to ST400 to set up an appointment. Evening and off-campus appointments can be arranged. Whatever your concern, you do not have to be alone.

4. Services for Students with disabilities

Trish Muchynski, Manager extension 4153
Schmon Tower 400

Brock encourages and supports the full participation of students with disabilities in all aspects of campus life. Services for Students with disabilities provides accommodations and services for students who require academic support due to the impact of a physical, medical, sensory, mental health or learning disability.

All services and accommodations are determined on an individual basis, depending on your documented needs. Services include:

- support services: use of a note taker, compensatory strategy assistance, exam accommodation, use of adaptive equipment and liaison with faculty. Screening and limited diagnostic assessment for learning disabilities are available on campus;
- adaptive technology: specialized computer software and other technical aids are available for use in the Student Development Centre and in locked carrels in the Library. Please see your case manager about your technology needs and to obtain access to equipment;
- library services: a designated reference librarian to co-ordinate library services for students with disabilities. Library services include obtaining text on tape, assistance with computer searches and locating materials in the library;
- accessible facilities: most facilities at Brock are wheelchair accessible. For a special accessibility tour of campus, please contact the Recruitment and

Liaison Office. There are 17 accessible housing units on campus;

- attendant care: limited attendant care service is available through the Ontario March of Dimes. If you require in attendant care, contact the Student Development Centre.

Students are advised to contact the Student Development Centre early in the application process to exchange information about their needs and the services available. This exchange will in no way impact your acceptance at Brock. After being admitted to Brock, you must make an appointment with your case manager to provide appropriate documentation of your needs, preferably before the beginning of term. Your case manager will review your needs and assist in setting up the accommodations and support services you require.

5. Student Non-Academic Discipline

Cathie Closs, University Discipline Officer, *extension 3240 Schmon Tower 400*

The University Discipline Officer provides advice and support to students, faculty and staff related to issues of non-academic discipline for students. The University Discipline Officer sits on the Committee on Non-Academic Discipline to advise on policy and procedures, supervises the training, organization and implementation of student peer Discipline Hearing Panels, attends hearings, and relays hearing decisions to individual students, the Associate Vice-President (Students Services), Campus Police and, where appropriate, the BUSU Business Manager and the Director of Residences. For more information on Non-Academic Discipline, see the University Calendar (Code of Student Conduct and Appeals in Non -Academic Matters, or see Brock's web page (www.brocku.ca))

II. Campus Ministries

*DeCew Residence 201 and 202, extension 3373
www.brocku.ca/ministries*

Reverend George Tattrie
(Protestant Ecumenical Chaplain)
Donna Hollands-Hurst (until June 30, 2000)
(Roman Catholic Ecumenical Chaplain)
Lenny Holierhoek, Co-ordinator,
Justice and Peace Programs (RC)
Peter Schuurman
(Christian Reformed Ecumenical Chaplain)

1. Chaplains' Office

Campus Ministries believes that spiritual development is an integral part of the university experience and provides people

oriented ecumenical worship, spiritual direction, pastoral counselling, workshops, seminars, study groups and public lectures.

The chaplains are appointed by several religious denominations and are available to discuss any topic with you, particularly concerning spiritual and ethical aspects of your life.

Anyone who wants to be a part of a faith community, to share concerns and experiences or to speak in confidence about any matter is welcome to contact any of the on-campus chaplains in our DeCew Residence Office.

2. Rita Welch Meditation Centre

The Rita Welch Meditation Centre was dedicated April 10, 1996. It was established in memory of Rita Welch, the late wife of Chancellor Robert Welch. The facility is available both for individual mediation and for all groups who wish to use it for spiritual/religious purposes. For use at a particular time it can be booked through Campus Ministries. However, the Centre is open daily from 8:00 am to 9:00 pm and at other times as arranged and all are encouraged to use it when they can. A monthly schedule of events is posted in the glass case outside the Centre.

III. Careers Services

Cindy Nogradi, Director, *extension 3242
Schmon Tower 411*

Career Services provides four key areas of service for Brock students:

- assisting Brock students with career exploration, employability skills development and job search;
- recruiting employers to advertise employment opportunities at Brock and hire Brock students/graduates; and
- administering the EXPERIENCE *Plus!* careers oriented, work experience program
- administering the Med Experience Plus health career exploration program.

Career Services provides assistance to Brock students with career planning and job search with a variety of services, whether you're looking for part-time work while you study, or if you're ready to launch your career after graduation.

- Drop-in career consultations with our Career Assistants.
- Workshops on writing cover letters, resume writing, job search strategies, interviewing.
- A career resource library to investigate occupations, employers, volunteer opportunities, further education programs.

Student Services

- Job postings for permanent, part-time and summer jobs.
- Graduating students employer recruitment program.
- Annual Fall Careers Day for students to meet potential employers.
- Annual Canadian Graduate Education Fair for students to explore postgraduate education opportunities.
- Drop In Resume Write for tips on constructing effective resumes.

Career Services recruits employers to come to the Brock campus to recruit Brock graduates with several services including:

- annual mailings to employers across Canada to promote the employability strengths of a Brock degree;
- job posting sites in the Career Centre and on the Internet;
- organization of annual Careers Day;
- interview arrangements and campus interview rooms.

Career Services co-ordinates *EXPERIENCE Plus!*, a careers-oriented work experience program, that is open to students in any faculty at Brock. Students in the program build their experience and employability skills in specific career streams by combining a variety of paid part-time work experiences, volunteer activities, and employment skills workshops into a documented career portfolio. The *EXPERIENCE Plus!* program supplements Brock's high quality academic environment with hands-on pragmatic work skills and instruction in employability skills development, to give you a competitive edge in finding the right career after graduation.

Career Services also co-ordinates Med Experience Plus, a four year, non-credit program for students interested in pursuing medical school or a health related career. Med Plus is an intensive, extracurricular program that runs concurrently with a Brock student's academic degree. The program enhances a students' academic studies with experience and skills through six components: Lecture/Discussion Series, Observation Visits, Volunteer Placements, Student Mentoring, Individual Development and Program Advising. Med Plus has a limited enrolment of 40 students per year, who all must have an academic average of 80 percent from their previous year of schooling. Students must apply and be accepted to participate in the Med Plus program activities.

IV. Student Health Services

Melodie Shick-Porter, Manager
Harrison Hall, extension 3243
Monday to Friday: 8:30 – 4:30
Closed: May – August
<http://www.brocku.ca/healthservices>

1. General information

Don't feel you have to wait for a problem to arise to visit the Student Health Services.

A team of nurses and physicians provide comprehensive medical/clinical services as well as health education and counselling. We can help you with a medical problem, provide treatment or a referral, give allergy injections or update your immunization. We provide health education and counselling about many issues including contraception, pregnancy, sexually transmitted diseases, nutritional or weight concerns, stress or lifestyle issues.

Your visit and treatment is **strictly confidential**. The health fee paid by all full-time students at registration covers some value added services at Student Health Services, Health Education Programs and a special Student Insurance Plan. This plan also helps cover prescription medication and accident expenses such as dental injuries. OHIP, UHIP or other health insurance is needed in order to be seen by a physician, but not by the nurse.

Students with special needs who are carrying fewer than three credits, but for whom this is a full-time academic load, can request to pay the full-time student health fee and thus be eligible for services. Students wishing to be considered should contact the Student Development Centre.

Part-time students who have questions or concerns about Student Health Services eligibility can contact the Manager of Student Health Services.

If you have questions or require any additional information about a health issue or specific health concern, feel free to drop in.

2. Required medical documentation

It is the University's policy to accept medical certificates from qualified medical practitioners attesting to a student's inability to write a test, examination etc. due to an incapacitating medical condition at the time of the scheduled test, examination etc. The University may, at its discretion, request more detailed documentation in certain cases.

Medical documentation must be written on the physician's or Student Health Services letterhead (or show the physician's address and telephone number). It must include the student's name, date the student was examined by the physician or at Student Health Services and must bear the physician's signature.

Student Health Services Policy

Student Health Services will provide medical documentation only if:

1. Medically warranted.
2. The student presents him/herself to Student Health Services before the exam.
3. The student is seen in our office the day of the exam.

If your exam is at a time of day when the Student Health Services is not open, then you must go to another medical facility to obtain the necessary written medical excuse documentation.

V. International Services

John Kaethler, Manager
DeCew Residence R209, extension 4318
<http://www.brocku.ca/international>

"Every student is an international student", according to John Kaethler, Manager of International Services.

1. International Student Advising

International students may find it helpful to discuss academic or personal problems with the manager and his assistant. They can offer assistance with such things as immigration, health, banking, accommodation and the completion of various forms, as well as providing liaison with instructors, the University administration and the community at large. It would be useful to see them when you arrive at Brock.

2. Host Family Program

International Services, in conjunction with the St. Catharines University Women's Club, offers international students a Host Family Program. This is not an accommodation service, but an opportunity for international students to meet informally with Canadian families.

3. Peer Partner Program

The office offers this program to new international students at Brock. Each interested international student is matched with an

international or Canadian student who is familiar with Brock and Canada. Each peer partner can help international students adjust to life at Brock.

4. International Study, Employment and Development

The manager and his assistant also assist Canadian students interested in studying or working in other countries. They administer exchange programs to Argentina, Australia, Austria, Brazil, Colombia, Finland, France, Japan, Korea, Mexico, Netherlands, Sweden, the United Kingdom, the United States and Uruguay. Students with disabilities are welcomed to apply. They are also responsible for international development activities on campus.

VI. Office of the Registrar

Robert J. Tiffin, Registrar
406 Schmon Tower
(905) 688-5550, extension 4277
rtiffin@spartan.ac.brocku.ca

The Office of the Registrar is located on the third floor of Schmon Tower and is comprised of the following units:

- Academic Advising
- Admissions
- Awards and Financial Aid
- Examination and Classroom Scheduling
- Student Records and Registration

Our office hours are Monday – Thursday, 8:30 a.m. to 5:00 p.m., and Friday 8:30 – 4:30 p.m.

The Office of the Registrar strives to provide a high level of quality services that support the enrolment, progression, and graduation of Brock students. We serve as the principal custodian of all confidential student enrolment data, including course registration, grades, and address information. Our office has contact with students from the point of application for admission through to graduation and beyond as we maintain each student's permanent academic transcript. Our knowledgeable staff is here to provide students with information on courses, grades, appeals, yearly progression and graduation eligibility, as well as academic counselling.

Student Services

The University offers a wide range of programs to recognize students with high academic achievement and provides financial assistance to those having difficulty meeting their educational costs. In addition to the federal and provincial loans programs, e.g. OSAP, Bursary for Students with Disabilities, our Awards and Financial Aid department administers all academic and financial need-based awards and bursaries.

Students may obtain additional information about other on-line registrarial services by contacting our web site: www.BrockU.ca/registerar.

VII. Recruitment and Liaison Services

Sandie Coppinger, Manager
Thistle 261, extension 3564
Monday to Friday: 8:30 – 4:30

Recruitment and Liaison staff communicate information about Brock's academic programs and campus life to high schools, prospective students, parents and the general public.

Recruitment and Liaison Services coordinates Brock's undergraduate recruitment activities, including :

- Fall and Spring open houses
- responses to queries about Brock programs
- presence at educational fairs across Ontario, Canada and internationally
- defining advertising needs
- direction of Campus Tour program
- direction of the Applicant Communications and the Applicant Calling programs
- hosting visiting dignitaries, school representatives and individual families or students during their campus visits

There are many opportunities for students to volunteer for experience assisting with open houses and campus tours.

Campus tours are available weekdays throughout the year at 10:30 a.m. and 2:30 p.m. Saturday tours are available in October and November. Registration is required.

Prospective students are encouraged to make arrangements ahead of time so that appointments can be made for them to speak with professors in their area of interest. Tours for students with special needs are available by calling the Office of Recruitment and Liaison. These tours outline specific access routes to buildings, classrooms and parking and may include one of the six wheelchair accessible housing units on campus in the Village residence.

To arrange a tour, call the Office of Recruitment and Liaison Services at (905) 688-5550, extension 4293.

VIII. Residence and Food Services

James R. Fleming, Director of Residence and Food Services
DeCew Residence 205, extensions 3370, 3594
<http://www.brocku.ca/residence>

Brock has four residences: DeCew, a traditional-style on-campus residence with all-male, all-female and co-ed accommodations and self-contained dining hall; New Residence is also a traditional-style residence on campus, has all single rooms and students eat in the same dining hall as DeCew residents; Queenston, a high-rise traditional-style residence located off campus has mostly single rooms, alternate male, female and co-ed floors, meal plan and bus service; or The Village, that combines the independence of townhouse living with the convenience of an on-campus location.

All residence rooms provide the basic necessities and all residences provide opportunities for residents' input through the Residence Action Council or the Residence Life Staff.

Students who indicate an interest in residence on their OUAC form will be sent an application for residence along with the University's offer of admission. There are six wheelchair accessible housing units in The Village residence and 11 single rooms in New Residence. Special housing needs should be discussed with both the Department of Residences and the Services for students with disABILITIES Office.

In addition, the Department of Residences staff posts listings of available rooms, apartments and houses for those looking for off-campus accommodations. A package that contains everything you need to make the search a little easier, from a list of average rents to a guide to the Landlord/Tenant Act, is also available.

Fees

Academic fees are charged on a per credit basis. The fee covers registration, tuition and ancillary fees as follows:

★★ PLEASE NOTE THAT THESE FEES ARE SUBJECT TO CHANGE★★

	Regular Undergraduate Fee per full credit	Regular Undergraduate Fee per half credit	Undergraduate Visa Fee Full credit	Undergraduate Visa Fee half credit
Tuition	\$774.80	\$387.40	\$1,865.20	\$932.60
*BUSAC Fee	\$10.75	\$5.38	\$10.75	\$5.38
Athletic, Intramural, Recreation Program and Facilities Fee	\$12.40	\$6.20	\$12.40	\$6.20
Capital Cost of the Student/Community Centre for Health and Fitness	\$15.00	\$7.50	\$15.00	\$7.50
BUSAC Student Centre Construction	\$10.00	\$5.00	\$10.00	\$5.00
BUSAC Capital Fund	\$2.50	\$1.25	\$2.50	\$1.25
^ OPIRG	\$1.50	\$0.75	\$1.50	\$0.75
CANCOPY	\$0.50	\$0.25	\$0.50	\$0.25
**OUSA	\$0.40	\$0.20	\$0.40	\$0.20
BUSU Safety Fee	\$0.25	\$0.12	\$0.25	\$0.12
Brock Radio	\$1.50	\$0.75	\$1.50	\$0.75
TOTAL FEE	\$829.60	\$414.80	\$1,920.00	\$960.00

*BUSAC - Brock University Students Administrative Council

^ OPIRG - Ontario People's Interest and Research Group

**OUSA - Ontario Undergraduate Student Alliance

In addition to the academic fee, any Canadian citizen or landed immigrant taking three or more credits in the Fall/Winter Session will be required to pay a **non-refundable health fee** of \$30. Students paying the international (visa) student fee will pay the **non-refundable health fee**. Students with special needs carrying fewer than three credits should contact the Services for Students with disABILITIES Office regarding their eligibility for the health fee. This fee covers the operating costs of the health facilities on campus, prescription drugs, as well as life insurance. For full details please consult the Health Services department. Please note that this fee is mandatory regardless of alternative coverage.

There is a \$1 charge per registered student in the Fall/Winter Session as per the agreement with BUSU and the Rosalind Blauer Day Care Centre.

Students who are not Canadian citizens, landed immigrants, international students sponsored by CIDA or who do not have diplomatic privileges, will pay the visa student fee.

Fees

Payment of Fees:

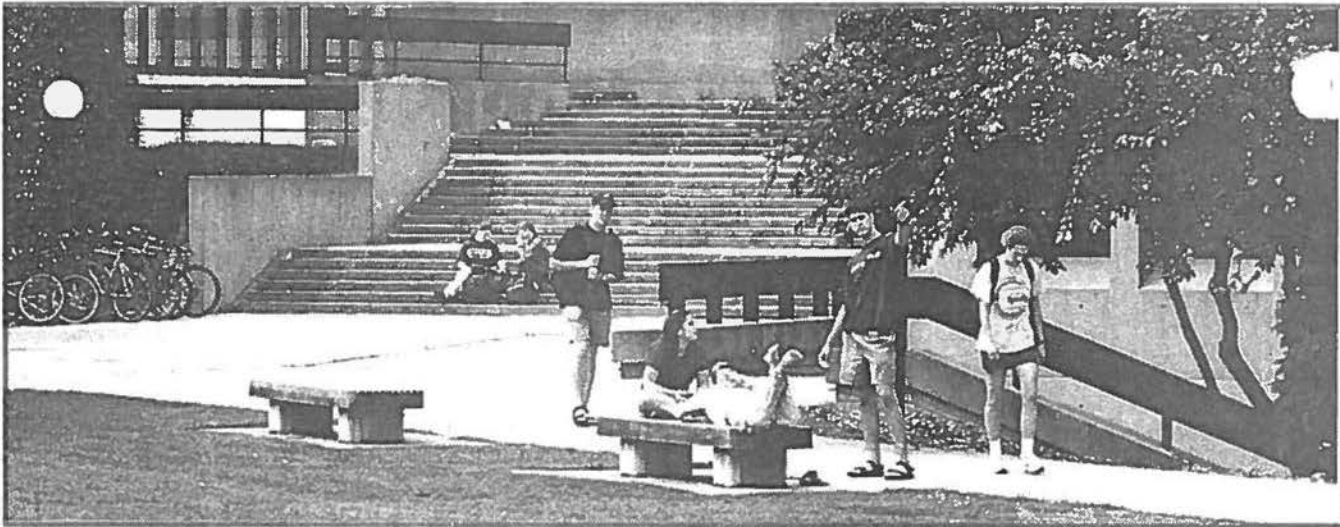
All fees are due and payable at Confirmation of Registration at which time students must have sufficient funds to pay at least the minimum instalment of tuition fees. The first instalment is approximately 70 percent of the total fee.

Students taking three or more full credits (six or more half credits) may pay the minimum installment. Those taking less than three credits must pay in full at registration. Therefore, for the Spring and Summer sessions, when the course load is normally under three credits, fees must be paid in full at Confirmation of Registration.

The method of payment used may be cash, personal cheque or money order. Credit cards are not accepted for fee payment.

Specific services charge dates are as follows:

Last Date for payment without carrying charges	Rate for each \$100 or part owing	Date charges are assessed
November 1, 2000	\$3.00	November 2, 2000
Last Date for Payment without Service Charge	Rate for each \$100 or part owing	Date charges are assessed
January 31, 2001	\$1.50	February 1, 2001
February 28, 2001	\$1.50	March 1, 2001
March 30, 2001	\$1.50	April 2, 2001
April 30, 2001	\$1.50	May 1, 2001
May 31, 2001	\$1.50	June 1, 2001
June 28, 2001	\$1.50	July 3, 2001
July 31, 2001	\$1.50	August 1, 2001
August 29, 2001	\$1.50	August 30, 2001



Tuition Fees at Withdrawal

Withdrawal notification, in writing after the closing of BIRT, must be received in the Office of the Registrar by the dates noted below for the 2000-2001 Fall/Winter Session. **Discontinuing attendance at classes, notification to the instructor or stopping payment on a cheque presented at registration does not constitute official withdrawal.** The tuition credit schedule is as follows:

Credit*	Duration 1	Duration 2	Duration 3
100%	Sep 11 - Sep 22	Sep 11 - Sep 22	Jan 8 - Jan 19
65%	Sep 23 - Oct 3	Sep 23 - Oct 2	Jan 20 - Jan 29
60%	Oct 4 - Oct 12		
55%	Oct 13 - Oct 23	Oct 3 - Oct 10	Jan 30 - Feb 6
50%	Oct 24 - Nov 1		
45%	Nov 2 - Nov 10	Oct 11 - Oct 18	Feb 7 - Feb 14
40%	Nov 11 - Nov 21		
35%	Nov 22 - Nov 30	Oct 19 - Oct 26	Feb 15 - Mar 1
30%	Dec 1 - Jan 15		
25%	Jan 16 - Jan 24	Oct 27 - Nov 3	Mar 2 - Mar 9
20%	Jan 25 - Feb 2		
0%	After February 2	After November 3	After March 9

Note: Do not confuse the last date for withdrawal without academic penalty with the last date for drops or withdrawal without financial penalty.

*Credit to be applied to your account. Refunds are only mailed if your account is paid in full at the time of withdrawal.

Fees

Payment Due Dates

Students must be prepared to pay at least the minimum installment at Confirmation of Registration. If you choose to pay only the minimum installment at registration, a one time carrying charge will be levied on the outstanding balance on November 2, 2000, at a rate of \$3 per \$100 (or part) owing. You can avoid these charges by paying outstanding charges in full by November 1, 2000. Otherwise, the balance of your tuition and related fees including carrying charges is due in full by January 31st, 2001.

Please note that Statements of Account are not automatically mailed after each transaction. If you add courses after confirmation of registration you are financially responsible for these courses without further notice. Fees must be paid by the above noted deadlines or service charges will be applied. Failure to receive a bill does not excuse you from the responsibility of payment. Students are academically and financially responsible for all courses in which they register and the fee incurred unless they officially withdraw by the appropriate University deadlines.

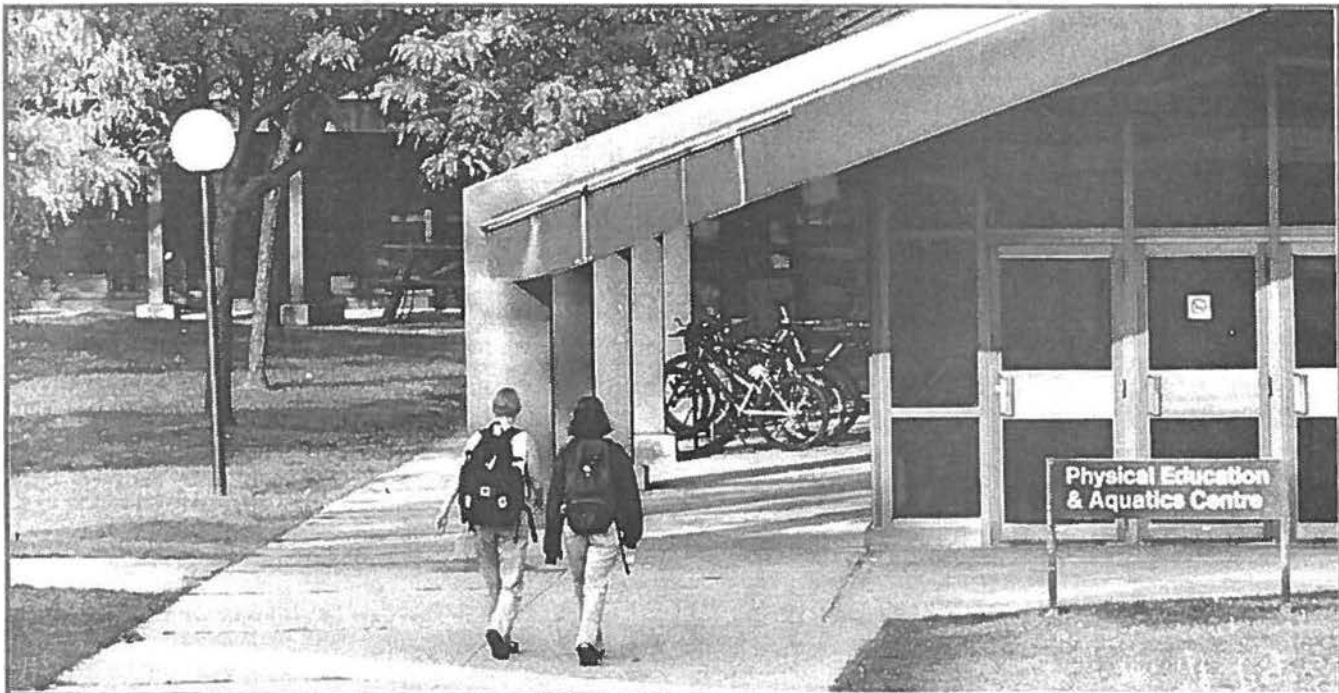
Students registering in September for Winter Term (duration 3) courses only are still liable for the minimum payment as listed in the payment chart. This will ensure your place in the course. If you do not wish to pay for the courses until January then you will be subject to the carrying charge.

Regardless of the date on your cheque, unless it is received in the Finance Office by the specified dates, you will be subject to the service charge. Payment in person during regular hours will ensure date of payment. As well, there is an after-hours drop box located on the 12th floor, Schmon Tower. Only cheques may be left in this box. No receipt is issued.

Students receiving government assistance will still be subject to service charges on their outstanding balance. The service charge has been included in the computation of OSAP assistance.

Withdrawal Charges:

From September 11 through to September 22, 2000, there are no charges for course changes or drops on duration 1 and 2 courses. Similarly, there is no penalty for course changes or drops on duration 3 courses up to January 19, 2001. After September 22, a withdrawal charge will be levied on duration 1 and 2 courses. Withdrawal credits are based on the dates and percentages outlined above. After January 19 a withdrawal charge will be levied on duration 3 courses as specified in the table on the chart above.



No refunds will be given after February 2, 2001, for duration 1 courses; after November 3, 2000, for duration 2 courses; and after March 9, 2001, for duration 3 courses.

Seniors: Students 60 years of age or older by the first week of class will be required to pay the regular tuition fee. However, a tuition waiver will be available at the Fee Payment Desk during Confirmation of Registration. Seniors opting for a tuition waiver will still be liable for the ancillary portion of the fees. The ancillaries total \$54.80 per full credit plus the health fee (if applicable) and day care building fee. (This amount is subject to change)

Unpaid Accounts: No student having an outstanding account with the University will receive a degree or a statement of final grades, or have any such statement furnished to parties outside the University until the debt has been cleared to the University's satisfaction. Final grades may only be released by the Office of the Registrar.

O.S.A.P.: Students expecting to receive assistance through the Ontario Student Assistance Program must file their application with the Financial Aid Office no later than June 30. Students who apply after this date and who have not received written confirmation that their applications have been processed must pay the required fees at registration.

Residence Fees: In 1999-2000 the residence rates for room and board averaged about \$5200 depending on the type of accommodation and meal plan.

Other Fees:

Course Audit Fee: The charge for auditing a course is 50% of the normal course fee or the withdrawal charge at the time of the change to audit status, whichever is greater.

U.H.I.P.: As of July 1, 1994, foreign students were no longer covered by OHIP. Therefore, all foreign students are required to pay for the mandatory health insurance plan UHIP (University Health Insurance Plan) at Confirmation of Registration. For detailed information relating to this plan contact Brock's Health Services.

SCHEDULE OF FEES ★ Fees are Subject to Change ★

Challenge for Credit:		Transcript of Record:	\$8.00
Canadian Fee per credit	\$351.00	Duplicate Tax Certificate	\$10.00
Visa Fee per credit	\$571.00	(previous year's replacement only)	per copy
Co-op Administration Fee:	\$450.00	Returned Cheques:	\$20.00
		(Students whose cheques are returned NSF at registration will be charged the \$20 returned cheque fee as well as the late registration fee of \$35.)	
Oenology and Viticulture		Pre-Collection Letter Service:	\$10.00
Employment Experience		Replacement of Diploma:	\$35.00
Administration Fee	\$250.00	Another University Transcript Assessment:	\$15.00
	per work term	Letter of Permission:	\$25.00
Experiential Learning	\$50.00	Administrative Fee for Appeals:	\$50.00
Administration Fee	per academic year	Verification of Registration and Other Status:	\$15.00
	(assessed in the Fall)		
Late Registration Fee	\$35.00		
I.D. Card Replacement:	\$20.00		

Finance Office: The Finance Office is located on the 12th floor of the Schmon Tower. Our office hours are Monday through Friday, 9:00 a.m. to 4:15 p.m. Inquiries concerning fees may be addressed in person at the above location or by phone at (905) 688-5550, extensions 3286, 3806, 4260, 3250, 3492 and 3283.

Code of Student Conduct and Disciplinary Procedures in Non-Academic Matters

I. University Jurisdiction

Brock endeavours to provide a working and learning environment of the highest quality, supportive of scholarship and research and free from stereotyping, harassment and discrimination. We believe that the members of the University community must lead the way toward becoming a humane and just society - where interpersonal interactions are based on honesty and integrity, where race, ancestry, place of origin, citizenship, creed, sex, age, sexual orientation, marital status, family status or disability make no difference, where respect for individual worth prevails, and where violence is not tolerated in any form.

This Code of Conduct and statement of disciplinary procedures seeks to support the above principles by outlining student responsibilities, rights and privileges, by detailing specific behaviours which are unacceptable and by describing the disciplinary procedures for dealing with infractions of the Code.

Brock University is a community which exercises jurisdiction and authority on campus as far as it is necessary to ensure a safe and orderly operation of the University. Brock University may also exercise jurisdiction and authority regarding Brock University students off campus when their behaviour is in conflict with policies, procedures and practices of the University, so far that it is in the vested interest of the University to respond.

II. Student Responsibilities, Rights and Privileges

Students may think, speak, write, create, study, learn, pursue social, cultural and other interests and associate together for these purposes subject to the principles of mutual respect for the dignity, worth and rights of others as outlined by the Ontario Human Rights Code. All members of the University community, as members of society at large, are responsible to abide by federal, provincial and municipal laws in addition to University regulations.

Every student has the right to a full, equal and fair hearing by an impartial tribunal for any disciplinary charges brought against him or her under University regulations. Every student who is charged with a disciplinary offense has a right to present a defence. Particularly every student has a right:

- to be promptly informed in writing of the nature of the charge;

- to refuse to answer incriminating questions;
- to present and examine witnesses, and to cross examine witnesses present who testify against him or her;
- to be accompanied by an adviser and/or support person from the Brock community as outlined in the relevant panel's policies and procedures.

The University upholds and will take reasonable steps to ensure students of the following privileges:

1. Participation in University and Student Government

Students may participate in formulation and application of institutional policy affecting academic, extra-curricular and student union affairs.

2. Freedom of Discussion

Traditional privileges of a university of freedom of inquiry and freedom of expression can be assured only if all members of the community share the responsibility of granting these freedoms to others and accept the obligation for a standard of behaviour which respects the rights of others.

3. Assembly

Peaceful assemblies, demonstrations and lawful picketing are allowed within established laws to the extent that they do not interfere with the rights and privileges of others or with the normal functions of the University.

4. Fairness

Consistency and fairness are ensured by the procedures outlined in sections III, IV, V and VI below.

5. Confidentiality

Confidentiality of University records relating to each student is protected. For further details refer to the following published statements: Student Record Policy (Office of the Registrar), Confidentiality in Counselling, Confidentiality and Security of Library Records.

6. Safety

The University is committed to maintaining safe conditions of living, learning and studying.

7. Access to Facilities and Services

Access to buildings and facilities is governed by regulations which are necessary for the safety and security of students. The University accepts the obligation to provide adequate access to persons with physical disabilities.

8. Access to Licensed Facilities and Events

Access to campus events where alcohol is served is subject to restrictions for persons under 19 years of age. Students who are of age must make responsible choices regarding the use of alcohol in order to maintain their privilege to attend such events.

III. Non-Academic Misconduct

Recognizing that an exhaustive list of all possible misconduct cannot be provided, the following list is offered as a guide. Any of the following activities constitutes an offense under the Code and is subject to disciplinary procedures and sanctions outlined in sections IV and V below. Furthermore, the activity may be subject to criminal prosecution notwithstanding and in addition to this Code.

1. Disruptions

No student shall, by action, words, written material, or by any means whatsoever, obstruct University activities or services. University activities and services include but are not limited to teaching, research, studying, student events, administration, meetings and public service.

2. Physical Abuses, Threatening Behaviour and Dangerous Activity

No student shall:

- physically abuse another student, threaten or cause any other person to fear physical abuse;
- create a condition which endangers or threatens the health, safety or well-being of themselves or others.

3. Inciting Violence

No student shall, on University property, individually or with a group and in connection with a demonstration including picketing or a rally:

- use words which threaten violence or physical abuse to any group or individual;
- abuse words in a situation of clear and imminent danger which incite others to behaviour which violates any article of this Section.

4. Harassment

No student shall harass another person. Harassment is defined as any unwanted behaviour (physical, verbal, written or otherwise) directed at an individual or group by another individual or group who know(s) or ought reasonably to know that this behaviour is unwanted (see also the University Policy on Harassment and Discrimination).

5. Unauthorized Entry and/or Presence

No student shall enter or remain in any University facility, room or office without proper authority. Facilities include but are not limited to the following: the Student Centre, parking lots, athletic fields, campus buildings, campus areas, off-campus residences and teaching sites. Campus Police may charge students under the Trespass to Property Act.

6. Theft, Illegal Possession, Damage and Destruction of Property

No student shall:

- possess University property or the property of any member of the University community without the consent or authority of the University or the rightful owner;
- misappropriate, destroy or otherwise damage University property;
- misappropriate, destroy or otherwise damage any property not the person's own on University property;
- deface the inside or outside of any building or property of the University.

7. Unauthorized Use of Facilities, Equipment, Materials or Services

No student shall:

- use any facility, equipment, material or service contrary to express instruction or without proper authority;
- obtain any University equipment, material or service by fraudulent means or by providing false information.

8. Misuse of University Supplies or Documents

No student shall, without proper authority, make, alter, use, receive or possess University supplies or documents. University supplies and documents include but are not limited to equipment, keys, records and permits.

9. Misuse of Library or Computer Resources

No student shall:

- remove books or other library material from the university libraries without proper authorization;
- mutilate or deface library books or material;
- purposefully misplace library books or material or in any way deprive others of the opportunity to have access to library resources;
- use any University computer or computer related facility or software, alter or remove computer files or software without proper authorization, purposefully misplace them, or any way deprive others of the opportunity to have access to computer resources;
- use computer equipment on campus to download, distribute or send pornographic materials.

Code of Conduct

10. Identification

No student shall refuse to identify himself or herself upon request by a University official acting in the course of that person's duties.

11. Aiding and Abetting

No student shall aid or abet another person in the commission of any infraction of the Code. Students who assist in misconduct will be liable for that infraction.

12. False Charges

No student shall bring a false charge against any member of the University community.

13. Misconduct Related to the Use of Alcohol

Intoxication is never grounds for leniency. Rather, excessive drinking itself is subject to banning from licensed facilities and University residences, notwithstanding and in addition to sanctions imposed for misconduct associated with drinking.

IV. Non-Academic Misconduct Sanctions

1. Temporary Suspension and Trespass Sanctions

The University reserves the right to intervene in disciplinary situations where students' behaviour affects others' use and enjoyment of University privileges and facilities. Pending convening of a Discipline Panel hearing, the Associate Vice-President (Student Services) or the Vice-President (Academic) may apply a temporary university-wide trespass/suspension sanction and the Director of Residence Services may apply a temporary residence trespass sanction, in the appropriate circumstances. These circumstances are where they determine there are reasonable grounds to believe that the safety of other people is endangered, that there is a high potential of physical danger in the student's continued presence, that damage to University property is likely, or that the continued presence of the student would be disruptive. Upon such a decision, the student will be excluded from residence or campus effective immediately, for as long as reasonably required by the nature of the danger. A formal discipline hearing should be held within 10 working days of notice to the student of this decision, during which time the student may only enter the residence and/or campus for discipline appointments with proper notice and an escort.

2. Criminal Offenses

Criminal offenses committed on the University campus against persons or property reported to Brock University Campus Police normally will be dealt with according to the law. When a student is involved, Campus Police will notify the Associate

Vice-President (Student Services). The Associate Vice-President (Student Services) will determine if the matter may be subject to University discipline under this Code, notwithstanding and in addition to criminal prosecution or civil actions.

3. Residence Offense Sanctions

Sanctions for residence offenses are defined under the Residence Agreement and Rules and Regulations of Residence.

4. Minor Offense Sanctions

Minor misconduct is dealt with in the area or department where it occurs. The officer of the University in whose jurisdiction an incident occurs may apply the following minor sanctions:

- a period of service to the University or the Students' Union to a maximum of 3 hours (by the Chief of Campus Police or the BUSU Business Manager);
- exclusion from a class for the class period in which the misconduct occurs (by the instructor);
- exclusion from other University facilities for a maximum of 48 hours (by the Director of the facility);
- exclusion from access to campus computing resources for a maximum of one week (by the Systems Services Department's Systems Administrators);
- exclusion from the Student Centre Pub and/or liquor service events for an indefinite period of time (by the BUSU Business Manager, the Student Centre Pub Manager, or the Director of Residence and Food Services);
- payment for damages of \$100 or less (by the Director of the facility, the BUSU Business Manager, or the Circulation Librarian).

5. Other Offense Sanctions

The University Discipline Panel may apply any one or any combination of the following sanctions:

- A letter of reprimand;
- A period of probation during which further incidents will be subject to automatic sanctions;
- Restitution for damages;
- A verbal and/or written apology;
- Fines not to exceed \$500;
- Removal of privileges for use of licensed facilities on campus;
- A period of service to the University or the Student Union not to exceed 20 hours;
- Completion of an educational program or project;
- Suspension from extra-curricular activities of the University community for a specified period of time not to exceed one year.

The University Discipline Panel may recommend to the Associate Vice-President (Student Services) the following sanctions:

- Exclusion from facilities of the University (in whole or in part) for a specified period of time not to exceed one year;
- Suspension from the University;
- Expulsion from the University.

The Associate Vice-President (Student Services) may uphold the recommendation and apply the sanction to the student, or apply a lesser sanction.

In exceptional circumstances, where the University Discipline Panel decides on a recommended sanction which is not listed above, the Panel may recommend an exceptional sanction to be considered by the Associate Vice-President (Student Services).

V. Student Discipline Procedures

1. Residence Offense Procedures

Any breaches of the Residence Agreement or residence rules or regulations will be handled in the first case by the Department of Residences disciplinary procedures and sanctions. In addition to sanctions applied within the Department of Residences, in serious offenses the Director of Residence and Food Services may forward the case to the University Discipline Officer for action under the "Other University Offenses" section of this code.

2. Minor Offense Procedures

Minor misconduct is dealt with in the area or department where it occurs. The official of the University in whose jurisdiction an incident occurs will notify the University Discipline Officer when:

- satisfactory resolution of minor allegations and sanctions cannot be achieved between the student and the University official;
- minor infractions are repeated by the same student;
- the University official believes the infraction warrants a sanction greater than the minor offense sanctions listed in Section IV.

Any University Officials who apply these minor sanctions shall report to the Associate Vice-President (Student Services) annually in May regarding the number and type of minor sanctions imposed in the preceding 12 months.

3. Other University Offense Procedures

Notice of an alleged offense under the Code may be filed with the University Discipline Officer by any member of the Brock community within 10 business days of the incident in question.

The University Discipline Officer may:

- dismiss the matter;
- interview the student independently and impose any of the

- minor offense sanctions listed in Section IV;
- refer the matter to the University Discipline Panel, and arrange for the student to appear at a specified hearing of the Panel, providing the student with a copy of University Discipline Panel Procedures.

VI. Student Appeal Procedures

1. Informal Appeals

Students who believe that they have been treated in an unfair or otherwise inappropriate manner in the course of their dealings with an office of the University are encouraged to address their concerns in the first instance directly to the office in question, normally to the senior administrator of the office. Where this seems inappropriate or does not lead to a satisfactory resolution, students may wish to consult the Ombuds Officer for advice regarding formal avenues of appeal. Formal appeal procedures are available as outlined below.

2. Residence Appeals

The Associate Vice-President (Student Services) will act as the final avenue of appeal for residence cases which have not been referred to the University Discipline Officer and the University Discipline Panel.

3. Minor Offense Appeals

The University Discipline Panel will act as the avenue of appeal for minor offenses where sanctions were applied by departmental officers. Students should forward their written appeal within 10 working days of receiving their sanction to the University Discipline Officer, c/o the Office of the Associate Vice-President (Student Services).

4. Other Offense Appeals

Eligibility for appeals:

Either party, appellant or complainant, may appeal the decision of the University Discipline Panel with respect to student non-academic conduct or discipline, under the following circumstances:

- where new evidence which was not available to a party at the time of the original hearing has been discovered, or where a breach of natural justice has occurred (Note: natural justice has two elements, the rule against bias and the right to a hearing);

AND

- where the outcome of the case at the original hearing might have been substantially affected by any of these circumstances.

Code of Conduct

Appeals from sanctions applied by the Associate Vice-President (Student Services):

- sanctions applied by the Associate Vice-President (Student Services) to suspend, expel or exclude a student from academic areas of the campus may be appealed to the University Appeal Board through the Office of the Vice-President (Academic);
- appeals must be submitted in writing to the Office of the Vice-President (Academic) within 10 working days of the student having received notification of sanctions from the Associate Vice-President (Student Services);
- the appeal must be signed by the student and include the grounds of the appeal;
- within 10 working days of receiving an appeal, the Vice-President (Academic) will establish a University Appeal Board hearing panel and notify appropriate parties as outlined in the Policies and Procedures of the University Appeal Board.

Appeals from sanctions applied by the University Discipline Panel:

- students may appeal to the Associate Vice-President (Student Services) any sanctions applied by the University Discipline Panel;
- appeals must be submitted in writing to the Office of the Associate Vice-President (Student Services) within 10 working days of the student's University Discipline Panel hearing;
- the appeal must be signed by the student and include the grounds of the appeal;
- within 10 working days of receiving an appeal, the Associate Vice-President (Student Services) will contact the student and arrange a meeting time with the student to review the appeal;
- the Associate Vice-President (Student Services) may uphold the sanctions applied by the University Discipline Panel, or may lessen the sanction.

by the Associate Vice-President (Student Services).

The University Discipline Officer, and a back-up University Discipline Officer, are appointed by the Associate Vice-President (Student Services) from University staff or faculty. The current University Discipline Officer is Ms Cathie Closs, Director, Student Development Centre, 4th floor, Schmon Tower. The current back-up Discipline Officer is Ms Tammy Brown, Residence Program Coordinator, Residences Department.

2. University Discipline Panel

The University Discipline Panel hearings will normally be scheduled on a weekly basis to ensure timely attention to non-academic discipline cases. The Chair of the Panel will be a student appointed by the Associate Vice-President (Student Services) from the student members of the Discipline Committee. All student members of the University Non-Academic Discipline Committee participate on the attendance roster for Discipline Panel hearings. The University Discipline Officer serves as a voting member and senior University adviser on all University Discipline Panel hearings. The University Discipline Officer reports statistics on the numbers of cases, outcomes and sanctions annually to the Associate Vice-President (Student Services).

3. Student Discipline Records

Records of charges and sanctions, other than suspension or expulsion, will not be placed in student academic records. Records of all University Discipline Panel decisions, including charges and sanctions, will be maintained as part of the confidential records in the Office of the Associate Vice-President (Student Services) for a period of up to four years after the student graduates or ceases to be a student.

VII. Administration of Non-Academic Conduct Policy

1. Authority and Amendments

Amendments to the Student Code of Non-Academic Conduct must be recommended by the Associate Vice-President (Student Services) to the Vice President (Academic), for approval by the University Senate.

The Associate Vice-President (Student Services) administers non-academic student conduct policy and procedures, and chairs the University Non-Academic Discipline Committee. The Committee meets twice annually, in the fall and the spring. The Committee maintains written procedures for the conduct of individual University Discipline Panel hearings and written sanction guidelines, which are reviewed and approved annually

Academic Computing Information

I. Computing Access for Students

Students may obtain a user code for access to the Badger server. This user code will authorize electronic mail (E-mail) and Internet access from within and outside the University. There is no charge for access from within the University; the charge for access from outside the University is on a "per hour" basis. Such a user code is to be regarded as a privilege, not a right.

II. A Guide to Academic Computing Behaviour

The purpose of these guidelines is to promote the ethical, considerate and responsible use of Brock's computing facilities. In a community of users, one should not do anything that would place at risk these facilities, the network or its users.

The following points are of general nature and are not meant to be definitive. Clarification of individual concerns may be done through the use of readily available public documents such as, but not limited to, Brock's Academic Misconduct Policy, the Criminal Code, the Libel and Slander Act of Canada and individual academic department policies. Disciplinary or legal actions could be instituted by Brock if there are infractions of such policies.

1. Computers in labs may be used only with authorization.
2. User codes for networked facilities are available to the Brock community and must be protected and not shared. Users are expected to keep their password secret and secure.
3. Use of any facilities for business or financial gain is specifically prohibited, unless prior written approval is obtained from the Vice-President, Administration.
4. As Brock's network facilities are connected to the Internet, usage of the network is governed by the acceptable use policies of connected nets and the laws of other countries. Users are urged to be sensitive and aware of other cultures and nations in their postings to the Internet.
5. It should **not** be assumed that E-mail and other data is private as it traverses Brock's internal network or the Internet. Users are urged to act accordingly.
6. Due to inevitable system upgrades or malfunctions,

Brock's system administrators may need to inspect user directories. If any data are required to remain private at all times, then the user must use encryption or removable storage media.

7. Any deliberate attempt to discover or alter other users' passwords is expressly prohibited, as are any attempts to subvert system security or operation of any of Brock's computers or other networked computers.
8. Brock's facilities may not be used for illegal purposes and it is expressly noted that copying copyrighted software and the execution of illegally copied software on Brock's facilities is prohibited.
9. Harassment in any form is not allowed. Brock has specific policies regarding harassment which will be enforced.
10. Any attempt to hide the identity of the sender/originator of a message will be treated as a serious infraction.
11. Any violation or attempted violations of these guidelines should be reported quickly to the lab supervisor or the appropriate system administrator for further action.

Users will be required to acknowledge the content of this document. Further clarification of any points should be addressed to the Chair, Senate Committee on Computing and Communications Policy, in care of the University Secretary.

III. Computer Based Training

All Brock students have access to computer based training modules covering a wide range of topics in computer use. The modules can be used to enhance course material and leads to Microsoft certification at a variety of levels.

International Study and Exchange Programs

Brock encourages its students to participate in study programs at universities in other countries. The overall objective of these programs is to promote international understanding and co-operation at the University, while the specific objective is to assist students in all disciplines to broaden their education by earning full university credits and by living in another culture. Brock has programs, both in English speaking and non-English speaking countries. These programs are administered by the Office of International Services and by specific academic departments. As well, some departments offer summer courses abroad.

Through Brock's programs, students can become international scholars for little more than it costs to study at Brock. All exchange students pay their tuition fees to Brock, as well as residence fees for certain exchange programs. Brock students also have access to OSAP and Canada Student Loan plans to help them pay for their year abroad, while they earn credits towards the completion of their degree at Brock.

Participants must normally apply as full-time students during their second year of study, have a minimum 75 percent overall average and meet the pertinent language and other academic requirements. Since French, German and Japanese study abroad programs require a minimum level of language competence, students are strongly advised to have introductory high school background in these languages or obtain introductory language credits upon entering Brock.

Students are urged to consult the *Directory of International Programs and Services for Brock University Students* or the departmental/Faculty sections of this Calendar.

Students interested in taking part in international programs should consider enrolling in the Concentration or the Certificate Program offered by International Studies.

The following year-long programs are administered by the Office of International Services:

Argentina

Brock/International Student Exchange Program:

- Universidad del Salvador
- Universidad Catolica de Cordoba

Australia

Brock/International Student Exchange Program:

- Deakin University
- Griffith University Program

Brazil

Brock/International Student Exchange Program:

- Pontifical University Católica do Rio de Janeiro

Colombia

Brock/International Student Exchange Program:

- Institute Colombiano de Estudios Superiores de Incolda (Cali)
- Universidad del Norte (Báranquilla)

Finland

Brock/International Student Exchange Program:

- University of Joensuu (A prior knowledge of Finnish is not required for some programs.)
- University of Tampere
- Helsinki University of Technology

France

Brock/International Student Exchange Program:

- Université Rennes II
- Université de Droit, D'Economie et des Sciences d'Aix-Marseilles III
- Université de Grenoble
- Rhône/Alpes

Germany

- Brock/Philipps-Universität Marburg

Japan

- Brock/Nagoya Gakuin University

Mexico

Brock/International Student Exchange Program:

- Instituto Tecnológico Y De Estudios Superiores De Monterrey
- Universidad Regiomontana

Netherlands

Brock/International Student Exchange Program:

- University of Leiden (A prior knowledge of Dutch is not required for some programs.)
- University of Utrecht

International Study and Exchange Programs

South Korea

Brock/International Student Exchange Program

- Yonsei University (A prior knowledge of Korean is not required for some programs.)

Sweden

Brock/International Student Exchange Program

- University of Vaxjo

Switzerland

Brock/International Student Exchange Program

- Université de Fribourg

United Kingdom

- Brock/Glasgow Caledonian University Exchange Program
- Brock/Keele University Student Exchange Program
- Brock/Swansea University Student Exchange Program

United States

Brock/International Student Exchange Program (over 100 universities in the consortium.)

- University of North Carolina at Greensboro.

For more information about these and other programs under consideration visit the Office of International Services, DeCew Residence 209 or their Web site:

<http://www.brocku.ca/international/>

Uruguay

Brock/International Student Exchange Program

- Universidad Catolica del Uruguay

The following year-long programs are administered by the departments indicated:

Department of Community Health Sciences

University College of St. Martin, Lancaster Student Exchange Program (United Kingdom)

Department of French, Italian and Spanish

Third-Year Abroad Program in Perpignan

Summer Studies in Italy (summer only)

Department of Germanic and Slavic Studies

Study Year in Freiburg (for students in year 2)

Ontario-Baden-Württemberg Student Exchange Program

The following Brock courses are offered at international locations:

For detailed information, please consult the appropriate department as courses are not offered on a yearly basis.

England

GEOG 3M90 (London Field Studies)

France

FREN 3E81 (Principles of Writing)

FREN 3E82 (The Civilization of France)

FREN 3X83 (Literary Analysis and Commentary)

FREN 3X84 (Textual Analysis and Commentary)

VISA 2F94 (Art Studies in France at Angers)

Germany

GERM 3P98 (Practicum in Germany I)

GERM 4P98 (Practicum in Germany II)

In addition, the Department of Germanic & Slavic Studies offers a number of courses in Freiburg.

Greece/Cyprus

CLAS 4F75 (Archaeological Practicum in Cyprus)

CLAS 4M00 (Study in Mediterranean Lands)

Italy

ITAL 1F90 (Intermediate Italian)

ITAL 1F95 (Culture and Civilization)

ITAL 2F50 (Italian Language and Culture)

ITAL 2P92 (Italian Theatre and Film)

Course Description Anatomy

Course name and number	—————>	CHYS 4P31
Course title	—————>	Treatment Alternatives for Children and Adolescents: Dynamic Therapies
Cross-listing information	—————>	(also offered as PSYC 4P31)
Course description	—————>	The theoretical background, research and evaluation of current therapeutic approaches to emotionally and behaviourally disturbed children and adolescents. Topics include play therapies, non-directive, expressive and Gestalt approaches; group methods, use of modelling, goal setting and evaluation methods.
Course format	—————>	Lectures, seminar, 3 hours per week.
Restriction(s)	—————>	Restriction: open to CHYS (single or combined) and PSYC (single or combined) majors with a minimum of 13.5 overall credits.
Prerequisite(s)	—————>	Prerequisite: CHYS (CHST) 2F10 or PSYC 2F12.
Course note(s)	—————>	Note: students participate in practicum placement.
Exclusion(s)	—————>	Students completing this course will forfeit credit in CHST 4P31.

Course numbering system

CHYS 4	P	31	
			—————> departmental code
			—————> credit value
			D -> 1.50 credits (Pre-service Education)
			E -> 2.00 credits (Pre-service Education)
			E -> 1.00 credit (exchange course)
			F -> 1.00 credit
			G -> 1.00 credit
			M -> 1.00 credit (multiple topics)
			N -> 0.00 credit
			P -> 0.50 credit
			Q -> 0.50 credit
			R -> 0.50 credit
			V -> 0.50 credit (variable topics)
			X -> 0.50 credit (exchange course)
			Y -> 0.25 credit
			—————> course year level*
			1 -> year 1 6 -> professional certificate
			2 -> year 2 7 -> Concordia Lutheran Seminary
			3 -> year 3 8 -> pre-service
			4 -> year 4 9 -> in-service
			5 -> graduate

* courses numbered 2(alpha)90 - 2(alpha)99 may be used as either a year 2 credit or year 3 credit and courses numbered 3(alpha)90 - 3(alpha)99 may be used as either a year 3 credit or a year 4 credit.

Course Title Abbreviations

ABST	Aboriginal Studies	INTL	International Studies
ACTG	Accounting	ITAL	Italian
ADED	Adult Education	ITIS	Information Technology Information Systems
APLS	Applied Language Studies	JAPA	Japanese
ASTR	Astronomy	LABR	Labour Studies
BCHM	Biochemistry	LATI	Latin
BIOL	Biology	LING	Linguistics
BTEC	Biotechnology	MAND	Mandarin
CANA	Canadian Studies	MATH	Mathematics
CHEM	Chemistry	MGMT	Management
CHSC	Community Health Sciences	MKTG	Marketing
CHYS	Child and Youth Studies	MUSI	Music
CLAS	Classics	NEUR	Neuroscience
COMM	Communications	OBHR	Organizational Behaviour and Human Resources
COSC	Computer Science	OEVI	Oenology and Viticulture
DIEE	Drama and Theatre in Education	OPER	Operations Management
DRAM	Dramatic Literature	PCUL	Popular Culture
ECON	Economics	PHED	Physical Education
EDUC	Education	PHIL	Philosophy
ENGL	English	PHYS	Physics
ENTR	Entrepreneurship	POLI	Political Science
ENVI	Environment	PSYC	Psychology
ERSC	Earth Sciences	RECL	Recreation and Leisure Studies
FAPA	Fine and Performing Arts	RUSS	Russian
FILM	Film	SCIE	Science
FISP	French, Italian and Spanish	SOCI	Sociology
FNCE	Finance	SPAN	Spanish
FREN	French	SPMA	Sport Management
GBLS	Great Books/Liberal Studies	THEA	Theatre
GEOG	Geography	TOUR	Tourism Studies
GERM	German	VISA	Visual Arts
GREE	Greek	WISE	Women's Studies
HIST	History		

Aboriginal Studies

Director
Merle Richards
Faculty of Education

General Information

Administrative Assistant, extension 4112
Education 126

Aboriginal Studies courses may be taken for credit as electives in any degree program. Language courses in Mohawk and Cayuga satisfy the Language Requirement for Humanities majors.

Prerequisites and Restrictions

Students must check to ensure that prerequisites are met. Students may be deregistered, at the request of the instructor, from any course for which prerequisites and/or restrictions have not been met.

Description of Courses

Note that not all courses are offered in every session. Refer to the applicable term timetable for details.

ABST 1P01

Introduction to Mohawk I

Common sentence forms and vocabulary taught by audio-lingual methods. Listening, reading and writing of stories recorded by native speakers are used. Materials are chosen for cultural and linguistic content. About one-third of class time is devoted to study of the Mohawk culture.

Lectures, lab, 4 hours per week.

Students completing this course will forfeit credit in EXST 1P01.

ABST 1P02

Introduction to Mohawk II

Extended dialogues and storytelling to increase fluency in speech and reading. Transcription of and response to recorded language samples to extend writing in the Mohawk language.

Lectures, lab, 4 hours per week.

Prerequisite: ABST (EXST) 1P01.

Students completing this course will forfeit credit in EXST 1P02.

ABST 1P03

Introduction to Cayuga I

Common sentence forms and vocabulary taught by audio-lingual methods. Listening, reading and writing of stories recorded by native speakers are used. Materials are chosen for cultural and linguistic content. About one-third of class time is devoted to study of the Iroquois culture.

Lectures, lab, 4 hours per week.

Students completing this course will forfeit credit in EXST 1P03.

ABST 1P04

Introduction to Cayuga II

Extended dialogues and storytelling to increase fluency in speech and reading. Transcription of and response to recorded language samples to extend writing in the Cayuga language.

Lectures, lab, 4 hours per week.

Prerequisite: ABST (EXST) 1P03.

Students completing this course will forfeit credit in EXST 1P04.

ABST 2F01

Intermediate Mohawk

Development of communication abilities and acquisition of the punctual, indefinite and perfect verb forms; transitive pronouns, noun incorporation and locatives. Extension of literacy and oral skills through taped and written traditional stories.

Lectures, lab, 4 hours per week.

Prerequisite: ABST (EXST) 1P02.

Students completing this course will forfeit credit in EXST 2F01.

ABST 2M90-2M95

Studies in Aboriginal History

A variable topics course that surveys the history of a selected Aboriginal society, with emphasis on the historical perceptions, developments and interpretations of that society.

Lectures, seminar, 3 hours per week.

Students completing this course will forfeit credit in EXST 2M90-2M95.

ABST 2M96-2M99

Studies in Aboriginal Culture

A variable topics course that surveys the culture of a selected Aboriginal society, with emphasis on the cultural perceptions, developments and interpretations of that society.

Lectures, seminar, 3 hours per week.

Students completing this course will forfeit credit in EXST 2M96-2M99.

ABST 2P03

Intermediate Cayuga I

Application of literacy skills and extension of vocabulary and listening skills by reading taped stories and legends and responding orally to audiotaped exercises and in writing to printed exercises.

Lectures, lab, 4 hours per week.

Prerequisites: ABST (EXST) 1P04.

Students completing this course will forfeit credit in EXST 2P03.

ABST 2P04

Intermediate Cayuga II

Development of communication abilities and acquisition of the grammatical forms of future, aorist, indefinite and perfect tenses; transitive pronouns, noun incorporation and locatives.

Lectures, lab, 4 hours per week.

Prerequisites: ABST (EXST) 2P03.

Students completing this course will forfeit credit in EXST 2P04.

ABST 3F01

Advanced Mohawk

Focus on the Great Law and the Code of Handsome Lake. Study of the elevated language and contemporary significance of these works from a Mohawk perspective.

Lectures, lab, 4 hours per week.

Prerequisite: ABST (EXST) 2F01.

Students completing this course will forfeit credit in EXST 3F01.

ABST 3F03

Advanced Cayuga

Focus on the Great Law and the Code of Handsome Lake. Study of the elevated language and contemporary significance of these works from a Cayuga perspective.

Lectures, lab, 4 hours per week.

Prerequisite: ABST (EXST) 2P04.

Students completing this course will forfeit credit in EXST 3F03.

ABST 3P46

Aboriginal Peoples and Canadian Society

(also offered as SOCI 3P46)

Relationship between Canada's Aboriginal peoples and selected institutions in Canadian society such as education, industry and government. Topics include the European impact on indigenous culture, the conflict between traditional life styles and Canadian institutions, and the responses of Aboriginal peoples.

Lectures, seminar, 3 hours per week.

Prerequisite: SOCI 1F90 or SOCI 2P82 or permission of the instructor.

Applied Language Studies

Chair

Glenwood H. Irons
Cheng Luo (as of July 1, 2000)

Undergraduate Co-ordinator

Richard J. Welland

Professor

John N. Sivell

Associate Professors

Glenwood H. Irons, Cheng Luo, Hedy M. McGarrell

Assistant Professors

Donna R. Patrick, Monica Sanchez, Richard J. Welland

Co-ordinator, Master of Education with Specialization in TESL

Hedy M. McGarrell

Director, Intensive English Language Program

Glenwood Irons

General Information

Administrative Assistant, extension 3374
Mackenzie Chown A242
<http://www.brocku.ca/appliedlang/>

The Department of Applied Language Studies offers programs leading to honours and pass BA degrees in General Linguistics and to a Certificate in Teaching English as a Second Language.

The department also offers courses in areas related to communication disorders and in Asian languages and English as a Second Language.

General Linguistics

General Linguistics at Brock examines the structure of language and its role in communication. The department's focus is on language as children acquire it, as the product of cultures and social groups and as the medium through which human communication most often occurs. Three specific streams allow students to develop a strong background in the core areas of linguistics and to specialize in their area of particular interest. The General Linguistics stream provides background for the analysis of language. Along with the introductory courses

(LING 1F91 and LING 1F94), there is a core of courses which focus on phonology, syntax, language and culture, ethnography, discourse analysis, language and gender and language learning.

A background in linguistics is essential for language teachers, translators, audiologists, speech language pathologists and many other language professionals.

The Communication Disorders stream is a preprofessional program that provides background in normal speech and language processes, language development and disorders of human communication. While successful completion of these courses does not qualify students to evaluate or treat individuals with communication disorders, this stream is of particular interest to students who are pursuing careers as speech language pathologists or audiologists and who intend to pursue graduate studies in these fields.

The Teaching English as a Second Language (TESL) stream is offered as a four-year honours program and provides background in theories and methodologies relevant to the learning and teaching of English as a second or subsequent language.

Students interested in teaching language in the Ontario school system should consult the Ministry of Education and Training guidelines. In those guidelines, "Language Courses" mean English or any teachable (modern language) subject.

Language Requirement for Humanities Majors

LING majors are required to complete one credit in a language other than English. Where half credit courses are used to satisfy the requirement, both half credits must be in the same language. The selection of non-Indo-European language courses (such as Mandarin Chinese or Japanese) is recommended.

Program Notes

1. Context credits must be completed within the first 10 credits.
2. In all 20 credit degree programs, at least 12 credits must be numbered 2(alpha)00 or above, six of which must be numbered 2(alpha)90 or above and of these, three must be numbered 3(alpha)90 or above. In all 15 credit degree programs, at least seven credits must be numbered 2(alpha)00 or above, three of which must be numbered 2(alpha)90 or above.

Single Major Programs

General Linguistics stream

Honours

Year 1

LING 1F91 and 1F94; one Science and one Humanities context credit; one elective credit (COMM 1F90 strongly recommended).

Year 2

LING 2P50, 2P53, 2P61, 2P62, 2P63 and 2P98; one credit from COMM 2P15, FREN 2P57, LING 2P51, 2P94, 2P95, 2P96, 2P99, SPAN 2P90; one elective credit.

Year 3

LING 3P92, 3P93, 3P94 and 3P95; one credit from COMM 3P88, ENGL 3F91, FREN 3P05, LING 3M80-3M99, 3P98, 3P99, 3Q91, 3V80-3V99; two elective credits.

Year 4

LING 4P41 and 4P50; two credits from COMM 4P50, 4P51, LING 4F01, 4P40, 4P82, 4P83; two elective credits (LING 4P60 strongly recommended).

Pass

Satisfactory completion of the first three years of the honours program entitles a student to apply for a pass degree.

Communication Disorders stream

Honours

Year 1

LING 1F91 and 1F94; one Science and one Humanities context credit; one elective credit (PSYC 1F90 strongly recommended).

Year 2

LING 2P50, 2P51 or 2P53, 2P61, 2P96, 2P97 and 2P98; two elective credits (PSYC 2F23 strongly recommended).

Year 3

LING 3P94, 3P95, 3P98 and 3P99; one credit from LING 2P99, 3P92, 3Q91, PSYC 2F91, 3P11, 3P98, 3P99; two elective credits.

Year 4

LING 4P20, 4P21, 4P30, 4P31 and 4P40; one-half credit from LING 4P41, 4P50, PSYC 3P94; two elective credits.

Pass

Satisfactory completion of the first three years of the honours program entitles a student to apply for a pass degree.

TESL stream (honours only)

Year 1

LING 1F94; one Science and one Social Science context credit; two elective credits.

Year 2

LING 2P50, 2P61 and 2P98; one and one-half credits from LING 2P51, 2P53, 2P62, 2P63, 2P99; two elective credits.

Year 3

LING 3P92, 3P94, 3Q91 and 3Q92; one credit from LING 3M80-3M99, 3P93, 3P95, 3V80-3V99; two elective credits.

Year 4

LING 4P40, 4P41, 4P80, 4P82, 4P83 and 4P84; two elective credits (LING 4P50 strongly recommended).

Combined Major Programs

Students proceeding towards a BA or BA (honours) in one of these streams may complete a combined major in conjunction with one other Humanities, Social Science or Science department.

Honours

Year 1

LING 1F91 and 1F94; one credit from the co-major discipline; two elective credits.

Year 2

LING 2P50 and 2P61; one credit from LING 2P51, 2P53, 2P62, 2P63, 2P94, 2P95, 2P96, 2P97, 2P98, 2P99; two credits from co-major discipline; one elective credit.

Year 3

Two credits from LING 3P92, 3P93, 3P94, 3P95, 3P98, 3P99, 3Q91, 3Q92; two credits from the co-major discipline; one elective credit.

Year 4

Two credits from LING 4P20, 4P21, 4P30, 4P31, 4P40, 4P41, 4P50; two credits from the co-major discipline; one elective credit.

Applied Language Studies

Pass

Satisfactory completion of the first three years of the honours program entitles a student to apply for a pass degree.

Linguistics and Child and Youth Studies

Honours

Year 1

LING 1F91 and 1F94; CHYS 1F90; PSYC 1F90; SOCI 1F90.

Year 2

LING 2P50 and 2P96; CHYS 2F10, 2P35 and 2P38; MATH 1F92 or PSYC 2F23 (preferred); one Science context credit (BIOL 1F25 preferred).

Year 3

LING 2P97, 2P98, 3P98 and 3P99; CHYS 3P10 and 3P15; one-half credit from CHYS 3P20, 3P23, 3P35, 3P38, 3P90, 3P91, 3P92, 3P94, 3P96, 3Q93, 3Q94; one-half credit from CHYS 3P11, 3P25, 3P65; one elective credit.

Year 4

LING 4P20, 4P21, 4P30 and 4P31; CHYS 4F97; one-half credit from CHYS 4P35, 4P38, 4P65; one-half credit from CHYS 3P90, 3P91, 3P92, 3P94, 3P96, 3P97, 3P98, 3P99, 3Q93, 3Q94, 3V90-3V93, 4P31, 4P32; one elective credit.

Pass

Satisfactory completion of the first three years of the honours program entitles a student to apply for a pass degree.

For further information on the LING/CHYS combined program, please see the Undergraduate Co-ordinator, Applied Language Studies or the Co-ordinator, Child and Youth Studies.

Linguistics and English

Honours

In addition to the required ENGL courses a student must complete one credit from List A; one credit from List B; one credit from List C. Refer to ENGL section of the calendar for the relevant list requirements.

Year 1

LING 1F94; one ENGL credit numbered 1(alpha)00 to 1(alpha)99 (ENGL 1F91 recommended); one Science and one Social Science context credit; one credit fulfilling the language requirement.

Year 2

LING 2P50, 2P61, 2P62 and 2P63; two ENGL credits numbered 2(alpha)00 to 2(alpha)99; one elective credit.

Year 3

LING 3P92, 3P93, 3P94 and 3P95; two ENGL credits numbered 3(alpha)00 to 3(alpha)99; one elective credit.

Year 4

LING 4P50; one and one-half LING credits numbered 2(alpha)90 or above (4P60 strongly recommended); two ENGL credits numbered 3(alpha)90 or above; one elective credit.

Pass

Satisfactory completion of the first three years of the honours program entitles a student to apply for a pass degree.

Master of Education (MEd) with a Specialization in TESL

Applied Language Studies, in collaboration with the Graduate Department of the Faculty of Education, offers courses leading to an MEd degree -- Curriculum Studies (with specialization in TESL). Please refer to the Graduate Calendar for details. For further information, please see the Co-ordinator, Master of Education with a Specialization in TESL.

Certificate Program in Teaching English as a Second Language

The Department of Applied Language Studies offers a Certificate in TESL/TEFL (Teaching English as a Foreign Language) for interested individuals who already have an undergraduate degree. The program consists of five credits and introduces theories of second-language instruction, their implications for teaching and learning subsequent languages, particularly listening, speaking, reading and writing and application to practical problems of teaching English as a second language in the classroom.

The certificate is awarded upon completion of at least five credits in LING with an overall average of 60 percent.

Required courses:

LING 1F94, 3Q91, 3Q92, 4P40, 4P80, 4P82, 4P83, 4P84.

Additional courses:

One of LING 2P50, 2P61, 3P92, 3P93, 3P94, 3P95, 4P41, 4P50.

Prerequisites and Restrictions

Students must check to ensure that prerequisites are met. Students may be deregistered, at the request of the instructor, from any course for which prerequisites and/or restrictions have not been met.

Description of Courses

Note that not all courses are offered in every session. Refer to the applicable term timetable for details.

LING 1F91

Introduction to Language and Communication Disorders

Various contemporary theories of normal and abnormal language acquisition and learning. Topics include neurological, psychological, cultural and pathological factors. Attention to the development of strong academic reading and writing abilities.

Lectures, seminar, 3 hours per week.

Note: this course is of interest to students in education, behavioural and social sciences, to health professionals and to students intending to pursue subsequent professional training in speech-language pathology or audiology.

LING 1F94

Introduction to General Linguistics

Phonetics, phonology, morphology, syntax and semantics; their evidence in language use; classification of human languages; language and society. Analysis of language data. Texts on language from Aristotle to the present.

Lectures, seminar, 3 hours per week.

LING 1P95

Principles of Language Structure for Primary and Junior Teachers

Concepts of language structure focusing on English grammar applicable to Primary and Junior school curriculum.

Lectures, seminar, 3 hours per week.

Note: designed to meet the English language requirement for the Pre-Service program of the Faculty of Education at Brock University.

LING 2P50

Phonetics

Phonological and phonetic features of English and possibly other languages including speech physiology, articulation, segmental and suprasegmental classifications. Lab exercises in transcription, production and auditory discrimination.

Lectures, lab, 3 hours per week.

Prerequisite: LING 1F94 or permission of the Chair.

LING 2P51

Clinical Phonetics

Techniques for the analysis of the production of speech sounds. The use of transcription skill in the analysis and description of the speech sound of second-language speakers, young children and phonologically impaired speakers of first and subsequent languages.

Lectures, lab, 3 hours per week.

Prerequisite: LING 2P50.

LING 2P53

Phonology

Analysis of sound patterns and examination of phonological theories. Strong emphasis on description and analysis of data from a wide variety of languages.

Lectures, seminar, 3 hours per week.

Prerequisite: LING 1F94.

LING 2P61

Syntax

Syntactic analysis focusing on English. Basic concepts, categories, rules and principles and analytic techniques involved. Selected frameworks influential in 20th-century linguistics.

Lectures, seminar, 3 hours per week.

Prerequisite: LING 1F94 or permission of the Chair.

LING 2P62

Semantics

Sense relations, word meaning, sentence meaning and utterance meaning. Consideration of semantic universals, feature analysis and logical representation of meaning.

Lectures, seminar, 3 hours per week.

Prerequisite: LING 1F94 or permission of the Chair.

LING 2P63

Morphology

Analysis of word structure in English and selected languages. Inflectional and derivational morphology, word formation processes and rules and the relationship of morphology to phonology and syntax. Analysis of language data.

Lectures, seminar, 3 hours per week.

Prerequisite: LING 1F94.

LING 2P94

Comparative Romance Linguistics

(also offered as FISP 2P94)

A comprehensive survey of the Romance languages; their evolution from Latin; phonetics and phonology; structures and related concepts (syntax, morphology and semantics); differences and mutual influences. Materials drawn from several Romance languages.

Lectures, seminar, 3 hours per week.

Prerequisite: one of LING 1F94, FREN 1F90, ITAL 1F90, SPAN 1F90 or permission of the instructor.

Note: may be counted as part of a major program in French, Italian or Spanish.

Applied Language Studies

LING 2P95

History of the Germanic Languages

(also offered as GERM 2P95)

The development of the Germanic languages from their roots in Indo-European to the present day; morphology; phonology; syntax. The evolution of words throughout the ages.

Lectures, 3 hours per week.

Prerequisite: LING 1F94 or GERM 1F90 or permission of the instructor.

Note: given in English.

Students completing this course will forfeit credit in GERM 4P19 and 4P20.

LING 2P96

Language Disorders in Children

Theories and methods of assessment and intervention for language disorders in children and youth.

Lectures, lab, 3 hours per week.

Prerequisite: LING 2P98 or permission of the Chair.

LING 2P97

Introduction to Audiology

Review of anatomy and physiology of hearing. Hearing disorders from preschool to the aging populations. Approaches to prevention, assessment and treatment.

Lectures, seminar, 3 hours per week.

Prerequisite: LING 1F91 or permission of the Chair.

LING 2P98

Child Language Acquisition: Early Stages

(also offered as CHYS 2P98 and PSYC 2P98)

Theories, research and methods in early language development. Linguistic stages in the development of child language at the level of grammar and meaning (phonology, morphology, syntax, semantics, pragmatics). Discourse as an indicator of the socialization process. The effect of interaction with care givers. Early bilingualism.

Lectures, seminar, 3 hours per week.

Prerequisite: LING 1F91 or PSYC 1F90 or permission of the Chair.

LING 2P99

Child Language Acquisition: Late Stages

(also offered as CHYS 2P99 and PSYC 2P99)

Later acquired aspects of language, especially syntactic, semantic and pragmatic. Development of ability to use linguistic ambiguity, humour. Reading and writing skills, registers. Abnormal language development.

Lectures, seminar, 3 hours per week.

Prerequisite: LING 2P98 or permission of the Chair.

Students completing this course will forfeit credit in CHST 2P99.

LING 3M80-3M99

Special Issues in Linguistics

Selected issues in the theory and/or practice of linguistics. Topics according to specific areas of instructional expertise.

Lectures, seminar, 3 hours per week.

Prerequisite or co-requisite: LING 1F94 or permission of the Chair.

LING 3P92

Sociolinguistics

Language in its social context: bilingualism and linguistic variation; social factors which interact with language; cultural implications of language learning and language behaviour.

Lectures, seminar, 3 hours per week.

Prerequisite: LING 1F94 or permission of the Chair.

LING 3P93

Gender and Language

(also offered as WISE 3P93)

A survey of major debates concerning language, gender and power in the 20th century.

Lectures, seminar, 3 hours per week.

LING 3P94

Pragmatics

Language use in speech acts, implicature and inferencing, deixis and presupposition and conversation structure. Comparison of major frameworks and application of analytic techniques to discourse data, textually and contextually.

Lectures, seminar, 3 hours per week.

Prerequisite: LING 1F94 or permission of the Chair.

LING 3P95

Topics in Discourse Analysis

Topics include variation analysis, text and context, knowledge and discourse comprehension, topicality and analysis of a variety of discourse data. Collection, transcription and analysis of data pertinent to selected topics.

Lectures, seminar, 3 hours per week.

Prerequisite: LING 3P94 or permission of the Chair.

LING 3P98

Anatomy and Physiology of Speech Production

Structural and functional bases of respiration, phonation and articulation for the production of speech and voice. Introduction to physiological measurement and theory of speech breathing and phonation.

Lectures, seminar, 3 hours per week.

Restriction: open to LING (single or combined) majors until date specified in BIRT guide.

Prerequisite: LING 1F91.

LING 3P99

Acoustic Phonetics and Speech Processing

Processes in speech production and perception. Vowel and consonant phonation, feedback mechanisms, models of production and perception.

Lectures, sem, 3 hours per week.

Prerequisite: LING 1F94.

LING 3Q91

Second-Language Acquisition and Learning
(also offered as PSYC 3Q91)

Theories of second- or subsequent-language learning. Topics include psychological aspects of language learning (behaviourism, cognitivism, humanism), language and culture, contrastive analysis, error analysis, interlanguage.

Lectures, seminar, 3 hours per week.

LING 3Q92

Methodology in Second-Language Instruction
(also offered as PSYC 3Q92)

Approaches to teaching and learning and their influence on classroom methods. Overview of methods from the Greeks to the modern era.

Lectures, seminar, 3 hours per week.

Prerequisite: LING 3Q91.

LING 3V80-3V99

Special Issues in Linguistics

Selected issues in the theory and/or practice of linguistics. Topics according to specific areas of instructional expertise.

LING 4F01

Honours Thesis

A research project carried out with faculty supervision.

Restriction: open to LING (single or combined) majors with approval to year 4 (honours).

Note: students must consult the Chair and an adviser before being admitted to course.

LING 4P20

Evaluation of Speech and Language Disorders

Procedures involved in the clinical evaluation of a variety of speech and language disorders across the life span. Topics include standardized testing, nonstandardized measurement and frameworks for identifying speech, voice and language disorders.

Lectures, seminar, 3 hours per week.

Restriction: open to LING (single or combined) majors with approval to year 4 (honours).

LING 4P21

Clinical Observation in Communication Disorders

Directed observation in the evaluation and treatment of speech, language, hearing and/or swallowing disorders. Observation experience includes videotape analyses and visits to off-campus clinical observation sites.

Lectures, seminar, 3 hours per week; clinical observations.

Restriction: open to LING (single or combined) majors with approval to year 4 (honours).

LING 4P30

Readings in Communication Disorders

Readings and directed discussions in diverse areas of speech-language pathology. Topics include cultural issues in communication disorders, phonological disorders, voice disorders, stuttering and other fluency disorders, hearing loss and neurogenic disorders.

Seminar, 3 hours per week.

Restriction: open to LING (single or combined) majors with approval to year 4 (honours).

LING 4P31

Communication, Communication Disorders and Aging

Theories and research on communication in healthy older adults and in those with age-associated disorders (e.g., dementia). Consideration of how age-related physiological changes and characteristics of the physical and psycho-social environments affect communication in later adulthood.

Lectures, seminar, 3 hours per week.

Restriction: open to LING (single or combined) majors with approval to year 4 (honours).

Note: COHL, HLSC, PSYC and WKHL majors with approval to year 4 may take this course with permission of the Chair.

LING 4P40

Language Testing

Theory and practice of language testing in research, teaching and clinical diagnosis. Design, analysis and critical evaluation of psychometric and pragmatic tests.

Lectures, seminar, 3 hours per week.

Restriction: open to LING (single or combined) majors with approval to year 4 (honours) and TESL certificate students.

LING 4P41

Bilingualism

Linguistic nature of bilingualism, models of bilingual education, linguistic abilities in bilinguals, phonological, morphological and syntactic constraints on code mixing, genetically related and unrelated languages and the organization of bilingual grammar and lexicon.

Lectures, seminar, 3 hours per week.

Restriction: open to LING (single or combined) majors with approval to year 4 (honours) and TESL certificate students.

LING 4P50

Topics in Sociolinguistics

Critical examination and application of current sociolinguistic theories. Topics include the analysis of language in relation to ideology, ethnicity, class, gender and power in institutional and other social settings.

Seminar, 3 hours per week.

Restriction: open to LING (single or combined) majors with approval to year 4 (honours).

LING 4P60

Storytelling

(also offered as CHYS 4P60)

Topics include functions of storytelling, characteristics of tellers, relationship between storytelling and social identity as they apply in Canada. Experience in performance of a variety of oral narratives.

Seminar, 3 hours per week.

Restriction: open to CANA, CHYS (single or combined), LING (single or combined) and COMM (single or combined) majors until date specified in BIRT guide. Students must have approval to year 4 (honours).

Applied Language Studies

LING 4P80

Supervised Teaching

Class observation, including planning, managing and delivering second language instruction. Seminar discussions on current conceptual knowledge (theoretical) and perceptual knowledge (practical) highlighted with reference to the second language teaching and learning context.

Observations and seminars, 3 hours per week.

Restriction: open to LING (single or combined) majors with approval to year 4 (honours) and TESL certificate students.

LING 4P82

Listening and Speaking in a Second Language

Theories of and issues in the development of oral language processing in a second or subsequent language. Implications and applications for selected teaching and learning situations.

Lectures, seminar, 3 hours per week.

Restriction: open to LING (single or combined) majors with approval to year 4 (honours) and TESL certificate students.

Prerequisite: LING 1F94.

Students completing this course will forfeit credit in TESL 4F03.

LING 4P83

Reading and Writing in a Second Language

Selected theories and models underlying reading and writing ability. Their relationship to the concept of "grammar" and influence on interlanguage development. Implications and applications for selected teaching and learning situations.

Lectures, seminar, 3 hours per week.

Restriction: open to LING (single or combined) majors with approval to year 4 (honours) and TESL certificate students.

Prerequisite: LING 1F94.

Students completing this course will forfeit credit in TESL 4F05.

LING 4P84

Materials and Curriculum Design

Theoretical foundations, development and/or adaptation of second-language syllabi; planning, managing, and delivering second-language instruction. Includes materials assessment, needs analysis and practical classroom experience.

Lectures, seminar, 3 hours per week.

Restriction: open to LING (single or combined) majors with approval to year 4 (honours) and TESL certificate students.

Prerequisite: LING 1F94.

Students completing this course will forfeit credit in TESL 4F04.

ASIAN LANGUAGES

Courses in this program are designed to introduce speaking and writing ability in Asian languages.

Description of Courses

Note that not all courses are offered in every session. Refer to the applicable term timetable for details.

JAPA 1P00

Introduction to Modern Standard Japanese I

Elementary conversational Japanese. Focus on developing listening skills and understanding customs. Introduction to essential grammar and hiragana and katakana syllabaries.

Lectures, lab, 4 hours per week.

Note: open to students with limited or no background in the language.

JAPA 1P01

Introduction to Modern Standard Japanese II

Conversational Japanese with emphasis on cultural knowledge and customs. Introduction of approximately 200 kanji (Chinese characters).

Lectures, lab, 4 hours per week.

Prerequisite: JAPA 1P00 or permission of the instructor.

JAPA 1P80

Practical Japanese I

Everyday communication skills. Focus on vocabulary building and reading skills.

Lectures, lab, 4 hours per week.

Prerequisite: JAPA 1P01 or permission of the instructor.

JAPA 1P81

Practical Japanese II

Oral and written communication skills. Focus on writing skills.

Lectures, lab, 4 hours per week.

Prerequisite: JAPA 1P80 or permission of the instructor.

MAND 1P00

Introduction to Mandarin Chinese I

Elementary Mandarin with focus on conversational listening and understanding of relevant customs. Introduction to Pinyin.

Lectures, lab, 4 hours per week.

Note: open to students with limited or no background in the language.

MAND 1P01

Introduction to Mandarin Chinese II

Conversational Mandarin with emphasis on vocabulary building, customs and cultural knowledge. Introduction of Chinese characters.

Lectures, lab, 4 hours per week.

Prerequisite: MAND 1P00 or permission of the instructor.

MAND 1P80

Practical Mandarin Chinese I

Basic written and oral skills for everyday needs. Emphasis on practical communication and reading of Chinese characters.

Lectures, lab, 4 hours per week.

Prerequisite: MAND 1P01 or permission of the instructor.

MAND 1P81

Practical Mandarin Chinese II

Written and oral skills, development of vocabulary. Focus on writing Chinese characters for practical text development.

Lectures, lab, 4 hours per week.

Prerequisite: MAND 1P80 or permission of the instructor.

ENGLISH AS A SECOND LANGUAGE

APLS courses are designed to enhance and develop the English speaking and writing ability of students whose native language is not English.

Students with scores below TOEFL 580 , TOEFL CBT 237, MELAB 90, IELTS 7.0 who have been accepted into academic programs are required to register in APLS 1P80 and APLS 1P81 in year 1 along with no more than 4 credits.

Description of Courses

APLS 1P80

English as a Second Language I

Introduction to academic listening, note taking, reading, writing and speaking.

Lectures, lab, 4 hours per week.

APLS 1P81

English as a Second Language II

Refinement of academic listening, note taking, reading, writing and speaking. Academic production and research presentation.

Lectures, lab, 4 hours per week.

APLS 1P90

Advanced Written English

For students who wish to refine writing skills and techniques to meet standards of basic academic and professional acceptance.

Lectures, lab, 4 hours per week.

Note: designed for students whose native language is not English.

APLS 1P91

Advanced Spoken English for ESL Students

Stresses the importance of seminar participation. Emphasizes oral presentations and simulations through the study of structure, vocabulary, focussed listening comprehension exercises and organization of spoken texts.

Lectures, lab, 4 hours per week.

Note: designed for students whose native language is not English.

Intensive English Language Program (IELP)

The IELP provides 25 hours of English instruction per week in: grammar and writing, guided reading, spoken English and listening. This program is open to all non-native speakers who wish to improve English for academic, professional or social purposes. Inquiries should be sent to the Director, Intensive English Language Program.

Biochemistry

This program is co-ordinated by the Department of Biological Sciences and Chemistry.

Co-ordinators

Alan J. Castle, Department of Biological Sciences
Ian D. Brindle, Department of Chemistry

General Information

Administrative Assistant, extension 3388
Mackenzie Chown F234
<http://www.brocku.ca/biochemistry>

At Brock, Biochemistry courses were developed originally by the Biological Sciences department and are now offered by that department and by the department of Chemistry.

Program Notes

1. Students preparing for professional studies in health sciences should note that many such programs require completion of a laboratory physics course i.e., PHYS 1F25 or 1F90 rather than PHYS 1F20.
2. CHEM 3P40 is strongly recommended for most projects in CHEM 4F90, 4F91 and should be taken in year 3 by students intending to proceed to a year 4 thesis in CHEM.
3. CHEM 4P27 is strongly recommended when offered. CHEM 4P27, together with CHEM 4P40, may be used to satisfy the CHEM credit requirement.
4. In all 20 credit degree programs. At least 12 credits must be numbered 2(alpha)00 or above, six of which must be numbered 2(alpha)90 or above and of these, three must be numbered 3(alpha)90 or above. In all 15 credit degree programs, at least seven credits must be numbered 2(alpha)00 or above, three of which must be numbered 2(alpha)90 or above.

Honours Program

Year 1
BIOL 1F90; CHEM 1P80 and 1P81, or CHEM 1P90 and 1P91 (preferred); MATH 1P93 and 1P94, or MATH 1P97 and 1P98; one of PHYS 1F20, 1F25, 1F90 (see program note 2); one Humanities or one Social Science context credit.

Year 2

BIOL 2F01; one credit from BIOL 2P92, 2P93, 2P96, 2P98; CHEM 2P12 or 2P63; CHEM 2P20, 2P21 and 2P42; the Humanities or Social Science context credit not taken in year 1.

Year 3

BCHM 3P01 and 3P02; BIOL 3P50; BIOL 3P51 or 3P91; CHEM 2P12 or 2P63 whichever was not taken in Year 2; CHEM 2P32, 3P20 and 3P21; one-half CHEM credit numbered 2(alpha)90 to 3(alpha)99; one-half elective credit (see program note 7).

Year 4

BIOL 4F90 and 4F91, or CHEM 4F90 and 4F91; one credit from BCHM 4P02, 4P04, 4P08, 4P67; one CHEM credit numbered 3(alpha)99 or above (see program note 9); one elective credit.

Pass Program

Satisfactory completion of the first three years of the honours program entitles a student to apply for a pass degree.

Prerequisites and Restrictions

Student must check to ensure that prerequisites are met. Students may be deregistered, at the request of the instructor, from any course for which prerequisites and/or restrictions have not been met.

Description of Courses

Note that not all courses are offered in every session. Students should plan their program accordingly and are advised to refer to the applicable term timetable for details.

BCHM 3P01

Metabolic Biochemistry

Buffers and pH, biochemical energetics, carbon metabolism of carbohydrates, lipids and proteins; nitrogen metabolism.

Lectures, seminar, 3 hours per week; labs, 3 hours per week for six weeks.

Restriction: open to BIOL (single or combined), BCHM, BTEC, BSc/BEd, CHEM (single or combined), ENVI (ENVS), CHSC (HLST) (single or combined), HLSC, NEUR and OEVI majors with a minimum of 8.0 overall credits.

Prerequisite: BIOL 2F01 or one credit from CHEM 2P20, 2P21, 2P22.

BCHM 3P02

Proteins and Enzymes

Primary-, secondary-, tertiary-, and quaternary-protein structure; protein function and physical chemistry; protein structure and enzyme activity. Enzyme mechanisms and kinetics; allostery and control; membrane-bound enzymes; multi-enzyme systems.

Lectures, seminar, simulations, 3 hours per week; lab, 3 hours per week for six weeks.

Restriction: open to BIOL (single or combined), BCHM, BTEC, BSc/BEEd, CHEM (single or combined), ENVI (ENVS), NEUR and OEVI with a minimum of 8.0 overall credits.

Prerequisite: BIOL 2F01.

BCHM 3V90-3V99

Special Topics in Biochemistry

(also offered as BIOL 3V90-3V99)

Selected issues in Biology on the basis of faculty expertise.

Restriction: open to BIOL (single or combined), BCHM, BTEC, BSc/BEEd, CHEM (single or combined), ENVI (ENVS), NEUR and OEVI majors with a minimum of 8.0 overall credits.

Note: under certain circumstances, a student may carry out, under faculty supervision, a detailed study of the scientific literature pertinent to a specific topic. The results of this study will be presented as a major essay and as a formal seminar.

BCHM 4P02

Plant Biochemistry: Membrane Transport

Ion-transporting ATPases, ion channels and ion-coupled transport at the plasma membrane and tonoplast. Cell transport and signaling cascades; Ca²⁺ and phospholipid mediated signaling.

Lectures or seminar, 2 hours per week.

Restriction: open to BIOL (single or combined), BCHM, BTEC, CHEM (single or combined), ENVI (ENVS), NEUR and OEVI majors with either a minimum of 14.0 overall credits or approval to year 4 (honours).

Prerequisite: BCHM 3P01 or 3P02 or permission of the instructor.

BCHM 4P03

Current Topics in Photobiology

(also offered as BIOL 4P03)

The interaction of light with biological molecules. Effects of ultraviolet radiation, photosynthesis, vision and photoregulation of genes and proteins.

Lectures, seminar, lab, 3 hours per week.

Restriction: open to BIOL (single or combined), BCHM, BTEC, CHEM (single or combined), ENVI (ENVS), NEUR and OEVI majors with either a minimum of 14.0 overall credits or approval to year 4 (honours).

Prerequisite: any year 3 BCHM credit or permission of the instructor.

BCHM 4P04

Bioenergetics

Energy conservation and use in the cell; thermodynamics of oxidative phosphorylation; chemical and chemiosmotic energy stores; mitochondrial, chloroplast and bacterial phosphorylation; growth and whole organism energetics; Elsdén's and Kleiber's laws.

Lectures, seminar, 2 hours per week.

Restriction: open to BIOL (single or combined), BCHM, BTEC, CHEM (single or combined), ENVI (ENVS), NEUR and OEVI majors with either a minimum of 14.0 overall credits or approval to year 4.

Prerequisites: BCHM 3P01 and 3P02 or permission of the instructor.

BCHM 4P08

Topics in Plant and Microbial Biotechnology

(also offered as BTEC 4P08)

Illustrative cases from the current literature to show how specific biochemical processes or structures may be characterized, and how molecular manipulation allows genetic modification of such processes and structures to meet scientific and/or societal needs. Examples include yeast and microbial enzymes or enzyme systems as well as crop proteins and enzymes.

Lectures, seminar, 3 hours per week.

Restriction: open to BIOL (single or combined), BCHM, BTEC, CHEM (single or combined), ENVI (ENVS), NEUR and OEVI majors with either a minimum of 14.0 overall credits or approval to year 4.

Prerequisite: one of BCHM 3P01, BCHM 3P02, BIOL (BTEC) 3P50, CHEM (BTEC) 3P63 or permission of the instructor.

BCHM 4P67

Biophysical Techniques

(also offered as BTEC 4P67 and CHEM 4P67)

Modern instrumental methods of biotechnology, emphasizing underlying theory. Development of newer technologies which utilize biological components. Topics include optical, X-ray, and NMR techniques, separation techniques, hybridization assays, immunoassays, biosensors and mass spectral techniques; membrane chemistry.

Lectures, seminars, 3 hours per week.

Prerequisites: CHEM 2P21 and 2P63 or permission of the instructor.

Biological Sciences

Chair

Alan J. Castle

Professor Emeritus

Arthur H. Houston

Professors

John E. Black, Alan W. Bown, Douglas H. Bruce, Yousef Haj-Ahmad, A. Joffre Mercier

Associate Professors

Robert L. Carlone, Alan J. Castle, Fiona F. Hunter, Andrew G. Reynolds

Assistant Professor

Miriam Richards

Adjunct Professors

Peter Nicholls, Ekaterini Riga, Dan Rinker, Lorne W. Stobbs

Laboratory Instructors

John Ciolfi, Diane Eaton, Ellen Maissan, George Melvin

General Information

Administrative Assistant, extension 3388

Mackenzie Chown F234

<http://aqueous.labs.brocku.ca/>

The biological sciences, or the life sciences, encompass a broad spectrum of subjects from molecular biology to ecology as well as such disciplines as biochemistry, biophysics, genetics and physiology. The program offered by the department is designed to provide the student with a broad base in modern biological thought, to fulfil the basic requirements for admission to professional and advanced degree studies and to prepare graduates for careers in the biological sciences and related fields. Although the undergraduate program provides students with flexibility in selecting the areas of biology most compatible with their interests and skills, it also ensures that students develop an overview of the major concepts and problems of modern biology as expressed at all levels of biological organization.

The objectives of the undergraduate program are realized through a group of core courses in years 1 and 2, each with an associated laboratory. Laboratory classes stress the investigative approach to experimental studies. Students move progressively from structured laboratory studies to increasingly independent investigations and in the honours year undertake individual research projects. Working from the core program, students may follow a variety of curriculum patterns to satisfy their interests.

Students must consult faculty advisers when planning years 3 and 4 of the BSc (honours) program or year 3 of the BSc (pass) program.

The honours year provides students with the opportunity for either broadening their understanding of the biological sciences

or for increased specialization. Ideally, the honours program provides an opportunity for the synthesis of material presented in earlier years and also provides an opportunity for independent investigative work. Each honours candidate undertakes a major research study under the direct supervision of a faculty member. Students must apply to the Department of Biological Sciences in order to be admitted to year 4 (honours).

Program Notes

1. Students registering for BIOL 1F90 should register in MATH 1P98 for the Fall Term, but should check with Mathematics department regarding prerequisites. MATH 1P93 may be substituted for MATH 1P97.

2. Students preparing for professional studies in health sciences should note that many such programs require completion of a laboratory physics course i.e., PHYS 1F25 or 1F90 rather than PHYS 1F20.

3. PHYS 1F20 or 1F25 is strongly recommended for students who do not have OAC Physics.

4. The third ancillary science credit must be numbered 1(alpha)00 to 2(alpha)99 and offered by a department in the Faculty of Mathematics and Science other than Biological Sciences, excluding ASTR 1F00, ERSC 1F90, SCIE 1F30, BTEC courses and MATH courses numbered 1(alpha)00 to 1(alpha)99. An organic chemistry course numbered 2(alpha)00 to 2(alpha)99 is recommended.

5. BIOL 2F95 does not carry major credit for the BSc (honours degree). Students who submit this for credit toward the BSc pass degree must replace it with accepted BIOL credits if they subsequently enter the Honours program.

6. Students in year 3 are encouraged to take one-half credit from BIOL 2P92, 2P93, 2P96, 2P98 not taken in year 2.

7. CHEM 3P40 is strongly recommended for most projects in CHEM 4F90, 4F91 and should be taken in year 3 by students intending to proceed to a year 4 thesis in CHEM.

8. Honours students who elect BIOL 4F90, 4F91 and who have taken only the minimum five credits in CHEM in years 1 through 3 may experience difficulty in obtaining the necessary two additional CHEM credits in year 4.

9. PSYC 3F40 and 3P39 are required for students intending to complete and honours thesis in Psychology.

10. In all 20 credit degree programs. At least 12 credits must be numbered 2(alpha)00 or above, six of which must be numbered 2(alpha)90 or above and of these, three must be numbered 3(alpha)90 or above. In all 15 credit degree programs, at least seven credits must be numbered 2(alpha)00 or above, three of which must be numbered 2(alpha)90 or above.

Honours Program

Year 1

BIOL 1F90 (see program note 1); CHEM 1P80 and 1P81, or CHEM 1P90 and 1P91; MATH 1P97 and 1P98; one credit from COSC 1P90, 1P93, 1P98, 1P99, ERSC 1F95, PHYS 1F20, 1F25, 1F90 (see program notes 2 and 3); one Humanities or Social Science context credit.

Year 2

BIOL 2F01, 2P05 and 2Q04; one credit from BIOL 2P92, 2P93, 2P96, 2P98; third ancillary science credit (see program note 4); the Humanities or Social Science context credit not take in year 1.

Year 3

Three BIOL credits numbered 2(alpha)90 or above (see program notes 5, 6 and 7); two elective credits.

Year 4

BIOL 4F90 and 4F91, or BIOL 4F92 and one BIOL credit numbered 3(alpha)90 or above; one BIOL credit numbered 2(alpha)90 or above; one BIOL credit numbered 3(alpha)90 or above; one elective credit.

Pass

Satisfactory completion of the first three years of the honours program entitles a student to apply for a pass degree.

Concurrent BSc/BEd

The Faculty of Mathematics and Science and the Faculty of Education co-operate in offering a concurrent Pass BSc/BEd program for students interested in teaching mathematics and science at the elementary level to grade 8. Refer to the Education-Concurrent BSc/BEd Program listing for additional information.

Combined Major Programs

Biology and Chemistry

Honours

Year 1

BIOL 1F90; CHEM 1P80 and 1P81 or CHEM 1P90 and 1P91; MATH 1P93 and 1P94 or MATH 1P97 and 1P98; one of PHYS 1F20, 1F25, 1F90 (see program notes 2 and 3); one Humanities or Social Science context credit.

Year 2

BIOL 2F01; CHEM 2P12 or 2P63; CHEM 2P20, 2P21 and 2P42; one credit from BIOL 2P05, 2P92, 2P93, 2P96, 2P98, 2Q04, the Humanities or Social Science context credit not taken in year 1.

Year 3

BCHM 3P01 and 3P02; CHEM 2P12 or 2P63 whichever was not taken in year 2; CHEM 2P32; one BIOL credit numbered 2(alpha)90 to 3(alpha)99 (BIOL 3P50 recommended); one and one-half credits from CHEM 3P20, 3P21, 3P30, 3P31, 3P40, 3P41, 3P51, 3P53, 3P60 (see program notes 4 and 7); one-half elective credit.

Year 4

BIOL 4F90 and 4F91 (see program note 8) or BIOL 4F92 and one BIOL credit numbered 3(alpha)90 or above, or CHEM 4F90 and 4F91; one credit from the Department of Biological Sciences in the areas of biochemistry, biophysics or molecular biology or one half credit from one of those areas plus BCHM 3P02 or BIOL 3P50; one CHEM credit numbered 2(alpha)90 or above (see program note 9); one elective credit (see program note 11).

Pass

Satisfactory completion of the first three years of the honours program entitles a student to apply for a pass degree.

Biology and Geography

Honours

Year 1

BIOL 1F90; GEOG 1F91; MATH 1P97 and 1P98; one Humanities and one Social Science context credit (GEOG 1F90 is strongly recommended).

Year 2

BIOL 2P05 and 2Q04; one credit from BIOL 2P92, 2P93, 2P96, 2P98; GEOG 2P11; one and one-half credits from GEOG 2P04, 2P05, 2P07, 2P09; one elective credit.

Year 3

Two BIOL credits; GEOG 3P56; one GEOG credit numbered 2(alpha)90 to 3(alpha)99 from group B; one-half GEOG credit numbered 2(alpha)90 to 3(alpha)99 from group B or C (see Geography department); one elective credit.

Year 4

Two BIOL credits; GEOG 4F99; one GEOG credit numbered 3(alpha)90 or above from group B or C (see Geography department); one elective credit. BIOL 4F90 and 4F91, or BIOL 4F92 and one additional BIOL credit numbered 3(alpha)90 or above or GEOG 4F90 must be included.

Pass

Satisfactory completion of the first three years of the honours program entitles a student to apply for a pass degree.

Biology and Mathematics

Honours

Year 1

BIOL 1F90; MATH 1P93, 1P94 and 1P98; CHEM 1P80 and 1P81 or CHEM 1P90 and 1P91; COSC 1P03 or 1P93; one Humanities or Social Science context credit.

Biological Sciences

Year 2

Two credits from BIOL 2F01, 2P05, 2P92, 2P93, 2P96, 2P98, 2Q04; MATH 2F00 or 2F95; MATH 2F96; the Humanities or Social Science context credit not taken in year 1.

Year 3

Two BIOL credits numbered 2(alpha)90 to 2(alpha)99 or above; MATH 1P12, 2P01, 3P95 and 3P96; one elective credit.

Year 4

Two BIOL credits numbered 2(alpha)90 or above; MATH 4P22 and 4P23; one MATH credit; one elective credit.

Pass

Satisfactory completion of the first three years of the honours program entitles a student to apply for a pass degree.

Biology and Psychology

Honours

Year 1

BIOL 1F90; PSYC 1F90; CHEM 1P80 and 1P81 or CHEM 1P90 and 1P91; one Humanities context credit; one elective credit (MATH 1F92 or 1P97 and 1P98 recommended).

Year 2

Two credits from BIOL 2F01, 2P05, 2P92, 2P93, 2P96, 2P98, 2Q04; PSYC 2F23; one PSYC credit numbered 2(alpha)00 or above; one elective credit.

Year 3

Two BIOL credits numbered 2(alpha)00 to 2(alpha)99; two PSYC credits numbered 2(alpha)90 or above which must include either PSYC 3F40 or PSYC 3P30 (see program note 10); one elective credit.

Year 4

Two BIOL credits which may include BIOL 4F90 and 4F91 or BIOL 4F92; PSYC 4P92 and 4P93 and one PSYC credit numbered 3(alpha)90 or above; (if neither BIOL 4F90 and 4F91 nor BIOL 4F92 is taken, PSYC 4F91 or 4F92 is required); one elective credit.

Pass

Satisfactory completion of the first three years of the honours program entitles a student to apply for a pass degree.

Biology and Earth Sciences

Consult the Earth Sciences entry for a listing of course requirements.

Biology and Physics

Consult the Physics entry for a listing of course requirements.

Master of Science (MSc) Program

The Department of Biological Sciences offers specialized training in a wide variety of research areas leading to the MSc degree.

Candidates will normally have an honours BSc or BA degree for admission to the program. A minimum of one year of full-time study and research is required. This must include BIOL 5F90 (MSc thesis) and a minimum course program equivalent to two credits.

For details, refer to the Graduate Calendar or contact the Chair of the Department.

Prerequisites and Restrictions

Student must check to ensure that prerequisites are met. Students may be deregistered, at the request of the instructor, from any course for which prerequisites and/or restrictions have not been met.

Description of Courses

Note that not all courses are offered in every session. Students should plan their program accordingly and are advised to refer to the applicable term timetable for details.

BIOL 1F25

Biology: A Human Perspective

For non-science majors: contemporary issues of human concern. For example, cardiovascular physiology, biology of cancer, issues in contemporary biology.

Lectures, 2 hours per week; lab, alternating weeks, 2 hours per week during the Fall Term.

Note: Secondary school biology is not a prerequisite for this course.

BIOL 1F90

Concepts in Biology

Topics may include cell structure and function; transmission and molecular genetics; physiology, neurobiology and behaviour; development and immunology; origins, natural selection and evolution. Weekly laboratory exercises or seminars are coordinated with lectures.

Lectures, 3 hours per week; lab/seminar, 3 hours per week during the Winter Term.

Note: OAC biology recommended. Students registering for BIOL 1F90 should normally register for MATH 1P98 in the Fall Term. MATH 1P93 may be substituted for MATH 1P97. BIOL 1F90 is a prerequisite for most courses in the department.

BIOL 2F01

Principles of Molecular and Cellular Biology

Cellular processes and their relationship to cellular structure with emphasis on the structure and function of proteins, membranes, cell organelles and the expression of genetic information.

Lectures, seminar, 3 hours per week; lab, 3 hours per week during the Winter Term.

Restriction: students must have a minimum of 3.0 overall credits.

Prerequisite: BIOL 1F90.

Note: one CHEM credit numbered 1(alpha)00 to 1(alpha)99 strongly recommended.

BIOL 2F95

Bioethics

(also offered as PHIL 2F95)

An interdisciplinary focus on value conflicts and moral dilemmas in biology and medicine. Emphasis on specific case studies in reproductive interventions, medical experimentation, concepts of "health" and "disease", modification of behaviour, lifestyle choices, allocation of scarce or expensive medical resources and death and dying.

Lectures, seminar, 3 hours per week.

Prerequisite: one credit in BIOL or PHIL or permission of the instructor.

Note: may count as an elective, but not as a major course in any honours BIOL (single or combined) program.

BIOL 2P05

Principles of Population and Behavioural Ecology

Biological processes and patterns of uniformity and diversity at the individual and population levels of organization; group characteristics of populations and the evolutionary basis of animal behaviour.

Lectures, 3 hours per week; tutorial, 1 hour per week.

Restriction: students must have a minimum of 3.0 overall credits.

Prerequisite: BIOL 1F90.

Note: one-half year 1 credit in MATH strongly recommended.

BIOL 2P92

Animal Form, Function and Diversity

Basic anatomical structure of organs and organ systems throughout the animal kingdom to illustrate the relationships of structure to such functions as movement, feeding, respiration, reproduction and development. Evolutionary progressions of organ systems illustrated where appropriate.

Lectures, 3 hours per week; lab, 3 hours per week.

Restriction: students must have a minimum of 3.0 overall credits.

Prerequisite: BIOL 1F90 or permission of the instructor.

BIOL 2P93

Plant Biology: An Evolutionary Perspective

Major evolutionary trends seen in the plant kingdom through the study of form, structure and the reproductive cycles of a large diversity of plants.

Lectures, 3 hours per week; lab/seminar, 3 hours per week.

Restriction: students must have a minimum of 3.0 overall credits.

Prerequisite: BIOL 1F90 or permission of the instructor.

BIOL 2P96

Biology of Fungi

Structure, development, metabolism, reproduction and evolution of fungi, emphasizing the importance of fungi, in particular yeasts, to industrial processes.

Lectures, 3 hours per week; lab 3 hours, alternating weeks.

Restriction: students must have a minimum of 3.0 overall credits.

Prerequisite: BIOL 1F90.

BIOL 2P97

Human Physiology

Normal human function with specific reference to circulatory, respiratory and excretory activities and their regulation as well as their more common genetic, environmental and lifestyle pathologies.

Lectures, 3 hours per week.

Restriction: students must have a minimum of 3.0 overall credits.

Prerequisite: BIOL 1F90.

Note: computer simulations

BIOL 2P98

Principles of Microbiology

The study of bacteria and viruses.

Lectures, 3 hours per week; lab, 3 hours alternate weeks.

Restriction: students must have a minimum of 3.0 overall credits.

Prerequisite: BIOL 1F90.

BIOL 2Q04

Principles of Community and Environmental Biology

(also offered as ENVI 2Q04)

Principles of evolutionary ecology; biological processes at the community level of biological organization; patterns and diversity in natural ecosystems in terms of environmental toxins and their bioaccumulation in food webs; factors influencing community structure, biotic diversity and energy flow through ecosystems.

Lectures, 2 hours per week, lab, 3 hours per week during the Fall Term.

Restriction: students must have a minimum of 3.0 overall credits.

Prerequisite: BIOL 1F90.

Note: one-half year 1 credit in MATH strongly recommended.

Year 2 students enrolled in the ENEC program are permitted to register in BIOL 2Q04 provided they have successfully completed the MATH and GEOG requirements in year 1 of the program.

Students completing this course will forfeit credit in BIOL 2P04.

BIOL 3P24

Invertebrate Zoology I

The diversity, structure, function, habits, habitat and evolutionary relationships of protozoans, coelenterates, pseudocoelomates, molluscs and related phyla.

Lectures, 3 hours per week; lab, 3 hours per week.

Restriction: open to BIOL (single or combined), BCHM, BTEC, BSc/Bed, CHEM (single or combined), ENVI (ENVS), NEUR and OEVI majors with a minimum of 8.0 overall credits.

Prerequisite: BIOL 2P92.

Students completing this course will forfeit credit in BIOL 2P90.

BIOL 3P25

Invertebrate Zoology II

The diversity, structure, function, habits, habitat and evolutionary relationships of annelids, arthropods, deuterostomes, echinoderms and related phyla.

Lectures, 3 hours per week; lab, 3 hours per week.

Restriction: open to BIOL (single or combined), BCHM, BTEC, BSc/Bed, CHEM (single or combined), ENVI (ENVS), NEUR and OEVI majors with a minimum of 8.0 overall credits.

Prerequisite: BIOL 2P92.

Students completing this course will forfeit credit in BIOL 2P90.

BIOL 3P26

Comparative Vertebrate Zoology

Evolutionary examination of the vertebrate taxa emphasizing the

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structure, development and function of organ systems.

Lectures, 3 hours per week; lab, 3 hours per week.

Restriction: open to BIOL (single or combined), BCHM, BTEC, BSc/BEEd, CHEM (single or combined), ENVI (ENVS), NEUR and OEVI majors with a minimum of 8.0 overall credits.

Prerequisite: BIOL 2P92 or permission of the instructor.

Students completing this course will forfeit credit in BIOL 2P91.

BIOL 3P28

Developmental Biology

Vertebrate, invertebrate and plant development. Topics include egg and sperm interaction; emergence of diverse cell types in the adult body from a single cell; genetic control of tissue and organ formation and the morphological patterns in these structures; mechanisms of development constraining evolutionary change.

Lectures, 3 hours per week; lab, 3 hours per week for 6 weeks.

Restriction: open to BIOL (single or combined), BCHM, BTEC, BSc/BEEd, CHEM (single or combined), CHSC (HLST) (single or combined), ENVI (ENVS), HLSC, NEUR, OEVI and WKHL majors with a minimum of 8.0 overall credits.

Prerequisite: BIOL 2F01.

BIOL 3P34

Neurobiology

(also offered as NEUR 3P34)

Nervous systems from the single neuron level to integrated function in the brain. Topics include sensory systems, synaptic function and transmitter substances, developmental aspects and neural plasticity, cellular basis of behaviour.

Lectures, 3 hours per week; lab, 3 hours per week.

Restriction: open to BIOL (single or combined), BCHM, BTEC, BSc/BEEd, CHEM (single or combined), ENVI (ENVS), NEUR and OEVI majors with a minimum of 8.0 overall credits.

Prerequisites: two credits from BIOL 2F01, 2P05, 2P92, 2P93, 2Q04 (2P04).

BIOL 3P42

Microbial Physiology

Microbial growth and metabolism as influenced by nutritional and environmental factors.

Lectures, seminar, 3 hours per week; lab, 3 hours per week for 6 weeks.

Restriction: open to BIOL (single or combined), BCHM, BTEC, BSc/BEEd, CHEM (single or combined), ENVI (ENVS), NEUR and OEVI majors with a minimum of 8.0 overall credits.

Prerequisite: BIOL 2P98.

BIOL 3P50

Molecular Genetics

(also offered as BTEC 3P50)

Topics include the genetic code and information flow from nucleic acids to proteins, RNA and protein synthesis; prokaryotic and eukaryotic chromosomes; gene organization; transcription, RNA processing; codon usage; enhancers and transposons.

Lectures, 3 hours per week; lab, 3 hours per week for 6 weeks.

Restriction: open to BIOL (single or combined), BCHM, BTEC, BSc/BEEd, CHEM (single or combined), ENVI (ENVS), NEUR and OEVI majors with a minimum of 8.0 overall credits.

Prerequisite: BIOL 2F01 or permission of the instructor.

BIOL 3P51

Genetics: Transmission, Development, Population

Concepts of classical genetics including genetic mapping, extranuclear inheritance, polyploidy, genetics and development, evolutionary genetics.

Lectures, 3 hours per week; lab, 3 hours per week for 6 weeks.

Restriction: open to BIOL (single or combined), BCHM, BTEC, BSc/BEEd, CHEM (single or combined), ENVI (ENVS), NEUR and OEVI majors with a minimum of 8.0 overall credits.

Prerequisite: BIOL 1F90.

BIOL 3P60

Animal Behaviour

Emphasis on the social context of behaviour and natural selection: the evolution and significance of visual, auditory and olfactory communication; spacing behaviour and the evolution of diversity in spacing systems; mating systems and sexual selection; the development of species-typical behaviour; the development and significance of periodic behaviour patterns including endogenous rhythms orientation and navigation.

Lectures, seminar, 3 hours per week; lab as required.

Restriction: open to BIOL (single or combined), BCHM, BTEC, BSc/BEEd, CHEM (single or combined), ENVI (ENVS), NEUR and OEVI majors with a minimum of 8.0 overall credits.

Prerequisites: BIOL 2P05, 2P92 and 2Q04 (2P04).

BIOL 3P63

Freshwater Ecology

Study of inland waters and associated flora and fauna, with emphasis on physical and chemical characteristics of lakes and streams as they relate to the biological community.

Lectures, seminar, 2 hours per week; lab, 3 hours per week.

Restriction: open to BIOL (single or combined), BCHM, BTEC, BSc/BEEd, CHEM (single or combined), ENVI (ENVS), NEUR and OEVI majors with a minimum of 8.0 overall credits.

Prerequisites: BIOL 2P05 and 2Q04 (2P04).

BIOL 3P64

Introductory Insect Biology

Field and laboratory exercises and lectures covering morphology, physiology, evolution, ecology, social behaviour and harmful and beneficial aspects of the insects.

Lectures, 2 hours per week; lab, 3 hours per week.

Restriction: open to BIOL (single or combined), BCHM, BTEC, BSc/BEEd, CHEM (single or combined), ENVI (ENVS), NEUR and OEVI majors with a minimum of 8.0 overall credits.

Prerequisite: BIOL 1F90 or permission of instructor.

BIOL 3P65

Investigative Studies in Animal Ecology

A laboratory and field ecology course that provides experience in the process of science; scientific process in laboratory and field settings: question-asking and formulation of hypotheses, experimental design, data collection and analysis, verbal and written presentation of results.

Lectures, lab, 6 hours per week.

Restriction: open to BIOL (single or combined), BCHM, BTEC, BSc/BEEd, CHEM (single or combined), ENVI (ENVS), NEUR and OEVI majors with a minimum of 8.0 overall credits.

Prerequisites: BIOL 2P05, 2P92 and 2Q04 (2P04) or permission of the instructor.

BIOL 3P71

Ontario Universities Field Biology Course

The units offered are: arid environments, insect sampling, limnology, fish ecology, ornithology, aquatic ecology, marine biology, bat behaviour, scavenging arthropods, small mammal ecology, arctic ecology, high arctic tundra and alpine ecology. Restriction: open to BIOL (single or combined), BCHM, BTEC, BSc/BEEd, CHEM (single or combined), ENVI (ENVS), NEUR and OEVI majors with a minimum of 8.0 overall credits.

Prerequisites: BIOL 2P05 and 2Q04 (2P04).

Note: in co-operation with Carleton, Queen's, Toronto, Trent, Waterloo, Western, Windsor, and York universities, the Department of Biological Sciences participates in a series of one and two week field courses at established field stations in Algonquin Park, Lake Opinicon and the OMNR station at Dorset, Ontario. In recent years, courses have been offered outside the province at field stations in Alberta, Manitoba and the Northwest Territories. Each course is a separate unit and may include students from all participating universities. The number of units offered will vary from year to year, but those available will normally be scheduled during one- and two-week periods from late April through early September. Two one-week units or one two-week unit will constitute the equivalent of one-half credit. Registration must be completed by the end of January with the course Coordinator. Registrants normally defray their own travel expenses to the field station. Modest board and room costs are required in addition to the usual half credit registration fee.

BIOL 3P72

Ontario Universities Field Ecology Course

See BIOL 3P71 for course description restriction and note.

Prerequisite: BIOL 3P71.

BIOL 3P80

Evolution

The idea of evolution and its development; scientific method and the past; classical, modern pre-Darwinian and Darwinian concepts; the history of the earth and the fossil record; biogeographical patterns; adaptation, natural selection and the origin of species; molecular evolution; evolution of specific taxonomic groups including humans.

Lectures, 2 hours per week; seminar, 1 hour per week.

Restriction: open to BIOL (single or combined), BCHM, BTEC, BSc/BEEd, CHEM (single or combined), ENVI (ENVS), NEUR and OEVI majors with a minimum of 8.0 overall credits.

Prerequisites: BIOL 2P05 and 2Q04 (2P04); one of BIOL 2P92, 2P93, 2P96 or 2P98.

BIOL 3P82

Human Sociobiology

Evolutionary concepts and the analysis of human affairs. Game theory and natural selection of social behaviour. Evolutionary theories of mind from Darwin to Wilson. Evolutionary ethics, altruism and selfish genes. The biology of aggression and war.

Lectures, 2 hours per week; seminar, tutorial, 2 hours per week.

Restriction: open to BIOL (single or combined), BCHM, BTEC, BSc/BEEd, CHEM (single or combined), ENVI (ENVS), NEUR and OEVI majors with a minimum of 8.0 overall credits.

Prerequisite: BIOL 2P05.

BIOL 3P84

Investigative Neurobiology

(also offered as NEUR 3P84)

Methods used in neurobiology and neurophysiology. Emphasis on electrophysiological techniques, including intracellular and extracellular recording from nerve cells and muscle, and on theory and techniques for electrophysiological data acquisition. Other topics include intracellular staining, immunocytochemistry and assay procedures.

Lectures, 2 hours per week; lab, 3 hours per week.

Restriction: open to BIOL (single or combined), BCHM, BTEC, BSc/BEEd, CHEM (single or combined), ENVI (ENVS), NEUR and OEVI majors with a minimum of 8.0 overall credits.

Prerequisite: BIOL 2F01 or PSYC 2F36.

Note: BIOL 3P34 is strongly recommended for students who have not taken PSYC 2F36.

BIOL 3P91

Plant Physiology: Metabolic and Biophysical Processes

The metabolism of carbon and nitrogen compounds; photosynthetic and respiratory processes; mineral nutrition; water relations; gas exchange and transport processes.

Lectures, 3 hours per week; lab, 3 hours per week.

Restriction: open to BIOL (single or combined), BCHM, BTEC, BSc/BEEd, CHEM (single or combined), ENVI (ENVS), NEUR and OEVI majors with a minimum of 8.0 overall credits.

Prerequisites: BIOL 2F01 and 2P93 or permission of the instructor.

BIOL 3P93

Introduction to Tissue Structure

Microscopic anatomy and functional organization of epithelia, connective tissue, blood, nervous tissue and muscle.

Lectures, 3 hours per week; labs, 3 hours per week.

Restriction: open to BIOL (single or combined), BCHM, BTEC, BSc/BEEd, CHEM (single or combined), ENVI (ENVS), NEUR and OEVI majors with a minimum of 8.0 overall credits.

Prerequisite: BIOL 2F01 or permission of the instructor.

Students completing this course will forfeit credit in BIOL 3P22.

BIOL 3P94

Histology of Vertebrate Organ Systems

The microanatomy and functional morphology of organs and organ systems: integumentary, circulatory, digestive, excretory, reproductive, respiratory, endocrine and nervous.

Lectures, 3 hours per week; lab, 3 hours per week.

Restriction: open to BIOL (single or combined), BCHM, BTEC, BSc/BEEd, CHEM (single or combined), ENVI (ENVS), NEUR and OEVI majors with a minimum of 8.0 overall credits.

Prerequisite: BIOL 2P92 or permission of the instructor.

Note: BIOL 3P93 strongly recommended.

Students completing this course will forfeit credit in BIOL 3P23.

BIOL 3V90-3V99

Special Topics in Biology

(also offered as BCHM 3V90-3V99)

Selected issues in Biology on the basis of faculty expertise.

Restriction: open to BIOL (single or combined), BCHM, BTEC, BSc/BEEd, CHEM (single or combined), ENVI (ENVS), NEUR and OEVI majors with a minimum of 8.0 overall credits.

Note: under certain circumstances, a student may carry out, under faculty supervision, a detailed study of the scientific

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literature pertinent to a specific topic. The results of this study will be presented as a major essay and as a formal seminar.

BIOL 4F90

Honours Thesis

Each student will undertake a limited research project involving field or laboratory study under faculty supervision.

Restriction: open to BCHM and BIOL (single or combined) majors with approval to year 4 (honours) and permission of the Chair.

Note: to be taken in conjunction with BIOL 4F91. Students electing to pursue studies on non-laboratory ecological projects will be permitted to initiate their programs during the summer preceding registration in year 4, but may not include data or observations obtained as a consequence of participation in field courses such as BIOL 3P71 or 3P72. Submission and oral defence of the thesis is required.

BIOL 4F91

Literature Research and Seminar

Each student will undertake a detailed study of the scientific literature relevant to the topic of the honours thesis.

Restriction: open to BCHM and BIOL (single or combined) majors with approval to year 4 (honours) and permission of the Chair.

Note: to be taken in conjunction with BIOL 4F90. The review will be included in the thesis and will be presented as a seminar.

BIOL 4F92

Library Research Essays

Each student will be required to carry out two detailed studies of the scientific literature under faculty supervision.

Restriction: open to BCHM, BIOL (single or combined) and BTEC majors with approval to year 4 (honours) and permission of the chair.

Note: for students not registered for BIOL 4F90 and 4F91.

The results of the studies will be presented in major essays and formal seminars. One research topic is to be completed each term.

BIOL 4P03

Current Topics in Photobiology

(also offered as BCHM 4P03)

The interaction of light with biological molecules. Effects of ultraviolet radiation, photosynthesis, vision and photoregulation of genes and proteins.

Lectures, seminar, lab, 3 hours per week.

Restriction: open to BIOL (single or combined), BCHM, BTEC, CHEM (single or combined), ENVI (ENVS), NEUR and OEVI majors with either a minimum of 14.0 overall credits or approval to year 4 (honours).

Prerequisite: any year 3 BCHM credit or permission of the instructor.

BIOL 4P23

Fungal Physiology

The physiology and biochemistry of fungi with a concentration on those aspects of physiology where fungi are significantly different from other organisms and often unique. Special attention to growth, nutrition, metabolism and reproduction of yeasts.

Lectures, seminar, 2 hours per week.

Restriction: open to BIOL (single or combined), BCHM, BTEC,

ENVI (ENVS), NEUR and OEVI majors with either a minimum of 14.0 overall credits or approval to year 4 (honours).

Prerequisite: BIOL 2P96 or 2P98 or permission of the instructor.

BIOL 4P28

Developmental Neurobiology

Principles of neural development. Topics include cell lineage and early determinative events, trophic functions, growth and plasticity, synaptogenesis and gene expression in the establishment of the nervous system.

Seminars, 2 hours per week.

Restriction: open to BIOL (single or combined), BCHM, BTEC, ENVI (ENVS), NEUR and OEVI majors with either a minimum of 14.0 overall credits or approval to year 4 (honours).

Prerequisites: BIOL 3P28 and 3P34 or permission of the instructor.

BIOL 4P34

Systems Neurophysiology

Selected topics in sensory and integrative mechanisms in the nervous system.

Seminars, 2 hours per week.

Restriction: open to BIOL (single or combined), BCHM, BTEC, ENVI (ENVS), NEUR and OEVI majors with either a minimum of 14.0 overall credits or approval to year 4 (honours).

Prerequisite: BIOL 3P34 or permission of the instructor.

Students completing this course will forfeit credit in BIOL 4P50.

BIOL 4P51

Molecular Virology

(also offered as BTEC 4P51)

Bacterial and animal viruses. Topics include biochemical properties, virus-host interaction, productive cycle, effect of virus on host cell and organism, viral vectors and gene therapy, recombinant viral vaccines and origin of virus.

Lectures, seminar, 2 hours per week.

Restriction: open to BIOL (single or combined), BCHM, BTEC, ENVI (ENVS), NEUR and OEVI majors with either a minimum of 14.0 overall credits or approval to year 4 (honours).

Prerequisite: BIOL 3P50 or permission of the instructor.

BIOL 4P52

Developmental Genetics

The role of structural/regulatory genes in development. Topics include homeotic genes in vertebrate and invertebrate pattern formation, primary induction and peptide growth factors and the use of transgenic mice and gene targeting to study mammalian embryogenesis.

Lectures, seminar, 2 hours per week.

Restriction: open to BIOL (single or combined), BCHM, BTEC, ENVI (ENVS), NEUR and OEVI majors with either a minimum of 14.0 overall credits or approval to year 4 (honours).

Prerequisites: BIOL 3P28 and 3P50 or 3P51 or permission of the instructor.

BIOL 4P53

Immunology

Humoral and cellular immunity; structure and synthesis of immunoglobulins; origin of antibody diversity; transplantation immunity and the importance of the major histocompatibility complex; autoimmunity and allergic reactions.

Lectures, seminar, 2 hours per week.

Restriction: open to BIOL (single or combined), BCHM, BTEC

ENVI (ENVS), NEUR and OEVI majors with either a minimum of 14.0 overall credits or approval to year 4 (honours).
Prerequisite: BCHM 3P01 or BIOL 3P50.

BIOL 4P56

Genes and Behaviour

Developmental and environmental influences on the behaviour of invertebrates and vertebrates. Genetic links between morphology and behaviour, the inheritance of quantitative behavioural traits, genetic relatedness, the influence of behaviour on patterns of inheritance, especially in social species.

Lectures, seminar, 2 hours per week.

Restriction: open to BIOL (single or combined) BCHM, BTEC, ENVI (ENVS), NEUR and OEVI majors with either a minimum of 14.0 overall credits or approval to year 4 (honours).

Prerequisite: BIOL 3P51 and 3P60.

BIOL 4P57

Bacterial Genetics

(also offered as BTEC 4P57)

Molecular and transmission genetics of bacteria. Bacterial genetics from early descriptions of transformation and transduction to current developments in molecular genetics.

Lectures, seminar, 2 hours per week.

Restriction: open to BIOL (single or combined), BCHM, BTEC, ENVS, NEUR and OEVI majors with either a minimum of 14.0 overall credits or approval to year 4.

Prerequisites: BIOL 2P98 and 3P50 or permission of the instructor.

BIOL 4P58

Fungal Genetics

(also offered as BTEC 4P58)

Transmission and molecular genetics of fungi. Recent advances in gene manipulation and the contribution of studies on these organisms to general genetic principles.

Lectures, seminar, 2 hours per week.

Restriction: open to BIOL (single or combined), BCHM, BTEC, ENVS, NEUR and OEVI majors with either a minimum of 14.0 overall credits or approval to year 4.

Prerequisite: one of BIOL 2P96, 3P50 or, 3P51 or permission of the instructor.

BIOL 4P60

Advanced Seminar in Population and Behavioural Ecology

Topics selected vary from year to year partly in response to student interests.

Lectures, seminar, 2 hours per week.

Restriction: open to BIOL (single or combined), BCHM, BTEC, ENVS, NEUR and OEVI majors with either a minimum of 14.0 overall credits or approval to year 4.

Prerequisite: one of BIOL 3P60, 3P64, 3P65.

BIOL 4P62

Aquatic Ecosystems

Freshwater and marine ecosystems and the impact of humans on these systems. Topics include reservoir limnology, salinization, biomanipulation, and exotic species introductions.

Lectures, seminar, 2 hours per week.

Restriction: open to BIOL (single or combined), BCHM, BTEC, ENVS, NEUR and OEVI majors with either a minimum of 14.0 overall credits or approval to year 4.

Prerequisite: BIOL 3P63 or permission of the instructor.

BIOL 4P64

Insect Behaviour

Selected topics in the field of insect behaviour including: programming and integration of behaviour orientation and dispersal, feeding and plant-herbivore co-evolution, chemical, visual and acoustical communication, defensive behaviour, reproductive behaviour and the eusocial insects.

Lectures, seminar, 2 hours per week.

Restriction: open to BIOL (single or combined), BCHM, BTEC, ENVS, NEUR and OEVI majors with either a minimum of 14.0 overall credits or approval to year 4.

Prerequisite: BIOL 3P60 or 3P64 or permission of the instructor.

BCHM 4P67

Biophysical Techniques

(also offered as BTEC 4P67 and CHEM 4P67)

Modern instrumental methods of biotechnology, emphasizing underlying theory. Development of newer technologies which utilize biological components. Topics include optical, X-ray, and NMR techniques, separation techniques, hybridization assays, immunoassays, biosensors and mass spectral techniques; membrane chemistry.

Lectures, seminars, 3 hours per week.

Prerequisites: CHEM 2P21 and 2P63 or permission of the instructor.

BIOL 4P70

Coral Reef Biology

Reef structure, flora, fauna, framework elements, zonation, physical environment, physical formation and destruction, biogenesis, biodegradation, mechanical properties of sessile forms, ecological interrelationships and other topics.

Lectures, 2 hours per week; seminar/lab, 2 hours per week.

Restriction: open to BIOL (single or combined) BCHM, BTEC, ENVS, NEUR and OEVI majors with either a minimum of 14.0 overall credits or approval to year 4.

Prerequisite: BIOL 2P92 or permission of the instructor.

BIOL 4P84

Physiology of Excitable Cells

Neurons, muscle and/or neurosecretory cells at the cellular and subcellular levels. Topics include ion channel activity, patch clamp recording, intracellular messenger systems, mechanisms of neurosecretion and neural plasticity.

Lectures, seminars, 2 hours per week.

Restriction: open to BIOL (single or combined), BCHM, BTEC, ENVS, NEUR and OEVI majors with either a minimum of 14.0 overall credits or approval to year 4.

Prerequisite: BIOL 3P34 or 3P84 or permission of the instructor.

Biotechnology

This program is co-ordinated by the Department of Biological Sciences and Chemistry.

Co-ordinators

Yousef Haj-Ahmad, Department of Biological Sciences
Herbert L. Holland, Department of Chemistry

Participating Faculty

Jeffrey K. Atkinson (Chemistry), Alan W. Brown (Biological Sciences), Douglas H. Bruce (Biological Sciences), Robert L. Carlone (Biological Sciences), Alan J. Castle (Biological Sciences), Yousef Haj-Amad (Biological Sciences), James McNulty (Chemistry), Art van der Est (Chemistry)

General Information

Administrative Assistant, extension 3406
Mackenzie Chown E206
<http://brocku.ca/biotechnology/>

Biotechnology is the use of living organisms to produce goods and services for practical and industrial purposes. Biotechnology has been used for centuries in fermentation and the making of bread and cheese, but today involves new scientific tools like genetic and protein engineering, cell fusion and production of monoclonal antibodies. Biotechnology is a strategic technology and an important economic component of industrialized nations. Biotechnology at Brock is a joint venture of the departments of Biological Sciences and Chemistry, with courses drawn from both departments plus courses designed specifically for the program.

Program Notes

1. CHEM 3P40 or 3P41 are strongly recommended as year 3 electives for students who intend to take BTEC 4F90 and 4F91 in the Department of Chemistry in year 4.
2. Students who anticipate doing graduate studies in Chemistry should have credit in CHEM 2P12, 2P32, 2P42, 3P21 and 3P40 or 3P41 in addition to the other required courses in CHEM.
3. In all 20 credit programs, at least 12 credits must be numbered 2(alpha)00 or above, six of which must be numbered 2(alpha)90 or above and of these, three must be numbered 3(alpha)90 or above. In all 15 credit degree programs, at least seven credits must be numbered 2(alpha)00 or above, three of which must be numbered 2(alpha)90 or above.

Honours Program

Year 1

BIOL 1F90; CHEM 1P80 and 1P81 or CHEM 1P90 and 1P91 (preferred); MATH 1P93 and 1P94 or MATH 1P97 and 1P98; one of PHYS 1F20, 1F25, 1F90; one Humanities or Social Science context credit.

Year 2

BTEC 2P09 and 2P63; BIOL 2F01; one-half credit from BIOL 2P05, 2P92, 2P93, 2P96, 2P98 (recommended), 2Q04; one of CHEM 2P12, 2P32, 2P42; CHEM 2P20 and 2P21; the Humanities or Social Science credit not taken in year 1.

Year 3

BTEC 3P09 and 3P50; BTEC 3P62 or 3P63; BCHM 3P01 and 3P02; CHEM 3P20; one credit from BIOL 3P28, 3P42, 3P51, CHEM 3P21, 3P40, 3P41, 3P60; one elective credit (see program notes 1 and 2).

Year 4

BTEC 3P62 or 3P63 (whichever was not taken in year 3); BTEC 4F90 and 4F91 (see program note 1); one credit from BTEC 4P08, 4P57, 4P58, BIOL 4P23, 4P51, 4P53, BCHM 4P02; one-half credit from BTEC 4P67, 4P68, CHEM 4P27; one elective credit (see program note 2).

Pass Program

Satisfactory completion of the first three years of the honours program entitles a student to apply for a pass degree.

Prerequisites and Restrictions

Students must check to ensure that prerequisites are met. Students may be deregistered, at the request of the instructor, from any course for which prerequisites and/or restrictions have not been met.

Description of Courses

Note that not all courses are offered in every session. Refer to the applicable term timetable for details.

BTEC 2P09**Introduction to Biotechnology**

Traditional and modern biotechnology. Topics include fermentation processes, medical, agricultural and forensic applications; the use of biotechnology in waste treatment.

Lectures, 3 hours per week; lab, 3 hours per week.

Prerequisites: BIOL 1F90; CHEM 1P80 and 1P81 or CHEM 1P90 and 1P91.

BTEC 2P63**Introduction to Biophysical Chemistry**

(also offered as CHEM 2P63)

Physical chemistry as applied to biological sciences. Introductory thermodynamics, kinetics, equilibria, transport phenomena as applied to proteins, biological membranes and other biological systems. Laboratory work includes kinetic measurements, equilibrium constant measurements and protein purification and characterization.

Lectures, 3 hours per week; lab, 3 hours per week.

Prerequisites: BIOL 1F90; CHEM 1P80 and 1P81 or CHEM 1P90 and 1P91; MATH 1P93 and 1P94 (preferred), or MATH 1P97.

BTEC 3P09**Bioreactor Processes**

Fermentation technology and bioprocessing; the kinetics and thermodynamics of fermentation. Topics include batch and continuous fermentation, biomass production (single-cell proteins), immobilized systems, by-product recovery and scale-up.

Lectures, 3 hours per week; lab, 3 hours per week.

Prerequisite: BTEC 2P63.

BTEC 3P50**Molecular Genetics**

(also offered as BIOL 3P50)

Topics include the genetic code and information flow from nucleic acids to proteins, RNA and protein synthesis; prokaryotic and eukaryotic chromosomes; gene organization; transcription, RNA processing; codon usage; enhancers and transposons.

Lectures, 3 hours per week; lab, 3 hours per week for 6 weeks.

Restriction: open to BIOL (single or combined), BCHM, BTEC, BSc/BEd, CHEM (single or combined), ENVI (ENVS), NEUR and OEVI majors with a minimum of 8.0 overall credits.

Prerequisite: BIOL 2F01 or permission of the instructor.

BTEC 3P62**Bio-organic Chemistry**

(also offered as CHEM 3P62)

The biosynthesis of the natural products of secondary metabolism. Introduction to the use of enzymes and other biological reagents in organic synthesis.

Lectures, 3 hours per week; lab, 3 hours per week.

Prerequisite: CHEM 2P21.

BTEC 3P63**Protein and Nucleic Acid Chemistry**

(also offered as CHEM 3P63)

Structure and chemistry of proteins and nucleic acids. Selected aspects of transcription, translation, protein folding, post-translational modification, targeting, synthesis and sequencing, and detection techniques.

Lectures, 3 hours per week; lab, 3 hours per week.

Prerequisite: CHEM 2P21.

BTEC 4F90**Research Project**

Experimental research carried out under faculty supervision.

Restriction: permission of the co-ordinators.

BTEC 4F91**Thesis**

The thesis will incorporate the results of the research project and will form the basis of a seminar presented by the student. Restriction: open to BTEC majors with approval to year 4 (honours).

Co-requisite: BTEC 4F90.

BTEC 4P08**Topics in Plant and Microbial Biotechnology**

(also offered as BCHM 4P08)

Illustrative cases from the current literature to show how specific biochemical processes or structures may be characterized, and how molecular manipulation allows genetic modification of such processes and structures to meet scientific and/or societal needs. Examples include yeast and microbial enzymes or enzyme systems as well as crop proteins and enzymes.

Lectures, seminar, 3 hours per week.

Restriction: open to BTEC, BCHM, BIOL (single or combined), CHEM (single or combined), ENVI (ENVS), NEUR and OEVI majors with either a minimum of 14.0 overall credits or approval to year 4 (honours).

Prerequisite: one of BTEC 3P50, 3P63, BCHM 3P01, 3P02 or permission of the instructor.

BTEC 4P51**Molecular Virology**

(also offered as BIOL 4P51)

Bacterial and animal viruses. Topics include biochemical properties, virus-host interaction, productive cycle, effect of virus on host cell and organism, viral vectors and gene therapy,

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recombinant viral vaccines and origin of virus.

Lectures, seminar, 2 hours per week.

Restriction: open to BTEC, BCHM, BIOL (single or combined), ENVI (ENVS), NEUR and OEVI majors with either a minimum of 14.0 overall credits or approval to year 4 (honours).

Prerequisite: BTEC 3P50 or permission of the instructor.

Lectures, 3 hours per week.

Prerequisite: one of BTEC 3P62, 3P63, CHEM 3P20 or permission of the instructor.

BTEC 4P57

Bacterial Genetics

(also offered as BIOL 4P57)

Molecular and transmission genetics of bacteria. Bacterial genetics from early descriptions of transformation and transduction to current developments in molecular genetics.

Lectures, seminar, 2 hours per week.

Restriction: open to BTEC, BCHM, BIOL (single or combined), ENVI (ENVS), NEUR and OEVI majors with either a minimum of 14.0 overall credits or approval to year 4 (honours).

Prerequisites: BTEC 3P50 and BIOL 2P98 or permission of the instructor.

BTEC 4P58

Fungal Genetics

(also offered as BIOL 4P58)

Transmission and molecular genetics of fungi. Recent advances in gene manipulation and the contribution of studies on these organisms to general genetic principles.

Lectures, seminar, 2 hours per week.

Restriction: open to BTEC, BCHM, BIOL (single or combined), ENVI (ENVS), NEUR and OEVI majors with either a minimum of 14.0 overall credits or approval to year 4 (honours).

Prerequisite: one of BTEC 3P50, BIOL 2P96, 3P51 or permission of the instructor.

BTEC 4P67

Biophysical Techniques

(also offered as BCHM 4P67 and CHEM 4P67)

Modern instrumental methods of biotechnology emphasizing understanding theory development of newer technologies which utilize biological components. Topics include optical, X-ray and NMR techniques; separation techniques, hybridization assays, immunoassays, biosensors and mass spectral techniques; membrane chemistry.

Lectures, seminar, 3 hours per week.

Prerequisites: BTEC 2P63 and CHEM 2P21 or permission of the instructor.

BTEC 4P68

Biotransformations

(also offered as CHEM 4P68)

The organic reactions carried out by isolated enzymes, fungal cultures and bacteria. The production of pharmaceutical, agricultural and industrial chemicals by biological processes.

Faculty of Business

Dean
Martin I. Kusy

Department of Accounting and Finance

Chair
Sandra M. Felton

Professor Emeritus
J. Robert Hanrahan

Professors
A. William Richardson, Robert Welch

Associate Professors
Thomas H. Barnes, Louis Culumovic, Donald Cyr, Maureen E. Donnelly, Sandra M. Felton, Raafat R. Roubi, Paul Scarbrough, Linda Stillabower

Assistant Professors
Ian Adamson, Ernest N. Biktimirov, Gail Cook, Paul Dunn, Howard B. Nemiroff, Barbara Sainty, Alfred Seaman, Anamitra Shome

Adjunct Professors
H. Donald Brown, Allister W. Young

Accounting Co-operative Program

Director
Cindy Dunne

Department of Management, Marketing and Human Resources

Chair
Eli Levanoni

Professors
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Associate Professors
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Assistant Professor
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M. Sharon Broderick

Business Administration Co-operative Program

Director
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The Faculty of Business offers four-year, 20 credit programs in Accounting and Business Administration. Subsequent degrees are available in the Bachelor of Accounting and Bachelor of Business Administration programs for students holding an undergraduate degree in another discipline. A five year credit minor in Business is open to Brock students pursuing degrees in other Faculties. The Faculty of Business also offers a Bachelor of General and Applied Studies to qualified students from Seneca College.

The program in Accounting is designed for students pursuing careers in the accounting profession. The program is professionally oriented and combines a high degree of specialization in accounting along with studies in Business, the Social Sciences, Humanities and Mathematics and Science.

The program in Business Administration is designed for students pursuing careers in business and government. The program is professionally oriented and combines studies in the Business disciplines with studies in the Social Sciences, Humanities and Mathematics and Science.

Bachelor of Accounting

The minimum grade requirement for admission to the Accounting program is a 75 percent average on six OACs (or equivalent) including at least one Mathematics (calculus or finite preferred) and at least one OAC English. The curriculum in Accounting is offered only as an honours program. This is a limited enrolment

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program. On successful completion of the program, the degree Bachelor of Accounting (BAcc) is awarded. The BAcc program is offered as a regular four-year honours program and on a co-operative work/study basis.

The requirement for graduation is a minimum 70 percent major average and a minimum 60 percent non-major average. Students should take courses in the order prescribed below.

Accounting Co-operative (Co-op)

The Co-op program is fully accredited by the Institute of Chartered Accountants of Ontario. Students work in a wide variety of locations throughout Ontario. The program scheduling combines academic and work terms over a four and one-half year period. Students must register with the Institute of Chartered Accountants of Ontario on a conditional basis at the beginning of the first work period. CA students must accumulate a minimum of 30 months work experience, six months of which must follow the completion of the BAcc degree.

Admission to the Co-op program is on the basis of marks and a review of personal résumés. The normal requirement is a minimum 80 percent average or more on six OACs (or equivalent) including at least one Mathematics (calculus or finite preferred) and at least one OAC English. An interview may be required. Promising students with lower grades may be accepted. For additional information, prospective students should contact the Director. Students should take courses in the order prescribed below. In addition to the current fees for courses in academic study terms, Co-op Accounting students are assessed an annual administrative fee (see the Schedule of Fees).

Periodic Review of Eligibility to Continue

The eligibility of each student to continue in the Bachelor of Accounting program will be reviewed when the student has attempted three or more credits since the previous review.

Eligibility to continue is based on the student's major average and non-major average.

1. A student with a minimum 70 percent major average and a minimum 60 percent non-major average, will be permitted to continue.
2. A student with a major average lower than 66 percent will not be permitted to continue.
3. Any student with averages that do not fit into categories 1 or 2 above, may be permitted to continue, but will be informed by letter that both a minimum 70 percent major average and a minimum 60 percent non-major average must be achieved on or before the date of the next review.

Programs of Study

Common First Year of Study - BAcc and BAcc (Co-op)

Year 1

ACTG 1P11, 1P12 and 1P71; ECON 1P91 and 1P92; ITIS 1P97; MATH 1P97, 1P98; one Humanities context credit.

Winter Term: Co-op students must also complete ADMI 0N90.

Bachelor of Accounting (Non co-op)

Year 2

ACTG 2P21, 2P31 and 2P32; ECON 2P23 and 2P91; FNCE 2P91 and 3P93; POLI 2P62; one Science context credit.

Year 3

ACTG 3P11, 3P22, 3P23, 3P33 and 3P41; MGMT 3P82; MKTG 2P91; OBHR 2P91; OPER 2P91; POLI 3P50.

Year 4

ACTG 4P11, 4P12, 4P34 and 4P41; MGMT 4P89; one elective credit; and for Program A*: ACTG 4P42, 4P61, 4P62. For Program B*: ACTG 4P24; MGMT 3P98; one-half credit from ACTG, ENTR, FNCE, ITIS, MGMT, MKTG, OBHR, OPER, POLI 4P54.

*In year 4 of the program there are two streams: Program A requirements are designed for students pursuing the CA designation after graduation. Program B requirements are designed for students pursuing the CMA designation after graduation. Students interested in the CGA designation should consult the Chair of the Accounting and Finance department.

Bachelor of Accounting (Co-op)

Year 2

Fall Term: ACTG 2P31 and 3P22; ECON 2P23, 2P91; FNCE 2P91.

Winter Term: ADMI 0N01.

Spring Term: ACTG 2P21, 2P32, 3P11; FNCE 3P93.

Summer Term: MGMT 3P82; one Science context credit.

Year 3

Fall Term: ADMI 0N02.

Winter Term: ADMI 0N03.

Spring Term: ACTG 3P23, 3P33, 3P41; POLI 2P62.

Year 4

Fall Term: ACTG 4P41; MKTG 2P91; OBHR 2P91; OPER 2P91; one-half elective credit.

Winter Term: ADMI 0N04

Spring Term: ACTG 4P34, 4P42, 4P61; POLI 3P50.

Year 5

Fall Term: ACTG 4P11, 4P12, 4P62; MGMT 4P89; one-half elective credit.

Bachelor of Accounting for Students Holding Other Degrees

Students holding a university degree in which the major area of study is other than a Business discipline and with an overall average of at least 70 percent may be admitted and receive a maximum of 10 credits towards a BAcc degree (offered as an honours program only). The requirements for graduation with a BAcc are a minimum major average of 70 percent and a minimum non-major average of 60 percent. Students who have been granted less than 10 advanced standing credits will require more than 10 Brock credits to complete the requirements.

Bachelor of Business Administration

The minimum grade requirement for admission to the Business Administration program is a 70 percent average on six OACs (or equivalent) including at least one Mathematics (calculus or finite preferred) and at least one OAC English. Students with an 80 percent average on six OACs and grade 12 mathematics are encouraged to apply for consideration by the Faculty. The curriculum in Business Administration is offered as a four-year 20 credit program and on a co-operative work/study basis. On successful completion of the program, the degree of BBA (Honours) or BBA is awarded.

The requirement for graduation with a BBA (Honours) is a minimum 70 percent major average and a minimum 60 percent non-major average. The requirement for graduation with a BBA is a minimum 60 percent major average and a minimum 60 percent overall average.

All BBA students are required to take a number of core courses. All students are expected to take the courses in the order

prescribed below. At the end of year 2 students may apply for admission to one of the areas of concentration. The requirements for admission are described under each area of concentration below. No student may take more than two of ACTG 4V90-4V99, ENTR 4V90-4V99, FNCE 4V90-4V99, MGMT 4V90-4V99, MKTG 4V90-4V95, OBHR 4V90-4V99. Please consult the Chair of the appropriate Department for details.

Business Administration Co-operative (Co-op)

The BBA Co-op program combines academic and work terms over a four and one-half year period. Students spend two years in an academic setting studying the functional areas of business as well as the Canadian and global business environments prior to the first work term. The exposure to courses in the core areas of business provides the necessary academic background for the work experience.

Admission to the Co-op program is on the basis of marks and a review of personal résumés. This is a limited enrolment program. Admission is a function of employer availability. The normal requirement is an average of 80 percent or more on six OACs (or equivalent) including at least one OAC Mathematics (calculus or finite preferred) and at least one OAC English. An interview may be required. Students will be required to maintain honours standing (70 percent major average and 60 percent non-major average) in order to continue in the BBA Co-op program. Admission decisions will be made by the Faculty of Business BBA Co-op Admissions Committee. In addition to the current fees for courses in academic study terms, BBA Co-op students are assessed an annual administrative fee (see the Schedule of Fees).

The requirement for graduation with a BBA (honours) is a minimum 70 percent major average and a minimum 60 percent non-major average. The BBA Co-op program designation will be awarded to those students who have honours standing and who have successfully completed a minimum of twelve months of Co-op work experience.

Periodic Review of Eligibility to Continue

BBA

The eligibility of each student to continue in the Bachelor of Business Administration program will be reviewed following completion of the Fall/Winter Session. Eligibility to continue is based on a minimum 60 percent major average and a minimum 60 percent overall average.

BBA (honours) Co-op

Eligibility to continue is based on the student's major average and non-major average.

1. A student with a major average of at least 70 percent and a non-major average of at least 60 percent will be permitted to continue.

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2. A student with a major average lower than 70 percent will not be permitted to continue in the BBA Co-op program, but may continue in the BBA stream. If a student subsequently raises his/her major average to 70 percent, the student can be readmitted to the Co-op program only if approved by the Co-op Admissions Committee.
3. Students admitted to the Co-op program must follow the BBA Co-op program schedule. Failure to adhere to the schedule may result in removal from the BBA Co-op program.

Program Notes

1. In the Business Administration programs, MGMT 1P96 is the prerequisite for all BBA courses numbered 2(alpha)00 and above except ACTG 2P40, FNCE 2P95 and ITIS 3P97.
2. All students must take a minimum of one elective credit in each of years 1 through 4. Students must complete their Science and Humanities context credits by the end of year 3.
3. There is a one-half credit overload for BBA co-op students during the Fall Term of year 4.
4. Concentration requirements are described under the BBA (non-co-op) stream.
5. In all BBA degree programs, at least 12 credits must be numbered 2(alpha)00 or above, six of which must be numbered 2(alpha)90 or above and of these, three must be numbered 3(alpha)90 or above.

Programs of Study

BBA and BBA Co-op students should select an area of concentration in year 3.

Common First Year of Study - BBA and BBA (Co-op)

ACTG 1P91; ECON 1P91, 1P92; ITIS 1P97; MGMT 1P93, 1P96; MATH 1P97, 1P98; one Humanities context credit or one Science context credit (see program note 2).

BBA (Co-op)

Year 2
ACTG 1P92; ADMI 0N90; ECON 2P91; FNCE 2P91; 3P93; MKTG 2P91, 3P24; OBHR 2P91, 3P42; the context credit not taken in year 1 (see program note 2).

Year 3

Fall Term: ADMI 0N11.

Winter Term: ECON 2P23; ENTR 3P45; ITIS 3P97; OPER 2P91; one-half BBA concentration credit (see note 4).

Spring Term: ADMI 0N12.

Year 4

Fall Term: MGMT 3P98; one and one-half BBA concentration credits; one elective credit numbered 2(alpha)00 or above (see notes 3 and 4).

Winter Term: ADMI 0N13.

Spring Term: ACTG 2P40; MGMT 3P82; one elective credit.

Year 5:

Fall Term: MGMT 4P89; one and one-half BBA concentration credits; one-half non-business credit (see notes 4 and 5).

BBA (non-Co-op)

Year 2

ACTG 1P92, 2P40; ECON 2P23, 2P91; FNCE 2P91; MKTG 2P91; OBHR 2P91; OPER 2P91; the context credit not taken in year 1 (see program note 2).

Areas of Concentration

Students who have successfully completed year 1 and 2 required BBA courses may apply to the appropriate Department for admission to an area of concentration provided they meet the specific requirements of the concentration as outlined below. The deadline for concentration admission applications is June 15th.

Only those students, admitted to a concentration, who graduate with a BBA (honours) will have their concentration recognized on their diploma and official transcript.

Those students not admitted to an area of concentration will complete year 3 and 4 of the BBA program as follows:

Year 3

ENTR 3P45; FNCE 3P93; ITIS 3P97; MGMT 3P82, 3P98; MKTG 3P24; OBHR 3P42; one-half credit from ACTG, ENTR, FNCE, MGMT, MKTG, OBHR, OPER; one elective credit numbered 2(alpha)00 or above.

Year 4

MGMT 4F87; three credits from ACTG, ENTR, FNCE, MGMT, MKTG, OBHR, OPER, POLI 4P54 (one and one-half

of which must be numbered 3(*alpha*)00 or above); one elective credit numbered 2(*alpha*)00 or above.

Concentration in Accounting

To concentrate in Accounting, students must have a minimum 70 percent major average and a minimum 70 percent average in ACTG 1P91 and 1P92 or ACTG 1P11 and 1P12.

Year 3

ACTG 2P21; ENTR 3P45; FNCE 3P93; ACTG 3P22; MGMT 3P82, 3P98; MKTG 3P24; OBHR 3P42; one elective credit numbered 2(*alpha*)00 or above.

Year 4

ACTG 2P31, 2P32, 3P11 and 4P40; MGMT 4F87; one and one-half elective credits numbered 2(*alpha*)00 or above; one-half elective credit numbered 3(*alpha*)90 or above.

Concentration in Entrepreneurship

To concentrate in Entrepreneurship, students must have a minimum 70 percent overall average in all year 1 and 2 required BBA courses.

Year 3

ENTR 3P45; FNCE 3P93; ITIS 3P97; MGMT 3P82, 3P98; MKTG 3P24; OBHR 3P42; one-half credit from ACTG, ENTR, FNCE, MGMT, MKTG, OBHR, OPER; one elective credit numbered 2(*alpha*)00 or above.

Year 4

MGMT 4F87; two credits from ENTR 3P52, 3P91, 3P92, 3P93, 3P94; one credit from ACTG 4P40, ENTR 4P80, 4(*alpha*)90 - 4(*alpha*)99, MGMT 4P98, OBHR 4P63, 4P65; one elective credit numbered 2(*alpha*)00 or above.

Concentration in Finance

To concentrate in Finance, students must have a minimum 70 percent overall average in all year 1 and 2 required BBA courses and a minimum grade of 70 percent in FNCE 2P91.

Year 3

ENTR 3P45; FNCE 3P93, 4P06; ITIS 3P97; MGMT 3P82, 3P98; MKTG 3P24; OBHR 3P42; one elective credit numbered 2(*alpha*)00 or above.

Year 4

FNCE 4P04 and 4P16; one and one-half FNCE credits numbered 4(*alpha*)00 or above; MGMT 4F87; one-half credit from ACTG, ENTR, FNCE, MGMT, MKTG, OBHR, OPER, POLI 4P54; one elective credit numbered 2(*alpha*)00 or above.

Concentration in General Management

To concentrate in General Management, students must have a minimum 70 percent overall average in all year 1 and year 2

required BBA courses and a minimum 70 percent average in FNCE 2P91, MKTG 2P91, OBHR 2P91 and OPER 2P91.

Year 3

ENTR 3P45; FNCE 3P93; ITIS 3P97; MGMT 3P82, 3P98; MKTG 3P24; OBHR 3P42; one elective credit numbered 2(*alpha*)00 or above; one-half credit from ACTG, ENTR, FNCE, MGMT, MKTG, OBHR, OPER.

Year 4

FNCE 4P06; MGMT 4F87; MKTG 3P96; OBHR 3P97; one and one-half credits from ACTG, ENTR, FNCE, MGMT, MKTG, OBHR, OPER, POLI 4P54; one elective credit numbered 2(*alpha*)00 or above.

Concentration in Human Resource Management

To concentrate in Human Resource Management, students must have a minimum 70 percent overall average in all year 1 and 2 required BBA courses and a minimum grade of 70 percent in OBHR 2P91.

Year 3

ENTR 3P45; FNCE 3P93; ITIS 3P97; MGMT 3P82, 3P98; MKTG 3P24; OBHR 3P42, 3P97; one elective credit numbered 2(*alpha*)00 or above.

Year 4

MGMT 4F87; OBHR 4P63; two and one-half OBHR credits numbered 4(*alpha*)00 or above; one elective credit numbered 2(*alpha*)00 or above.

Note: The following courses are recognized by the Human Resources Professionals Association of Ontario (HRPAO) as education requirements towards the Certified Human Resource Professional (CHRP) designation: OBHR 2P91, 3P42, 4P62, 4P63, 4P66, 4P67, 4P69, 4P96, 4V98.

Concentration in International Business

To concentrate in International Business, students must have a minimum 70 percent overall average in all year 1 and 2 required BBA courses.

Year 3

ENTR 3P45; FNCE 3P93; ITIS 3P97; MGMT 3P82 and 3P98; MKTG 3P24; OBHR 3P42; one elective credit numbered 2(*alpha*)00 or above; one-half non-business elective credit.

Year 4

MGMT 4F87; two credits from ECON 3P13, 3P93, FNCE 4P05, 4P06, MGMT 4P82, MKTG 4P33, 4P34, OBHR 4P90; one credit numbered 3(*alpha*)90 or above from ACTG, ENTR, FNCE, MGMT, MKTG, OBHR; one elective credit numbered 2(*alpha*)00 or above or a language credit other than English numbered 1(*alpha*)90 or above.

Business

Concentration in Marketing

To concentrate in Marketing, students must have a minimum 70 percent overall average in all year 1 and 2 required BBA courses and a minimum grade of 70 percent in MKTG 2P91.

Year 3

ENTR 3P45; FNCE 3P93; ITIS 3P97; MGMT 3P82, 3P98; MKTG 3P24, 3P96; OBHR 3P42; one elective credit numbered 2(alpha)00 or above.

Year 4

MGMT 4F87; MKTG 4P25, 4P31; one and one-half credits from MGMT 4P82, MKTG 4P23, 4P26, 4P27, 4P28, 4P29, 4P33, 4P34, 4P91; one-half credit from ACTG, ENTR, FNCE, MGMT, MKTG, OBHR, OPER, POLI 4P54; one elective credit numbered 2(alpha)00 or above.

Concentration in Public Administration

To concentrate in Public Administration, students must have a minimum 70 percent overall average in all year 1 and 2 required BBA courses.

Year 3

ENTR 3P45; FNCE 3P93; MGMT 3P98; MKTG 3P24; OBHR 3P42; POLI 2F98 or 3P50 and 3P65; one elective credit numbered 2(alpha)00 or above; one-half non-business elective credit.

Year 4

ITIS 3P97; POLI 4P52 and 4P54; one and one-half credits from POLI 3P52, 4P01, 4P14, 4P15, 4P50, 4P51, 4P53, 4V10-4V19, 4V60-4V69; one credit numbered 3(alpha)90 or above from ACTG, ENTR, FNCE, MGMT, MKTG, OBHR; one elective credit numbered 2(alpha)00 or above.

Bachelor of Business Administration for Students Holding Other Degrees

Students holding a university degree in which the major area of concentration is other than Business and with an overall average of at least 70 percent may be admitted and receive a maximum 10 unspecified credits towards the BBA degree at Brock. Students without advanced standing will be required to complete the program of study listed below.

Students who are granted credit in any of the courses listed below must complete a program consisting of at least 10 Brock credits that include the core courses below and substitute courses approved by a Faculty of Business academic adviser.

Students normally will enter the program in September. Applications for admission must be received at least two months before entry.

The requirement for graduation with a BBA (honours) is a minimum major average of 70 percent and a minimum non-major average of 60 percent in the remaining credits. The minimum major average for graduation with a BBA is a minimum major average of 60 percent and a minimum overall average of 60 percent.

Year 1

ACTG 1P91 and 1P92; ECON 1P91 and 1P92; MATH 1P98; FNCE 2P91; MKTG 2P91; OBHR 2P91; one credit from ACTG, ENTR, FNCE, ITIS, MGMT, MKTG, OBHR, OPER.

Year 2

FNCE 3P93; MGMT 4F87; MKTG 3P24; OBHR 3P42; two and one-half credits from ACTG, ENTR, FNCE, ITIS, MGMT, MKTG, OBHR, OPER (one and one-half of which must be numbered 3(alpha)90 or above).

Combined Honours Programs

Combined honours programs leading to a Bachelor of Arts (honours) degree are available in Business and Economics and Business and Political Science.

Business and Economics

See the Economics entry for a listing of course requirements.

Business and Great Books/Liberal Studies

See the Great Books/Liberal Studies entry for a listing of course requirements.

Business and Political Science

See the Political Science entry for a listing of course requirements.

Minor in Business

Students in other disciplines can obtain a minor in business within their degree program by completing the following courses with a minimum 60 percent overall average. ACTG 1P91 and 1P92; ENTR 2P51; FNCE 2P51; MGMT 1P91, 1P92

and 3P81; MKTG 2P51; OBHR 2P51; OPER 2P51.

Bachelor of General and Applied Studies

Applicants who have graduated from the Seneca College three-year Accounting and Finance Program with a minimum 3.5 grade point average will be granted eight transfer credits. To complete the Bachelor of General and Applied Studies at Brock, the student must complete the following: one Humanities context credit; one Science context credit; one Social Science context credit; four credits (one of which may be in business) numbered 2(*alpha*)00 level or above.

Prerequisites and Restrictions

Students must check to ensure that prerequisites are met. Students may be deregistered, at the request of the instructor, from any course for which prerequisites and/or restrictions have not been met.

Description of Courses

Note that not all courses are offered in every session. Refer to the applicable term timetable for details.

ACCOUNTING

ACTG 1P11

Introduction to Accounting I

The nature and role of accounting information for planning, decision making, control and external reporting by businesses and other economic organizations.

Lectures, discussion, 3 hours per week.

Restriction: open to BAcc majors.

Note: enrolment limited to 45 students per section.

Students completing this course will forfeit credit in ACTG 1P91.

ACTG 1P12

Introduction to Accounting II

A continuation of ACTG 1P11 with emphasis on the application of various accounting concepts to generate information for a variety of purposes.

Lectures, discussion, 3 hours per week.

Restriction: open to BAcc majors.

Prerequisite: ACTG 1P11.

Note: enrolment limited to 45 students per section.

Students completing this course will forfeit credit in ACTG 1P92.

ACTG 1P71

The Legal Environment of Business

The Canadian legal system as it affects the modern business environment, in particular the accounting professional. Topics include financial disclosure and audit requirements, corporate finance and securities, corporate capacity and agency and professional liability for negligence and other business torts.

Lectures, seminar, 3 hours per week.

Restriction: open to BAcc majors.

Note: enrolment limited to 65 students per section.

Students completing this course will forfeit credit in ACTG 2P40 and MGMT 2P40.

ACTG 1P91

Introduction to Financial Accounting

The fundamental concepts of financial accounting as related to the balance sheet, income statement and statement of cash flow. The problems of income determination, asset and equity measurements and analysis of financial statements.

Lectures, discussion, 3 hours per week.

Restriction: open to BBA, BBE (honours), BCB and combined Business majors until date specified in BIRT guide.

Note: enrolment limited to 45 students per section.

Students completing this course will forfeit credit in ACTG 1P11.

ACTG 1P92

Introduction to Management Accounting

Accounting for managerial decision making, including relevant data, various cost accounting systems and break-even analysis.

Lectures, discussion, 3 hours per week.

Restriction: open to BBA, BBE (honours), BCB and combined Business majors until date specified in BIRT guide.

Prerequisite: ACTG 1P91 (minimum 60 percent).

Note: enrolment limited to 45 students per section.

Students completing this course will forfeit credit in ACTG 1P12.

ACTG 2P21

Accounting for Planning and Control I

Internal recording systems devised to implement and guide management planning and control with particular emphasis on cost finding, product costing, cost behaviour and cost allocations as well as analysis and communication of relevant information to users in a professional manner.

Lectures, discussion, 3 hours per week.

Restriction: open to BAcc majors until date specified in BIRT guide. After that date open to BAcc majors and BBA students approved to the Accounting concentration. In Spring Term open to BAcc Co-op majors until date specified in BIRT guide. Prerequisite: ACTG 1P12 or ACTG 1P92 or permission of the instructor.

Note: enrolment limited to 40 students per section.

Business

ACTG 2P31

Accounting for External Reporting I

The theory and practice of financial statement preparation including the measurement, reporting and disclosure of assets, liabilities, equity, revenue and expenses with specific reference to generally accepted accounting principles.

Lectures, discussion, 3 hours per week.

Restriction: open to BAcc majors until date specified in BIRT guide. After that date open to BAcc majors and BBA students approved to the Accounting concentration.

Prerequisite: ACTG 1P12 or ACTG 1P92 or permission of the instructor.

Note: enrolment limited to 40 students per section.

ACTG 2P32

Accounting for External Reporting II

The theory and practice of financial statement preparation in accordance with generally accepted accounting principles.

Lectures, discussion, 3 hours per week.

Restriction: open to BAcc majors until date specified in BIRT guide. After that date open to BAcc majors and BBA students approved to the Accounting concentration. In Spring Term open to BAcc Co-op majors until date specified in BIRT guide.

Prerequisite: ACTG 2P31 or permission of the instructor.

Note: enrolment limited to 40 students per section.

ACTG 2P40

Commercial Law

Basic legal considerations for the business organization.

Lectures, discussion, 3 hours per week.

Note: enrolment limited to 45 students per section.

Students completing this course will forfeit credit in ACTG 1P71 and MGMT 2P40.

ACTG 3P11

Auditing Concepts

Nature of verification, audit evidence, testing, the elements of effective control structures, the use of statistical sampling and evolution of external, internal and comprehensive auditing.

Lectures, discussion, 3 hours per week.

Restriction: open to BAcc majors until date specified in BIRT guide. After that date open to BAcc majors and BBA students approved to the Accounting concentration. In Spring Term open to BAcc Co-op majors until date specified in BIRT guide.

Prerequisite: ACTG 3P22 or MGMT 4P12 or permission of the instructor.

Note: enrolment limited to 40 students per section.

ACTG 3P22

Accounting for Planning and Control II

(also offered as MGMT 4P12)

Accounting information systems within the context of a management information system with emphasis on the design and implementation of systems and controls.

Lectures, discussion, 3 hours per week.

Restriction: open to BAcc majors with a minimum of 5.0 overall credits, BBA, BBE (honours), BCB and combined Business majors with a minimum of 13.5 overall credits.

Prerequisite: ACTG 1P12 or ACTG 1P92; MKTG 2P91 and OBHR 2P91 or permission of the instructor.

Note: enrolment limited to 40 students per section.

Students completing this course will forfeit credit in ITIS 3P97.

ACTG 3P23

Accounting for Planning and Control III

Topics include performance evaluation, divisional performance measurement, transfer pricing, behavioural implications of accounting information and current issues as well as analysis and communication of relevant information to users in a professional manner.

Lectures, discussion, 3 hours per week.

Restriction: open to BAcc majors. In Spring Session open to BAcc Co-op majors until date specified in BIRT guide.

Prerequisite: ACTG 2P21 or permission of the instructor.

Note: enrolment limited to 40 students per section.

ACTG 3P33

Accounting for External Reporting III

The theory and practice of financial statement preparation in accordance with generally accepted accounting principles.

Lectures, discussion, 3 hours per week.

Restriction: open to BAcc majors. In Spring Session open to BAcc Co-op majors until date specified in BIRT guide.

Prerequisite: ACTG 2P32 or permission of the instructor.

Note: enrolment limited to 40 students per section.

ACTG 3P41

Taxation I

The principles underlying federal income taxation in Canada through an analysis of the Income Tax Act, R.S.C., as amended. The computation of net income for tax purposes is examined in detail.

Lectures, discussion, 3 hours per week.

Restriction: open to BAcc majors. In Spring term open to BAcc Co-op students until date specified in BIRT guide.

Prerequisite: ACTG 1P12 or ACTG 1P92 permission of the instructor.

Note: enrolment limited to 40 students per section.

Students completing this course will forfeit credit in ACTG 4P40.

ACTG 4P03

Financial Analysis

(also offered as FNCE 4P03)

The importance and use of financial statement information in areas such as analysis of credit, equity investment, industry and competitors, analysis of mergers and acquisitions and the firm's strategy in communicating information to capital markets.

Lectures, case discussion, 3 hours per week.

Restriction: open to BBA students approved to the finance concentration with a 70 percent major average, BAcc students and BBE financial economics option students until date specified in BIRT guide. After that date, open to BBA, BAcc, BBE, BCB and combined Business majors.

Prerequisite: FNCE 4P06 or permission of the instructor.

Note: enrolment limited to 40 students per section.

ACTG 4P11

Accounting Theory

Mathematical, economic and behavioural foundations of accounting theory including the need for and development of standards, a conceptual framework, alternatives to present accounting models and current issues.

Lectures, discussion, 3 hours per week.

Restriction: open to BAcc majors with a minimum of 14.5 overall credits.

Prerequisite: ACTG 3P33 or permission of the instructor.

Note: enrolment limited to 40 students per section.

ACTG 4P12

Integration and Problem Solving

Problem solving which integrates the subdisciplines of accounting in the context of a wider view of organizations through the examination of a variety of applied and theoretical issues.

Lectures, discussion, 3 hours per week.

Restriction: open to BAcc majors.

Prerequisites: ACTG 3P23 and 4P34 (may be taken concurrently) or permission of the instructor.

Note: enrolment limited to 40 students per section.

ACTG 4P24

Advanced Topics in Cost and Management Accounting

A capstone course in cost and management accounting with an activity-based management framework and a quality focus. Topics include strategic cost management (target costing, mid-range budgeting), theory of constraints (queuing and linear programming), productivity, business process re-engineering, cost management of computer hardware and software systems.

Lectures, case discussion, 3 hours per week.

Prerequisite: ACTG 3P23 or permission of the instructor.

Note: enrolment limited to 40 students per section.

ACTG 4P34

Accounting for External Reporting IV

The theory and practice of financial statement preparation in accordance with generally accepted accounting principles with emphasis on accounting for complex business organizations and not-for-profit organizations.

Lectures, discussion, 3 hours per week.

Restriction: open to BAcc majors. In Spring Session open to BAcc co-op majors until date specified in BIRT guide. In Fall Term not open to BAcc co-op majors without permission of the instructor.

Prerequisite: ACTG 3P33 or permission of the instructor.

Note: enrolment limited to 40 students per section.

ACTG 4P40

Tax Strategies for Planning and Decision Making

Principles of individual and corporate taxation emphasizing the effects of federal and subfederal income taxes on decision making in business.

Lectures, discussion, cases, 3 hours per week.

Restriction: open to BBA and combined Business majors with a minimum of 10.0 overall credits; not open to BAcc majors.

Prerequisites: ACTG 1P92 or permission of the instructor.

Note: enrolment limited to 40 students per section.

Students completing this course will forfeit credit in ACTG 4P41 and 4P42.

ACTG 4P41

Taxation II

The computation of taxable income and taxes payable for individuals and corporations. Rights and obligations of the taxpayer. The determination of the effects of federal income taxes on decision making.

Lectures, discussion, 3 hours per week.

Restriction: open to BAcc majors.

Prerequisite: ACTG 3P41 or permission of the instructor.

Note: enrolment limited to 40 students per section.

Students completing this course will forfeit credit in ACTG 4P40.

ACTG 4P42

Taxation III

Topics include tax implications of changes in corporate structures, corporate distributions, rollovers and shareholder/manager remuneration, trusts and partnerships.

Lectures, discussion, 3 hours per week.

Restriction: open to BAcc majors. In Spring Session open to BAcc co-op majors until date specified in BIRT guide.

Prerequisite: ACTG 4P41 or permission of the instructor.

Note: enrolment limited to 40 students per section.

Students completing this course will forfeit credit in ACTG 4P40.

ACTG 4P61

External Auditing I

The financial statement audit including the professional and legal responsibilities of the auditor, generally accepted auditing standards, risk, materiality and the planning and execution of the audit.

Lectures, discussion, 3 hours per week.

Restriction: open to BAcc majors with a minimum of 14.5 overall credits. In Spring Session open to BAcc co-op majors until date specified in BIRT guide. In Fall term not open to BAcc co-op majors without permission of the instructor.

Prerequisite: ACTG 3P11 or permission of the instructor.

Note: enrolment limited to 40 students per section.

ACTG 4P62

External Auditing II

Emphasis on the completion of the audit, evaluation of results, audit reports, review engagements and current topics.

Lectures, discussion, 3 hours per week.

Restriction: open to BAcc majors.

Prerequisite: ACTG 4P61 or permission of the instructor.

Note: enrolment limited to 40 students per section.

ACTG 4P91

Research Topic

Directed intensive study or research under the supervision of a faculty member in an area in which the student has shown particular competence.

Business

Restriction: open to BAcc, BBA and combined Business majors with a minimum of 13.5 overall credits and permission of the Chair and supervising faculty member.

Note: to be chosen in consultation with the supervising faculty member.

ACTG 4V90-4V99

Topics in Accounting

Courses in specialized areas within the discipline.

Lectures, discussion, 3 hours per week.

Restriction: open to BAcc, BBA and combined Business majors.

ENTREPRENEURSHIP

ENTR 2P51

Introduction to Entrepreneurship

Entrepreneurs and the new venture creation process: attributes of entrepreneurs and the processes involved in successfully launching new enterprises.

Lectures, discussion, 3 hours per week.

Restriction: minimum 3.0 overall credits. Not open to BBA and BAcc majors.

Students completing this course will forfeit credit in ENTR 3P45.

ENTR 3P45

Entrepreneurial Management

Theories of entrepreneurship and intrapreneurship, entrepreneurial attributes, new venture creation processes, business plan preparation.

Lectures, discussion, 3 hours per week.

Restriction: open to BBA and BAcc majors.

Prerequisites: FNCE 2P91, MKTG 2P91, OBHR 2P91 and OPER 2P91.

Students completing this course will forfeit prior credit in ENTR 2P51.

ENTR 3P52

Creativity and the Entrepreneur

Exploration of creative and personal entrepreneurial abilities. Topics include sources of ideas and their transformation into commercial opportunities, environmental scanning, trend identification and futurism.

Lectures, discussion, 3 hours per week.

Prerequisite: ENTR 2P51 or 3P45 or permission of the instructor.

ENTR 3P91

New Venture Creation

Strategies and techniques to help identify and assess appropriate forms for commercial development of new ventures. Identification and use of public and private resources and research materials. Building entrepreneurial teams.

Lectures, discussion, 3 hours per week.

Prerequisite: ENTR 2P51 or 3P45 or permission of the instructor.

Note: enrolment limited to 40 students per section.

ENTR 3P92

New Venture Planning

Aspects of strategic and operational planning relevant to the successful creation of an entrepreneurial firm. Entry and early-stage growth strategies based on sustainable, competitive advantages; preparation of a written formal plan to be presented to sources of venture capital.

Lectures, discussion, 3 hours per week.

Prerequisites: one of ENTR 2P51, 3P45, 3P91; ACTG 1P91 and FNCE 2P91 (may be taken concurrently) or permission of the instructor.

Note: enrolment limited to 40 students per section.

ENTR 3P93

New Venture Management

Development of management concepts and techniques relevant to new and growing enterprises. Adaptations of management techniques due to limitations of management time and resources in early stage companies and changes to management approaches as companies grow.

Lectures, discussion, 3 hours per week.

Prerequisites: ENTR 3P92 and ACTG 1P91 or permission of the instructor.

Note: enrolment limited to 40 students per section.

ENTR 3P94

Intrapreneurship

Management of innovation and entrepreneurship in mid-sized and larger organizations. The role of leadership in developing and maintaining innovation and entrepreneurship and the mechanisms for stimulating organizational growth and entrepreneurial culture. How organizations respond to innovation.

Lectures, discussion, 3 hours per week.

Restriction: open to BAcc, BBA, BBE, BCB and combined Business majors with a minimum of 9.0 overall credits.

Prerequisite: one of ENTR 2P51, 3P45, 3P92 or permission of the instructor.

Note: enrolment limited to 40 students per section.

ENTR 3V90-3V99

Topics in Entrepreneurship I

Courses in specialized areas within the discipline.

ENTR 4F90

Research Topic

Directed intensive study and research under the supervision of a faculty member in an area in which the student has shown particular competence.

Restriction: open to BBA, BBE and combined Business majors with a minimum of 13.5 overall credits and permission of the Chair and supervising faculty member.

Note: to be chosen in consultation with the supervising faculty member.

ENTR 4P80

Managing High Growth Organizations

Techniques for managing organizations during high rates of growth with emphasis on stages beyond start-up. Role of the team leader, external relations, human resources selection and development, financial resources, facilities and communications.

Lectures, case discussion, 3 hours per week.

Prerequisites: ENTR 2P51 or 3P45; OBHR 3P42 or permission of the instructor.

Note: enrolment limited to 40 students per section.

ENTR 4P91

Research Topic

Directed study or research under the supervision of a faculty member in an area in which the student has shown particular competence.

Restriction: open to BBA, BBE (honours) and combined Business majors with a minimum of 13.5 overall credits and permission of the Chair and supervising faculty member.

Note: to be chosen in consultation with the supervising faculty member.

ENTR 4V90-4V99

Topics in Entrepreneurship II

Courses in specialized areas within the discipline.

FINANCE

FNCE 2P51

Introduction to Finance

Criteria used in making investment decisions, risk concepts and the valuation of assets, a financial analysis, forecasting and leverage, the theory of interest, valuation and capital budgeting.

Lectures, discussion, 3 hours per week.

Restriction: not open to BAcc, BBA, BBE and combined Business majors.

Students completing this course will forfeit credit in FNCE 2P91, 2P92 and 3P92.

FNCE 2P91

Corporate Finance I

The finance function in the private and public sectors. Techniques of financial analysis. Investment in current assets, capital budgeting, valuation, risk and return.

Lectures, discussion, 3 hours per week.

Restriction: open to BAcc, BBA, BBE, BCB and combined Business majors. In Fall Term open to BAcc, BBA co-op, BBE and BCB majors until date specified in BIRT guide.

Prerequisites: ACTG 1P11 (minimum 60 percent), or ACTG 1P91 (minimum 60 percent); ECON 1P91 and 1P92; MATH 1P93 or 1P98.

Note: enrolment limited to 40 students per section.

Students completing this course will forfeit credit in FNCE 2P51 and 3P92.

FNCE 2P95

Personal Financial Planning

Assessment of financial worth, analysis of financial products and services, generation of investment alternatives, relevant regulations. Development of financial planning techniques and practices.

Lectures, case discussion, 3 hours per week.

Note: enrolment limited to 40 students per section.

FNCE 3P93

Corporate Finance II

Cost of capital, capital structure and dividend policy. Analysis of long- and short-term financing decisions. Introduction to options and futures, mergers and acquisitions.

Lectures, discussion, 3 hours per week.

Restriction: open to BAcc, BBA, BBE, BCB and combined Business majors. In Spring Session open to BAcc co-op majors until date specified in BIRT guide. In Winter Term open to BBA co-op majors until date specified in the BIRT guide.

Prerequisite: FNCE 2P91 (3P92) (minimum 60 percent).

Note: enrolment limited to 40 students per section.

Students completing this course will forfeit credit in FNCE 2P52.

FNCE 4P02

Corporate Financial Policy

Students are provided with an opportunity through case discussions to develop and apply their understanding of the material in FNCE 2P91 and 3P93 to situations encountered in a variety of business decision settings.

Seminar, case discussion, 3 hours per week.

Restriction: open to BBA students approved to the finance concentration with a minimum 70 percent major average and to BBE financial economics option students until date specified in BIRT guide. After that date open to BAcc, BBA, BBE, BCB and combined Business majors.

Prerequisite: FNCE 4P06 or permission of the instructor.

Note: enrolment limited to 30 students per section.

FNCE 4P03

Financial Analysis

(also offered as ACTG 4P03)

The importance and use of financial statement information in areas such as analysis of credit, equity investment, industry and competitors, analysis of mergers and acquisitions and the firm's strategy in communicating information to capital markets.

Lectures, case discussion, 3 hours per week.

Restriction: open to BBA students approved to the finance concentration with a minimum 70 percent major average, BAcc students and BBE financial economics option students until date specified in BIRT guide. After that date, open to BBA, BAcc, BBE, BCB and combined Business majors.

Prerequisite: FNCE 3P93 or permission of the instructor.

Note: enrolment limited to 40 students per section.

Business

FNCE 4P04

Investment Analysis and Portfolio Management

A synthesis of theoretical finance and the art of investing in Canada. Theoretical and practical valuation models for individual securities are reviewed within a framework of market efficiency, portfolio theory and capital market theory. Portfolio construction timing and performance evaluation are included.
Lectures, discussion, 3 hours per week.

Restriction: open to BBA students approved to the finance concentration with a minimum 70 percent major average and to BBE financial economics option students until date specified in BIRT guide. After that date open to BAcc, BBA, BBE, BCB and combined Business majors.

Prerequisite: FNCE 4P06 or permission of the instructor.

Note: enrolment limited to 40 students per section.

FNCE 4P05

International Finance

An overview of the international financial environment, the theoretical and practical aspects of the various international financial markets, and the impact of the international environment on the financial decision making of the individual and the firm.

Lectures, discussion, 3 hours per week.

Restriction: open to BBA students approved to the finance concentration with a minimum 70 percent major average and to BBE financial economics option students until date specified in BIRT guide. After that date open to BAcc, BBA, BBE, BCB and combined Business majors.

Prerequisite: FNCE 4P06 or permission of the instructor.

Note: enrolment limited to 40 students per section.

FNCE 4P06

Financial Theory

Theoretical foundations of finance and their implications for the financial decision making of both individuals and corporations. Decisions involving the valuation of fixed assets and marketable securities under conditions of certainty and uncertainty and in the context of perfect and imperfect capital markets.

Lectures, discussion, 3 hours per week.

Restriction: open to BBA students approved to the finance concentration with a minimum 70 percent major average and to BBE financial economics option students until date specified in BIRT guide. After that date open to BAcc, BBA, BBE, BCB and combined Business majors.

Prerequisite: FNCE 3P93 (minimum 60 percent) or permission of the instructor.

Note: enrolment limited to 40 students per section.

FNCE 4P08

Management of Financial Institutions

Organizational structure and operating practices; self-regulation, government and international regulation of financial institutions; managerial aspects associated with savings, credit liquidity, assets, liabilities and capital problems, financial planning, strategy formulation and performance evaluation. The

growth of financial services on a global basis.

Lectures, case discussion, 3 hours per week.

Restriction: open to BBA students approved to the finance concentration with a minimum 70 percent major average and to BBE financial economics option students until date specified in BIRT guide. After that date open to BAcc, BBA, BBE, BCB and combined Business majors.

Prerequisite: FNCE 4P06 or permission of the instructor.

Note: enrolment limited to 40 students per section.

FNCE 4P09

Portfolio Management

Utility theory and stochastic dominance, the efficient formation of portfolios in mean/variance framework under various assumptions, application of asset pricing models to portfolio management, the evaluation of portfolio performance and current topics in portfolio management. Students will employ computer software in the management of stock and fixed income portfolios.

Lectures, discussion, 3 hours per week.

Restriction: open to BBA students approved to the finance concentration with a minimum 70 percent major average and to BBE financial economics option students until date specified in BIRT guide. After that date open to BAcc, BBA, BBE, BCB and combined Business majors.

Prerequisites: FNCE 4P04 and 4P06 or permission of the instructor.

Note: enrolment limited to 40 students per section.

FNCE 4P14

Personal Financial Strategies

Principles and practice of estate planning including bestowing gifts, estate freezing, income splitting and use of insurance products for tax planning. Wills and trusts. Legal and ethical considerations in personal financial planning. Personal investment planning consistent with the risk profile of the investor for creation and growth of estates.

Lectures, discussion, 3 hours per week.

Restriction: open to BBA students approved to the finance concentration with a minimum 70 percent major average and to BBE financial economics option students until date specified in BIRT guide. After that date open to BAcc, BBA, BBE, BCB and combined Business majors.

Prerequisite: FNCE 4P06 or permission of the instructor.

Note: enrolment limited to 40 students per section.

FNCE 4P15

Advanced Topics in Financial Theory

Theoretical concepts from FNCE 4P06 are extended to include capital structure, dividend policy, leasing and mergers. May include computer applications of theory to empirical data.

Lectures, 3 hours per week.

Restriction: open to BBA students approved to the finance concentration with a minimum 70 percent major average and to BBE financial economics option students until date specified in BIRT guide. After that date open to BAcc, BBA, BBE, BCB and combined Business majors.

Prerequisite: FNCE 4P06.

Note: enrolment limited to 40 students per section.

FNCE 4P16

Derivatives I

An introduction to options and futures markets. The pricing principles and theory of these derivative securities as they apply to various trading and hedging strategies.

Lectures, discussion, 3 hours per week.

Restriction: open to BBA students approved to the finance concentration with a minimum 70 percent major average and to BBE financial economics option students until date specified in BIRT guide. After that date open to BAcc, BBA, BBE, BCB and combined Business majors.

Prerequisite: FNCE 4P06.

Note: enrolment limited to 40 students per section.

Students completing this course will forfeit credit in FNCE 4P11 and 4P12.

FNCE 4P17

Derivatives II

Further refinements in the theory of derivative securities and its application to options and futures markets.

Lectures, discussion, 3 hours per week.

Restriction: open to BBA students approved to the finance concentration with a minimum 70 percent major average and to BBE financial economics option students until date specified in BIRT guide. After that date open to BAcc, BBA, BBE, BCB and combined Business majors.

Prerequisite: FNCE 4P16.

Note: enrolment limited to 40 students per section.

Students completing this course will forfeit credit in FNCE 4P11 and 4P12.

FNCE 4P18

Fixed Income Securities

Analysis of the bond markets concentrating on fixed income and fixed income derivatives markets. The risks and returns associated with investments in the markets, and on how these instruments can be optimally allocated to yield successful portfolio performance.

Lectures, 3 hours per week.

Restriction: open to BBA students approved to the finance concentration with a minimum 70 percent major average and to BBE financial economics option students until date specified in BIRT guide. After that date open to BAcc, BBA, BBE, BCB and combined Business majors.

Prerequisite: FNCE 4P06.

Note: enrolment limited to 40 students per section.

FNCE 4P91

Research Topic

Directed intensive study or research under the supervision of a faculty member in an area in which the student has shown particular competence.

Restriction: open to BAcc, BBA, BBE, BCB and combined Business majors with a minimum of 13.5 overall credits and

permission of the Chair and supervising faculty.

Note: to be chosen in consultation with the supervising faculty member.

FNCE 4V90-4V99

Topics in Finance

Courses in specialized areas within the discipline.

Restriction: open to BAcc, BBA, BBE and combined Business majors.

INFORMATION TECHNOLOGY INFORMATION SYSTEMS

ITIS 1P97

Management of Information Systems

General information systems concepts. The use and management of information systems and information technology in business organizations including the web, Internet, intranet, extranet and e-commerce. The application and evaluation of control and security measures in information system resources.

Lectures, labs, 3 hours per week.

Restriction: open to BAcc and BBA students.

ITIS 3P97

Management Information Technology

Information systems in business organizations. The analysis, design, implementation and maintenance of information systems to increase quality, acceptance and productivity within the organization and to improve customer service.

Lectures, labs, 3 hours per week.

Restriction: open to BBA students.

Prerequisite: ITIS 1P97

Note: enrolment limited to 40 students per section. Students completing this course will forfeit credit in ACTG 3P22 and MGMT 4P12.

MANAGEMENT

MGMT 1P91

Business and its Environment

Multi-dimensional approach to business scenarios emphasizing political, economic, social, technological, legal and ethical issues for business decision making. Seminars emphasize problem solving, case analysis and time management.

Lectures, seminar, 3 hours per week.

Restriction: not open to BAcc, BBA and combined Business majors.

Students completing this course will forfeit credit in MGMT 1P93 and 1P96.

MGMT 1P92

Understanding Business

Basic business decision-making areas including accounting, entrepreneurship, finance, human resources, international busi-

Business

ness, marketing and operations. Analyse business problems by using cases, within the constraints of functional areas. Operationalizing integrative concepts such as team work, whole employee, productivity, competition and quality.

Lectures, seminar, 3 hours per week.

Restriction: not open to BAcc, BBA and combined Business majors.

Prerequisite: MGMT 1P91 or permission of instructor.

Students completing this course will forfeit credit in MGMT 1P93 and 1P96.

MGMT 1P93

Introduction to Business in Canada

Issues relating to managing businesses in Canada. The definition and interaction of the core functional areas of business, the legal environment and ethical issues.

Lectures, seminars, 3 hours per week.

Restriction: open to BAcc, BBA and combined Business majors.

Students completing this course will forfeit credit in MGMT 1P91 and 1P92.

MGMT 1P96

Business Analysis and Reporting

Visual, oral, written and electronic facets of business communication including case analysis and report writing.

Lectures, seminars, 3 hours per week.

Restriction: open to BAcc, BBA and combined Business majors.

Prerequisite: MGMT 1P93

Students completing this course will forfeit credit in MGMT 1P91 and 1P92.

MGMT 2P82

Business Ethics

(also offered as PHIL 2P82)

An evaluation of the contribution of business practices, institutions and actions to the general human good. Topics include false or misleading advertising, product safety, monopolistic price schemes, effects of pollution, discriminatory hiring policies, the role of shareholders, management, government and the public in determining corporate policy and economic justice.

Lectures, seminar, 3 hours per week.

Restriction: not open to BAcc and BBA majors.

Students completing this course will forfeit credit in MGMT 3P82.

MGMT 3P81

Strategic Management

The identification, development and implementation of organizational strategy.

Seminars, case discussion, 3 hours per week.

Restriction: not open to BAcc, BBA or combined Business majors.

Prerequisite: one credit from FNCE 2P51, MTKG 2P51, OBHR 2P51, OPER 2P51.

Students completing this course will forfeit credit in MGMT 4F87 (4P85, 4P86) and 4P89.

MGMT 3P82

Ethics in Business

Philosophical ideas and ethical issues pertaining to business behavior, business organizations and economic systems. Topics may include basic concepts of ethics; the social purpose of business; rights and responsibilities of employees and employers; product and workplace safety; the roles of shareholders and shareholder environment issues; the morality of capitalism and other systems; cases in marketing, finance, operations, employee relations and international business.

Lectures, seminar, 3 hours per week.

Restriction: open to BAcc and BBA students.

Students completing this course will forfeit credit in MGMT (PHIL) 2P82,

MGMT 3P98

International Business

The global business environment; development, implementation and evaluation of international business strategies; international opportunities and constraints facing Canadian businesses.

Lectures, case discussion, 3 hours per week.

Restriction: students must have a minimum of 8.5 overall credits.

Prerequisites: ACTG 1P12 or ACTG 1P92 and MGMT 1P92 or 1P96 or permission of the instructor.

Note: enrolment limited to 40 students per section.

MGMT 3V90-3V99

Topics in Management I

Courses in specialized areas within the discipline.

MGMT 4F87

Business Strategy

An integration of the functional areas of management with emphasis on senior management's involvement in defining the mission, formulating and implementing strategy.

Lectures, case discussion, 3 hours per week; plus major two-term field project.

Restriction: open to BBA and combined Business majors with a minimum of 14.0 overall credits.

Prerequisites: FNCE 3P93, OPER 2P91 (MGMT 3P30), MKTG 3P24 (minimum 60 percent) and OBHR 3P42 or permission of the instructor.

Note: enrolment limited to 40 students per section.

Students completing this course will forfeit credit in MGMT 3P81, 4P85, 4P86 and 4P89.

MGMT 4F90

Research Topic

Directed intensive study and research under the supervision of a faculty member in an area in which the student has shown particular competence.

Restriction: open to BBA, BBE, BCB and combined Business majors with a minimum of 13.5 overall credits and permission of the Chair and supervising faculty member.

Note: to be chosen in consultation with the supervising faculty member.

MGMT 4P12**Accounting for Planning and Control II**
(also offered as ACTG 3P22)

Accounting information systems within the context of a management information system with emphasis on the design and implementation of systems and controls.

Lectures, case discussion, 3 hours per week.

Restriction: open to BBA, BBE, BCB and combined Business majors with a minimum of 13.5 overall credits; BAcc majors with a minimum of 5.0 overall credits.

Prerequisites: ACTG 1P12 or ACTG 1P92; MKTG 2P91 and OBHR 2P91 or permission of the instructor.

Note: enrolment limited to 40 students per section.

Students completing this course will forfeit credit in ITIS 3P97.

MGMT 4P82**Global Quality Management**

The role of quality in global business strategies. Topics include ISO 9000, quality improvement methods, writings of Deming, Juran and Crosby and quality techniques practised by countries such as Germany and Japan.

Lectures, case discussion, 3 hours per week.

Restriction: students must have a minimum of 13.5 overall credits.

Prerequisites: MKTG 3P24 and OBHR 3P42.

Note: enrolment limited to 40 students per section.

Students completing this course will forfeit credit in MKTG 4V93.

MGMT 4P89**Business Strategy for Accounting Majors**

Industry analysis and competitive strategy emphasizing integration of functional area strategies and positioning with regard to market opportunities.

Lectures, case discussion, 3 hours per week.

Restriction: open to BAcc majors with a minimum of 13.5 overall credits.

Prerequisites: FNCE 3P93, OPER 2P91 (MGMT 3P30) MKTG 2P91 and OBHR 2P91 or permission of the instructor.

Note: enrolment limited to 40 students per section.

Students completing this course will forfeit credit in MGMT 3P81, 4F87, 4P85 and 4P86.

MGMT 4P91**Research Topic**

Directed study or research under the supervision of a faculty member in an area in which the student has shown particular competence.

Restriction: open to BBA, BBE (honours) and combined Business majors with a minimum of 13.5 overall credits and permission of the Chair and supervising faculty.

Note: to be chosen in consultation with the supervising faculty member.

MGMT 4P95**Canadian Business History**

The development of modern Canadian corporations and management practices emphasizing certain industries, companies

and entrepreneurs. Analyses of the implications of changing economic, political and social forces on the strategic decisions made by managers.

Lectures, case discussion, 3 hours per week.

Note: enrolment limited to 40 students per section.

MGMT 4P97**Advanced Topics in Business and Society**

Selected topics in business ethics/business and society. Topics may include neoclassical economics and the social role of business, environmentalism and the "greening" of business, social issues relating to downsizing, automation and the future of work, corporate philanthropy, employment equity and pay equity as social issues, the relation of business and government as a set of social issues.

Seminar, case discussion, student presentations, 3 hours per week.

Prerequisite: MGMT 2P82 or 3P82 or permission of the instructor.

Note: enrolment limited to 40 students per section.

Students completing this course will forfeit credit in MGMT 4V97.

MGMT 4P98**Family Business**

Theories, research and current practices relating to family business management. Topics will include the importance of family businesses, the role of the founder and the entrepreneur, intergenerational succession, going outside the family, managing conflict, strategic management of the family business.

Lectures, case discussions, 3 hours per week.

Restriction: open to BAcc and BBA majors with a minimum of 13.5 credits.

Prerequisite: OBHR 2P91 or permission of the instructor.

Note: enrolment limited to 40 students per section.

Students completing this course will forfeit credit in MGMT 4V98.

MGMT 4V90-4V99**Topics in Management II**

A course structured by a faculty member having specialized interest in an area within the discipline, normally offered on an experimental basis.

Restriction: open to BBA, BBE, BCB and combined Business majors until date specified in BIRT guide. Students must have a minimum of 13.5 overall credits.

MARKETING**MKTG 2P51****Marketing Basics**

An introduction to basics of marketing.

Lectures, 3 hours per week.

Restriction: not open to BAcc, BBA, BBE and combined Business majors. Open to CSBC and WKHL majors until date specified in BIRT guide.

Prerequisite: MGMT 1P92.

Business

Note: designed for non-BBA students.

Students completing this course will forfeit credit in MKTG 2P91.

MKTG 2P52

General Marketing Management

Exploring the marketing management process.

Lectures, 3 hours per week.

Restriction: not open to BAcc, BBA, BBE and combined Business majors. Open to CSBC majors until date specified in BIRT guide.

Prerequisite: MKTG 2P51.

Note: designed for non-BBA students.

Students completing this course will forfeit credit in MKTG 2P91 and 3P24.

MKTG 2P91

Introduction to Marketing

The characteristics of the marketing function in Canada, basic marketing concepts and the marketing function in organizations.

Lectures, case discussion, 3 hours per week.

Restriction: open to BAcc, BBA, BBE, BCB, CSBC and combined Business majors. In Fall Term open to BAcc and BBA co-op majors until date specified in BIRT guide.

Prerequisites: ACTG 1P11 or ACTG 1P92 and MGMT 1P96 (minimum 60 percent) or permission of the instructor.

Students completing this course will forfeit credit in MKTG 2P51, 2P52 and 3P22.

MKTG 3P24

Marketing Management

Marketing concepts in decision making and the role of the marketing manager.

Lectures, case discussion, 3 hours per week.

Restriction: open to BAcc, BBA, BBE, BCB, CSBC and combined Business majors. In Winter Term open to BBA co-op majors until date specified in BIRT guide.

Prerequisite: MKTG 2P91 (minimum 60 percent).

Students completing this course will forfeit credit in MKTG 2P52.

MKTG 3P96

Marketing Research

Market research as a managerial tool including scientific method, research and questionnaire design, experimentation, sample selection, data collection and research procedure.

Lectures, case discussion, 3 hours per week.

Restriction: open to BAcc, BBA students approved to the marketing concentration with a minimum 70 percent major average, BBE, BCB, CSBC and combined Business majors until date specified in BIRT guide. After that date open to BAcc, BBA, BBE, BCB, CSBC and combined Business majors. Students must have a minimum of 10.0 overall credits.

Prerequisite: MKTG 3P24 (minimum 60 percent) or MKTG 2P52 and COMM 3P65.

Note: a field work assignment will be required. Enrolment limited to 40 students per section.

Students completing this course will forfeit credit in MKTG 4P22.

MKTG 4F90

Research Topic

Directed intensive study and research under the supervision of a faculty member in an area in which the student has shown particular competence.

Restriction: open to BBA, BBE (honours) and combined Business majors with a minimum of 13.5 overall credits and permission of the Chair and supervising faculty member.

Note: to be chosen in consultation with the supervising faculty member.

MKTG 4P23

Marketing Communications

Management problems in the formulation, implementation and evaluation of programs in the areas of advertising, selling and promotional activities.

Lectures, case discussion, 3 hours per week.

Restriction: open to BAcc, BBA students approved to the marketing concentration with a minimum 70 percent major average, BBE, BCB, CSBC and combined Business majors until date specified in BIRT guide. After that date open to BBA, BAcc, BBE, CSBC, BCB and combined Business majors. Students must have a minimum of 13.5 overall credits.

Prerequisite: MKTG 3P24 or MKTG 2P52 and COMM 3P65. Note: enrolment limited to 40 students per section.

MKTG 4P25

Marketing Strategy

Development and execution of marketing strategies. Topics include analysis of industry, customer, market and competitive environments, sources of competitive advantage and methods of allocating resources to new and established products. The strategic role of market evolution and cost dynamics.

Lectures, case discussion, 3 hours per week.

Restriction: open to BAcc, BBA students approved to the marketing concentration with a minimum 70 percent major average, BBE, BCB, CSBC and combined Business majors until date specified in BIRT guide. After that date open to BBA, BAcc, BBE, CSBC, BCB and combined Business majors. Students must have a minimum of 13.5 overall credits.

Prerequisite: MKTG 3P24.

Note: enrolment limited to 40 students per section.

MKTG 4P26

Sales Management

Management of the sales force and the role of the sales function in marketing strategy. Topics include the interface between sales strategy and marketing strategy; duties of the sales manager with respect to sales force selection, training, compensation and evaluation; time and territory management; sales forecasting; the impact of new technology on the sales management function; career paths in sales management.

Lectures, case discussion, 3 hours per week.

Restriction: open to BAcc, BBA students approved to the marketing concentration with a minimum 70 percent major

average, BBE, BCB and combined Business majors until date specified in BIRT guide. After that date open to BBA, BAcc, BBE, CSBC, BCB and combined Business majors. Students must have a minimum of 13.5 overall credits.

Prerequisite: MKTG 3P24.

Note: enrolment limited to 40 students per section.

MKTG 4P27

Marketing and Society

The state of the consumer movement, marketing ethics and deceptive practices, truth and deception in advertising, government regulation, consumer protection, information and product safety. New developments and their implications for future marketing strategy.

Lectures, case discussion, 3 hours per week.

Restriction: open to BAcc, BBA students approved to the marketing concentration with a minimum 70 percent major average, BBE, BCB, CSBC and combined Business majors until date specified in BIRT guide. After that date open to BAcc, BBA, BBE, BCB, CSBC and combined Business majors. Students must have a minimum of 13.5 overall credits.

Prerequisite: MKTG 3P24 or MKTG 2P51 and COMM 3P65.

Note: enrolment limited to 40 students per section.

MKTG 4P28

Retail Management

The managerial role and its effect on retailing decisions. The institutional structure of retailing and its past and probable future patterns. Marketing strategies and the interrelationships among suppliers, customers and members of the distribution channels.

Lectures, case discussion, 3 hours per week.

Restriction: open to BAcc, BBA students approved to the marketing concentration with a minimum 70 percent major average, BBE, BCB and combined Business majors until date specified in BIRT guide. After that date open to BAcc, BBA, BBE, BCB, CSBC and combined Business majors. Students must have a minimum of 13.5 overall credits.

Prerequisite: MKTG 3P24.

Note: enrolment limited to 40 students per section.

MKTG 4P29

Industrial Marketing

The function of the marketer in the intermediate customer market. Demand, communications and delivery processes. Emphasis on market identification, the role of personal communications and solving customer problems.

Lectures, case discussion, 3 hours per week.

Restriction: open to BAcc, BBA students approved to the marketing concentration with a 70 percent major average, BBE, BCB and combined Business majors until date specified in BIRT guide. After that date open to BAcc, BBA, BBE, BCB, CSBC and combined Business majors. Students must have a minimum of 13.5 overall credits.

Prerequisite: MKTG 3P24.

Note: enrolment limited to 40 students per section.

MKTG 4P31

Consumer Behaviour

The application of behavioural science concepts to marketing; the interactions of consumers, sellers, public policy makers and researchers.

Lectures, case discussion, 3 hours per week.

Restriction: open to BAcc, BBA students approved to the marketing concentration with a minimum 70 percent major average, BBE, BCB, CSBC and combined Business majors until date specified in BIRT guide. After that date open to BBA, BAcc, BBE, BCB, CSBC and combined Business majors. Students must have a minimum of 13.5 overall credits.

Prerequisites: MKTG 3P24 or MKTG 2P52 and COMM 3P65.

Note: enrolment limited to 40 students per section.

MKTG 4P33

International Marketing

The marketing concept and individual components of the marketing mix in the context of the international environment; the differences between international and domestic marketing and how they affect the planning, organization and control of marketing programs.

Lectures, case discussion, 3 hours per week.

Restriction: open to BAcc, BBA students approved to the marketing concentration with a minimum 70 percent major average, BBE, BCB and combined Business majors until date specified in BIRT guide. After that date open to BBA, BAcc, BBE, BCB, CSBC and combined Business majors. Students must have a minimum of 13.5 overall credits.

Prerequisite: MKTG 3P24.

Note: enrolment limited to 40 students per section.

MKTG 4P34

Marketing Financial Services

The application of marketing principles to financial services.

Lectures, case discussion, 3 hours per week.

Restriction: open to BAcc, BBA students approved to the marketing concentration with a minimum 70 percent major average, BBE, BCB, CSBC and combined Business majors until date specified in BIRT guide. After that date open to BBA, BAcc, BBE, BCB, CSBC and combined business majors. Students must have a minimum of 13.5 overall credits.

Prerequisites: MKTG 3P24 or MKTG 2P52 and COMM 3P65 or permission of the instructor.

Note: site visits to Canadian and US financial institutions. Enrolment limited to 40 students per section.

MKTG 4P91

Research Topic

Directed intensive study or research under the supervision of a faculty member in an area in which the student has shown particular competence.

Restriction: open to BBA, BBE and combined Business majors with a minimum of 13.5 overall credits and permission of the Chair and supervising faculty member.

Note: to be chosen in consultation with the supervising faculty member.

Business

MKTG 4V90-4V95

Topics in Marketing

Courses in specialized areas within the discipline.

Restriction: open to BAcc, BBA, BBE and combined Business majors until date specified in BIRT guide. Students must have a minimum of 13.5 overall credits.

ORGANIZATIONAL BEHAVIOUR AND HUMAN RESOURCES

OBHR 2P51

Fundamentals of Organizations

Micro and macro aspects of formal organizations from a behavioural perspective. Theories, research and current practices in the management of human resources and the design of organizations. Topics include motivation, leadership, group dynamics, organizational goals and effectiveness, environment and other contingencies and organizational culture.

Lectures, case discussions, 3 hours per week.

Restriction: not open to BAcc, BBA, CSBC and combined Business majors.

Prerequisite: MGMT 1P92

Note: designed for non-BBA students.

Students completing this course will forfeit credit in OBHR 2P91 and 3P42.

OBHR 2P91

Organizational Behaviour

Micro aspects of formal organizations from a behavioural science perspective. Theories, research and current practices in the management of human resources. Topics include motivation, leadership, group dynamics, interpersonal communication, conflict and stress management.

Lectures, case discussion, 3 hours per week.

Restriction: open to BAcc, BBA, BBE, BCB, CSBC, WKHL and combined Business majors until date specified in BIRT guide. In Fall Term open to BAcc and BBA co-op majors until date specified in BIRT guide.

Prerequisite: one of ACTG 1P12, MGMT 1P92, 1P93 (minimum 60 percent), 1P96 (minimum 60 percent) or permission of the instructor.

Students completing this course will forfeit credit in OBHR 2P51.

OBHR 3P42

Organization Theory and Design

Macro aspects of formal organizations from a behavioural perspective. Theories, research and current practices in organizational design and redesign. Topics include the development of management thought, organizational goals, organizational effectiveness and efficiency; environment, technology, structural alternatives, power and politics in organizations and organizational culture.

Lectures, case discussion, 3 hours per week.

Restriction: open to BAcc, BBA, BBE, BCB, CSBC, WKHL and combined Business majors until date specified in BIRT guide. In the Winter Term open to BBA co-op majors until date

specified in the BIRT guide.

Prerequisite: OBHR 2P91 (minimum 60 percent).

Students completing this course will forfeit credit in OBHR 2P51.

OBHR 3P97

Human Resource Management

Recruitment, selection and training, wage and salary administration and the design and administration of benefit programs.

Lectures, case discussion, 3 hours per week.

Restriction: open to BBA students approved to the human resource management concentration with a minimum 70 percent major average until date specified in the BIRT guide. After that date open to BAcc, BBA, BBE, BCB, CSBC and combined Business majors. Students must have a minimum of 13.5 overall credits.

Prerequisite: OBHR 3P42 (minimum 60 percent).

Note: enrolment limited to 40 students per section.

Students completing this course will forfeit credit in OBHR 4P62.

OBHR 4F90

Research Topic

Directed intensive study and research under the supervision of a faculty member in an area in which the student has shown particular competence.

Restriction: open to BBA and combined Business majors with a minimum of 13.5 overall credits and permission of the Chair and supervising faculty member.

Note: topic to be chosen in consultation with the supervising faculty member.

OBHR 4P61

Organizational Development: Individual and Interpersonal Skills

Theory and practice of individual and interpersonal skills needed to affect development and change in organizations. Emphasis on small group experiential exercises for skill development.

Lectures, case discussion, 3 hours per week.

Restriction: open BBA students approved to the human resource management concentration with a minimum 70 percent average until date specified in the BIRT guide. After that date open to BAcc, BBA, BBE, BCB, CSBC and combined Business majors. Students must have a minimum of 13.5 overall credits.

Prerequisite: OBHR 3P42.

Note: enrolment limited to 40 students per section.

OBHR 4P63

Industrial and Labour Relations

Labour-management relations in Canada emphasizing the collective bargaining process, the grievance and arbitration process and other aspects of collective agreement administration.

Lectures, case discussion, 3 hours per week.

Restriction: open to BBA students approved to the human resource management concentration with a minimum 70 percent average until date specified in the BIRT guide. After that

date open to BAcc, BBA, BBE, BCB, CSBC and combined Business majors. Students must have a minimum of 13.5 overall credits.

Prerequisite: OBHR 3P97 (4P62) or permission of the instructor.

Note: enrolment limited to 40 students per section.

OBHR 4P65

Negotiating in Organizations

The causes and consequences of conflict in organizations, and strategies and tactics to manage conflict. Emphasis on the use of bargaining and negotiation skills to manage conflict and resolve disputes.

Lectures, case discussion, 3 hours per week.

Restriction: open to BBA students approved to the human resource management concentration with a minimum 70 percent average until date specified in the BIRT guide. After that date open to BAcc, BBA, BBE (honours), BCB, CSBC and combined Business majors. Students must have a minimum of 13.5 overall credits.

Prerequisite: OBHR 3P42.

Note: enrolment limited to 40 students per section.

OBHR 4P66

Motivation and Compensation Management

Motivation theories and their application. Compensation theory and practice including pay and benefits determination, job evaluation and the overall planning and administration of compensation and reward systems.

Lectures, case discussion, 3 hours per week.

Restriction: open to BBA students approved to the human resource management concentration with a minimum 70 percent average until date specified in the BIRT guide. After that date open to BAcc, BBA, BBE, BCB, CSBC and combined Business majors. Students must have a minimum of 13.5 overall credits.

Prerequisite: OBHR 3P97 (4P62).

Note: enrolment limited to 40 students per section.

OBHR 4P67

Training and Development

The three sequential steps in the training and development process in organizations: assessment of training needs, development and implementation of the training program and evaluation of the training program. Training methods used in employee orientation, skill training and management development in the context of adult education.

Lectures, case discussion, 3 hours per week.

Restriction: open BBA students approved to the human resource management concentration with a minimum 70 percent average until date specified in the BIRT guide. After that date open to BAcc, BBA, BBE, BCB, CSBC and combined Business majors. Students must have a minimum of 13.5 overall credits.

Prerequisite: OBHR 3P97 (4P62).

Note: enrolment limited to 40 students per section.

OBHR 4P68

Leadership and Supervision

Leadership and supervision in a variety of organizational settings. Topics include leadership research, leadership effectiveness through the organizational hierarchy with a particular focus on middle management issues, the new supervisor, supervisory and other managerial roles.

Lectures, case discussion, 3 hours per week.

Restriction: open to BBA students approved to the human resource management concentration with a minimum 70 percent major average until date specified in the BIRT guide. After that date open to BAcc, BBA, BCB, CSBC and combined Business majors. Students must have a minimum of 13.5 overall credits.

Prerequisite: OBHR 3P42.

Note: enrolment limited to 40 students per section.

OBHR 4P69

Staffing and Evaluation

Personnel selection, placement and performance evaluation in organizations in the context of human rights/equal employment legislation. Recruitment and selection strategies and the validation of selection, placement and performance evaluation practices.

Lectures, case discussion, 3 hours per week.

Restriction: open to BBA students approved to the human resource management concentration with a minimum 70 percent major average until date specified in the BIRT guide. After that date open to BAcc, BBA, BCB, CSBC and combined Business majors. Students must have a minimum of 13.5 overall credits.

Prerequisite: OBHR 3P97 (4P62).

Note: enrolment limited to 40 students per section.

OBHR 4P72

Labour Law

Federal and provincial labour statutes, the practices of federal and provincial labour relations boards and ministries of labour and the common law of employer-employee relations. The impact of these statutes, regulations, boards and ministries on management, unions and employees.

Lectures, case discussion, 3 hours per week.

Restriction: open to BBA students approved to the human resource management concentration with a minimum 70 percent major average until date specified in the BIRT guide. After that date open to BAcc, BBA, BCB, CSBC and combined Business majors. Students must have a minimum of 13.5 overall credits.

Prerequisites: ACTG (MGMT) 2P40, MGMT 1P92 or 1P96; OBHR 3P42, 3P97 (4P62) and 4P63 or permission of the instructor.

Note: enrolment limited to 40 students per section.

OBHR 4P90

International Organizational Behaviour

Understanding behaviour in global organizations. Topics may include cultural differences, managing decision-making and

Business

personnel transitions, international negotiations and organization design for global competition.

Lectures, case discussion, 3 hours per week.

Restriction: open to BBA students approved to the human resource management concentration with a minimum 70 per cent major average until date specified in the BIRT guide. After that date, open to BAcc, BBA, CSBC and combined Business majors until date specified in BIRT guide. Students must have a minimum of 13.5 overall credits.

Prerequisite: OBHR 3P42.

Note: enrolment limited to 40 students per section.

Students completing this course will forfeit credit in OBHR 4V90.

OBHR 4P91

Research Topic

Directed study and research under the supervision of a faculty member in an area in which the student has shown particular competence.

Restriction: open to BBA and combined business majors with a minimum of 13.5 overall credits and permission of the Chair and supervising Faculty member.

Note: topic to be chosen in consultation with the supervising faculty member.

OBHR 4P96

Administration of the Collective Agreement

Issues faced by employees, union representatives, supervisors and managers in the day to day administration of collective agreements. Types of disputes include discipline and discharge, seniority related disputes, compensation, management rights and the reasons why some complaints cannot be decided by arbitrators.

Lectures, case discussion, 3 hours per week.

Restriction: open to BBA students approved to the human resource management concentration with a minimum 70 per cent major average until date specified in the BIRT guide. After that date, open to BAcc, BBA, CSBC and combined Business majors until date specified in BIRT guide. Students must have a minimum of 13.5 overall credits.

Prerequisite: OBHR 4P63.

Note: enrolment limited to 40 students per section.

Students completing this course will forfeit credit in OBHR 4V96.

OBHR 4V90-4V99

Topics in Organizational Behaviour and Human Resources

Courses in specialized areas within the discipline.

Restriction: open to BBA, BBE (honours) and combined Business majors with a minimum of 13.5 overall credits.

OBHR 4V97

2000-2001: Human Resource Information Systems and Research

The nature and scope of human resource information systems (HRIS) as a managerial tool. Topics include the application of research methodology and statistics to human resource man-

agement, the interface of HRIS with other human resource management functions and various applications of such systems to the work of human resource professionals.

Lectures, case discussions, 3 hours per week.

Restriction: open to BBA students approved to the human resource management concentration with a minimum 70 per cent major average until date specified in the BIRT guide. After that date, open to BAcc and BBA students until date specified in the BIRT guide. After that date, open to BAcc, BBA, CSBC and combined Business majors until date specified in BIRT guide. Students must have a minimum of 13.5 overall credits.

Prerequisite: OBHR 3P97 or permission of the instructor.

Note: enrolment limited to 40 students per section.

OBHR 4V98

2000-2001: Occupational Health and Safety

Legal, technical and management issues regarding employee health and safety. Topics include occupational health and safety legislation; hazard identification and control; accident investigation; emergency preparedness; properties of chemical, biological and physical agents; ergonomics and management of occupational health and safety programs.

Lectures, case discussion, 3 hours per week.

Prerequisite: OBHR 3P97 (4P62)

Note: enrolment limited to 40 students per section

OPERATIONS MANAGEMENT

OPER 2P51

General Operations Management

Operations management and its interactions with other functional areas. Topics include process analysis, forecasting, scheduling, materials management, quality assurance and capacity planning.

Lectures, case discussion, 3 hours per week.

Restriction: not open to BAcc, BBA or combined Business majors.

Prerequisites: ACTG 1P91 and MGMT 1P92.

Students completing this course will forfeit credit in MGMT 2P30, 3P30, 3P39 and OPER 2P91.

OPER 2P91

Introduction to Operations Management

Concepts and techniques used in managing the operations function in the manufacturing and service sectors for both profit and not-for-profit organizations. Topics may include, but are not restricted to, managerial implications of several types of processes, capacity planning and facility location, product and process design, aggregate planning, inventory management, scheduling, productivity and quality management. Capital budgeting, simulation and decision analysis models, including linear programming and other management science tools.

Lectures, case discussion, computer applications, 3 hours per week.

Restriction: open to BAcc and BBA, BBE (honours), BCB and combined Business majors with a minimum of 8.5 overall

credits. In the Fall Term open to BAcc and in the Winter Term open to BBA co-op majors until date specified in BIRT guide. Prerequisites: ACTG 1P12 or ACTG 1P92 (minimum 60 percent) and ECON 2P91 (minimum 60 percent). Students completing this course will forfeit credit in MGMT 2P30, 3P30 and OPER 2P51.

OPER 3P31

Operations Management

Long-term aspects of managing the operations function in the manufacturing and service sectors for both profit and not-for-profit organizations. Topics include aggregate planning and scheduling, quality control, facilities planning, technology planning and operations strategy.

Lectures, case discussion, 3 hours per week.

Prerequisite: OPER 2P91 (MGMT 3P30).

Students completing this course will forfeit credit in MGMT 3P31.

NON-CREDIT

ADMI 0N01

Work Placement I

First co-op work placement (4 months) with an approved employer.

Restriction: open to ACCC Co-op students.

ADMI 0N02

Work Placement II

Second co-op work placement (4 months) with an approved employer.

Restriction: open to ACCC Co-op students.

ADMI 0N03

Work Placement III

Third co-op work placement (4 months) with an approved employer.

Restriction: open to ACCC Co-op students.

ADMI 0N04

Work Placement IV

Fourth co-op work placement (4 months) with an approved employer.

Restriction: open to ACCC Co-op students.

ADMI 0N05

Work Placement V

Fifth co-op work placement (4 months) with an approved employer.

Restriction: open to ACCC Co-op students.

ADMI 0N06

Work Placement VI

Sixth co-op work placement (4 months) with an approved employer.

Restriction: open to ACCC Co-op students.

ADMI 0N11

Work Placement I

First co-op work placement (4 months) with an approved employer.

Restriction: open to BBA Co-op students.

ADMI 0N12

Work Placement II

Second co-op work placement (4 months) with an approved employer.

Restriction: open to BBA Co-op students.

ADMI 0N13

Work Placement III

Third co-op work placement (4 months) with an approved employer.

Restriction: open to BBA Co-op students.

ADMI 0N90

Co-op Training and Development

Provides a framework for the development of learning objectives by students for individual work terms. Includes orientation to the Co-op experience goal setting, résumé preparation, interview skills preparation.

Lectures, presentation, site visits, 3 hours per week.

Restriction: open to BAcc and BBA Co-op students.

Business Economics

This program is co-ordinated by the
Department of Economics.

Co-ordinator
Joseph Kushner

General Information

Administrative Assistant, extension 3325
Taro Hall 465
<http://www.brocku.ca/economics/>

Business Economics offers a four-year program of study leading to a honours BBE degree designed for students who wish to combine the study of economics and business. There are two streams: Financial Economics for those who wish to combine economics with finance and Consumer Economics for those who wish to combine economics with marketing as well as a Co-op option.

The Business Economics Co-op stream combines academic and work terms over a four an one-half year period. Students spend two years in an academic setting studying the functional areas of business economics prior to taking the first work placement. Some employers may wish to extend a student's work placement, in such a case, the student must seek the approval of the Dean and Director. While every attempt will be made to build flexibility into the work placement and study sequence, in some instances, extended work placement may not be possible. In addition to the current fees for courses in academic study terms, students are assessed an annual administrative fee (see the Schedule of Fees).

As this is a limited enrolment program, admission is on the basis of marks and a personal interview. The normal requirement is a minimum 80 percent average on six OACs. Decisions will be made by the Business Economics Admissions Committee.

Business economists provide analyses and recommendations to policy makers in both the private and public sectors. The program seeks to develop the skills and knowledge required for such tasks. Possible fields of employment include financial analysis, market research and managerial positions in the private and public sectors.

Computer Literacy is required for many of the upper year courses in this program. Students who are not computer literate should take COSC 1P90, 1P98 or both as elective credits.

Graduates of the Business Economics program may pursue graduate studies in Economics without taking additional courses.

Program Notes

1. ECON 1P91 and 1P92 may be taken concurrently or in either order.
2. In all 20 credit degree programs, at least 12 credits must be numbered 2(alpha)00 or above, six of which must be numbered 2(alpha)90 or above and of these, three must be numbered 3(alpha)90 or above.

Honours Program

Year 1

ACTG 1P91 and 1P92; ECON 1P91 and 1P92; MATH 1P93 or 1P97; MATH 1P98; one Humanities and one Science context credit.

Year 2

ECON 2P21, 2P22, 2P31, 2P32, 2P90 and 2P94; FNCE 2P91; MKTG 2P91; one elective credit.

Financial Economics stream

Year 3

ECON 3P03, 3P04, 3P90, 3P91 and 3P92; one ECON credit numbered 2(alpha)90 or above; FNCE 3P93 and 4P06; one-half elective credit.

Year 4

ECON 3P95, 4P13 and 4P14; one-half credit from ECON 3P15, 3P24, 3P94, 3P96, 3P97; one and one-half credits from FNCE 4P04, 4P05, 4P15, 4P16, 4P17; one credit from ACTG, ENTR, FNCE, MGMT, MKTG, OBHR numbered 4(alpha)00 or above; one-half elective credit.

Consumer Economics stream

Year 3

ECON 3P06, 3P16, 3P90, 3P91 and 3P92; one-half credit from ECON 3P13, 3P18, 3P24, 3P93; one ECON credit numbered 2(alpha)90 or above; MKTG 3P24; one-half elective credit.

Year 4

ECON 3P95, 4P13 and 4P14; MKTG 3P96, 4P25 and 4P31; one-half MKTG credit numbered 4(alpha)00 or above; one credit from ACTG, ENTR, FNCE, MGMT, MKTG, OBHR numbered 4(alpha)00 or above; one half elective credit.

Business Economics Co-op stream

Description of Courses

Year 1
ACTG 1P91 and 1P92; ECON 1P91 and 1P92; MATH 1P93 or 1P97; MATH 1P98; one Humanities and one Science context credit.

See relevant calendar entries for course descriptions.

Year 2
ECON 2P21, 2P22, 2P31, 2P32, 2P90 and 2P94; FNCE 2P91; MKTG 2P91; one elective credit.

Year 3

Fall Term

ECON 3P03 or 3P04; ECON 3P90, 3P91 and 3P92; FNCE 3P93; one-half elective credit.

Winter Term

ECON 0N01

Spring Term

one ECON credit numbered 2(alpha)90 or above; ECON 3P03 or 3P04; one elective credit.

Year 4

Fall Term

ECON 0N02

Winter Term

ECON 3P95, 4P13 and 4P14; FNCE 4P05 and 4P06.

Summer Term

ECON 0N03

Year 5

Fall Term

FNCE 4P04 and 4P16; one ECON credit; one-half elective credit.

Prerequisites and Restrictions

Students must check to ensure that prerequisites are met. Students may be deregistered, at the request of the instructor, from any course for which prerequisites and/or restrictions have not been met.

Canadian Studies

Director

Jane M. Koustas, Department of French, Italian and Spanish

General Information

Administrative Assistant, extension 4029

Mackenzie Chown F242

<http://www.brocku.ca/canstudies/>

The Centre for Canadian Studies offers an opportunity to study Canadian culture and society from a variety of disciplinary perspectives, with co-operating faculty from Communications, Popular Culture and Film, Economics, English Language and Literature, Fine Arts, French, Italian and Spanish, Geography, History, Political Science and Sociology.

Students take required interdisciplinary Canadian Studies courses along with a number of Canada-centred courses offered by other departments. Emphasis is placed upon the unique nature of the Canadian experience and upon the value and practice of combining disciplinary approaches in the study of culture and society.

The Canadian Studies core courses offered in years 1, 2 and 3 are designed to introduce students to interdisciplinary studies in a progressive manner. The year 1 course is taught by one instructor and examines the development of Canadian culture from the perspectives of disciplines within the Humanities. Year 2 and 3 courses are interdisciplinary courses which combine humanities and social science perspectives on a particular topic or issue related to the study and understanding of Canada.

Canadian Studies offers combined major programs leading to a BA (honours or pass). Canadian Studies core courses may also be taken as electives by students in other degree programs.

Canadian Studies may be combined with any other discipline or program in the Humanities or Social Sciences which offers a combined major program.

Program Notes

1. CANA students must take one credit in FREN (required in some combined major programs) or one credit related to French Canada as part of their degree program. Eligible courses appear with an asterisk (*) in the list of approved Canadian Studies courses.

2. Students in a combined major program are designated "Humanities" or "Social Science" students according to the designation of the co-major discipline. Humanities students must fulfil the language requirement of the co-major discipline in which they are working.

3. CANA 1F91 will satisfy the Humanities context requirement.

4. Humanities students must take POLI 1F90 as their Social Science context elective in year 1 and POLI 2F12 in year 2. Social Science students must take one credit from HIST 2P07, 2P11, 2P12 as part of their program.

5. It is strongly recommended that all CANA students complete one course in Canadian history, one course in Canadian politics, one course in Canadian literature and one Canadian-related fine arts, FILM, DRAM or VISA course as part of their combined major program of study.

6. To encourage interdisciplinary study, Canadian Studies credits must be chosen from approved courses outside the student's co-major.

7. Each student should meet with the Program Director and the Chair or Director of the co-major discipline at the beginning of the second year of study, to ensure that his or her choice of courses meets the criteria for the combined major degree.

8. For 2000-2001, CANA majors are required to take CANA 3V91 to satisfy the one-half credit in Canadian Cultural Studies I and CANA 3P16 to satisfy the one-half credit in Canadian Cultural Studies II.

9. Students contemplating a thesis or project must consult the Program Director at the end of year 3.

10. In all 20 credit degree programs, at least 12 credits must be numbered 2(alpha)00 or above, six of which must be numbered 2(alpha)90 or above and of these, three must be numbered 3(alpha)90 or above. In all 15 credit degree programs, at least seven credits must be numbered 2(alpha)00 or above, three of which must be numbered 2(alpha)90 or above.

Honours Program

Year 1

CANA 1F91; one credit from the co-major discipline; one Social Science (see program note 4) and one Science context elective; one elective credit.

Year 2

CANA 2F91; POLI 2F12 or one credit from HIST 2P07, 2P11, 2P12 (see program note 4); two credits from the co-major discipline; one elective credit.

Year 3

One-half credit from CANA 3V90-3V94; one-half credit from CANA 3V95-3V99 (see program note 8); one credit numbered 2(alpha)90 level or above from the list of approved Canadian Studies courses; two credits from the co-major discipline; one elective credit (see program note 9).

Year 4

CANA 4F80 or 4F99; one credit numbered 3(alpha)90 level or above from the list of approved Canadian Studies courses; two credits from the co-major discipline; one elective credit.

Pass Program

Satisfactory completion of the first three years of the honours program entitles a student to apply for a pass degree.

Prerequisites and Restrictions

Students must check to ensure that prerequisites are met. Students may be deregistered, at the request of the instructor, from any course for which prerequisites and/or restrictions have not been met.

Description of Courses

Note that not all courses are offered in every session. Refer to the applicable term timetable for details.

CANA 1F91

Introduction to Canadian Studies

The development of Canadian culture from the beginning of colonization to the present. An interdisciplinary examination of cultural expressions drawn from Canadian art, literature and music, as well as selected issues in Canadian social and cultural history.

Lectures, seminar, 3 hours per week.

CANA 2F91

Culture and Power in Canada

Interdisciplinary examination of Canadian culture and society employing a variety of methods and perspectives, including those of cultural studies. Cultural theory and approaches to critical analysis in the arts and social sciences. Topics may include cultural institutions; issues of race, class and gender; Canadian-American relations; critical examination of Canadian myths.

Lectures, seminar, 3 hours per week.

Prerequisite: CANA 1F91 or permission of the instructor.

CANA 3P16

Politics in Québec

(also offered as POLI 3P16)

Québec's political, social and economic evolution since 1945. Topics include old and new varieties of nationalism, the Quiet Revolution, the changing roles of church and state, the decline of the anglophone minority and Québec's impact on Canadian Federalism.

Lectures, seminar, 3 hours per week.

Prerequisite: CANA 2F91 or one POLI credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

CANA 3V90-3V94

Canadian Cultural Studies I

Selected topics in Canadian cultural studies emphasizing methods and issues with a Humanities orientation.

Lectures, seminar, 3 hours per week.

Prerequisite: CANA 2F91 or permission of the instructor.

CANA 3V91

2000-2001: TBA

(also offered as HIST 3V91)

Prerequisite: CANA 2F91 or two HIST credits numbered 2(alpha)00 to 2(alpha)99 or permission of the instructor.

CANA 3V95-3V99

Canadian Cultural Studies II

Selected topics in Canadian cultural studies with an emphasis on methods and issues with a Social Science orientation.

Lectures, seminar, 3 hours per week.

Prerequisite: CANA 2F91 or permission of the instructor.

CANA 4F80

Directed Reading

Directed individual or group reading and written work in an area of Canadian Studies. Students will also be required to participate in staging an annual Canadian Studies colloquium. Restriction: open to CANA majors with approval to year 4 (honours) and permission of the Director.

Note: students are responsible for arranging their course with a supervising faculty member and must submit a written proposal, signed by the supervisor, to the Director for approval before registration.

CANA 4F99

Honours Thesis/Project

Independent interdisciplinary study under the guidance of a faculty adviser. Thesis/project, to be evaluated by a faculty committee representing the disciplinary areas to which the thesis/project is related.

Restriction: open to CANA majors with approval to year 4 (honours) and permission of the Director.

Note: students are responsible for making arrangements with a supervising faculty member and must submit a written proposal by September 15.

Canadian Studies

Departmental Offerings which are Approved Canadian Studies Credits:

Note: As many of the courses listed below have prerequisites, students should plan their programs in advance.

		GEOG 2P06	Cultural and Historical Geography
		GEOG 2P91	Geography of Canada
		GEOG 3P74	Geography and Gender (also offered as COMM/WISE 3P74)
		HIST 2P07	Origins: Canadian History to 1800
		HIST 2P11	Canada in the 19th Century
		HIST 2P12	Canada in the 20th Century
		HIST 2P97	Canada: Social Control or Social Reform
COMM 4P17	Canadian Cultural and Communication Policy (also offered as PCUL 4P17)	HIST 2Q95	Women in North America (also offered as WISE 2Q95)
DRAM 2F97	Canadian Drama	HIST 3P74	Canada: A Land of Immigrants
DRAM 2P91	Canadian Radio and Television Drama	HIST 3P92	Aspects of Ontario History, 1784-1914
ECON 2P09	Canadian Economic History	*HIST 3P98	French Canada
ECON 2P94	Canadian Economic Issues (also offered as LABR 2P94)	HIST 3Q95	Canadian Labour History (also offered as LABR 3Q95)
ECON 2V96-2V99	Topics in Canadian Economic Policy	HIST 4V10-4V19	Problems in Canadian History
ECON 3P19	Regional Economics	ITAL 2P85	Italians in Canada and Italy-Canada Relations
ENGL 2P91	Canadian Literature to 1920	LABR 2F00	Labour Law and Labour Unions
ENGL 2P92	Canadian Literature from 1920 to Present	LING 4P50	Topics in Sociolinguistics
ENGL 4V60	Contemporary Canadian Fiction	LING 4P60	Storytelling (also offered as CHYS 4P60)
ENGL 4V61	Contemporary Canadian Poetry	MUSI 2P11	History of Music in Canada
ENGL 4V62	Elsewhere and Away in Contemporary Canadian Fiction	POLI 2F12	The Government and Politics of Canada
ENGL 4V63	Historical Inscription in Contemporary Canadian Poetry	POLI 2F98	Canadian Public Administration (also offered as COMM/LABR 2F98)
FILM 2F97	Canadian Cinema (also offered as COMM 2F97)	POLI 3P11	Local Government
FILM 2P21	Canadian Popular Culture (also offered as COMM/PCUL 2P21)	POLI 3P13	The Politics of Labour (also offered as LABR 3P13)
FILM 3P21	Canadian Television	POLI 3P15	Politics in Ontario
*FREN 1F90	Intermediate French	*POLI 3P16	Politics in Québec
*FREN 1P01	Introductory French I	POLI 3P17	Politics and the Mass Media in Canada (also offered as COMM/PCUL 3P17)
*FREN 1P02	Introductory French II	POLI 3P18	Law and Politics
*FREN 1P03	Introductory French III	POLI 3P28	Canadian Foreign Policy
*FREN 2F00	Grammar and Composition	POLI 3P29	Canadian - American Relations
*FREN 3P73	French Canadian Literature to 1939	POLI 3P66	Environmental Policy, Law and Administration
*FREN 3P74	French Canadian Literature from 1939-1960	POLI 4P14	Federalism in Canada
*FREN 3P85	Women Writers of <i>la francophonie</i> (also offered as WISE 3P85)	POLI 4P15	Canadian Political Economy (also offered as LABR 4P15)
*FREN 4P75	French Canadian Literature after 1960	POLI 4P19	The Canadian Judicial Process
GEOG 2P03	Urban Geography		

POLI 4P50	Machinery of Government
POLI 4P52	Managing the New Public Organization
POLI 4P54	Business-Government Relations (also offered as LABR 4P54)
POLI 4V10-4V19	Issues in Canadian Politics
POLI 4V60-4V69	Selected Topics in Canadian Public Policy
SOCI 2P22	Education and Society
SOCI 2P32	The Sociology of Work (also offered as LABR 2P32)
SOCI 2P34	Sociology of Trade Unions
SOCI 2P62	The Criminal Justice System
SOCI 2V84	Societal Implications of Educational Theories and Policies
SOCI 3P16	Mass Media (also offered as COMM/PCUL 3P16)
SOCI 3P33	Law and Society
SOCI 3P36	Critical Issues in Contemporary Society
SOCI 3P46	Native Peoples and Canadian Society
SOCI 3P47	Race and Ethnicity
SOCI 3P51	Gender and Society (also offered as WISE 3P51)
SOCI 4P33	Advanced Seminar in Law and Society
VISA 2P50	Canadian Identities: From <i>Nouvelle France</i> to the Group of Seven
VISA 2P51	Themes in 20th Century Canadian Art
WISE 2P99	Canada in a Global Context
WISE 2V95	Women in the Economy

*Courses which may be used to fulfil the French/French Canadian requirement (see Program notes, above).

Chemistry

Chair

Ian D. Brindle

Professors Emeriti

Martin S. Gibson, Richard R. Hiatt, David C. Moule

Professors

Ian D. Brindle, G. Ronald Brown, J. Stephen Hartman, Herbert L. Holland, Jack M. Miller, Mary Frances Richardson, Stuart M. Rothstein

Associate Professors

Jeffrey K. Atkinson, Fred Capretta, Andrew G. Reynolds

Assistant Professors

Stephen Duffy (to June 30, 2000), Heather L. Gordon, James McNulty, Art van der Est

Research Professor (honorary)

Mikio Chiba

Adjunct Professor

Klaus Kaiser

Senior Demonstrator

Gail Neff

Senior Demonstrator - Research Technician

Donna Vukmanic

Co-ordinator, Analytical Services

T.R.B. Jones

General Information

Administrative Assistant, extension 3406

Mackenzie Chown E206

<http://www.brocku.ca/chemistry/>

Chemistry is the study of matter and its interactions with various forms of energy. Brock students are involved in the analysis, synthesis and purification of substances, determining their structures and properties and explaining the mechanisms of processes.

Our programs stress chemical principles and practice through research in organic, inorganic, analytical, physical and theoretical chemistry, as well as the related fields of bio-inorganic and bio-organic chemistry and chemical physics. Research interests of the department include development of sol-gel derived materials for use as catalysts, oxidation of organic molecules by fungi, the chemistry of plant-insect interactions, new chiral ligands for asymmetric catalysis, new approaches in

natural product synthesis, molecular spectroscopy, nuclear magnetic resonance spectroscopy, mass spectrometry including organometallic mass spectrometry, quantum chemistry, pesticide and trace element analysis, protein affinity labelling, and structure-activity correlations of anticancer pharmaceuticals.

The honours program in Chemistry is designed to give the student a broad knowledge of chemistry as well as depth in areas in which the student is most interested. A research project must be successfully completed and a thesis written as part of the requirements for an honours degree. The honours program and certain of the combined honours programs listed below, when taken with CHEM electives, satisfy the requirements for membership in the Chemical Institute of Canada and are the normal requirements for admission to graduate school in chemistry.

The equipment available in the Mackenzie Chown Complex is actively used for both teaching and research. Undergraduate students gain hands-on experience in operating modern equipment for separating of complex mixtures, determining molecular structures, and making quantitative measurements. Newer equipment is computer-controlled and is connected to the University's Ethernet backbone. The department also has a variety of computers and UNIX workstations for advanced computation, data interpretation and molecular modelling.

Specific instrumentation includes 200- and 300- MHz NMR cryospectrometers for solution and high resolution solids studies. A high resolution double focusing magnetic mass spectrometer interfaced to a data acquisition system allows for acquisition of positive and negative ion spectra with EI, CI and FAB sources. A GC interface and linked scanning add to the suite of capabilities of this instrument. A modern ion trap HPLC/MS/MS spectrometer is available with ESI and APCI sources and full MS/MS scanning. A dedicated HP quadrupole GC/MSD is also available. The research laboratories are all equipped with modern computer-interfaced equipment including liquid and gas chromatography systems for analytical and preparative work, UV/Visible spectrophotometers, FT-IR spectrophotometers, lasers, DCP and ICP spectrometers, AA spectrometers and an autopolarimeter. This instrumentation is augmented by a range of modern facilities available through the Cool Climate Oenology and Viticulture Institute, which support work in biochemistry, especially work involving proteins, nucleic acids, yeasts and bacteria.

Students should consult the Department Chair when planning years 3 and 4 of the BSc (honours) and BSc with a major program, or year 3 of the BSc (pass) program.

In addition to its own programs, the Chemistry department participates in combined major programs with six other departments and is also a major participant in the Biochemistry, Biotechnology, Environment and Oenology and Viticulture programs.

Accreditation

The honours program in Chemistry and the combined honours program in Chemistry/Physics are accredited by the Chemical Institute of Canada.

Safety

For Chemistry majors who wear glasses, it is strongly recommended that students wear prescription glasses with hardened lenses. (Safety glasses are required in the chemical labs.) Students in laboratory courses are advised to purchase cotton, rather than disposable plastic or paper, laboratory coats.

Breakage charges

Students in laboratory courses will be charged for excessive breakage.

Program Notes

1. PHYS 1F90 is preferred; note that professional schools may require an introductory PHYS credit with a lab.
2. The elective credits are normally taken from the Faculty of Mathematics and Science (except ASTR 1F00, BIOL 1F25, ERSC 1F90 and SCIE 1F30).
3. COSC 1P93 is recommended. MATH 2F95 is recommended for students interested in physical chemistry and MATH 2F96 is recommended for students interested in analytical chemistry.
4. CHEM 3P40 and 3P41 are required for CHEM majors and are highly recommended for combined majors. At least one of these is a prerequisite for most projects in CHEM 4F90 and 4F91 and should be taken in year 3 by students intending to proceed to a year 4 thesis in Chemistry. Combined majors proceeding to research in organic and inorganic chemistry must take CHEM 3P40 while combined majors proceeding to research in analytical, physical, and theoretical chemistry must take CHEM 3P41.
5. Students planning to pursue graduate studies in Chemistry are strongly recommended to take at least two and one-half CHEM credits numbered 3(alpha)90 or above covering at least three of the subdisciplines of physical, inorganic, analytical and organic chemistry, in addition to CHEM 4F90 and 4F91. Chemistry majors planning to pursue graduate studies in biochemistry or biological chemistry are strongly recommended to take CHEM 4P27, 4P67, or 4P68, and two additional year 4 CHEM credits.

6. In all 20 credit degree programs, at least 12 credits must be numbered 2(alpha)00 or above, six of which must be numbered 2(alpha)90 or above and of these, three must be numbered 3(alpha)90 or above. In all 15 credit degree programs, at least seven credits must be numbered 2(alpha)00 or above, three of which must be numbered 2(alpha)90 or above.

7. Beginning in September 2001, entry into any year 2 chemistry course will require as a prerequisite a minimum average of 60 percent in year 1 chemistry.

Programs of Study**Honours***Year 1*

CHEM 1P80 and 1P81 or CHEM 1P90 and 1P91 (preferred) (see program note 7); one of PHYS 1F20, 1F25, 1F90 (see program note 1); MATH 1P93 and 1P94; one Humanities and one Social Science context credit.

Year 2

CHEM 2P12, 2P20, 2P21, 2P32, 2P42 and 2P63; one-half credit from PHYS 2P20, 2P31, 2P50, 2P51; one-half COSC or MATH credit (see program note 3); one elective credit (see program note 2).

Year 3

CHEM 3P40 and 3P41; two credits from CHEM 3P20, 3P21, 3P30, 3P31, 3P51, 3P53; one-half credit from PHYS 2P20, 2P30, 2P31, 2P50, 2P51 (not taken in year 2); one and one-half elective credits (CHEM 3P60 recommended) (see program notes 2 and 5).

Year 4

CHEM 4F90 and 4F91; one credit from CHEM 3P20, 3P21, 3P30, 3P31, 3P51, 3P53 (not taken in year 3); one CHEM credit numbered 3(alpha)90 or above; one elective credit (see program notes 2 and 5).

BSc with a Major in Chemistry

This program is identical to the honours program listed above in years 1 to 3. It differs from the honours program in that honours standing is not required for entry into year 4, and year 4 does not include the research project and thesis courses (CHEM 4F90 and 4F91). Combined majors should consult the Chair.

Year 4

One credit from CHEM 3P20, 3P21, 3P30, 3P31, 3P40, 3P51, 3P53 (not taken in year 3); three CHEM credits numbered 3(alpha)90 or above; one elective credit (CHEM 3P60 and either CHEM 3P62 or CHEM 3P63 recommended).

Chemistry

Pass

Satisfactory completion of the first three years of the honours program entitles a student to apply for a pass degree.

BSc Honours in Chemistry: Environmental Stream

The following has a biological content. A similar pattern with ERSC or GEOG courses replacing BIOL courses is possible. Consult the Chair. This program does not satisfy the requirements for membership in the Chemical Institute of Canada.

Year 1

CHEM 1P80 and 1P81 or CHEM 1P90 and 1P91 (preferred) (see program note 7); BIOL 1F90; ENVI 1P90 and 1P91; MATH 1P93 and 1P94 or MATH 1P97 and 1P98; PHYS 1F25 or 1F90.

Year 2

CHEM 2P12 or 2P63; CHEM 2P20, 2P21, 2P32 and 2P42; BIOL 2P04; PHYS 2P01; one-half BIOL credit; one Humanities context credit.

Year 3

CHEM 3P40 and 3P41; two credits from CHEM 3P20, 3P21, 3P30, 3P31, 3P60; ENVI 3P01 and 3P02; one elective credit (BIOL recommended).

Year 4

CHEM 4F90 and 4F91; ENVI 4P01; one CHEM credit numbered 3(alpha)90 or above; one and one-half elective credits (CHEM or BIOL recommended).

Biochemistry

See separate calendar entry.

Biotechnology

See separate calendar entry.

Concurrent BSc/BEEd

The Faculty of Mathematics and Science and the Faculty of Education co-operate in offering a concurrent pass BSc/BEEd program for students interested in teaching mathematics or science at the elementary level to grade 8. Refer to the Education-Concurrent BSc/BEEd Program listing for additional information.

Combined Major Programs

Combined honours and pass programs can be taken in Chemistry/Biology, Chemistry/Computer Science (Honours only), Chemistry/Earth Sciences, Chemistry/Environment. In most of the combined major programs a research project must be successfully completed and a thesis written as part of the requirements for an honours degree.

Chemistry and Mathematics

Honours

Year 1

CHEM 1P80 and 1P81 or CHEM 1P90 and 1P91 (preferred) (see program note 7); MATH 1P12, 1P93 and 1P94; one of PHYS 1F20, 1F25, 1F90; one Humanities or Social Science context credit; one-half elective credit.

Year 2

CHEM 2P12 or 2P63; CHEM 2P20, 2P32 and 2P42; MATH 2F00 or 2F95; MATH 2P01; PHYS 2P20; the Humanities or Social Science context credit not taken in year 1.

Year 3

CHEM 3P40 or 3P41; CHEM 3P51 and 3P53; one-half CHEM credit numbered 2(alpha)90-3(alpha)99; one credit from MATH 2F10, 2P20 and 3P20, 3F94; MATH 2F96; one CHEM or MATH credit numbered 2(alpha)90 or above.

Year 4

CHEM 4F90 and 4F91; CHEM 3P20 and 3P21, or 3P30 and 3P31; two MATH credits numbered 2(alpha)90 or above (see program note 6).

Pass

Satisfactory completion of the first three years of the honours program entitles a student to apply for a pass degree.

Chemistry and Physics

Honours

Year 1

CHEM 1P80 and 1P81 or CHEM 1P90 and 1P91 (preferred) (see program note 7); one of PHYS 1F20, 1F25, 1F90 (see program note 1); MATH 1P93 and 1P94; one Humanities and one Social Science context credit.

Year 2

CHEM 2P12, 2P20, 2P32 and 2P42; PHYS 2P20, 2P31, 2P50 and 2P51; MATH 2F95.

Year 3

CHEM 3P51; one and one-half credits from CHEM 3P20, 3P21, 3P30, 3P31, 3P40, 3P41, 3P53; PHYS 3P35 and 3P36; MATH 3F94; one elective credit.

Year 4

CHEM 4F90 and 4F91 or PHYS 4F90 and 4F91; one-half credit from CHEM 3P20, 3P21, 3P30, 3P31, 3P40, 3P41, 3P53; one CHEM or PHYS credit numbered 2(*alpha*)90 or above; one-half credit from PHYS 3P20, 4P61, 4P70; one elective credit (see program note 6).

Pass

Satisfactory completion of the first three years of the honours program entitles a student to apply for a pass degree.

For combinations with Biological Sciences and Earth Sciences, see the entry under the other department. For combined majors in other areas of concentration consult the departments.

Brock-Mohawk College Articulation Agreement

This agreement allows Brock to admit Mohawk graduates who have a minimum 75 percent overall average in the Chemical Engineering Technology Program to the honours BSc program in Chemistry. Students receive credit for the first two years of the honours BSc program and can complete the requirements for the honours degree within two years. Many Mohawk transfer students elect to take the pass BSc degree, which can be completed with just five additional credits taken at Brock.

Master of Science (MSc) Program

Candidates with either an honours or a pass BA or a BSc degree in Chemistry, or equivalent, may apply to the Director of Graduate Studies Office for entry into this program. Candidates holding a pass degree will be required to take a qualifying year, similar to year 4 of the honours program, before formally enrolling for the MSc degree. Candidates may be required to write Graduate Record Aptitude and Advanced Chemistry Examinations.

Candidates with an honours degree, or who have completed a qualifying year, require a minimum of one year of full-time study.

The department offers a wide range of courses and research opportunities in analytical, inorganic, organic, physical and theoretical chemistry.

For further information about the MSc program see the Graduate Calendar and the department's Graduate Studies brochure.

Prerequisites and Restrictions

Students must check to ensure that prerequisites are met. Students may be deregistered, at the request of the instructor, from any course for which prerequisites and/or restrictions have not been met.

Description of Courses

Note that not all courses are offered in every session. Refer to the applicable term timetable for details.

CHEM 1P80**Introduction to Modern Chemistry I**

Inorganic and organic chemistry, including molecular structure and bonding; the meaning of equations; mass relations. Problem solving is stressed. Laboratory work includes chemical analysis and illustrative experiments.

Lectures, 3 hours per week; seminar, lab, 3 hours per week.

Prerequisite: grade 12 chemistry required. OAC chemistry or equivalent course recommended.

Note: students with 75 percent or higher in OAC chemistry are strongly encouraged to take CHEM 1P90 instead.

Students completing this course will forfeit credit in CHEM 1P90.

CHEM 1P81**Introduction to Modern Chemistry II**

Gas laws, thermochemistry, solutions, chemical equilibria and kinetics. Problem solving is stressed. Laboratory work includes chemical analysis and synthesis and experiments illustrating lecture topics.

Lectures, 3 hours per week; seminar, lab, 3 hours per week.

Prerequisite: CHEM 1P80 or 1P90.

Students completing this course will forfeit credit in CHEM 1P91.

CHEM 1P90**Chemical Principles and Properties I**

General chemistry, stoichiometry, inorganic and organic structures and reactions. Laboratory work includes chemical purification and analysis.

Lectures, 3 hours per week; lab, 3 hours per week.

Prerequisite: a minimum 75 percent grade in OAC chemistry or equivalent course.

Students completing this course will forfeit credit in CHEM 1P80.

Chemistry

CHEM 1P91

Chemical Principles and Properties II

General chemistry, introduction to physical chemistry, thermochemistry, chemical equilibria, kinetics and analysis. Laboratory work includes experiments in chemical analysis and synthesis, thermochemistry and chemical kinetics.

Lectures, 3 hours per week; lab, 3 hours per week.

Prerequisite: CHEM 1P90.

Students completing this course will forfeit credit in CHEM 1P81.

CHEM 2P12

Introduction to Modern Physical Chemistry

Phase equilibrium; gas phase kinetics; electronic structure of atoms and molecules; interaction of light with matter.

Lectures, 3 hours per week; tutorial, 1 hour per week; lab, 3 hours alternating weeks.

Prerequisites: CHEM 1P80 and 1P81 or CHEM 1P90 and 1P91; MATH 1P93 and 1P94 (preferred), or MATH 1P97.

CHEM 2P20

Principles of Organic Chemistry

An introduction to the principles and techniques of organic chemistry; correlation of reactions and physical properties of organic compounds with structure and energetic concepts. Laboratory work includes organic preparations and techniques.

Lectures, 3 hours per week; lab, 3 hours per week.

Prerequisites: CHEM 1P80 and 1P81 or CHEM 1P90 and 1P91.

CHEM 2P21

Principles of Bio-organic Chemistry

Organic chemistry of selected groups of natural products; their biological origin and significance. Introduction to applications of spectroscopy in organic chemistry and biochemistry. Laboratory work includes organic syntheses and characterization and organic analysis.

Lectures, 3 hours per week; lab, 3 hours per week.

Prerequisite: CHEM 2P20.

CHEM 2P32

Principles of Inorganic Chemistry

A survey of the periodic table stressing periodicity of chemical behaviour. Chemistry and reactions in aqueous solutions; structure and bonding in simple compounds; applications to biological and environmental processes.

Lectures, 3 hours per week; lab, 3 hours alternating weeks.

Prerequisites: CHEM 1P80 and 1P81 or CHEM 1P90 and 1P91.

CHEM 2P42

Introduction to Analytical Chemistry

Introduction to separation methods such as chromatography, solvent extraction and precipitation; use of buffers for pH-control; statistical treatment of analytical data including normal distributions, significance testing and linear regression.

Lectures, 3 hours per week; lab, 3 hours per week.

Prerequisites: CHEM 1P80 and 1P81 or CHEM 1P90 and 1P91.

CHEM 2P63

Introduction to Biophysical Chemistry

(also offered as BTEC 2P63)

Physical chemistry as applied to biological sciences. Introductory thermodynamics, kinetics, equilibria and transport phenomena as applied to proteins, biological membranes and other biological systems. Laboratory work includes kinetic measurements, equilibrium constant measurements and protein purification and characterization.

Lectures, 3 hours per week; lab, 3 hours per week.

Prerequisites: CHEM 1P80 and 1P81 or CHEM 1P90 and 1P91; MATH 1P93 and 1P94 (preferred), or MATH 1P97.

CHEM 2P98

Undergraduate Research

Undergraduate research project carried out either in the department under the supervision of a faculty member or as an employee in a chemical industry or other suitable laboratory. Restriction: open to CHEM (single or combined) majors and permission of the department.

Note: if both CHEM 2P98 and CHEM 3P98 are taken, only one of these may be based on work done in the department.

CHEM 3P20

Structure and Reactivity of Organic Molecules

Basic stereochemical principles. Methods for functional group manipulation including oxidation, reduction and the use of protecting groups in organic chemistry. General methods for carbon-carbon bond formation emphasizing three dimensional structure and mechanism. Modern methods of asymmetric synthesis. Laboratory work includes selected experiments in synthetic organic chemistry and the handling of air and water sensitive reagents.

Lectures, 3 hours per week; lab, 3 hours per week.

Prerequisite: CHEM 2P20 or permission of the department.

Note: CHEM 3P40 recommended. May be taken concurrently.

CHEM 3P21

Organic Reactions

The chemistry of acyclic, cyclic and heterocyclic compounds, reactive intermediates, design of organic synthesis, molecular rearrangements, free radical chemistry; introduction to organic photochemistry and electrochemistry.

Lectures, 3 hours per week; lab, 3 hours per week.

Prerequisite: CHEM 3P20.

CHEM 3P30

Main Group Inorganic Chemistry

Systematic inorganic chemistry of the non-transition elements with emphasis on structure, bonding and reactivity in inorganic and organometallic compounds; inorganic reaction mechanisms. Selected experiments in inorganic synthesis; use of modern physical methods for determination of composition, structure and bonding.

Lectures, 3 hours per week; lab, 3 hours per week.

Prerequisite: CHEM 2P32.

Note: CHEM 3P40 recommended. May be taken concurrently.

CHEM 3P31

Transition Metal Chemistry

A continuation of CHEM 3P30, emphasizing the transition elements; introduction to ligand field theory.

Lectures, 3 hours per week; lab, 3 hours per week.

Prerequisite: CHEM 3P30.

CHEM 3P40

Spectroscopic Techniques for Structure Elucidation

The use of instrumental methods for the determination of structures of molecules. Techniques will include mass spectroscopy, nuclear magnetic resonance spectroscopy, dispersive and Fourier transform infrared spectroscopy, visible and UV spectroscopy, computerized data manipulation. Molecular modelling software may be included for three-dimensional visualization of complex molecules.

Lectures, 3 hours per week; lab, 3 hours per week.

Restriction: students must have a minimum of 9.0 overall credits.

Prerequisite: CHEM 2P20.

CHEM 3P41

Instrumental Methods for Quantitative Analysis

The use of instrumental methods for quantitative determination of elements and molecular species. Techniques include chromatography, atomic spectrometry, X-ray fluorescence spectrometry, nuclear emission and neutron-activation analysis, introduction to electroanalytical techniques. Emphasis on sample preparation and cleanup and aspects of quality assurance/quality control.

Lectures, 3 hours per week; lab, 3 hours per week.

Restriction: students must have a minimum of 9.0 overall credits.

Prerequisite: CHEM 2P42.

CHEM 3P51

Quantum Chemistry

Schrodinger equation, solution of the harmonic oscillator problem, hydrogen atom, angular momentum theory, variational method with applications to atomic and molecular systems, molecular orbital theory and simple group theory. Introduction to FORTRAN 77.

Lectures, 3 hours per week; tutorial, 3 hours per week.

Prerequisite: CHEM 2P12 or CHEM 2P63.

CHEM 3P53

Atomic and Molecular Structure and Spectroscopy

Group theory and theory of electromagnetic radiation and spectroscopic transitions. Rotational and vibrational spectroscopy (Microwave, IR, Raman); atomic and molecular electronic spectroscopy (UV/Visible); magnetic resonance (NMR, EPR); X-ray crystallography.

Lectures, 3 hours per week; lab, 3 hours per week.

Prerequisite: CHEM 3P51.

CHEM 3P60

Industrial Chemistry

Principles and practice of industrial chemistry. A survey of the chemical industry, pollution control, plant design, corrosion

and similar topics. Selected industrial processes will be discussed in detail. Tours of chemical plants and industrial laboratories.

Lectures, 3 hours per week; seminar and plant tours, 3 hours per week.

Prerequisite: one credit from CHEM 2P12, 2P20, 2P32, 2P42, 2P63.

CHEM 3P62

Bio-organic Chemistry

(also offered as BTEC 3P62)

The biosynthesis of the natural products of secondary metabolism. Introduction to the use of enzymes and other biological reagents in organic synthesis.

Lectures, 3 hours per week; lab, 3 hours per week.

Prerequisite: CHEM 2P21.

CHEM 3P63

Protein and Nucleic Acid Chemistry

(also offered as BTEC 3P63)

Structure and chemistry of proteins and nucleic acids. Selected aspects of transcription, translation, protein folding, post-translational modification, targeting, synthesis and sequencing, and detection techniques.

Lectures, 3 hours per week; lab, 3 hours per week.

Prerequisite: CHEM 2P21.

CHEM 3P98

Undergraduate Research

Undergraduate research project carried out either in the department under the supervision of a faculty member or as an employee in a chemical industry or other suitable laboratory. Restriction: open to CHEM (single or combined) majors with 9.0 overall credits and permission of the department.

Note: if both CHEM 2P98 and CHEM 3P98 are taken, only one of these may be based on work done in the department.

CHEM 4F90

Research Project

Experimental or theoretical research to be carried out under faculty supervision.

Restriction: open to CHEM (single or combined) and BCHM majors with approval to year 4 (honours) and permission of the Chair.

Prerequisite: CHEM 3P40 or 3P41.

Co-requisite: CHEM 4F91.

CHEM 4F91

Thesis

The thesis incorporates the results of the research in CHEM 4F90 and forms the basis for a seminar to be presented by the student.

Restriction: open to CHEM (single or combined) and BCHM majors with approval to year 4 (honours) and permission of the Chair.

Prerequisite: CHEM 3P40 or 3P41.

Co-requisite: CHEM 4F90.

Chemistry

CHEM 4P14

Statistical Thermodynamics

Systems of independent particles, chemical equilibrium, partition functions for atoms and molecules, nuclear spin statistics, fluctuations, thermodynamic properties of crystals, real gases, metals.

Lectures, seminar, 3 hours per week.

Prerequisite: CHEM 3P51.

Co-requisite: CHEM 3P53.

CHEM 4P15

Principles of Physical Polymer Chemistry

Techniques used in characterization of such polymer properties as molecular weight, configuration and conformation. Structure-property relationships including an analysis of the amorphous and crystalline states. Liquid crystalline polymers, polymer blends and medical polymers.

Lectures, 3 hours per week.

Restriction: students must have a minimum of 13.5 overall credits.

Prerequisite: CHEM 2P12 or 2P63.

CHEM 4P16

Physical Chemistry of Surfaces

Introduction to basic concepts of the physical chemistry of surfaces including surface tension, wetting, adhesion, adsorption and binding, and catalysis. Examination of modern methods of analysis of surface composition, both chemical and physical.

Lectures, 3 hours per week.

Restriction: Students must have a minimum of 13.5 overall credits.

Prerequisite: CHEM 2P12 or 2P63.

CHEM 4P17

Biophysical Photochemistry

The principles of light induced processes such as electron, energy and signal transfer and their role in biological systems. Marcus theory, Dexter and Foerster mechanisms of energy transfer. The optical and magnetic resonance spectroscopy of excited states.

Lectures, 3 hours per week.

Prerequisite: CHEM 3P40 or 3P53 or permission of the instructor.

CHEM 4P18

Computational Chemistry: Applications in Biotechnology

Structure-based drug design; molecular modelling; conformational search techniques; secondary and tertiary protein structure prediction; quantitative structure activity relationships; bioinformatics.

Lectures, 3 hours per week.

Restriction: students must have a minimum of 13.5 overall credits.

Prerequisites: one of CHEM 2P12 or 2P63.

CHEM 4P21

Organic Reactions and Synthesis

The disconnection approach to organic synthesis. Problems of chemo-, regio- and stereo-selectivity. Appreciation of elaborate syntheses. Synthetic organic chemistry topics from the recent literature.

Lectures, seminar, 3 hours per week.

Prerequisite: CHEM 3P21.

CHEM 4P22

Organic Reactions and Mechanisms

Topics include conformational analysis, introduction to transition state theory and the description of stereo and electronic control in organic reactions. Pertinent applications will be taken from the recent literature.

Lectures, seminar, 3 hours per week.

Prerequisite: CHEM 3P21.

CHEM 4P27

Enzyme and Co-enzyme Mechanisms

Hydrolytic and other processes catalyzed by enzymes lacking non-protein prosthetic groups; transferase reactions involving biotin, pyridoxal phosphate, thiamine pyrophosphate, folic acid and cobalamin; oxidation mechanisms involving pyridine nucleotides, flavoenzymes, hydroperoxidases and oxgenases.

Lectures, seminar, 3 hours per week.

Prerequisites: CHEM 2P21; BCHM 3P01 and 3P02.

CHEM 4P40

Scientific Instrumentation

Review of the use of electronic components and circuits for measurements and control; analog and digital measurements; instrument optics. Application to spectroscopic, electrochemical and other scientific instrumentation used for analysis, measurement or control.

Lectures, 3 hours per week.

Prerequisite: CHEM 3P40 or 3P41 or permission of the instructor.

CHEM 4P47

Nuclear Magnetic Resonance (NMR) Spectroscopy

Applications of high-resolution NMR spectroscopy to chemical systems. Theory of chemical shifts, coupling constants and relaxation times; instrumentation, including pulse and Fourier transform techniques; structure determination by NMR; two-dimensional NMR; chemical exchange effects.

Lectures, 3 hours per week.

Prerequisite: CHEM 3P40 or permission of the instructor.

CHEM 4P48

Mass Spectroscopy

The theory and practice of modern mass spectroscopy applied to organic, inorganic and organometallic systems; systematic interpretation of organic mass spectra; high resolution mass spectra; GC/MS; HPLC/MS; new ionization methods;

metastable ions; computerized mass spectrometry.

Lectures, 3 hours per week.

Prerequisite: CHEM 3P40 or permission of the instructor.

CHEM 4P67

Biophysical Techniques

(also offered as BCHM 4P67 and BTEC 4P67)

Modern instrumental methods of biotechnology emphasizing understanding theory. Development of newer technologies which utilize biological components. Topics include optical, X-ray and NMR techniques; separation techniques, hybridization assays, immunoassays, biosensors and mass spectral techniques; membrane chemistry.

Lectures, seminar, 3 hours per week.

Prerequisites: CHEM 2P21 and 2P63 or permission of the instructor.

CHEM 4P68

Biotransformations

(also offered as BTEC 4P68)

The organic reactions carried out by isolated enzymes, fungal cultures and bacteria. The production of pharmaceutical, agricultural and industrial chemicals by biological processes.

Lectures, 3 hours per week.

Prerequisite: one of CHEM 3P20, 3P62, 3P63 or permission of the instructor.

CHEM 4P92

Library Research and Seminar

Detailed study of the scientific literature under faculty supervision. The results of the study will be written up in a major essay and presented as a formal seminar.

Restriction: open to students in the BSc with a Major in Chemistry program with a minimum of 15.0 overall credits or permission of the Department.

CHEM 4V10-4V13

Special Topics in Physical Chemistry

Selected topics in advanced physical chemistry.

Prerequisite: CHEM 3P51 and 3P53.

CHEM 4V23-4V26

Special Topics in Organic Chemistry

Selected topics in advanced organic chemistry.

Prerequisite: CHEM 3P20 and 3P21.

CHEM 4V30-4V35

Special Topics in Inorganic Chemistry

Selected topics in advanced inorganic chemistry.

Prerequisites: CHEM 3P30 and 3P31.

CHEM 4V41-4V45

Special Topics in Analytical Chemistry

Lectures, seminar, 3 hours per week.

Prerequisite: CHEM 3P41.

Child and Youth Studies

Chair

Christine Blais

Associate Professors

Christine Blais, Dorothy Griffiths, Jane Helleiner, Zopito Marini, Teena Willoughby

Assistant Professor

Thomas O'Neill

Adjunct Professors

Margaret Ogilvie, Frances Owen

Co-ordinator

Rosamund Battye

General Information

Administrative Assistant, extension 3740

Mackenzie Chown D332

<http://www.brocku.ca/childandouthstudies/>

The Department of Child and Youth Studies offers a four-year program leading to the BA honours in Child and Youth Studies, a three-year BA pass degree and a concurrent four-year BA pass degree/BEd degree program in child and youth development theory and its application. Each program integrates psychological, sociological and educational perspectives. (For further information see the *Child and Youth Studies Student Handbook*).

The BA in Child and Youth Studies is not equivalent to an Early Childhood Education diploma and does not directly lead to certification as a preschool teacher. Many colleges offer fast-track Early Childhood Education programs designed for University graduates. Alternately, a letter of equivalency may be issued by the Association for Early Childhood Education (Ontario) upon completion of additional qualifications. Normally, graduates must have successfully completed CHYS 3P50 and 3P52.

Applicants to the Child and Youth Studies program must have a minimum 75 percent overall average across six OACs (or equivalent); OAC English is required and one OAC mathematics is strongly recommended.

Students must apply to a common first year. Following successful completion of year 1, students may continue to one of two programs in Child and Youth Studies: the honours or the pass BA; or apply on a competitive basis to the concurrent BA/BEd program. These are limited enrolment programs and

applicants must have the approval of the Chair of Child and Youth Studies. Admission is not guaranteed by attainment of the minimum requirements.

Entrance into the BA (honours) Child and Youth Studies requires a minimum major average of 65 percent and department approval. Application forms for the Child and Youth Studies BA and BA/BEd programs are available in the Child and Youth Studies Office from April 1. The forms must be completed and returned to the office by June 1. Late applications will not be accepted. New applications to the Child and Youth Studies honours and pass BA programs are accepted in years 2 and 3.

Applicants for honours Child and Youth Studies year 4 must submit a Child and Youth Studies departmental application form to the Child and Youth Studies office before June 1, in addition to the University honours application form. Students must apply to complete either a thesis or a project for an honours degree.

Students who have completed an appropriate College of Applied Arts and Technology two or three-year diploma must have a minimum 85 percent cumulative average for consideration by Child and Youth Studies and may receive between three and five transfer credits if they are admitted to Brock. Child and Youth Studies evaluates the files of eligible students in consultation with the Registrar's Office after acceptance to Brock has been completed and transferable credits have been awarded. If Early Childhood Education graduates from Niagara, Lambton and Mohawk Colleges are subsequently admitted to the BA/BEd stream in year 2, they may receive up to one and one-half additional transfer credits. All applicants must take CHYS 1F90.

Teachable subjects

Students wishing to apply to teacher education programs in provinces other than Ontario are advised to check the admission requirements in the pertinent faculties of education with regard to teachable subjects. Students wishing to apply to teacher education programs in Ontario who do not take a minimum of three elective credits in courses designated as teachable subjects in one area may be restricted to certification at the Primary/Junior level.

It is recommended that Child and Youth Studies majors seek academic advice from the Co-ordinator. See the *Child and Youth Studies Handbook* for more information.

Concurrent BA/BEd

The Department of Child and Youth Studies and the Faculty of Education co-operate in offering a concurrent BA/BEd program. The Child and Youth Studies BA/BEd program com-

bines the BA pass program with the teacher education program for students interested in teaching at the Primary/Junior level (grades K-6). Refer to the Education-Concurrent BA/BEEd Child and Youth Studies program listing for additional information.

Program Notes

1. Students wishing to proceed to years 2 and 3 of the BA program must have achieved a minimum of 65 percent in Child and Youth Studies required courses. All CHYS courses; PSYC 1F90 and SOCI 1F90; one of MATH 1F92, PSYC 2F23, SOCI 2F10 (for combined CHYS/SOCI majors); will be used to calculate the CHYS average. Students failing to maintain the required average may request an opportunity to upgrade their marks and to be reinstated. A request to upgrade may be granted only once and for only one full academic year (Spring, Summer, Fall/Winter).

2. All Child and Youth Studies majors are encouraged to choose electives from other departments to broaden their academic experience. If CHYS majors register in more than one-half credit from required CHYS courses as electives, they may be deregistered.

3. Combined CHYS/SOCI majors who change to a single CHYS major will be required to take MATH 1F92 or PSYC 2F23.

4. SOCI4F90 is restricted to students with a minimum major average of 80 percent.

5. SOCI4F91 is restricted to students with a minimum major average of 75 percent.

6. In all 20 credit degree programs, at least 12 credits must be numbered 2(alpha)00 or above, six of which must be numbered 2(alpha)90 or above and of these, three must be numbered 3(alpha)90 or above. In all 15 credit degree programs, at least seven credits must be numbered 2(alpha)00 or above, three of which must be numbered 2(alpha)90 or above.

Honours Program

Year 1
CHYS 1F90; PSYC 1F90; SOCI 1F90; one Humanities or Science context credit; one elective credit.

Year 2
CHYS 2F10, 2P35 and 2P38; MATH 1F92 or PSYC 2F23; the Humanities or Science context credit not taken in year 1; one elective credit.

Year 3
CHYS 3P10 and 3P15; one-half credit from CHYS 3P20, 3P35, 3P90, 3P94, 3P96; one-half credit from CHYS 3P23, 3P38, 3P91, 3P92, 3Q93, 3Q94; one-half credit from CHYS 3P11, 3P25, 3P65; two and one-half elective credits.

Year 4
CHYS 4F97 and one-half elective credit, or 4F99 and 4P99; one-half credit from CHYS 4P35, 4P38, 4P65; one credit from CHYS 3P90, 3P91, 3P92, 3P94, 3P96, 3P97, 3P98, 3P99, 3Q93, 3Q94, 3V90, 3V91, 3V92, 3V93, 4P31, 4P32, PSYC 4F11; two elective credits.

Pass Program

Satisfactory completion of the first three years of the honours program entitles a student to apply for a pass degree.

Combined Major Programs

Students may take a combined degree in Child and Youth Studies and another discipline. For requirements in the co-major discipline the student should consult the relevant department. It should be noted that not all departments provide a combined major option.

Child and Youth Studies and Community Health

Consult the Community Health Sciences entry for a listing of the course requirements.

Child and Youth Studies and Linguistics

Consult the Applied Language Studies entry for a listing of course requirements.

Child and Youth Studies and Psychology

Honours

Entrance to the CHYS/PSYC combined honours program requires application to the Psychology department and a minimum of 9.0 overall credits.

Year 1
CHYS 1F90; PSYC 1F90; SOCI 1F90; one Humanities or Science context credit; one elective credit.

Child and Youth Studies

Year 2

CHYS 2F10, 2P35 and 2P38; PSYC 2F23; the Humanities or Science context credit not taken in year 1; one of PSYC 2F20, 2F25, 2F30, 2F36, 2F45.

Year 3

CHYS 3P10 and 3P15; one-half credit from CHYS 3P20, 3P23, 3P35, 3P38, 3P90, 3P91, 3P92, 3P94, 3P96, 3Q93, 3Q94; one-half credit from CHYS 3P11, 3P25, 3P65; PSYC 3P30 and 3P39; one PSYC credit numbered 2(alpha)90 or above; one elective credit.

Year 4

CHYS 4F97 and one elective credit or CHYS 4F99, 4P99 and one-half elective credit; one-half credit from CHYS 4P35, 4P38, 4P65; one-half credit from CHYS 3P90, 3P91, 3P92, 3P94, 3P96, 3P97, 3P98, 3P99, 3Q93, 3Q94, 3V90, 3V91, 3V92, 3V93, 4P31, 4P32; PSYC 4P92; one and one-half PSYC credits numbered 3(alpha)90 to 4(alpha)99.

Pass

Satisfactory completion of the first three years of the combined honours program entitles a student to apply for a combined pass degree (students may substitute one PSYC credit numbered 2(alpha)90 or above for PSYC 3P30 and 3P39).

Child and Youth Studies and Sociology

Honours

Year 1

CHYS 1F90; PSYC 1F90; SOCI 1F90; one Humanities or Science context credit; one elective credit.

Year 2

CHYS 2F10, 2P35 and 2P38; SOCI 2F10 (see program note 3); one-half SOCI credit numbered 2(alpha)00 or above; the Humanities or Science context credit not taken in year 1; one-half elective credit.

Year 3

CHYS 3P10 and 3P15; one-half credit from CHYS 3P20, 3P23, 3P35, 3P38, 3P90, 3P91, 3P92, 3P94, 3P96, 3Q93, 3Q94; one-half credit from CHYS 3P11, 3P25, 3P65; SOCI 3P00 and 3P01; one and one-half SOCI credits numbered 2(alpha)90 or above; one-half elective credit.

Year 4

Students may select one of three streams:

1. CHYS project option:

CHYS 4F97 and 4P38; one-half credit from CHYS 3P90, 3P91, 3P92, 3P94, 3P96, 3P97, 3P98, 3P99, 3Q93, 3Q94, 3V90, 3V91, 3V92, 3V93, 4P31, 4P32, 4P35, 4P65; SOCI 4F91 (see program note 5) or 4F10; one-half SOCI credit numbered 3(alpha)90 or above; one and one-half elective credits.

2. CHYS thesis option:

CHYS 4F99, 4P38 and 4P99; one-half credit from CHYS 3P90, 3P91, 3P92, 3P94, 3P96, 3P97, 3P98, 3P99, 3Q93, 3Q94, 3V90, 3V91, 3V92, 3V93, 4P31, 4P32, 4P35, 4P65; one and one-half SOCI credits numbered 3(alpha)90 or above; one elective credit.

3. SOCI thesis option:

CHYS 4P38; one credit from CHYS 3P90, 3P91, 3P92, 3P94, 3P96, 3P97, 3P98, 3P99, 3Q93, 3Q94, 3V90, 3V91, 3V92, 3V93, 4P31, 4P32, 4P35, 4P65; SOCI 4F90 and 4F01 (see program note 4); one and one-half elective credits.

Pass

Satisfactory completion of the first three years of the combined honours program entitles a student to apply for a combined pass degree.

Prerequisites and Restrictions

Students must check to ensure that prerequisites are met. Students may be deregistered, at the request of the instructor, from any course for which prerequisites and/or restrictions have not been met.

Description of Courses

Note that not all courses are offered in every session. Refer to the applicable term timetable for details.

CHYS 1F90

Introduction to Child and Youth Studies

Theories, methods and issues involved in studying children and youth from a multidisciplinary perspective. Topics may include the history of childhood, family life, peer relations and children and youth with special needs.

Lectures, seminar, 3 hours per week.

Students completing this course will forfeit credit in CHST 1F90.

CHYS 2F01

School Learning

(also offered as EDUC 2F01)

The psychological processes involved in learning in a school setting. Cognitive theories of learning applied to examples in each of the major school subject areas with emphasis on the specific nature of the learning associated with each subject. Topics may include individual differences and problems in evaluating school learning.

Lectures, seminar, 3 hours per week.

Prerequisite: CHYS (CHST) 1F90 or PSYC 1F90.
Students completing this course will forfeit credit in CHST 2F01.

CHYS 2F10

Child and Youth Development

Basic concepts and contemporary issues in the development of the child and youth, including processes in cognitive and social-emotional patterns of change. Developmental theory and research provides the conceptual framework.

Lectures, seminar, 3 hours per week.

Restriction: open to BA/BEEd, BSc/BEEd, CHYS (single or combined), LING (single or combined), CHSC (HLST) (single or combined) HLSC and BPhEd/BEEd majors until date specified in BIRT guide.

Prerequisites: CHYS (CHST) 1F90 and PSYC 1F90 or permission of the instructor.

Note: a half-day placement per week is required for all students. School placements in the Niagara Peninsula are arranged by the CHYS Co-ordinator. Transportation to placement is a student responsibility. Screening, such as police checks for criminal activity may be required. This course is designed to promote the bridging of disciplines.

Students completing this course will forfeit credit in CHST 2F10 and PSYC 2F12. Students may not concurrently register in PSYC 2F12.

CHYS 2P35

Diversity and Development

Theoretical aspects of development of children and youth with exceptional needs. Topics may include cognitive, physical and psychological/emotional differences.

Lectures, seminar, 3 hours per week.

Restriction: open to BA/BEEd and CHYS (single or combined) majors until date specified in the BIRT guide.

Prerequisites: CHYS (CHST) 1F90 and PSYC 1F90.

Co-requisite: CHYS (CHST) 2F10 or PSYC 2F12.

Students completing this course will forfeit credit in CHST 2P35.

CHYS 2P38

Childhood, Youth and Society

(also offered as SOCI 2P38)

Historical, cross-cultural and sociological perspectives on the relationship between childhood, youth and society. Topics include children and youth in schools, communities, popular culture and state policy.

Lectures, seminar/lab, 3 hours per week.

Restriction: open to BA/BEEd and CHYS (single or combined) majors until date specified in BIRT guide.

Prerequisites: CHYS (CHST) 1F90 and SOCI 1F90.

Students completing this course will forfeit credit in CHST 2P38 and 2P91.

CHYS 2P93

Rhythmic Activities for Children

(also offered as PHED 2P93)

Basic elements of rhythm development of rhythmic abilities; role of rhythm in motor skill acquisition performance; practical

experiences with small apparatus methods of music education and curriculum planning.

Lectures, lab, 3 hours per week.

Restriction: open to BA/BEEd, CHYS (single or combined) or PHED majors until date specified in BIRT guide. Students must have a minimum of 4.0 overall credits.

Prerequisite: PHED 1P90 or CHYS (CHST) 1F90 and PSYC 1F90.

CHYS 2P94

Movement for the Young Child

(also offered as PHED 2P94)

Movement experiences for preschoolers in dance, developmental games and educational gymnastics. Topics include the impact of physical activity on the developing child, preschooler's characteristics and needs, motor development principles and planning age-appropriate movement experiences.

Lectures, lab, 3 hours per week.

Restriction: open to BA/BEEd, CHYS (single or combined) or PHED majors until date specified in BIRT guide. Students must have a minimum of 4.0 overall credits.

Prerequisites: CHYS (CHST) 1F90 and PSYC 1F90 or PHED 1P93.

Students completing this course will forfeit credit in CHST 2P94.

CHYS 2P98

Child Language Acquisition: Early Stages

(also offered as LING 2P98 and PSYC 2P98)

Theories, research and methods in early language development. Linguistic stages in the development of child language at the level of grammar and meaning (phonology, morphology, syntax, semantics, pragmatics). Discourse as an indicator of the socialization process. The effect of interaction with care givers. Early bilingualism.

Lectures, seminar, 3 hours per week.

Prerequisite: LING 1F91 or PSYC 1F90 or permission of the instructor.

Students completing this course will forfeit credit in CHST 2P98.

CHYS 2P99

Child Language Acquisition: Late Stages

(also offered as LING 2P99 and PSYC 2P99)

Later acquired aspects of language, especially syntactic, semantic and pragmatic. Development of ability to use linguistic ambiguity and humour. Reading and writing skills, registers. Abnormal language development.

Lectures, seminar, 3 hours per week.

Prerequisite: CHYS (CHST) 2P98 or permission of the instructor.

Students completing this course will forfeit credit in CHST 2P99.

CHYS 3P10

Qualitative Research Methods in Child and Youth Studies

Qualitative research design and analysis. Topics include participant observation, interviewing, archival research, discourse analysis, ethics.

Child and Youth Studies

Lectures, tutorial, 3 hours per week.

Restriction: open to BA/BEd and CHYS (single or combined) majors.

Prerequisite: one of MATH 1F92, PSYC 2F23 (2F24), SOCI 2F10 (for CHYS/SOCI combined majors).

Students completing this course will forfeit credit in CHST 3P10.

CHYS 3P11

Theories in Developmental Psychology

(also offered as PSYC 3P11)

Theories in developmental psychology and recent controversies.

Lectures, seminar, 3 hours per week.

Restriction: open to BA/BEd, CHYS (single or combined) and PSYC (single or combined) majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits or 3.0 PSYC credits above PSYC 1F90.

Prerequisite: CHYS (CHST) 2F10 or PSYC 2F12.

Students completing this course will forfeit credit in CHST 3P11.

CHYS 3P15

Quantitative Research Methods in Child and Youth Studies

Practical, theoretical and ethical issues in quantitative research design including computer applications and analyses.

Lectures, tutorial, 3 hours per week.

Restriction: open to BA/BEd and CHYS (single or combined) majors.

Prerequisite: one of MATH 1F92, PSYC 2F23 (2F24), SOCI 2F10 (for combined CHYS/SOCI majors).

Students completing this course will forfeit credit in CHST 2P20 and 3P15.

CHYS 3P20

Learning Disabilities

Current theoretical, methodological and remedial approaches to learning disabilities in children and youth. Cognitive and social aspects of learning disabilities.

Lectures, seminar, 3 hours per week.

Prerequisite: CHYS (CHST) 2P35.

Students completing this course will forfeit credit in CHST 3P20.

CHYS 3P23

Psychology of Parenting

(also offered as PSYC 3P23)

The determinants, varieties and consequences of parenting. Focus on psychological research findings in contemporary parenting/parenthood issues. Topics include the transition to parenthood, different styles of parenting, dual-career parents and abusive parents.

Lectures, seminar, 3 hours per week.

Restriction: open to BA/BEd, CHYS (single or combined) majors and PSYC (single or combined) until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits or 3.0 PSYC credits above PSYC 1F90.

Prerequisite: CHYS (CHST) 2F10 or PSYC 2F12.

Students completing this course will forfeit credit in CHST 3P23.

CHYS 3P25

Cognitive Processes in Childhood

The development of processes of perception, attention, representation, memory, thinking and language within an information processing framework. Emphasis on cognitive processes related to learning. Theoretical issues and empirical controversies.

Lectures, seminar, 3 hours per week.

Restriction: open to BA/BEd and CHYS (single or combined) majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits.

Prerequisite: CHYS (CHST) 2F10.

Students completing this course will forfeit credit in CHST 3P25.

CHYS 3P35

Developmental Disabilities: Issues of Inclusion

The philosophical and practical issues of inclusion of the child and youth with disabilities in the family, schools and the community.

Lectures, seminar/lab, 3 hours per week.

Restriction: open to BA/BEd and CHYS (single or combined) majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits.

Prerequisite: CHYS (CHST) 2P35.

Students completing this course will forfeit credit in CHST 3P35.

CHYS 3P38

Children, Youth and Families

Research on children and youth in families from historical, comparative and contemporary perspectives. Topics may include theories of the family, comparative family relations, issues of social change and policy and their impact on children and youth in the context of family life.

Lectures, seminar/lab, 3 hours per week.

Restriction: open to BA/BEd and CHYS (single or combined) majors until date specified in BIRT guide.

Prerequisite: CHYS (CHST) 2P38.

Students completing this course will forfeit credit in CHST 2P91, 3P24, 3P38 and SOCI(WISE) 2F21.

CHYS 3P50

Focus on Early Childhood Education I

(also offered as EDUC 3P50)

Early childhood education programs for children from birth to age eight. Topics include the historical and societal influences on early childhood education, program models derived from theories of learning and child development and research on the effectiveness of these programs.

Lectures, seminar, 3 hours per week.

Prerequisite: CHYS (CHST) 2F10.

Students completing this course will forfeit credit in CHST 3P50.

CHYS 3P52

Focus on Early Childhood Education II

(also offered as EDUC 3P52)

Methods in early childhood education programs for children from birth to age eight. Topics include curricula, instructional strategies and evaluative techniques.

Lectures, seminar/lab, 4 hours per week.

Prerequisite: CHYS (CHST) 3P50.

Note: enrolment limited to 25 students to be determined by academic standing. Students will be involved in a field placement working with young children in a community setting. Students completing this course will forfeit credit in CHST 3P52.

CHYS 3P56

Maturation and Development

(also offered as PSYC 3P56)

The influences of brain physiology and maturation on psychological development and vice versa and the role of heredity in understanding human development.

Lectures, seminar, 3 hours per week.

Restriction: open to BA/BEEd, CHYS (single or combined), NEUR and PSYC (single or combined) majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits or 3.0 PSYC credits above PSYC 1F90.

Students completing this course will forfeit credit in CHST 3P56.

CHYS 3P65

Thinking and Development

Theoretical and applied issues in the development of thinking abilities including how this is expressed in the development of motor control.

Lectures, seminar/lab, 3 hours per week.

Restriction: open to BA/BEEd and CHYS (single or combined) majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits.

Prerequisite: CHYS (CHST) 2F10.

Students completing this course will forfeit credit in CHST 3P65.

CHYS 3P74

Psychology of Computers in Education

(also offered as PSYC 3P74)

Uses of computers in education in light of current theories of child and youth development.

Lectures, seminar, 3 hours per week.

Restriction: open to BA/BEEd, CHYS (single or combined), and PSYC (single or combined) majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits or 3.0 PSYC credits above PSYC 1F90.

Prerequisite: one of MATH 1F92, PSYC 2F23 (2F24), SOCI 2F10 (for CHYS/SOCI combined majors). May be taken concurrently.

Note: this is not a computer programming course.

Students completing this course will forfeit credit in CHST 3P74.

CHYS 3P90

Assessment of Infants and Preschoolers with Special Needs

Issues in the assessment of children, as well as preventative and early intervention strategies. A variety of assessment techniques including testing, observation and rating scales.

Lectures, seminar, 3 hours per week.

Restriction: open to BA/BEEd, CHYS (single or combined) and PSYC (single or combined) majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits.

Prerequisite: CHYS (CHST) 2F10 or PSYC 2F12.

Students completing this course will forfeit credit in CHST 3P90.

CHYS 3P91

Approaches to Family Assessment and Intervention

Theoretical, research and clinical issues pertaining to assessment and intervention with families. Interventions include parent training, self-help groups and family counselling. Focus on early identification and intervention.

Lectures, seminar, 3 hours per week.

Restriction: open to BA/BEEd, CHYS (single or combined), and PSYC (single or combined) majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits.

Prerequisite: CHYS (CHST) 2F10 or PSYC 2F12.

Students completing this course will forfeit credit in CHST 3P91.

CHYS 3P92

Gender and Sexuality in Childhood and Youth

(also offered as SOCI 3P92 and WISE 3P92)

Historical, cross-cultural and sociological approaches to the development of gender identities and sexuality amongst children and youth. Topics include the role of families, schools, peers and state policies in such processes.

Lectures, seminar, 3 hours per week.

Restriction: open to BA/BEEd, CHYS (single or combined), SOCI (single or combined) and WISE majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits.

Prerequisite: one of CHYS (CHST) 2P38, SOCI 2F10, WISE 2F90 or 2P91.

Students completing this course will forfeit credit in CHST 3P92.

CHYS 3P93

Biological and Psychosocial Influences on the Behaviour of Children and Youth

Factors influencing behavioural challenges presented by children and youth, within a multi-modal paradigm. Case examples will be used to illustrate the model from the perspective of assessment and intervention.

Lectures, seminar, 3 hours per week.

Restriction: open to BA/BEEd and CHYS (single or combined) majors until date specified in the BIRT guide.

Prerequisite: CHYS (CHST) 2P35.

Child and Youth Studies

CHYS 3P94

Childhood, Youth and Equity Issues

Research on contemporary children and youth with a focus on how age and generation intersect with social class, race and gender. Topics include children's rights, child poverty and equity strategies.

Lectures, seminar/lab, 3 hours per week.

Restriction: open to BA/BEEd and CHYS (single or combined) majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits.

Prerequisites: CHYS (CHST) 2P38.

Students completing this course will forfeit credit in CHST 3P24 and 3P94.

CHYS 3P96

Applied Studies of Diversity and Development

Theoretical applications in diversity and development related to childhood and youth. Topics may include field work relationships, participant observations, report writing and ethical issues. Involves an extended community practicum.

Lectures, seminar/lab, 3 hours per week.

Restriction: open to BA/BEEd and CHYS (single or combined) majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits.

Prerequisite: one of CHYS (CHST) 2P35, 3P20, 3P35.

Note: enrolment will be limited to the availability of an appropriate match between a student and a child/youth. Transportation to placement is a student responsibility. Screening such as police checks for criminal activity may be required.

Students completing this course will forfeit credit in CHST 3F96, 3P96, PSYC 3P27 and 3F96.

CHYS 3P97

Policies of Childhood and Youth: Canadian Perspectives

Canadian initiatives in child welfare, education, health and children's rights are located within a broader global context. The roles of national and local governments, non-governmental organizations, professionals, adults and children.

Lectures, seminar, 3 hours per week.

Restriction: open to BA/BEEd and CHYS (single or combined) majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits.

Prerequisite: CHYS (CHST) 2P38.

CHYS 3P98

Policies of Childhood and Youth: Global Perspectives

International and national initiatives in child provision, child protection and child participation before and after the 1989 United Nations Convention on the Rights of the Child.

Lectures, seminar, 3 hours per week.

Restriction: open to BA/BEEd and CHYS (single or combined) majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits.

Prerequisite: CHYS (CHST) 2P38.

CHYS 3P99

Contemporary Issues in Childhood and Youth Studies

Current research in the area of child and youth cultures. Topics may include the ethnography of childhood, youth and popular culture.

Lectures, seminar, 3 hours per week.

Restriction: open to CHYS (single or combined) majors with a minimum of 8.0 overall credits.

Prerequisite: CHYS (CHST) 2P38.

Students completing this course will forfeit credit in CHST 4P95.

CHYS 3Q93

Conflict, Contradictions and Development

(also offered as PSYC 3Q93)

Conflict in early human development including the understanding of the causes, management and outcomes of conflicts. Cognitive and social strategies used to resolve conflicts.

Lectures, seminar, 3 hours per week.

Restriction: open to BA/BEEd, CHYS (single or combined) and PSYC (single or combined) majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits.

Prerequisite: CHYS (CHST) 2F10 or PSYC 2F12 or permission of the instructor.

Students completing this course will forfeit credit in CHST 3Q93.

CHYS 3Q94

Advanced Topics in Social Development

(also offered as PSYC 3Q94)

Social competence, aggression, friendship and other topics in social development from a variety of developmental perspectives. Methodological and training issues relevant to the study of social development.

Lectures, seminar, 3 hours per week.

Restriction: open to BA/BEEd, CHYS (single or combined) and PSYC (single or combined) majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits or 3.0 PSYC credits above PSYC 1F90.

Prerequisite: CHYS 2F10 or PSYC 2F12 or permission of the instructor.

Students completing this course will forfeit credit in CHST 3Q94.

CHYS 3V90-3V91

Directed Readings

A program of study not available among the regular course offerings, designed in consultation with the faculty member directing the course.

Restriction: open to BA/BEEd and CHYS (single or combined) majors. Students must have a minimum of 8.0 overall credits and approval of the co-ordinator.

Note: arrangements must be agreed upon with the co-ordinator prior to registration.

CHYS 3V92-3V93

Special Topics Seminar

The topic will vary depending on the needs of the program and availability of a faculty instructor.

Seminar, 3 hours per week.

Restriction: open to CHYS (single or combined) majors with a minimum of 8.0 overall credits.

Students completing this course will forfeit credit in CHST 4V35-4V36.

CHYS 4F97

Honours Project

Group research projects providing experience with different methods of data collection and analysis.

Lectures, seminar/lab, 3 hours per week.

Restriction: open to CHYS (single or combined) majors with a minimum of 14.0 overall credits and approval to year 4 (honours).

Prerequisites: CHYS (CHST) 3P10 and 3P15 (2P20).

Students completing this course will forfeit credit in CHST 4F97.

CHYS 4F99

Honours Thesis

A research project carried out under the supervision of a faculty adviser.

Restriction: open to CHYS (single or combined) majors with a minimum of 14.0 overall credits and approval to year 4 (honours).

Prerequisites: CHYS (CHST) 3P10 and 3P15 (2P20).

Co-requisite: CHYS (CHST) 4P99.

Note: students must be admitted to the honours program and must consult with the Chair before registering for a thesis.

Students completing this course will forfeit credit in CHST 4F99.

CHYS 4P31

Treatment Alternatives for Children and Adolescents: Dynamic Therapies

(also offered as PSYC 4P31)

The theoretical background, research and evaluation of current therapeutic approaches to emotionally and behaviourally disturbed children and adolescents. Topics include play therapies, non-directive, expressive and Gestalt approaches; group methods, use of modelling, goal setting and evaluation methods.

Lectures, seminar, 3 hours per week.

Restriction: open to CHYS (single or combined) and PSYC (single or combined) majors with a minimum of 13.5 overall credits.

Prerequisite: CHYS (CHST) 2F10 or PSYC 2F12.

Note: students participate in practicum placement.

Students completing this course will forfeit credit in CHST 4P31.

CHYS 4P32

Treatment Alternatives for Children and Adolescents: Cognitive and Behavioural Approaches

(also offered as PSYC 4P32)

Behavioural theory and techniques; social skills training, cognitive theories, contingency management and relaxation.

Lectures, seminar, 3 hours per week.

Restriction: open to CHYS (single or combined) and PSYC (single or combined) majors with a minimum of 13.5 overall credits.

Prerequisite: CHYS (CHST) 2F10 or PSYC 2F12.

Note: students participate in practicum placement.

Students completing this course will forfeit credit in CHST 4P32.

CHYS 4P35

Issues in Diversity and Development

Contemporary issues of social policy and practice affecting the diversity and development of children and youth.

Lectures, seminar/lab, 3 hours per week.

Restriction: open to CHYS (single or combined) majors with a minimum of 14.0 overall credits and approval to year 4 (honours).

Prerequisite: one of CHYS (CHST) 3P20, 3P35, 3P90, 3P94, 3P96.

Students completing this course will forfeit credit in CHST 4P35.

CHYS 4P38

Issues in Childhood, Youth and Society

(also offered as SOCI 4P38)

Canadian and international research on childhood and youth in changing societies. Topics include globalization of childhood and youth, child labour, child welfare and Canadian policy.

Lectures, seminar/lab, 3 hours per week.

Restriction: open to CHYS (single or combined) and SOCI (single or combined) majors with a minimum of 14.0 overall credits and approval to year 4 (honours).

Prerequisite: one of CHYS (CHST) 3P23, 3P38 (2P91), 3P91, 3P92, 3Q93, 3Q94.

Students completing this course will forfeit credit in CHST 4P38.

CHYS 4P60

Storytelling

(also offered as LING 4P60)

Topics include functions of storytelling, characteristics of tellers, relationship between storytelling and social identity. Experience in performance of a variety of oral narratives, with a focus on Canada.

Seminar, 3 hours per week.

Restriction: open to CHYS (single or combined), CANA, COMM (single or combined) and LING (single or combined) majors until date specified in BIRT guide. Students must have approval to year 4 (honours).

Child and Youth Studies

CHYS 4P65

Issues in Thinking and Development

Contemporary issues in learning and development. Topics may include memory, cognitive approach to motor development and social cognition.

Lectures, seminar/lab, 3 hours per week.

Restriction: open to CHYS (single or combined) majors with a minimum of 14.0 overall credits and approval to year 4 (honours).

Prerequisite: one of CHYS (CHST) 3P11, 3P25, 3P65.

Students completing this course will forfeit credit in CHST 4P65.

CHYS 4P99

Thesis Seminar

Applications of principles of research design and data analysis.

Lectures, seminar, 3 hours per week.

Restriction: open to CHYS (single or combined) majors with a minimum of 14.0 overall credits and approval to year 4 (honours).

Prerequisites: CHYS (CHST) 3P10 and 3P15 (2P20).

Co-requisite: CHYS (CHST) 4F99.

Students completing this course will forfeit credit in CHST 4P99.

Classics

Chair

Noel D. Robertson

Professors

Alan D. Booth, Noel D. Robertson, David W. Rupp

Associate Professors

Frederick H. Casler, Richard W. Parker

Assistant Professor

Carol U. Merriam

General Information

Administrative Assistant, extension 3575

Schmon Tower 1121

<http://www.brocku.ca/classics/>

Classics is an interdisciplinary field, overlapping all the main areas of the humanities. The Department of Classics offers two types of courses: courses in Greek or Latin language and literature; and courses in Classics, embracing ancient civilization in all its aspects: literature, philosophy, education, history, religion and art and archaeology. In general, CLAS courses require no knowledge of Greek or Latin.

The department has special resources for illustrating ancient life. Archaeological training sessions are conducted in the summer in Mediterranean lands. Brock is a contributing member to several research and teaching institutions located in the Mediterranean including the American School of Classical Studies at Athens and the Canadian Archaeological Institute in Athens.

The Brock Museum of Cypriote Antiquities provides a representative collection of art and artifacts from the Neolithic period to beyond the Roman Empire. The Niagara Peninsula Society of the Archaeological Institute of America, in conjunction with the department, organizes archaeological programs and lectures.

The brochure *Classics at Brock* contains further information about the Classics department and its programs. Students are encouraged to consult the Department Chair to discuss their educational objectives and career plans.

Language Requirement for Humanities Majors

Students majoring in Classics are required to complete one credit in one language other than English to fulfill the Humanities language requirement. Where half credit courses are used to satisfy the requirement, both half credits must be in the same language. Note that either Greek or Latin, as required for a Classics degree, also fulfills the Humanities language requirement.

Students are advised that graduate programs in Classics require competence in Greek and Latin. Those considering graduate work in Classics (including classical archaeology) should plan to go beyond the minimum four GREE/LATI credits required in the Classical Studies honours program.

Program Note

In all 20 credit degree programs, at least 12 credits must be numbered 2(alpha)00 or above, six of which must be numbered 2(alpha)90 or above and of these, three must be numbered 3(alpha)90 or above. In all 15 credit degree programs, at least seven credits must be numbered 2(alpha)00 or above, three of which must be numbered 2(alpha)90 or above.

Honours Programs

Students seeking an honours degree have a choice of three programs in Classics. 1) Classical languages emphasizes proficiency in the Greek and Latin languages and knowledge of Greek and Roman literature. 2) Ancient art and archaeology examines the cultures of the ancient Mediterranean and Near East from the perspectives of both anthropological archaeology and art history. 3) Classical studies combines the study of Greek and Roman history, religion and literature-in-translation.

Honours majors should consult with their departmental adviser to arrange a suitable program.

1. Classical languages: a student must take 12 credits labelled CLAS, GREE or LATI, six of which must be numbered 2(alpha)90 or above and of these, three must be numbered 3(alpha)90 or above; two must be from CLAS 2P91, 2P92, 2P98, 2P99, 3P18, 3P19, eight must be GREE and/or LATI credits, one of which must be in each language numbered 2(alpha)00 or above.

Classics

2. Ancient art and archaeology: a student must take 14 credits labelled CLAS, GREE or LATI, three of which must be numbered 3(alpha)90 or above; four must be GREE and/or LATI credits, six must be in ancient art and archaeology and two must be from CLAS 2P91, 2P92, 2P98, 2P99, 3P18, 3P19. Ancient art and archaeology courses include: CLAS 2P30, 2P32, 2P36, 2P38, 2P48, 3P18, 3P19, 3P22, 3P23, 3P24, 3P25, 3P75, 4F75, 4M00-4M09, 4P13, 4P14, 4V20-4V29, 4V30-4V39. A maximum of one credit in field work may be counted towards the six credits in ancient art and archaeology. Field work courses include: CLAS 3P75 and 4F75.

3. Classical studies: a student must take 12 credits labelled CLAS, GREE or LATI, six of which must be numbered 2(alpha)90 or above and of these, three must be numbered 3(alpha)90 or above; two must be from CLAS 2P91, 2P92, 2P98, 2P99, 3P18, 3P19 and four must be GREE and/or LATI credits.

Pass Programs

Students seeking a pass degree have a choice of two programs in Classics. 1) Classical languages emphasizes proficiency in the Greek and Latin languages and knowledge of Greek and Roman literature. 2) Classical studies combines the study of Greek and Roman history, religion, literature-in-translation and art and archaeology. Pass majors should consult with their departmental adviser to arrange a suitable program.

1. Classical languages: a student must take eight credits labelled CLAS, GREE or LATI, three of which must be numbered 2(alpha)90 or above; five must be GREE and/or LATI credits and one must be from CLAS 2P91, 2P92, 2P98 or 2P99.

2. Classical studies: a student must take eight credits labelled CLAS, GREE or LATI, three of which must be numbered 2(alpha)90 or above; one must be a GREE or LATI credit and one must be from CLAS 2P91, 2P92, 2P98 or 2P99.

Combined Major Programs

A student may combine either an honours or a pass program in classical studies with another major field.

The honours program consists of a minimum of seven credits labelled CLAS, GREE or LATI, four of which must be numbered 2(alpha)90 or above of these, two must be numbered 3(alpha)90 or above; two must be GREE or LATI.

The pass program consists of a minimum of five credits labelled CLAS, GREE or LATI, two of which must be numbered 2(alpha)90 or above; one must be a GREE or LATI credit.

Prerequisites and Restrictions

Students must check to ensure that prerequisites are met. Students may be deregistered, at the request of the instructor, from any course for which prerequisites and/or restrictions have not been met.

Description of Courses

Note that not all courses are offered in every session. Refer to the applicable term timetable for details.

CLASSICS

CLAS 1P91

Greek Civilization

The literature, art, thought and political evolution of ancient Greece, based on masterworks of classical literature. Slides are used to illustrate classical history and archaeology. *Lectures, seminar, 3 hours per week.*

CLAS 1P92

Roman Civilization

The literature, art, thought and political evolution of ancient Rome, based on masterworks of classical literature. Slides are used to illustrate classical history and archaeology. *Lectures, seminar, 3 hours per week.*

CLAS 1P93

Culture and Civilization of Central Europe: From the Prehistoric to the Carolingian Period

(also offered as GERM 1P93)

The cultural development of central Europe from the earliest stone and pottery cultures, the Bronze and Iron Ages, the Celts and Romans and the first Germanic kingdoms. Beliefs and practices, artistic style and architecture. Slides are used to illustrate the cultural evidence. *Lectures, 3 hours per week.*

Lectures, 3 hours per week.

Note: given in English.

CLAS 1P95

Myths of the Greek and Roman Gods

Traditional story types: nature myths, ritual myths. Diffusion of myths in the ancient world. The creation, the succession in heaven, the individual gods. Functions of myth in ancient society. Modern theories of myth. *Lectures, seminar, 3 hours per week.*

CLAS 1P97

Myths of the Heroic Age

Traditional story types: folktale, legend. The concept of a Heroic Age, centres and cycles of legend, pseudo-history. The response to Greek and Roman myths through the ages.

Lectures, seminar, 3 hours per week.

CLAS 2P15

Egyptian Hieroglyphs

The vocabulary, grammar and syntax of ancient Egyptian with selected readings from the *Book of the Dead* and/or other ancient texts.

Lectures, seminar, 3 hours per week.

Students completing this course will forfeit credit in CLAS 4P35.

CLAS 2P30

Origins of Human Culture

The growth and development of human society from the prehistoric beginnings through the complex societies of the ancient Near East and India.

Lectures, seminar, 3 hours per week.

CLAS 2P32

Field Archaeology

An introduction to basic archaeological theory, field techniques and procedures; the study of archaeological materials.

Lectures, seminar, 3 hours per week.

Students completing this course will forfeit credit in CLAS 2P93.

CLAS 2P36

Greek Archaeology

The archaeology and material culture of the ancient Greek world from the Upper Paleolithic period to the end of the Hellenistic period.

Lectures, seminar, 3 hours per week.

Prerequisite: one credit from CLAS 1P91, 1P92, 1P93, 1P95, 1P97, 2P30, 2P32.

CLAS 2P38

Roman Archaeology

The archaeology and material culture of the Italian peninsula and Roman Empire from the 12th century BC through the 4th century AD.

Lectures, seminar, 3 hours per week.

Prerequisite: one credit from CLAS 1P91, 1P92, 1P93, 1P95, 1P97, 2P30, 2P32.

CLAS 2P48

Greek Sanctuaries

The historical development of Greek sanctuaries. Rural shrines in different regions; civic shrines in different city-states; ethnic and Panhellenic shrines. Healing and other needs; patterns of civic worship; the rise and fall of Delphi and Olympia. Emphasis on the interplay between tradition and changing needs and values.

Lectures, seminar, 3 hours per week.

Prerequisite: one credit from CLAS 1P91, 1P92, 1P95, 1P97.

CLAS 2P61

Women in the Ancient World

(also offered as WISE 2P61)

Problems and issues of particular relevance to women in Greek and Roman society. Topics include social, political and legal rights; prostitution; religious duties; marriage and children; birth control and abortion.

Lectures, seminar, 3 hours per week.

CLAS 2P62

The Politics of Gender in Archaic and Classical Greece

(also offered as WISE 2P62)

Social issues of ancient Greece as viewed from a modern perspective. Topics include familial bonding; female and male identity; domestic and civil violence; sexuality and social status; power dynamics within the family and the city-state.

Lectures, seminar, 3 hours per week.

CLAS 2P91

The History of Early Greece

The social and political history of the Greek world from the Bronze Age to 450 BC: Minoans and Mycenaeans, the Dark Age, the colonizing period, the tyrants, the rise of Sparta, the Persian wars and the Athenian Empire. Readings from Greek historians and documents in translation.

Lectures, seminar, 3 hours per week.

Restriction: open to students with a minimum of 4.0 overall credits.

CLAS 2P92

The History of Classical Greece

The social and political history of the Greek world, 450-323 BC. The great war between Athens and Sparta, the rivalry of the city-states, the rise of national states, Alexander the Great. Readings from Greek historians and documents in translation.

Lectures, seminar, 3 hours per week.

Restriction: open to students with a minimum of 4.0 overall credits.

CLAS 2P98

History of the Roman Republic

The history of Rome to the Battle of Actium (31 BC), with emphasis on social and political developments from the Gracchi to Julius Caesar.

Lectures, seminar, 3 hours per week.

Restriction: open to students with a minimum of 4.0 overall credits.

CLAS 2P99

History of the Early Roman Empire

The history of Rome from the Battle of Actium to the death of Marcus Aurelius (AD 180), with emphasis on social and political developments.

Lectures, seminar, 3 hours per week.

Restriction: open to students with a minimum of 4.0 overall credits.

Classics

CLAS 3P00

Homer and Greek Epic

The two heroic epics of Homer, *The Iliad* and *The Odyssey*. Topics include the conventions of epic, the oral transmission of epic verse and the Homeric concept of the gods.

Lectures, seminar, 3 hours per week.

Prerequisite: one of CLAS 1P91, 1P95, 1P97, 3P05.

Note: open to students who lack the prerequisite but have a minimum of 8.0 overall credits.

CLAS 3P02

Greek Tragedy

The origins of tragedy and its development as entertainment and literature through the Classical period. Works may include Aeschylus, *The Oresteia*; Sophocles, *Oedipus Rex* and *Oedipus at Colonus*; and Euripides, *Medea* and *Hippolytus*.

Lectures, seminar, 3 hours per week.

Prerequisite: one of CLAS 1P91, 1P95, 1P97, 3P05, DRAM 1F93.

Note: open to students who lack the prerequisite but have a minimum of 8.0 overall credits.

CLAS 3P05

Masterworks and Major Genres of Greek Literature

A critical study of selected works from the Archaic through the Roman period with emphasis on poetry and drama, literary history and the conventions of major genres. Genres include epic, tragedy, comedy, satyr drama, lyric, pastoral, novel and satire.

Lectures, seminar, 3 hours per week.

Restriction: open to students with a minimum of 4.0 overall credits.

CLAS 3P06

Masterworks and Major Genres of Latin Literature

A critical study of selected works from both the Republican and Imperial eras with emphasis on poetry and drama, literary history and the conventions of major genres. Genres include epic, tragedy, comedy, lyric, elegy, pastoral, novel and satire.

Lectures, seminar, 3 hours per week.

Restriction: open to students with a minimum of 4.0 overall credits.

CLAS 3P18

The Ancient Near East: 10,000-1150 BC

The history and material culture of Egypt, Syro-Palestine, Anatolia, Mesopotamia and Iran from the advent of food production through the Late Bronze Age.

Lectures, seminar, 3 hours per week.

Prerequisite: one credit from CLAS 1P91, 1P92, 1P93, 1P95, 1P97 or permission of the instructor.

CLAS 3P19

The Ancient Near East: 1150-330 BC

The history and material culture of Egypt, Syro-Palestine, Anatolia, Mesopotamia and Iran from the beginning of the Iron Age through the conquest of Alexander the Great.

Lectures, seminar, 3 hours per week.

Prerequisite: one credit from CLAS 1P91, 1P92, 1P93, 1P95, 1P97 or permission of the instructor.

CLAS 3P22

The Art and Architecture of Iron Age Italy and the Roman Republic

(also offered as VISA 3P22)

The art and architecture of the cultures of the Italian peninsula, in the first millennium BC, within the framework of cultural change and external influences.

Lectures, seminar, 3 hours per week.

Prerequisite: one credit from CLAS 1P91, 1P92, 1P93, 1P95, 1P97 or VISA 1F90.

CLAS 3P23

The Art and Architecture of Rome in the Imperial Age

(also offered as VISA 3P23)

Roman art and architecture from Augustus to Late Antiquity. Christian art and architecture and the influence of Roman aesthetics on the Renaissance and beyond.

Lectures, seminar, 3 hours per week.

Prerequisite: one credit from CLAS 1P91, 1P92, 1P93, 1P95, 1P97 or VISA 1F90.

CLAS 3P24

The Art and Architecture of Early Greece

(also offered as VISA 3P24)

Greek art and architecture from the Bronze age through the end of the Archaic period within the framework of historical and cultural change.

Lectures, seminar, 3 hours per week.

Prerequisite: one credit from CLAS 1P91, 1P92, 1P93, 1P95, 1P97 or VISA 1F90.

CLAS 3P25

The Art and Architecture of Classical Greece and the Hellenistic World

(also offered as VISA 3P25)

Greek art and architecture from the early Classical era through the Hellenistic period within the framework of historical and cultural change.

Lectures, seminar, 3 hours per week.

Prerequisite: one credit from CLAS 1P91, 1P92, 1P93, 1P95, 1P97 or VISA 1F90.

CLAS 3P75

Archaeological Field Work

Topics may include excavation, surveys, lectures, demonstrations and study tours of sites, monuments and museums.

Restriction: open to students with a minimum of 4.0 overall credits and permission of the department.

Note: recommended preparation for this course includes CLAS 2P30 and CLAS 2P32. Students are expected to pay their own expenses.

CLAS 4F75

Archaeological Practicum in Mediterranean Lands

Field work including excavation, surveys, lectures, demonstrations and study tours of ancient sites, monuments and museums.

Restriction: permission of the department.

Note: when offered (once every three years) practica run daily for six weeks during the summer and are conducted with the assistance of local authorities. Recommended preparation for this course includes CLAS 2P30, 2P32 and 4P13. Students are expected to pay their own expenses.

CLAS 4M00-4M09

Study in Mediterranean Lands

(also offered as VISA 4M00-4M09)

Topographical investigations of ancient sites and monuments. Study tours of the great cities and museums of the Mediterranean world with emphasis on the art and architecture of the Prehistoric, Classical and later periods.

Restriction: permission of the department.

Note: offered in the Summer Session for three or four weeks of intensive study abroad. Students are expected to pay their own expenses.

CLAS 4P13

The Art and Archaeology of Cyprus

(also offered as VISA 4P13)

The cultural history of Cyprus from the Neolithic period through the early Byzantine period, based on the archaeological record. The role of Cyprus in the civilization of the eastern Mediterranean.

Lectures, seminar, 3 hours per week.

Prerequisite: one CLAS credit numbered 2(alpha)90 or above or VISA 1F90 or permission of the department.

CLAS 4P14

The Aegean Bronze Age

(also offered as VISA 4P14)

The development of the Bronze Age cultures of the Aegean basin from 3000 to 1100 BC. The art and architecture of the Minoans on Crete and the Mycenaeans on the Greek mainland will be stressed.

Lectures, seminar, 3 hours per week.

Prerequisite: one CLAS credit numbered 2(alpha)90 or above or VISA 1F90 or permission of the department.

CLAS 4V20-4V29

Topics in Archaeology

Selected topics and problems in current archaeological research that pertain to the Mediterranean and to the Near East.

Lectures, seminar, 3 hours per week.

Prerequisites: CLAS 2P30, 2P32; one CLAS credit numbered 2(alpha)90 or above or permission of the department.

CLAS 4V23

2000-2001: Archaeological Analysis and Interpretation

CLAS 4V30-4V39

Topics in Mediterranean Art and Architecture

(also offered as VISA 430-4V39)

Selected topics and problems in current art historical and archaeological research pertaining to the art and architecture of the ancient Greek or Roman world.

Lectures, seminars, 3 hours per week.

Prerequisites: one credit from CLAS 3P22, 3P23, 3P24, 3P25 or VISA 1F90 or permission of the department.

CLAS 4V50-4V59

Special Subject in Classics

Study of a special subject is one of the following areas: Greek and Latin linguistics and literature, Greek and Roman history, philosophy and religion. Some emphasis may be given to new directions in research.

Lectures, seminar, 3 hours per week.

Prerequisite: one CLAS credit numbered 2(alpha)90 or above or permission of the department.

CLAS 4V57

2000-2001: Special subject: Greek

CLAS 4V58

2000-2001: Special subject: Roman

CLAS 4V90-4V99

Advanced Study and Directed Research

Individual study in one of the following areas: archaeology, ancient history, classical literature. Content to be determined by the interests of the student and the advice of the department.

Restriction: permission of the department.

CLASSICAL LANGUAGES

ANCIENT GREEK

GREE 1P01

Language (Introductory) I

The fundamentals of Greek. Selections from various Greek authors.

Lectures, seminar, 4 hours per week.

Note: students who have studied classical Greek before coming to university should identify themselves to the department; such students may be eligible to enrol in GREE 2P01.

GREE 1P02

Language (Introductory) II

The fundamentals of Greek. Selections from various Greek authors.

Lectures, seminar, 4 hours per week.

Prerequisite: GREE 1P01.

Classics

GREE 2P01

Language and Literature I

Review of grammar. Intermediate selections from Greek authors.

Lectures, seminar, 4 hours per week.

Prerequisite: GREE 1P02 or permission of the department.

GREE 2P02

Language and Literature II

Further intermediate selections from Greek authors. Greek prose composition.

Lectures, seminar, 4 hours per week.

Prerequisite: GREE 2P01 or permission of the department.

GREE 3V00-3V09

Greek Epic

Selections from Greek epic (authors and works vary from year to year).

Lectures, seminar, 3 hours per week.

Prerequisite: GREE 2P02 or permission of the instructor.

GREE 3V03

2000-2001: Homer, *Odyssey* VI-VIII

GREE 3V10-3V19

Greek Historians

Selections from the works of the classical Greek historians (authors and selections vary from year to year).

Lectures, seminar, 3 hours per week.

Prerequisite: GREE 2P02 or permission of the instructor.

GREE 3V90-3V99

Greek Tragedy

One or more Greek tragedies and/or satyr-drama (authors and works vary from year to year).

Lectures, seminar, 3 hours per week.

Prerequisite: GREE 2P02 or permission of the instructor.

GREE 4V00-4V09

Attic Oratory

Speeches from the Attic orators (authors and works vary from year to year).

Lectures, seminar, 3 hours per week.

Prerequisite: GREE 2P02 or permission of the instructor.

GREE 4V50-4V59

Greek Comedy

One or more Greek comedies (authors and works vary from year to year).

Lectures, seminar, 3 hours per week.

Prerequisite: GREE 2P02 or permission of the instructor.

GREE 4V50

2000-2001: Aristophanes, Selected Comedies

GREE 4V60-4V69

Greek Philosophy

Selected Greek philosophical works (authors and works vary from year to year).

Lectures, seminar, 3 hours per week.

Prerequisite: GREE 2P02 or permission of the instructor.

CLAS 4V60

2000-2001: Plato, *Apology*

GREE 4V90-4V99

Advanced Readings and Directed Research

Studies in Greek literature. Content to be determined by the interests of the student and availability of instructors.

Seminar, 3 hours per week.

Restriction: permission of the department.

LATIN

LATI 1P01

Language (Introductory) I

The fundamentals of Latin. Selections from various Latin authors.

Lectures, seminar, 4 hours per week.

Note: students who have studied Latin before coming to university should identify themselves to the department; such students may be eligible to enrol in LATI 2P01.

LATI 1P02

Language (Introductory) II

The fundamentals of Latin. Selections from various Latin authors.

Lectures, seminar, 4 hours per week.

Prerequisite: LATI 1P01.

LATI 2P01

Language and Literature I

Review of grammar. Intermediate selections from Latin authors.

Lectures, seminar, 4 hours per week.

LATI 1P02 or permission of the department.

LATI 2P02

Language and Literature II

Further intermediate selections from Latin authors. Latin prose composition.

Lectures, seminar, 4 hours per week.

Prerequisite: LATI 2P01 or permission of the department.

LATI 3V00-3V09

Roman Comedy

Selections from Plautus and Terence (authors and works vary from year to year).

Lectures, seminar, 3 hours per week.

Prerequisite: LATI 2P02 or permission of the instructor.

LATI 3V10-3V19

Latin Speeches, Letters and Dialogues

Selections from Cicero, Seneca and Pliny the Younger (authors and works may vary from year to year).

Lectures, seminar, 3 hours per week.

Prerequisite: LATI 2P02 or permission of the instructor.

LATI 3V12

2000-2001: Cicero, *Pro Caelio*

LATI 3V90-3V99

Roman Lyric and Elegy

Selections from Horace, Catullus, Tibullus, Ovid and Propertius (authors and works may vary from year to year).

Lectures, seminar, 3 hours per week.

Prerequisite: LATI 2P02 or permission of the instructor.

LATI 3V90

2000-2001: Horace, *Odes* and Vergil, *Georgics*

LATI 4V00-4V09

Roman Epic, Didactic and Pastoral Poetry

Selections from Vergil and Lucretius (authors and works may vary from year to year).

Lectures, seminar, 3 hours per week.

Prerequisite: LATI 2P02 or permission of the instructor.

LATI 4V03

2000-2001: Lucretius

LATI 4V10-4V19

Roman Historians and Biographers

Selections from Caesar, Sallust, Nepos, Livy, Tacitus and Suetonius (authors and works may vary from year to year).

Lectures, seminar, 3 hours per week.

Prerequisite: LATI 2P02 or permission of the instructor.

LATI 4V20-4V29

Roman Satire and Epigram

Selections from Juvenal, Martial and Petronius (authors and works vary from year to year).

Lectures, seminar, 3 hours per week.

Prerequisite: LATI 2P02 or permission of the instructor.

LATI 4V20

2000-2001: Juvenal

LATI 4V90-4V99

Advanced Readings and Directed Research

Studies in Latin literature. Content to be determined by the interests of the student and availability of instructors.

Seminar, 3 hours per week.

Restriction: permission of the department.

Communications, Popular Culture and Film

Chair

Jeannette Sloniowski
Jim Leach (as of July 1, 2000)

Undergraduate Program Adviser

Bohdan Szuchewycz

Professors

Barry K. Grant, Jim Leach

Associate Professors

Nicolas Baxter-Moore, Barry W. K. Joe, John Lye, Joan Nicks,
Jeannette Sloniowski, Bohdan Szuchewycz

Assistant Professor

Marian Bredin

Lecturer

M. Sharon Broderick

General Information

Administrative Assistant, extension 4290
Mackenzie Chown A225
<http://www.brocku.ca/cpcf/>

The Department of Communications, Popular Culture and Film offers three separate programs of study. A four-year program leading to the BA honours degree and a three-year program leading to the BA pass degree is offered in all three programs. In addition a four-year Co-op program leading to a BA honours degree in Communications Studies is available.

1. Communications Studies

Communications Studies is an interdisciplinary program which studies human communicative behaviour, the institutions of communication and the social production of meaning. It has five streams; the streams share a core of COMM courses but focus on distinct areas of interest.

Students are generally advised that choice of stream is based on their interest and aptitude. It is possible to change streams although in some cases this may require additional courses; students should consult the Undergraduate Program Advisor.

The Business Communications stream combines the study of communications with a study of some aspects of business. The

stream aims to equip the student with a sound theoretical basis for analysing and practising communications within the business environment.

The Business Communications Co-op stream combines academic and work terms over a four year period. Students spend two years in an academic setting studying the functional areas of business communications prior to taking the first work placement. The exposure to courses in the core areas of business communications provides the necessary academic background for the work experience.

The Communications Policy stream focuses on relations between the mass media and cultural industries, on the one hand and political, economic and social forces on the other, including the study of media ownership, cultural regulation and public policies in Canada and elsewhere.

The Information Technology stream integrates the study of communications with the study of theoretical and applied aspects of the new information technology.

The Media and Culture stream is oriented toward an understanding of the role of mass media in the construction of meaning and the creation of national identity in our culture through the study of the cultural, cognitive and textual aspects of film, television, literature and popular culture.

Please consult the Communication Studies entry for a listing of courses and program requirements.

2. Film Studies

The Film Studies Program is a sequence of critical and historical courses which examines a variety of approaches to film. The courses explore the nature of film language and develop an analytical perspective on film as both an art and a medium. Other courses explore issues and theories in popular culture. Students have opportunities to engage in film and video production in upper year courses, in class assignments and as part of the student Spring Festival.

Please consult the Film Studies entry for a listing of courses and program requirements.

3. Popular Culture

The Popular Culture program is a series of critical and historical courses which examines popular culture and its relation to folk, mass and high culture. Popular Culture is studied in its wide variety of forms (including film, television, literature, music and advertising) and its economic, political and historical contexts.

Please consult the Popular Culture entry for a listing of courses and program requirements.

Communications Studies

This program is co-ordinated by the Department of Communications, Popular Culture and Film.

Undergraduate Program Adviser
Bohdan Szuchewycz

General Information

Administrative Assistant, extension 4290
Mackenzie Chown A225
<http://www.brocku.ca/cpcf/>

Communications Studies is an interdisciplinary program which studies human communicative behaviour, the institutions of communication and the social production of meaning. It has five streams; the streams share a core of COMM courses but focus on distinct areas of interest.

The Business Communications stream combines the study of communications with a study of some aspects of business. The stream aims to equip the student with a sound theoretical basis for analysing and practising communications within the business environment.

The Business Communications Co-op stream combines academic and work terms over a four year period. Students spend two years in an academic setting studying the functional areas of business communications prior to taking the first work placement. The exposure to courses in the core areas of business communications provides the necessary academic background for the work experience. In addition to the current fees for courses in academic study terms, students are assessed an annual administrative fee (see the Schedule of Fees).

As this is a limited enrolment program, admission is on the basis of marks, a review of personal résumés and a function of employer availability. The normal requirement is a minimum 80 percent average on six OACs (or equivalent) with one OAC English. An interview may be required. Decisions will be made by the Business Communications Co-op Admissions Committee. Students will be required to maintain honours standing (minimum 70 percent major average and minimum 60 percent non-major average) in order to continue in the program. If a student subsequently raises his/her major average to 70 percent, the student may be readmitted only if approved by the Co-op Admissions Committee.

The Communications Policy stream focuses on relations between the mass media and cultural industries, on the one hand and political, economic and social forces on the other, including the study of media ownership, cultural regulation and public policies in Canada and elsewhere.

The Information Technology stream integrates the study of communications with the study of theoretical and applied aspects of the new information technology.

The Media and Culture stream is oriented toward an understanding of the role of mass media in the construction of meaning and the creation of national identity in our culture through the study of the cultural, cognitive and textual aspects of film, television, literature and popular culture.

Students are generally advised that choice of stream is based on their interest and aptitude. It is possible to change streams although in some cases this may require additional courses; students should consult the Undergraduate Program Adviser.

Communication Studies is a limited enrolment program. Students must apply to proceed to year 2 of the honours and pass programs. A minimum 70 percent average in required courses will normally ensure that the student may proceed. Others will be allowed to proceed on the basis of their grade standing and available places in the streams.

The requirement for graduation with a BA honours in Communications Studies is a minimum 70 percent major average and a minimum 60 percent non-major average. The Business Communications Co-op program designation will be awarded to those students who have honours standing and who have successfully completed a minimum of twelve months of Co-op work experience.

Program Notes

1. All Communications Studies majors must meet the requirements for one of the streams.
2. Students intending to go on to graduate studies are advised to take COMM 4F99. Students may not register for this course without permission of the Undergraduate Program Adviser who should be consulted before June 30 of the previous year.
3. Students in the Information Technology stream are advised to take MATH 1P66 and 1P67 as electives if they wish to take upper year programming and graphics courses in Computer Science.
4. In all 20 credit degree programs, at least 12 credits must be numbered 2(alpha)00 or above, six of which must be numbered 2(alpha)90 or above and of these, three must be numbered 3(alpha)90 or above. In all 15 credit degree programs, at least seven credits must be numbered 2(alpha)00 or above, three of which must be numbered 2(alpha)90 or above.

Communications Studies

Honours Programs

Business Communications stream

Year 1

COMM 1F90; ENGL 1F91 or 1F95; MGMT 1P91 and 1P92; POLI 1F90; one Science context credit.

Year 2

COMM 2F50, 2P15, 2P20 and 2P21; MKTG 2P51 and 2P52; OBHR 2P91; one elective credit.

Year 3

COMM 2F98, 3P16, 3P62 and 3P65; OBHR 3P42; one COMM credit; one elective credit.

Year 4

One credit from COMM 4P30, 4P31, 4P50, 4P51, 4V50-4V59; one COMM credit numbered 3(alpha)90 or above; two credits from ENTR, MGMT, OBHR numbered 3(alpha)90 or above; one elective credit.

Business Communications Co-op stream (honours only)

Students admitted to the Business Communications Co-op program must follow the program schedule as listed below. Failure to adhere may result in removal from the program.

Year 1

COMM 1F90; ENGL 1F91, 1F95 or 1F99; MGMT 1P91 and 1P92; POLI 1F90; one Science context credit.

Year 2

COMM 2F50, 2F98, 2P15 and 3P65; one COMM credit; MKTG 2P51 and 2P52.

Spring/Summer Term: COMM 0N01.

Year 3

Fall Term: COMM 3P16; one-half COMM credit; one-half COMM credit numbered 3(alpha)90 or above; OBHR 2P91 and 3P42.

Winter Term: COMM 0N02.

Spring Term: 2P20 and 2P21; one elective credit.

Summer Term: one elective credit.

Year 4

Fall Term: COMM 0N03

Winter Term: one and one-half COMM credits numbered 3(alpha)90 or above; one credit from ENTR, MGMT, MKTG, OBHR numbered 3(alpha)90 or above.

Spring Term: one credit from ENTR, MGMT, MKTG, OBHR numbered 3(alpha)90 or above; one elective credit.

Communications Policy stream

Year 1

COMM 1F90; ENGL 1F91 or 1F95; MGMT 1P91 and 1P92 or SOCI 1F90; POLI 1F90; one Science context credit.

Year 2

COMM 2F50, 2P15, 2P20 and 2P21; POLI 2F12; one and one-half elective credits.

Year 3

COMM 2F98, 3P16, 3P17, 3P20 and 3P21; one COMM credit; one elective credit.

Year 4

One credit from COMM 3P93, 4P17, 4P32; two credits from COMM 3P93, 4F80, 4F99, 4P17, 4P23, 4P30, 4P31, 4P32, 4P50, 4P51, 4V50-4V59; one COMM credit numbered 3(alpha)90 or above; one elective credit.

Information Technology stream

Year 1

COMM 1F90; COSC 1P02 and 1P03; ENGL 1F95 or FILM 1F94; POLI 1F90 or SOCI 1F90; one Science context credit.

Year 2

COMM 2F50, 2P15, 2P20 and 2P21; COSC 1P98, 1P99 and 2P50; one elective credit (see program note 3).

Year 3

COMM 2P90, 2P91, 3P16, 3P17, 3P65 and 3P90; COSC 2P89 and 3P04; one credit from COMM courses numbered 2(alpha)90 or above, SOCI 3P34, VISA 2F95.

Year 4

Two COMM credits from COMM 4F80, 4F99, 4P17, 4P22, 4P30, 4P31, 4P50, 4P51, 4V50-4V59; two COMM credits numbered 3(alpha)90 or above; one elective credit.

Media and Culture stream

Year 1

COMM 1F90; ENGL 1F91 or 1F95; FILM 1F94; PSYC 1F90 or SOCI 1F90; one Science context credit.

Year 2

COMM 2F50, 2P15, 2P20 and 2P21; one COMM credit or one of FILM 2F90, LING 1F94, PSYC 2F20, 2F30, VISA 1F90; one and one-half elective credits.

Year 3

COMM 3P16, 3P17, 3P20 and 3P21; two COMM credits; one elective credit.

Year 4

Two credits from COMM 4F80, 4F99, 4P30, 4P31, 4P50, 4P51, 4V50-4V59; two COMM credits numbered 3(alpha)90 or above; one elective credit.

Pass Program

Satisfactory completion of the first three years of the honours program in any stream entitles a student to apply for a pass degree.

Combined Major Program

Students may take a combined major in Communications Studies and in a second discipline. For requirements in the other discipline, the student should consult the relevant department. Note that not all departments provide a combined major option.

Honours

COMM 1F90, 2F50, 2P20, 2P21, 3P16, 3P20 and 3P21; one-half credit from COMM 3P17, 3P65, 3P93; one credit from COMM 4P17, 4P23, 4P30, 4P31, 4P50, 4P51; two credits from COMM 3P17, 3P65, 3P93, 4F80, 4F99, 4P17, 4P23, 4P30, 4P31, 4P32, 4P50, 4P51.

Pass

COMM 1F90, 2F50, 2P20, 2P21, 3P16, 3P20 and 3P21; one-half credit from COMM 2P90, 3P17, 3P65, 3P93.

Certificate and Concentration in Writing

With the exception of students in the Business Communications Co-op stream, it is possible for Communications Studies majors to earn either a certificate or a concentration in Writing. For details see the calendar entry for the Department of English Language and Literature.

Prerequisites and Restrictions

Students must check to ensure that prerequisites are met. Students may be deregistered, at the request of the instructor, from any course for which prerequisites and/or restrictions have not been met.

Description of Courses

Note that not all courses are offered in every session. Refer to applicable term timetable for details.

COMM 1F90

Introduction to Communications

Approaches and issues in communications from both humanities and social science perspectives. Topics include the cultural use of symbols and signs, qualitative and quantitative mass media analysis, critical analysis of texts, the cultural character of the Canadian media and the impact of the media and media institutions upon society.

Lectures, seminar, 3 hours per week.

COMM 2F50

Communications Theory

Systems theory, semiotic and cognitive approaches to message production and reception, symbolic interactionism and other constructivist approaches, interpersonal and group communication theories, communications analysis and theories of the mass media and their functions in society.

Lectures, seminar, 3 hours per week.

Prerequisite: one of COMM 1F90, FILM 1F94, PSYC 1F90, SOCI 1F90 or permission of the instructor.

COMM 2F54

Documentary Film

(also offered as FILM 2F54 and SOCI 2F54)

The history, theory, aesthetics and cultural implications of documentary film and other media.

Lectures, seminar, 3 hours per week; plus weekly film lab.

Prerequisite: one of COMM 1F90, FILM 1F94, SOCI 1F90 or permission of the instructor.

COMM 2F92

Popular Narrative

(also offered as ENGL 2F92 and PCUL 2F92)

Archetypal and mythic dimensions of popular literary genres such as the detective novel, Gothic fiction, science fiction, the romance novel; comparison and contrast with other media.

Lectures, seminar, 3 hours per week.

Prerequisite: one of COMM 1F90, one ENGL credit numbered 1(alpha)90 to 1(alpha)99, FILM 1F94 or permission of the instructor.

COMM 2F95

Introduction to Digital Imaging

(also offered as VISA 2F95)

Digital image creation and processing from basic concepts to applications in print and screen-ready production including the use of vector-based draw, bit-map paint and page layout software. Projects emphasising resolution, scanning, file formats, colour dimensions and calibration, use of the digital camera, colour-print technologies and web page construction.

Communications Studies

Readings on the theoretical implications of digital imagery and Internet communications to complement project-based assignments.

Lectures, lab, 4 hours per week.

Restriction: open to COMM (single or combined) and VISA (single or combined) majors until date specified in BIRT guide. Prerequisite: COMM 1F90 or VISA 1P97 (1F96) or permission of the instructor.

Note: enrolment limited to 15 students. Material fee required. Students may need additional materials which they must supply.

COMM 2F97

Canadian Cinema

(also offered as FILM 2F97)

A critical and historical study of the Canadian cinema and selected directors.

Lectures, seminar, 3 hours per week; plus weekly film lab.

Prerequisite: one of COMM 1F90, FILM 1F94, DRAM 2F97 or permission of the instructor.

COMM 2F98

Canadian Public Administration

(also offered as LABR 2F98 and POLI 2F98)

Political, legal and managerial dimensions of public administration. Topics include the structure and management of public organizations; government reform; political-bureaucratic relations; pressure groups; personnel and budgetary processes; the policy process; ethics and accountability.

Lectures, seminar, 3 hours per week.

Prerequisite: one of COMM 1F90, LABR 1P91 and 1P92, one POLI credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

Students completing this course will forfeit credit in COMM(POLI) 3F51 and POLI 3P50.

COMM 2M90-2M99

Special Studies in Communications

Topics selected on the basis of specific areas of instructional expertise and student interest.

COMM 2P15

Communications Research Methods

Introduction to qualitative and quantitative methods for communications research.

Lectures, lab, 3 hours per week.

Prerequisite: COMM 1F90 or permission of the instructor.

Students completing this course will forfeit credit in COMM (SOCI) 2F10.

COMM 2P20

Introduction to Popular Culture

(also offered as FILM 2P20 and PCUL 2P20)

Historical, theoretical and critical approaches to various forms of popular culture (e.g., film, music, television, literature, periodicals and advertising).

Lectures, seminar, lab, 4 hours per week.

Prerequisite: one of COMM 1F90, CANA 1F91, FILM 1F94 or permission of the instructor.

COMM 2P21

Canadian Popular Culture

(also offered as FILM 2P21 and PCUL 2P21)

A survey of the media in Canada. Studies in the popular arts, with special reference to the ways in which institutions (e.g., CBC, NFB) and selected artists identify and express a Canadian cultural imagination.

Lectures, seminar, lab, 4 hours per week.

Prerequisite: COMM 2P20 or permission of the instructor.

COMM 2P22

Media and Sport

(also offered as PCUL 2P22 and SPMA 2P22)

The representation of sport in film, television and advertising. Topics may include issues of race, gender, business, politics and ideology in both professional and non-professional sports.

Lectures, seminar, 3 hours per week.

Restriction: open to COMM (single or combined) PCUL and SPMA majors with a minimum of 5.0 overall credits or permission of the instructor.

COMM 2P55

Interpersonal Communication

(also offered as SOCI 2P55)

Perspectives on human communication including both verbal and non-verbal communication.

Lectures, seminar, 3 hours per week.

Prerequisite: COMM 1F90 or SOCI 1F90 or permission of the instructor.

Students completing this course will forfeit credit in RECL 3P14.

COMM 2P70

Politics and Popular Music

(also offered as MUSI 2P70, PCUL 2P70 and POLI 2P70)

The political context and content of popular music. Topics may include theoretical perspectives on popular culture/popular music; the relationship of popular music to public policy, race and gender, popular movements and political identity; political economy of the music business.

Lectures, seminar, 3 hours per week.

Students completing this course will forfeit credit in COMM(POLI) 2V70.

COMM 2P90

Computer-Mediated Communication

The nature of computer-mediated communication (CMC) and its role in social, educational and interpersonal contexts. A practicum component will introduce the technology and the methodologies which are essential to explore the potential of CMC.

Lectures, seminar, lab, 4 hours per week.

Prerequisite: COMM 1F90 or permission of the instructor.

COMM 2P91

Hypertext: Reading and Writing in New Spaces

Theory, philosophy and politics of Hypertext as a communicative mode. Topics include critical theory in a Hypertext context, changing perceptions of reader narrative, new forms of Hypertext fiction and Hypertext compared with other electronic textuality.

Lectures, seminar, lab, 4 hours per week.

Prerequisite: COMM 2P90 or permission of the instructor.

COMM 2P94

Popular Cinema

(also offered as FILM 2P94 and PCUL 2P94)

Popular cinema as art and institution with emphasis on film genres and cultural contexts.

Lectures, seminar, lab, 4 hours per week.

Prerequisite: FILM 1F94.

Students completing this course will forfeit credit in FILM 3P94.

COMM 3F10

Psychology of Television

(also offered as PSYC 3F10)

Psychological aspects of the visual, auditory and content dimensions of television viewing. Evaluation of several psychological and communication theories.

Lectures, lab, 3 hours per week.

Restriction: open to COMM (single or combined) and PSYC (single or combined) majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits.

Prerequisite: COMM 1F90 or PSYC 1F90 or permission of the instructor.

COMM 3F28

Basic Production: Video

(also offered as FILM 3F28)

Introduction to the theory and practice of video techniques: critique of video and production work.

Workshops, seminar, 3 hours per week; additional production time as required.

Restriction: permission of the department.

Prerequisite: two FILM credits and permission of the instructor.

Note: enrolment limited to 15 students. Materials fee required.

COMM 3F70

Film Studies: Experiential Learning

(also offered as FILM 3F70)

Internship in professional film, video or media production, distribution or exhibition. Cultural and economic context of media organizations, technology systems and government funding agencies.

Tutorial, 3 hours per week; plus internship placement time.

Restriction: open to COMM (Media and Culture stream) and FILM (single or combined) majors with a minimum of 10.0 overall credits, a minimum 70 percent major average, a minimum 60 percent non-major average and permission of the Undergraduate Program Adviser.

Note: enrolment limited to a maximum of 15 students. An administration fee required.

COMM 3F71

Internship in Communications Industries

Internships with an emphasis on the economic and social contexts of media organizations, businesses and technology systems.

Tutorial, 3 hours per week; plus internship placement time.

Restriction: open to COMM (Business Communications, Communications Policy and Information Technology stream) majors with a minimum of 10.0 overall credits, a minimum 70 percent major average, a minimum 60 percent non-major average and permission of the Undergraduate Program Adviser. Note: enrolment limited to a maximum of 15 students.

COMM 3F97

Screened Women

(also offered as FILM 3F97 and WISE 3F97)

Women's representation as an aesthetic and cultural subject, from classical Hollywood cinema to contemporary women's cinema, in the context of feminist film theories and including other popular media (e.g., music videos, television).

Lectures, seminar, 3 hours per week; plus weekly film lab.

Prerequisite: one of COMM 2P20 and 2P21, FILM 2F90, WISE 1F90 and WISE 2P91 or permission of the instructor.

COMM 3P01

Directed Reading

Tutorial combined with one or more research papers or projects in an area of Communication Studies of mutual interest to the student and instructor.

Restriction: permission of the Undergraduate Program Adviser.

Note: students are responsible for arranging their course with a faculty member in consultation with the Undergraduate Program Adviser and must submit a written proposal signed by the faculty member to the Undergraduate Program Adviser before registration. The reading may not be on the topic or with the faculty member of the student's COMM 4F99 thesis.

COMM 3P16

Mass Media

(also offered as PCUL 3P16 and SOCI 3P16)

Introduction to methods of media analysis. Comparison of theoretical and methodological approaches to mass media content, structures, institutions and audiences. Analysis of relations among media, culture and society with reference to Canadian examples.

Lectures, seminar, 3 hours per week.

Prerequisite: one of COMM 2F50, 2P21, SOCI 2F10 or permission of the instructor.

Students completing this course will forfeit credit in SOCI(COMM)2P23.

COMM 3P17

Politics and the Mass Media in Canada

(also offered as PCUL 3P17 and POLI 3P17)

The Canadian mass media and their relationship to the political process.

Lectures, seminar, 3 hours per week.

Prerequisite: COMM 2F50 or one POLI credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

Communications Studies

COMM 3P20

Television Studies

(also offered as FILM 3P20 and PCUL 3P20)

Historical, theoretical and critical approaches to television.

Lectures, seminar, lab, 4 hours per week.

Prerequisite: one of COMM 2P20 and 2P21, FILM 2F90 or permission of the instructor.

Students completing this course will forfeit credit in COMM 3F50.

COMM 3P21

Canadian Television

(also offered as FILM 3P21 and PCUL 3P21)

Historical theoretical and critical approaches to Canadian television.

Lectures, seminar, lab, 4 hours per week.

Prerequisite: COMM 3P20 or permission of the instructor.

Students completing this course will forfeit credit in COMM 3F50.

COMM 3P33

Psychology of Intergroup Behaviour

(also offered as PSYC 3P33)

Social psychological theories and research in the area of intergroup relations and intergroup conflict. Topics include realistic conflict theory, social identity theory, social exchange, relative deprivation, elite theory and research on intergroup perceptions and attitudes. Current issues/controversies and implications for the resolution of intergroup conflict.

Lectures, seminar, 3 hours per week.

Restriction: open to COMM (single or combined) and PSYC (single or combined) majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits or 3.0 PSYC credits above PSYC 1F90.

Prerequisite: PSYC 1F90.

COMM 3P62

Practicum in Business Communications

Practical managerial applications to business communications. Topics include integration of the communication mix and the design and implementation of a communications strategy.

Lectures, lab, 3 hours per week.

Restriction: open to COMM (Business Communications stream) majors with a minimum of 9.0 overall credits.

Students completing this course will forfeit credit in COMM 3F60.

COMM 3P63

Desktop Publishing and Design

(also offered as WRIT 3P63)

Practicum in desktop publishing, layout and design.

Lectures, lab, 3 hours per week.

Prerequisite: COMM 2F50 or one WRIT credit numbered 2(alpha)00 or above or permission of the instructor.

COMM 3P65

Organizational Communication

Critical examination of the theories and practices relating to the process of communication in various organizational contexts.

Lectures, seminar, 3 hours per week.

Prerequisite: COMM 2F50.

Students completing this course will forfeit credit in COMM 3P95.

COMM 3P74

Geography and Gender

(also offered as GEOG 3P74 and WISE 3P74)

The work of feminist geographers. The relationship between gender and space with respect to the organization of the city, architecture of the home, design of the shopping mall, the media, fear, homelessness, gentrification and employment.

Lectures, seminar, 4 hours per week.

Prerequisite: one of COMM 2P20 and 2P21, GEOG 2P02, 2P03, 2P06, WISE 2F90, 2P91 or permission of the instructor.

COMM 3P80

Psychology of Interpersonal Behaviour

(also offered as PSYC 3P80)

The social psychology of interpersonal attraction and relationships, as studied through experimental, correlational and longitudinal designs. Reinforcement, exchange, attributional, equity and balance models. Levels of relationships. Aspects of the maintenance and dissolution of relationships and of interpersonal psycho pathology.

Lectures, seminar, 3 hours per week.

Restriction: open to COMM (single or combined) and PSYC (single or combined) majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits or 3.0 PSYC credits above PSYC 1F90.

Prerequisite: PSYC 1F90.

Note: PSYC 2F30 recommended.

COMM 3P88

Language and Meaning

(also offered as PSYC 3P88)

Psychological aspects of the meaning of words and sentences, including word families, mental lexicon, reference and attribution, categorizing experience, drawing distinctions and semantic relations within sentences.

Lectures, lab, 3 hours per week.

Restriction: open to COMM (single or combined) and PSYC (single or combined) majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits or 3.0 PSYC credits above PSYC 1F90.

Prerequisite: PSYC 1F90.

Note: PSYC 2F30 recommended.

COMM 3P90

Advanced Topics in Computer-Mediated Communication

Explorations of topics such as virtual communities, cyber-identity/identities and cyber-spirituality.

Lectures, lab, seminar, 4 hours per week.

Prerequisite: COMM 2P90 or permission of the instructor.

COMM 3P92

Technology and Culture

(also offered as FILM 3P92 and PCUL 3P92)

Studies in the effects of technological change on cultural forms and the representations of technology in different media.

Lectures, lab, seminar, 4 hours per week

Prerequisite: COMM 2P20 or 2P21 or permission of the instructor.

COMM 3P93

Media and Minorities

(also offered as PCUL 3P93 and SOCI 3P93)

Relations between mass media and minority groups in society including dominant representations and stereotypes of cultural, racial and sexual minorities and minority group access to alternative forms of media production.

Lectures, seminar, 3 hours per week; plus weekly lab.

Prerequisite: one of COMM 2F50, COMM 2P21, SOCI 2F10 or permission of the instructor.

COMM 3P96

Issues in Popular Culture

(also offered as FILM 3P96 and PCUL 3P96)

Specialized studies in different media; or the role of different media in specific, social, historical or theoretical contexts.

Lectures, seminar, 3 hours per week, plus weekly lab.

Prerequisite: COMM 2P20 and 2P21 or FILM 2F90 or permission of the instructor.

COMM 3Q99

Media: Fantasy and Reality

(also offered as PSYC 3Q99)

Media images and reality, the role of absorption as well as other personality and cognitive aspects of the experience of reality vs. fantasy, virtual reality, computer effects and images.

Lectures, lab, 3 hours per week.

Restriction: open to COMM (single or combined) and PSYC (single or combined) majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits or 3.0 PSYC credits above PSYC 1F90.

Prerequisite: COMM 1F90 or PSYC 1F90 or permission of the instructor.

COMM 4F80

Directed Reading

Directed individual or group reading in an area of communications studies.

Restriction: permission of the Undergraduate Program Adviser.

Note: students are responsible for arranging their course with a faculty member in consultation with the Undergraduate

Program Adviser and must submit a written proposal signed by the faculty member to the Undergraduate Program Adviser before registration. The reading may not be on the topic or with the faculty member of the student's COMM 4F99 thesis.

COMM 4F99

Honours Thesis

A thesis to be based on individual study and research carried out under the supervision of a faculty adviser.

Restriction: open to COMM (single or combined) majors with a minimum of 14.0 overall credits, a minimum 70 percent major average, a minimum 60 percent non-major average, approval to year 4 (honours) and permission of the Undergraduate Program Adviser.

Note: to register in the honours thesis, the student must consult the Undergraduate Program Adviser about topics, department regulations and the selection of an adviser.

COMM 4P17

Canadian Cultural and Communications Policy

(also offered as PCUL 4P17)

Historical perspectives on the development of government policies affecting the arts, cultural industries, public and private broadcasting in Canada.

Lectures, seminar, 3 hours per week.

Restriction: open to COMM (single or combined) majors and PCUL (single or combined) majors with approval to year 4 (honours) or permission of the instructor.

Students completing this course will forfeit credit in CANA 4P17.

COMM 4P22

Technology, Change and Curriculum

The impact of technology and the information age on society and schools and the need to reflect resulting changes in school curriculum.

Lectures, 3 hours per week.

Restriction: open to COMM (Information Technology stream) majors with approval to year 4 (honours) and permission of the Undergraduate Program Adviser.

Note: enrolment limited.

COMM 4P23

Research on Popular Culture

(also offered as PCUL 4P23 and SOCI 4P23)

Advanced research seminar on the relations between mass media and popular culture. Topics vary with the interests of instructor and students.

Seminar, 3 hours per week.

Restriction: open to COMM (single or combined), PCUL (single or combined) and SOCI (single or combined) majors with approval to year 4 (honours) or permission of the instructor.

Prerequisite: COMM 2P20 or 3P16 (2P23) or permission of the instructor.

Communications Studies

COMM 4P30

Theories of Mass Culture

(also offered as FILM 4P30 and PCUL 4P30)

Studies in cultural theory and its application to mass media texts, with special reference to the work of the Frankfurt School, French Structuralism and British Cultural Studies.

Lectures, lab, seminar, 4 hours per week.

Restriction: open to COMM (single or combined), FILM (single or combined) or PCUL (single or combined) majors with approval to year 4 (honours) or permission of the instructor.

Students completing this course will forfeit credit in COMM (FILM/PCUL) 4F30.

COMM 4P31

Theories of the Visible

(also offered as FILM 4P31 and PCUL 4P31)

Central 20th-century developments in the theories of visibility and their relevance to the field of media studies.

Lectures, lab, seminar, 4 hours per week.

Restriction: open to COMM (single or combined), FILM (single or combined) and PCUL (single or combined) with approval to year 4 (honours) or permission of the instructor.

Students completing this course will forfeit credit in COMM (FILM/PCUL) 4F30.

COMM 4P32

Comparative Mass Media

(also offered as POLI 4P32)

Selected problems concerning the mass media and the political process in Canada and other countries.

Seminar, 3 hours per week.

Restriction: open to COMM (single or combined) and POLS (POLI) (single or combined) majors with a minimum of 14.0 overall credits and either a minimum major average of 70 percent and a minimum non-major average of 60 percent or approval to year 4 (honours).

Prerequisite: COMM 3P17 or POLI 2F30 or permission of the instructor.

COMM 4P50

Ethnography of Communication

Anthropological approaches to cultural variations in communications, particularly verbal communication. The purposes to which speech is put and the way it is organized for these purposes in different cultural contexts.

Lectures, seminar, 3 hours per week.

Restriction: open to COMM (single or combined) majors with approval to year 4 (honours) or permission of the instructor.

COMM 4P51

Language and Power

The role of language in the creation and maintenance of ideology and power structures. Topics include political rhetoric, religious discourse, language in the professions (e.g., law, medicine).

Lectures, seminar, 3 hours per week.

Restriction: open to COMM (single or combined) majors with approval to year 4 (honours) or permission of the instructor.

COMM 4P60

Directed Project in Information Technology

Supervised information technology, related project through placement in a publicly or privately funded organization.

Restriction: open to COMM (Information Technology stream) majors with approval to year 4 (honours) and permission of the Undergraduate Program Adviser.

Note: enrolment limited.

COMM 4V50-4V59

Research in Communications Studies

Theory and methodology in social science-based approaches to communications studies.

Seminar, 3 hours per week.

Restriction: open to COMM (single or combined) majors with approval to year 4 (honours) or permission of the instructor.

COMM 4V55

2000-2001: Research in Organizational Communication

Advanced topics in organizational communications research, methodology and theory.

Prerequisite: COMM 3P65 or permission of the instructor.

NON-CREDIT

COMM 0N01

Co-op Work Placement I

First co-op work placement (4 months) with an approved employer.

Restriction: open to COMM Co-op students.

COMM 0N02

Co-op Work Placement II

Second co-op work placement (4 months) with an approved employer.

Restriction: open to COMM Co-op students.

COMM 0N03

Co-op Work Placement III

Third co-op work placement (4 months) with an approved employer.

Restriction: open to COMM Co-op students.

Community Health Sciences

Chair
John Hay

Associate Professor
John Hay

Assistant Professors
Anthony F. Bogaert, John Cairney, Brent E. Faught, Kelli-an G. Lawrance, Andréa Toepell, Evangelia L. Tsiani

Lecturers
Melanie MacNeil

Nursing Clinical Administrator
TBA

General Information

Administrative Assistant, extension 4228
Physical Education 290
<http://arnie.pec.brocku.ca/~health/CHSC.html>

The Department of Community Health Sciences offers four-year programs of study leading to a BA honours in Community Health both a BA honours in Workplace Health, and a Workplace Health Co-op option, a BSc in Health Sciences, a BSc with a Major in Health Sciences, a BA pass degree and a BSc in Nursing degree completion program.

The BA in Community Health program focuses on community health and wellness with an emphasis on health promotion, health assessment, program development and evaluation.

The BSc in Health Sciences prepares students for careers in health professions with a bio-science perspective. This pre health professional degree program allows students to meet the requirements for postgraduate degree programs.

The BA in Workplace Health program is designed for students with an interest in working in both private and public corporations as part of workplace health and/or wellness initiatives. Courses offered by the Faculty of Applied Health Sciences and the Faculty of Business are combined to provide a strong background in the understanding of health, management, and economics.

Admission to the Workplace Health non Co-op program is based on a minimum 75 percent OAC average including one OAC biology, one OAC English and one OAC Mathematics.

The BA in Workplace Health Co-op program combines academic and work terms over a four year period. In addition to the current fees for courses in academic study terms, students in the Co-op program are assessed an annual administrative fee (see the Schedule of Fees).

As this is a limited enrolment program, admission is on the basis of grades, a review of personal résumés and completion of the Workplace Health Co-op application form. The normal entrance requirement is a minimum 80 percent average on six OACs including one OAC Biology, one OAC English and one OAC Mathematics. An interview may be required. Students must maintain a minimum overall average of 75 percent in order to continue in the Co-op program.

The BSc in Nursing is designed for Registered Nurses graduates of a three year nursing program, offered through Colleges of Applied Arts and Technology, wishing to obtain a BSc N. Admission consideration requires successful completion of a three year diploma in Nursing (or equivalent) with a minimum 70% average, a license practice as an R.N., and a good standing with the College of Nurses in Ontario. The program requires successful completion of eight Brock credits taken on a full-time basis over twelve months or part-time basis.

In all degrees a core of Community Health Sciences courses are supplemented by a broad choice of electives. Students are advised to select appropriate elective courses to prepare them to meet their academic and career goals.

Program Notes

1. To proceed to year 2, students must achieve a minimum grade of 60 percent in CHSC 1F90, successful completion of COSC 1P90 or 1P98 and have completed a declaration to major.
2. To proceed to year 4 (honours) BA Community Health students must complete an *Application for Year 4 Studies* available from the Office of the Registrar.
3. The following courses are not available for science credit in the BSc program: ASTR 1F00, BIOL 1F25, ERSC 1F90, PHYS 1F20, SCIE 1F30, 3P90.
4. At least one credit must be taken outside the Department of Community Health Sciences.
5. In all 20 credit degree programs, at least 12 credits must be numbered 2(alpha)00 or above, six of which must be numbered 2(alpha)90 or above and of these, three must be numbered 3(alpha)90 or above. In all 15 credit degree programs, at least seven credits must be numbered 2(alpha)00 or above, three of which must be numbered 2(alpha)90 or above.

Community Health Sciences

Bachelor of Arts Honours Programs

Community Health

Year 1

CHSC 1F90; COSC 1P90 or 1P98; one Humanities context credit and one Science context credit; one and one-half elective credits.

Year 2

CHSC 2P07; two credits from CHSC 2P21, 2P40, 2P49, 2P50, 2P51, 2P60, 2P91, 2P92, 2P93, 2P99; two and one-half elective credits.

Year 3

CHSC 3F20 and 3P50; CHSC 3P07 or 3P17; one-half credit from CHSC 3P07, 3P17, 3P40, 3P59, 3P80, 3P91, 3P92, 3P96, 3P99, 3V50 - 3V99; two and one-half elective credits (see program notes 2 and 4).

Year 4

CHSC 4P50 and 4P51; one credit from CHSC courses numbered 3(alpha)90 or above, PSYC 3P95, 4F50, 4P45; three elective credits.

BA Workplace Health (honours only)

Year 1

CHSC 1F90; BIOL 1F90; ECON 1P91 and 1P92; MGMT 1P91 and 1P92; one Humanities context credit.

Year 2

CHSC 2P09, 2P49, 2P91 and 2P99; ECON 2P15; ENTR 2P51; MKTG 2P51; OBHR 2P91; RECL 2P10; one-half elective credit.

Year 3

CHSC 3P07, 3P23, 3P40 and 3P50; ECON 2P94; OBHR 3P42; RECL 3P04, 3P10 and 3P30; one-half elective credit.

Year 4

CHSC 3P93, 3P99, 4P50 and 4P51; OBHR 3P97 and 4P69; two elective credits.

BA Workplace Health Co-op (honours only)

Year 1

CHSC 1F90; BIOL 1F90; ECON 1P91 and 1P92; MGMT 1P91 and 1P92; one Humanities context credit.

Year 2

CHSC 0N01, 2P09, 2P49, 2P91 and 2P99; ECON 2P15; ENTR

2P51; MKTG 2P51; OBHR 2P91; RECL 2P10; one-half elective credit.

Year 3

CHSC 0N02, 3P07, 3P23, 3P40 and 3P50; ECON 2P94; OBHR 3P42; RECL 3P04, 3P10 and 3P30; one-half elective credit.

Year 4

CHSC 0N03, 3P93, 3P99, 4P50 and 4P51; OBHR 3P97 and 4P69; two elective credits.

Pass Program

Satisfactory completion of the first three years of the honours program entitles a student to apply for a pass degree.

Bachelor of Science in Health Sciences

The requirement for graduation with a BSc (honours) is a minimum 70 percent major average and a minimum 60 percent non-major average. The requirement for graduation with a BSc with a Major in Health Sciences is a minimum 60 percent major average and a minimum overall average of 60 percent.

Year 1

CHSC 1F90; BIOL 1F90; MATH 1P97; COSC 1P90 or 1P98; CHEM 1P80 and 1P81; one Humanities context credit.

Year 2

CHSC 2P09, 2P91, 2P92 and 2P93; BIOL 2P97; MATH 1P98; one Science elective credit numbered 2(alpha)00-2(alpha)99; one credit from BIOL 2F01, 2P98, 2P92, CHEM 2P20, 2P21, ERSC 1F95, PHYS 1F25, 1F90, PHYS 2P01 (see program note 3).

Year 3

CHSC 2P99, 3P07 or 3P17 and 3P99; two credits from BCHM 3P01, BIOL 3P28, CHEM 3P20, 3P21, ENVS 3P01, PHYS 2P20, 2P50 or from BIOL 2F01, 2P98, 2P92, CHEM 2P20, 2P21, ERSC 1F95, PHYS 1F25, 1F90, 2P01, (not taken in year 2); one CHSC elective credit; one-half Science elective credit.

Year 4

CHSC 4P50 and 4P51; one and one-half credit from CHSC courses numbered 3(alpha)90 or above; one and one-half credits from Science courses numbered 2(alpha)90 or above; one elective credit (see program note 3).

Bachelor of Science in Nursing

NUSC 4F90 must be completed during one of the following terms:

Fall Term: CHSC 2P09, 2P21, 2P50 and 2P94; NUSC 4P40.

Winter Term: CHSC 3P19 and 3P97; NUSC 3P10, 3P20 and 4P30.

Spring Term: CHSC 2P91; NUSC 4P70.

Summer Term: NUSC 4P20 and 4P80.

Combined Major Program

Community Health and Child and Youth Studies

The department of Community Health Sciences in co-operation with the department of Child and Youth Studies offers a combined major program focusing on Child Health. Prospective students must gain admission to Child and Youth Studies prior to applying to the combined program.

Year 1
CHSC 1F90; CHYS 1F90; PSYC 1F90 or SOCI 1F90; one Humanities context credit; one Science context credit.

Year 2
CHSC 2P50, 2P91, 2P09; CHYS 2F10, 2P35, 2P38; MATH 1F92 or PSYC 2F23; one-half elective credit.

Year 3
CHSC 3P50 and 3P80; CHYS 3P10 and 3P15; one-half credit from CHYS 3P20, 3P23, 3P35, 3P38, 3P90, 3P91, 3P92, 3P94, 3P96, 3Q93, 3Q94; one-half credit from CHYS 3P11, 3P25, 3P65; one credit from CHSC 2P99, 3P30, 3P31, 3P33, 3P92, 3P96, 3P99, PSYC 2P91; one elective credit.

Year 4
CHSC 4P80; one credit from CHSC 4P30, 4P31, 4P50, 4P51; CHYS 4F97 and one-half elective credit or CHYS 4F99 and 4P99; one-half credit from CHYS 4P35, 4P38, 4P65; one-half credit from CHYS 3P90, 3P91, 3P92, 3P94, 3P96, 3P97, 3P98, 3P99, 3Q93, 3Q94, 3V90-3V91, 3V92-3V93, 4P31, 4P32; one elective credit.

Prerequisites and Restrictions

Students must check to ensure that prerequisites are met. Students may be deregistered, at the request of the instructor, from any course for which prerequisites and/or restrictions have not been met.

Description of Courses

Note that not all courses are offered in every session. Refer to the applicable term timetable for details.

CHSC 1F90

Introduction to Community Health Sciences

Issues and controversies in the area of health. Aspects of health status, determinants of health and personal health.

Lectures, seminar, 3 hours per week.

Students completing this course will forfeit credit in HLST 1F90.

CHSC 2P09

Introduction to Human Physiology

(also offered as PHED 2P09)

Molecular, cellular, tissue and organ physiology. Topics include nerve and muscle tissue, nervous system, endocrine regulation, metabolism and reproductive physiology.

Lectures, 3 hours per week.

Restriction: open to CHSC (HLST) (single or combined), HLSC, NUSC, PHED and WKHL students until date specified in BIRT guide. Students must have a minimum of 4.0 overall credits.

Note: this course provides foundation for students seeking Cardiac Rehabilitation Certification.

Students completing this course will forfeit credit in HLST 2P09.

CHSC 2P21

The Health of Canadian Society

Health status of Canadians and the history and structure of the health care system.

Lectures, seminar, 3 hours per week.

Restriction: open to CHSC (HLST) (single or combined) HLSC and NUSC majors until date specified in BIRT guide.

Prerequisite: CHSC (HLST) 1F90.

Students completing this course will forfeit credit in HLST 2P21 and SPMA 2P21.

CHSC 2P40

Gerontology: Approaches to Well-being

(also offered as SPMA 2P40)

Aspects of aging; issues relating to health, in terms of both lifestyle and health services.

Lectures, seminar, 3 hours per week.

Community Health Sciences

Restriction: open to CHSC (HLST) (single or combined), HLSC and SPMA majors until date specified in BIRT guide.
Prerequisite: CHSC (HLST) 1F90.
Students completing this course will forfeit credit in HLST 2P40.

CHSC 2P49

Health and Behaviour

Topics include major theories, current issues and applications surrounding the study of health behaviour.

Lectures, seminar, 3 hours per week.

Prerequisite: CHSC (HLST) 1F90.

Students completing this course will forfeit credit in HLST 2P49.

CHSC 2P50

Introduction to Human Sexuality

Research methodology, theoretical and biological foundations.

Lectures, seminar, 3 hours per week.

Restriction: open to CHSC (HLST) (single or combined), HLSC and NUSC majors until date specified in BIRT guide. After that date open to WISE majors until date specified in BIRT guide.

Prerequisite: CHSC (HLST) 1F90.

Students completing this course will forfeit credit in HLST 2F50 and 2P50.

CHSC 2P51

Advanced Human Sexuality

Topics include sexual attraction and love, sexual orientation, pornography and prostitution, sexual assault, sexual disorders, STDs and sex therapy.

Lecture, 3 hours per week.

Restriction: open to CHSC (HLST) (single or combined) and HLSC majors until date specified in BIRT guide. Students must have a minimum of 4.0 overall credits.

Prerequisite: CHSC (HLST) 1F90 and 2P50.

Students completing this course will forfeit credit in HLST 2F50 and 2P50.

CHSC 2P60

Medical History

The rise of the medical professions through history. The development of the role of health care professionals in society and the formation of public policy.

Lectures, seminar, 3 hours per week.

Restriction: open to CHSC (HLST) (single or combined) and HLSC majors.

Prerequisite: CHSC (HLST) 1F90.

CHSC 2P91

Nutrition

(also offered as SPMA 2P91)

An introduction to nutrition with emphasis on diet for health maintenance.

Lectures, seminar, 3 hours per week.

Restriction: open to CHSC (HLST) (single or combined), HLSC, NUSC, SPMA and WKHL majors until date specified in BIRT guide.

Prerequisite: CHSC (HLST) 1F90.

Students completing this course will forfeit credit in HLST 2P91.

CHSC 2P93

Basic Anatomy

(also offered as SPMA 2P93)

An overview of the gross anatomy of the musculo-skeletal, neurological and cardio-respiratory systems.

Lectures, lab, 3 hours per week.

Restriction: open to CHSC (HLST) (single or combined), HLSC, RECL and SPMA majors until date specified in the BIRT guide.

Prerequisite: CHSC (HLST) 1F90 or PHED 1P90 (PHED 1P92 and 1P94).

Students completing this course will forfeit credit in HLST 2P93 and PHED 2P04.

CHSC 2P94

Functional Human Anatomy

(also offered as SPMA 2P94)

A clinical systems approach to explore the structures of the human body and their inter-relationships.

Lectures, 3 hours per week.

Restriction: open to CHSC (HLST) (single or combined), HLSC, NUSC and SPMA majors until date specified in BIRT guide.

Prerequisite: CHSC (HLST) 2P93 or PHED 2P04.

Students completing this course will forfeit credit in HLST 2P92 and SPMA 2P92.

CHSC 2P99

Clinical Health Assessments

Techniques of physiological evaluation and health assessment, their theoretical basis and clinical application.

Lectures, lab, 4 hours per week.

Restriction: open to CHSC (HLST) (single or combined) and HLSC and WKHL majors until date specified in BIRT guide.

Prerequisites: CHSC (HLST) 1F90 and 2P93.

Note: course may be used towards accreditation as certified fitness consultant (CFC).

Students completing this course will forfeit credit in HLST 2P99 and 3P54.

CHSC 2Q07

Introduction to Research Design and Evaluation

Principles and techniques for research. Issues concerning the construction, administration and evaluation of data collection as well as the processing and analysis of data.

Lectures, lab, 3 hours per week.

Restriction: open to CHSC (HLST) (single or combined) and HLSC majors.

Prerequisite: COSC 1P90 or 1P98 or permission of the instructor.

Students completing this course will forfeit credit in HLST 2P07, PHED 2P08, 2Q07, RECL 2P07, SPMA 2P07 and TOUR 2P07.

CHSC 3F20

Program Planning and Evaluation

Program development based on needs assessment and theoretical models, program implementation, process and outcome evaluation.

Lectures, seminar, 3 hours per week.

Restriction: open to CHSC (HLST) (single or combined) and HLSC majors with a minimum of 9.0 overall credits.

Prerequisite: CHSC (HLST) 2Q07 (2P07).

Students completing this course will forfeit credit in HLST 3F20 and SPMA 3F20.

CHSC 3P09

Introduction to Endocrinology

Physiological functions of hormones and mechanisms of hormonal action. Abnormalities of hormonal control leading to disease. Topics include pituitary, thyroid and adrenocortical hormones; pancreatic, ovarian and testicular hormones; parathyroid hormone and calcitonin.

Lectures, 3 hours per week.

Restriction: open to CHSC (HLST) (single or combined) and HLSC majors.

Prerequisite: CHSC (HLST) 2P09.

CHSC 3P19

Introduction to Pharmacology

Drug absorption and movement across body membranes; drug distribution, biotransformation and clearance. Pharmacokinetics; dose-response relationships; drug receptors, signal transduction and second messengers. Selectivity of drug action. Drug development and regulations.

Lectures, 3 hours per week.

Restriction: open to CHSC (HLST) (single or combined), HLSC and NUSC majors.

Prerequisite: CHSC (HLST) 2P09.

CHSC 3P21

Issues in Health Policy

Effects of Canadian health law and policy on individuals and society from birth to death. Topics include health care reform, genetics, reproductive technologies, assisted suicide, legal status of the fetus, biotechnology, regulation of health care providers, confidentiality of information and ethics in health research.

Lectures, seminar, 3 hours per week.

Restriction: open to CHSC (HLST) (single or combined) and HLSC majors.

Prerequisite: CHSC (HLST) 2P21.

CHSC 3P23

Therapeutic Benefits of Humour

(also offered as RECL 3P23)

Functions and dynamics of superiority, arousal and incongruity humour theories. Contributions of humour to well-being, tension relief, personal efficacy and competency and social facilitation.

Lectures, seminar, 3 hours per week.

Prerequisite: RECL 2P11.

Students completing this course will forfeit credit in HLST 3P23.

CHSC 3P30

Directed Readings

A program of study not available among the regular course offerings, designed in consultation with the faculty member directing the course.

Restriction: open to CHSC (HLST) (single or combined) and HLSC majors with a minimum of 9.0 overall credits and a minimum 75 percent major average.

Note: topics are to be chosen in consultation with a faculty member willing to supervise. Proposals must be approved by a faculty member prior to registration. Forms available from CHSC Website.

Students completing this course will forfeit credit in HLST 3P30.

CHSC 3P33

Internship in Community Health

Clinical/field experience within the many areas of Community Health.

Lectures, seminar, 3 hours per week.

Restriction: open to CHSC (HLST) (single or combined) and HLSC majors with a minimum of 9.0 overall credits and a minimum 75 percent major average.

Note: this is a limited enrolment course. Enrolment is dependent upon availability of faculty advisers. Arrangements must be made prior to registration. Internship forms can be obtained from CHSC Website.

Students completing this course will forfeit credit in HLST 3P33.

CHSC 3P40

Introduction to Health Issues in the Workplace

A multidisciplinary approach to issues in the development of a healthy workplace.

Lectures, seminar, 3 hours per week.

Prerequisite: CHSC (HLST) 1F90.

Students completing this course will forfeit credit in HLST 3P40.

CHSC 3P50

Health Promotion

Strategies and approaches to health promotion; the relationship between theory and practice, historical development and future directions.

Lectures, seminar, 3 hours per week.

Restriction: open to CHSC (HLST) (single or combined), HLSC and WKHL majors with a minimum 9.0 overall credits.

Prerequisite: CHSC (HLST) 2P07.

Students completing this course will forfeit credit in HLST 3P50.

CHSC 3P59

Gender and Health

A comparative analysis of men's and women's health from a global perspective.

Community Health Sciences

Lectures, seminar, 3 hours per week.

Restriction: open to CHSC (HLST) (single or combined) and HLSC majors until date specified in BIRT guide. Students must have a minimum 9.0 overall credits.

Prerequisite: CHSC (HLST) 1F90.

Students completing this course will forfeit credit in HLST 3P59.

CHSC 3P80

The Health of Children

Bio-psycho-social determinants of health during childhood. A wellness perspective will be emphasized.

Lectures, 3 hours per week.

Restriction: open to CHSC (HLST) (single or combined) and HLSC majors until date specified in BIRT guide.

Prerequisite: CHSC (HLST) 1F90.

Students completing this course will forfeit credit in HLST 3P80.

CHSC 3P91

Cardiac Rehabilitation

Mechanisms of heart disease and principles of cardiac rehabilitation. Practical experience in cardiac rehabilitation programming is a component of the course.

Lectures, lab, 4 hours per week.

Restriction: open to CHSC (HLST) (single or combined) and HLSC majors until date specified in BIRT guide. Students must have a minimum 9.0 overall credits.

Prerequisite: CHSC (HLST) 3P99.

Note: students gain valuable practical experience which may be used towards accreditation as a Cardiac Rehab Specialist. Students must have advanced CPR.

Students completing this course will forfeit credit in HLST 3P91.

CHSC 3P92

Electronic Curriculum

Introduction to electronic curriculum and development of health education units in multimedia environments.

Lectures, lab, 3 hours per week.

Restriction: open to CHSC (HLST) (single or combined) and HLSC majors until date specified in BIRT guide. Students must have a minimum 9.0 overall credits.

Prerequisites: CHSC (HLST) 1F90 and COSC 1P90 or 1P98. Co-requisite: CHSC (HLST) 3P50.

Students completing this course will forfeit credit in HLST 3P92.

CHSC 3P96

The Development of Healthy Communities

Exploration of social, economic and environmental factors and processes which influence community well-being.

Lectures, seminar, 3 hours per week.

Prerequisite: CHSC (HLST) 1F90.

Students completing this course will forfeit credit in HLST 3P96 and 3V96.

CHSC 3P97

Fundamentals of Infectious Diseases

An overview of medical microbiology. The etiology, prevention and control of infectious diseases in humans with emphasis on Canadian health.

Lectures, 3 hours per week.

Prerequisite: BIOL 1F90.

CHSC 3P99

Advanced Clinical Health Assessments

Advanced methods in exercise science, lifestyle counselling and exercise prescription with an emphasis on community and workplace applications.

Lectures, lab, 4 hours per week.

Prerequisites: CHSC (HLST) 1F90, 2P92 and 2P99 (3P54).

Note: may be used towards accreditation as a professional fitness and lifestyle consultant (PFLC).

Students completing this course will forfeit credit in HLST 3P55 and 3P99.

CHSC 3Q07

Quantitative Methods of Inquiry

(also offered PHED 3Q07, RECL 3Q07, SPMA 3Q07 and TOUR 3Q07)

Quantitative means of understanding, evaluating and interpreting statistical information.

Lectures, lab, 3 hours per week.

Prerequisite: CHSC (HLST) 2Q07 (2P07).

Students completing this course will forfeit credit in HLST 3P07, PHED 3P08, RECL 3P07, SPMA 3P07 and TOUR 3P07.

CHSC 3Q17

Qualitative Approaches to Inquiry

(also offered as PHED 3Q17, RECL 3Q17, SPMA 3Q17 and TOUR 3Q17)

Theories, approaches, designs, methods and procedures for conducting evaluative analyses.

Lectures, seminar, 3 hours per week.

Prerequisite: CHSC (HLST) 2Q07 (2P07).

Students completing this course will forfeit credit in HLST 3P17, PHED 3P18, RECL 3P17, SPMA 3P17 and TOUR 3P17.

CHSC 3V50 - 3V99

Special Topics in Health Studies

Courses in specialized areas within health and wellness.

Restriction: open to CHSC (HLST) and HLSC majors with a minimum of 9.0 overall credits.

Students completing this course will forfeit credit in HLST 3V50-3V99.

CHSC 3V93

2000-2001: Advanced Nutrition

Basic nutrition principles and issues in clinical nutrition. Nutrition assessments, computerized dietary analysis, sport supplements and ergogenic aids, lifestyle nutrition and disease prevention.

Restriction: open to CHSC (HLST) and HLSC majors until date specified in BIRT guide. Students must have a minimum 9.0 overall credits.

Prerequisite: CHSC (HLST) 2P91.

Students completing this course will forfeit credit in HLST 3V93.

CHSC 4F90

Thesis

Original research project culminating in a thesis carried out with a faculty adviser. Topics are to be chosen in consultation with faculty willing to supervise.

Seminar, 1 hour per week in alternate weeks.

Restriction: open to CHSC (HLST) (single or combined) and HLSC majors with a minimum of 13.5 overall credits and a minimum 80 percent major average.

Note: proposals must be submitted prior to May 30 and approved by a faculty member prior to registration.

Students completing this course will forfeit credit in HLST 4F52.

CHSC 4P30

Advanced Directed Readings

A topic of study not available among the regular course offerings, designed in consultation with the faculty member directing the course.

Restriction: open to CHSC (HLST) (single or combined) and HLSC majors with a minimum of 13.5 overall credits and a minimum 75 percent major average.

Note: proposals must be approved by a faculty member prior to registration. Forms available from CHSC Website.

Students completing this course will forfeit credit in HLST 4P30.

CHSC 4P50

Research Methods in Epidemiology

Epidemiological research methods and identification of risk factors.

Lectures, seminar, 3 hours per week.

Restriction: open to CHSC (HLST) (single or combined), HLSC and WKHL majors with a minimum of 13.5 overall credits.

Students completing this course will forfeit credit in HLST 4P50.

CHSC 4P51

Processes of Health and Wellness

The holistic nature of health and wellness; environmental and government roles; management and alternatives to traditional medicine. Concepts and applications of biophysical and psycho-social dimensions of health and wellness over the lifespan. Both traditional and alternative medical responses are examined.

Lectures, seminar, 3 hours per week.

Restriction: open to CHSC (HLST) (single or combined), HLSC and WKHL majors with a minimum of 13.5 overall credits.

Note: CHSC (HLST) 2P21 is recommended.

Students completing this course will forfeit credit in HLST 4P51.

CHSC 4P59

Sexual Health Education

The development of educational curriculum or educational materials in human sexuality. Controversial issues and aspects in sexual health education.

Lectures, seminar, 3 hours per week.

Restriction: approval to year 4 (honours).

Prerequisites: CHSC (HLST) 2P50 and 3P50.

CHSC 4P80

Pediatric Exercise Science

The roles of physical activity and exercise in the diagnosis, treatment and prognosis of children with chronic illness. Major children's diseases will be discussed from a holistic perspective.

Lectures, seminar, 3 hours per week.

Restriction: open to CHSC (HLST) (single or combined), HLSC majors until date specified in BIRT guide. Students must have a minimum of 13.5 overall credits.

Prerequisites: CHSC (HLST) 2P09 and 3P80.

Students completing this course will forfeit credit in HLST 4P80.

CHSC 4P92

Interactive Technologies in Health Promotion

The design and development of web-based interactive multimedia approaches to health promotion.

Lectures, 3 hours per week.

Restriction: open to CHSC (HLST) (single or combined) and HLSC majors with a minimum 13.5 overall credits and a 75 percent major average.

Prerequisite: CHSC (HLST) 3F20, 3P50 and 3P92.

CHSC 4P99

Clinical Epidemiology

Description and principles of clinical epidemiology. Decision-making strategies for implementing and evaluating clinical research.

Lectures, seminar, 3 hours per week.

Restriction: open to CHSC (HLST) (single or combined) and HLSC majors with approval to year 4 (honours).

Prerequisite: CHSC (HLST) 2Q07 (2P07).

Students completing this course will forfeit credit in HLST 4P99.

NON-CREDIT

CHSC 0N01

Co-op Work Placement I

First co-op work placement (4 months) with an approved employer.

Restriction: open to WKHL Co-op students.

Community Health Sciences

CHSC 0N02

Co-op Work Placement II

Second co-op work placement (4 months) with an approved employer.

Restriction: open to WKHL Co-op students.

CHSC 0N03

Co-op Work Placement III

Third co-op work placement (4 months) with an approved employer.

Restriction: open to WKHL Co-op students.

NURSING

NUSC 3P10

Theoretical Foundations of Nursing

Various nursing models and selected interdisciplinary theories exploring underlying foundations, principles and concepts as frameworks for practice. Development of critical thinking and analysis of nursing models.

Lecture, seminar, 3 hours per week.

Restriction: open to NUSC majors.

NUSC 3P20

Nursing Ethics

Critical concepts and systems which impact the health care system. Educational models, policy formation, decision-making and resources are examined. The social ethical and legal perspectives in social justice, professionalism, technology, human experimentation and choices regarding death.

Lectures, seminar, 3 hours per week.

Restriction: open to NUSC majors.

NUSC 4F90

Specialized Clinical Placement

Clinical placement providing the opportunity for the practice, application and integration of specialized nursing skills and theory in a variety of community-based health care settings.

100 hours of clinical experience.

Restriction: open to NUSC majors.

Note: clinical placements will be co-ordinated through the Nursing Clinical Administrator. Transportation to placement is a student's responsibility.

NUSC 4P20

Leadership in Nursing and Management I

Current issues in Nursing leadership. Topics include leadership strategies, empowerment, organizational paradigms, communicating visions and goals, stimulating change, facilitating coalitions, crisis management and conflict resolution.

Lectures, seminar, 3 hours per week.

Restriction: open to NUSC majors.

Note: student's previous nursing experiences provide an opportunity to explore various leadership/management styles.

NUSC 4P30

Advanced Adult Clinical Assessment

Documenting adult health history and performing a comprehensive physical examination. Emphasis on assessment issues for older adults.

Restriction: open to NUSC majors.

NUSC 4P40

Advanced Pediatric Clinical Assessment

Assessment at different developmental stages with emphasis on the adult and child examination and history taking. Documenting and performing comprehensive pediatric examination. *Lectures, seminar, 3 hours per week.*

Restriction: open to NUSC majors.

Note: special attention will be paid to neonatal assessments.

NUSC 4P70

Nursing Research

Current nursing research. A critical appraisal approach will be taken to determine the evidence base for practice. Clinical epidemiological principles will be developed. Application of clinical epidemiology principles to research in Nursing.

Lectures, seminar, 3 hours per week.

Restriction: open to NUSC majors.

NUSC 4P80

Leadership in Nursing and Management II

Current issues in nursing management including institutional management, community-based practice and case management.

Lectures, 3 hours per week.

Restriction: open to NUSC majors.

Computer Science

Chair

Jonathan Radue

Associate Professors

Jerzy Barchanski, David Hughes, Thomas Jenkyns, David McCarthy, Jonathan Radue, Brian Ross, Vladimir Wojcik

Assistant Professors

Sheridan Houghten, Jianna Zhang

Adjunct Professor

Jack Miller

Technical Assistant

David Bockus

Mentor

Rebecca Arntz

General Information

Mackenzie Chown, J314

Administrative Assistant, extension 3513

<http://www.cosc.brocku.ca/>

The Department of Computer Science offers three- and four-year programs of study leading to single or combined BSc (honours or pass), a single Computer Science Co-op option (honours) and combined BA (honours or pass) degrees. The honours program consists of two streams: software engineering and artificial intelligence. An Internship option is available in the honours program. There are also cross-disciplinary programs in Computing and Business (see separate calendar entry), Computing and Solid-state Device Technology (see separate calendar entry) and the Information Technology stream in the Department of Communications, Popular Culture and Film.

The Computer Science Co-op program combines academic and work terms over a four and one-half year period. Students spend two years in an academic setting studying the fundamentals of computer programming, algorithms, data-structures, database systems and object-oriented programming prior to their first work term. Successful completion of courses in the core areas of Computer Science provides the necessary academic background for the work experience. In addition to the current fees for courses in academic study terms, Co-op students are assessed an annual administration fee (see the Schedule of Fees).

Admission to the Co-op program is on the basis of marks and a review of personal résumés. As this is a limited enrolment program admission is subject to employer availability. Decisions will be made by the Computer Science Co-op Admission Committee. The normal requirement is a minimum 75

percent average on 6 OACs including one OAC Mathematics (with a minimum 75 percent grade) and one OAC English. An interview may be required. Prospective students with lower grades may be accepted. For additional information, prospective students should contact the department. Students will be required to maintain a minimum 70 percent major average and a minimum 60 percent minor average in order to continue in the Co-op program. If a student subsequently raises his/her major average to 70 percent, the student may be readmitted only if approved by the Computer Science Co-op Admissions Committee.

The Internship Option combines academic and work experience in a five-year program. It is available in Computer Science honours (single or combined), Computing and Business and Computing and Solid-state Device Technology programs. Students complete the normal four-year honours program and an 8-16 month work placement after second or third year.

Students enrolled in the program may apply for admission to the Internship Option during the Fall Term of year 1 or year 2 (depending on whether they plan a work term after year 2 or 3, respectively). As this is a limited enrolment program admission is subject to employer availability. Admission will be based on the achievement (as of January of the application year) and maintenance of a minimum 75 percent major average. Prior to the placement, the student must have completed at least 10, but preferably 15 credits, including COSC 1P12, 2P03, 2P32 and 2P91 and one or more of COSC 2P13, 2P50, 2P89. Admission decisions will be made by the Computer Science Internship Admissions Committee.

In order to complete the Internship placement, students will be required to submit an acceptable placement report which will be graded by the Department.

In addition to the usual fees for courses, a one-time administration fee will be levied during the work term (see the Schedule of Fees).

The requirements for graduation from the Computer Science program is a minimum 70 percent major average and a minimum 60 percent non-major average. The Computer Science Co-op program designation will be awarded to those students who have honours standing and have successfully completed a minimum of twelve months Co-op work experience.

Department Facilities

The University's academic computing facilities are all linked by a campus-wide fibre optic network. The department's computers form an integral part of this resource. Most computers on campus can be accessed from microcomputers in any of the laboratories. In particular, the department maintains two laboratories of Silicon Graphics O2 UNIX work stations (J327, J333) served by a 16 CPU Silicon Graphics Origin 2000 server. The department has two microcomputer laboratories: J301 and J310 containing Pentium PCs. Students also have access to scanners, a CD-ROM recorder, video cards, digitizers, robot

Computer Science

arms, a mobile robot, a robot vision system, transputers, computer animation (e.g., Alias/Wavefront, Maya, SoftImage) and multimedia equipment.

Computer Based Training

Modules covering a wide range of topics in computer use leading to Microsoft certification at a variety of levels are available.

Telephone Access

Brock's computing facilities and those of the department are accessible via telephone using a modem. Speeds up to 28.8 Kbps are supported for both remote terminal and SLIP/PPP access. A nominal fee is charged for this service. Students in residence may also obtain a direct network connection from their room. See the section titled "Academic Computing Information" at the beginning of this Calendar for more information.

Printer Fees

A printer fee may be charged for all courses which use departmental or User Services laboratories.

Service Courses

COSC 1P90, 1P93, 1P98 and 1P99 are intended for non-Computer Science majors who require an introduction to the use of computers. Students without previous computing experience are directed to COSC 1P90. COSC 1P98 is more appropriate for those with experience. COSC 1P93 is intended for students who require an introduction to programming. COSC 1P99 introduces the Internet and its resources and is open to all, but some previous computing experience is desirable. These courses may not be held for major credit by COSC (single or combined) majors, Computing and Business students or Computing and Solid-state Device Technology students.

Major Credits

In calculating the major average for a Computer Science major or co-major, all COSC courses (with the exception of the service courses COSC 1P90, 1P93, 1P98 and 1P99) and MATH 1P66, 1P67 and 3F65 (for single honours only) are included.

Secondary School Computer Programming Requirements

The normal entry to the Computer Science program is one grade 12 computer programming credit. Students without such a credit must complete COSC 1P02 prior to taking the normal entry course COSC 1P03. Prospective students should contact the department.

Mathematics in Computer Science

Mathematics is fundamental to the study of Computer Science. A minimum of one credit from MATH is required in each year

of the honours and pass degrees. In order to be more competitive in the workplace and if considering graduate studies, students are strongly encouraged to take as many MATH courses as possible.

Computer Hardware

Students interested in computer hardware are advised to elect PHYS 2P31, 2P92 and 3P92 within their Computer Science program. One of PHYS 1F20, 1F25 or 1P90 is a prerequisite for PHYS 2P31. Students may also wish to consider the Computing and Solid-state Device Technology program. (See separate calendar entry.)

Program Notes

1. Students without grade 12 computer programming credit must choose COSC 1P02 and 1P03 in year 1 and COSC 1P12 prior to year 3 (replacing one-half elective credit).
2. Students planning on graduate studies in Computer Science should substitute MATH 1P93 and 1P94 for MATH 1P97, should select MATH 4P19 and take additional MATH courses in consultation with the department.
3. Students should consider MGMT 1P91 and 1P92 as an elective in years 1, 2 or 3.
4. MATH 1P97 and 1P98 for Earth Sciences; MATH 1P93 and 1P94 for Chemistry.
5. PHYS 1F20 or 1F90 for Chemistry and Earth Sciences.
6. PHYS 2P20, 2P50 and 2P51 are prerequisites for year 3 PHYS courses.
7. One elective credit if the required course in year 1 in the other discipline is a Social Science or Humanities context credit for the combined degree with Social Science or Humanities, respectively.
8. Students may take MATH 1P93 and 1P94 in place of MATH 1P97 and 1P98 in year 1. MATH 1P98 would then be taken in year 2 in place of a one-half credit elective.
9. A student who does not achieve a 60 percent in a prerequisite course is strongly advised to upgrade the mark in the course before proceeding.
10. For students with a special interest in geographic information systems, the following courses are strongly recommended as GEOG and COSC elective credits: GEOG 3P04, 3P05, 3P07, COSC 3P98.
11. A student in the honours Computer Science program must select one of the two streams prior to registration for year 3.

Students should consider their desired stream when selecting elective courses in years 1 and 2.

12. In all 20 credit degree programs, at least 12 credits must be numbered 2(alpha)00 or above, six of which must be numbered 2(alpha)90 or above and of these, three must be numbered 3(alpha)90 or above. In all 15 credit degree programs, at least seven credits must be numbered 2(alpha)00 or above, three of which must be numbered 2(alpha)90 or above.

Honours Program

Software Engineering stream

This option does NOT lead to a professional engineering degree.

Year 1
COSC 1P03 and 1P12 (see program note 1); MATH 1P66 and 1P67; one Humanities context credit; one Science context credit; one elective credit.

Year 2
COSC 2P03, 2P13, 2P32, 2P50 and 2P91; MATH 1P12 and 1P97 (see program note 2); one Social Science context credit; one-half elective credit (see program note 1).

Year 3
COSC 2P92, 3F00, 3P01 and 3P04; one-half COSC credit; MATH 3F65; one elective credit (see program note 12).

Year 4
COSC 4F90, 4P13 and 4P14; one COSC credit (see program note 12); one credit from MATH 1P98, 2P01, 2P20, 2P60, 4P19, 4P20; one elective credit.

Artificial Intelligence stream

Year 1
COSC 1P03 and 1P12 (see program note 1); MATH 1P66 and 1P67; one Humanities context credit; one Science context credit; one elective credit.

Year 2
COSC 2P03, 2P13, 2P32, 2P50 and 2P91; MATH 1P12 and 1P97 (see program note 2); one Social Science context credit; one-half elective credit (see program note 1).

Year 3
COSC 2P93, 3F00, 3P01 and 3P71; one-half COSC credit (COSC 3P04 recommended); MATH 3F65; one elective credit.

Year 4
COSC 4F90, 4P78 and 4P79; one COSC credit (see program note 12); one credit from MATH 1P98, 2P01, 2P20, 2P60, 4P19, 4P20, 4P59; one elective credit.

Computer Science Co-op stream (honours only)

Students admitted to the Computer Science program must follow the program schedule as listed below. Failure to adhere may result in removal from the program.

Year 1
COSC 1P03 and 1P12 (see program note 1); MATH 1P66 and 1P67; one Humanities context credit; one Science context credit; one elective credit.

Year 2
COSC 2P03, 2P12, 2P32, 2P50 and 2P91; MATH 1P12 and 1P97; one Social Science context credit; one-half elective credit.

Summer Term: COSC 0N01.

Year 3
COSC 2P92, 3F00, 3P01 and 3P04; MATH 3F65; one-half COSC credit; one elective credit.

Year 4
Fall Term: COSC 0N02.

Winter Term: COSC 0N03.

Summer Term: COSC 4F90 and 4P14; one MATH credit.

Year 5
Fall Term: COSC 4P13; one COSC credit numbered 3(alpha)90 or above; one elective credit.

Pass Program

Year 1
COSC 1P03 and 1P12 (see program note 1); MATH 1P66 and 1P67; one Humanities context credit; one Science context credit; one elective credit (see program note 3).

Year 2
COSC 2P03, 2P13, 2P32, 2P50 and 2P91; MATH 1P12 and 1P97; one Social Science context credit; one-half elective credit (see program notes 1 and 3).

Year 3
COSC 3F00, 3P01 and 3P04; one COSC credit; MATH 3F65 or one credit from MATH 1P98, 2P01, 2P20, 2P60, 4P19, 4P20, 4P59; one elective credit (see program notes 3 and 12).

Computer Science and Business

Much of the application of Computer Science is in a business environment. Students (especially in the pass program) plan-

Computer Science

ning to find employment in such application areas are strongly encouraged to elect courses from the Faculty of Business, especially MGMT 1P91 and 1P92. Students who wish to specialize in this area might consider the Computing and Business program (see separate calendar entry).

Computer Science as a Second Degree

A student holding an honours or pass degree in another discipline may obtain a BSc (honours) in Computer Science or a BSc (pass) degree. Students should refer to the University regulations concerning "Requirements for a Second or Subsequent Degree" section for further information. Previous or transfer credits may be used to satisfy some of the following requirements. Students without previous secondary school or university computer programming credit must additionally complete COSC 1P02 before taking any other COSC credit listed below.

The additional courses taken for a second degree in Computer Science must include a minimum of five (for a second honours degree) or four (for a second pass degree) Brock COSC credits. All elective credits should be at the 2(alpha)00 level or above.

A second degree program is often taken as part-time study since the normal prerequisite structure requires a minimum of four (for honours) or three (for pass) years of study. A student wishing to pursue full-time study can usually complete the program in three (for honours) or two (for pass) years by following the pattern of study below.

Permission to take COSC 3F00 concurrent with COSC 2P32 must be sought from the Chair of the Department to complete this pattern.

Honours Program

Year 1

Fall/Winter Session:

COSC 1P03 and 1P12 (see program note 1); MATH 1P12 or 1P98; MATH 1P66, 1P67 and 1P97.

Spring Session:

COSC 1P12 (if not previously taken) and 2P03.

Year 2

Fall/Winter Session:

COSC 2P13, 2P32, 2P50, 2P91, 3F00, 3P01 and 3P04; one-half COSC credit.

Year 3

Fall/Winter Session:

Three COSC credits numbered 3(alpha)90 or above.

Pass Program

Satisfactory completion of the first two years of the above Honours program entitles the student to apply for a pass degree.

Combined Major Program

The COSC requirements for combined major programs with all other disciplines are outlined below. For specific co-major requirements, consult the co-major department.

BSc (honours) Computer Science and another Science

Year 1

COSC 1P03 and 1P12 (see program note 1); MATH 1P66 and 1P67; one MATH credit (see program note 4); one credit in the co-major; one Social Science context credit.

Year 2

COSC 2P03 and 2P32; one additional Science credit (see program note 5); two credits in the co-major; one Humanities context credit.

Year 3

COSC 2P13, 2P50, 2P91 and 3P01; MATH 1P12; two credits in co-major; one-half elective credit (see program note 1).

Year 4

COSC 3F00; two COSC credits numbered 3(alpha)90 or above; two credits in the co-major numbered 3(alpha)90 or above.

BSc (honours) Computer Science and Mathematics

Year 1

COSC 1P03 and 1P12 (see program note 1); MATH 1P93 and 1P94; MATH 1P66 and 1P67; one Science and one Social Science context credit.

Year 2

COSC 2P03, 2P13, 2P32 and 2P50; MATH 1P12, 2F95 and 2P60; one Humanities context credit.

Year 3

COSC 2P91, 3F00 and 3P01; MATH 2F96, 2P20 and 3F65; one-half elective credit (see program note 1).

Year 4

Two COSC credits numbered 3(alpha)90 or above; MATH 2F10 or 3F10; MATH 4P19 and 4P20; one elective credit.

BSc (honours) Computer Science and Physics*Year 1*

COSC 1P03 and 1P12 (see program note 1); one of PHYS 1F20, 1F25, 1F90 (preferred); MATH 1P93 and 1P94; MATH 1P66 and 1P67; one Social Science context credit.

Year 2

COSC 2P03 and 2P32; PHYS 2P20, 2P31, 2P50 and 2P51 (see program note 6); MATH 2F95; one Humanities context credit.

Year 3

COSC 2P13, 2P50, 2P91 and 3P01; MATH 1P12; two credits from MATH 3F94; PHYS 3P20, 3P35, 3P36, 3P41, 3P70; one-half elective credit (see program note 1).

Year 4

COSC 3F00; two COSC credits numbered 3(alpha)90 or above; two credits from PHYS 4F50, 4F90, 4P41, 4P70.

BA (honours) or BSc (honours) Computer Science and a Humanities or a Social Science*Year 1*

COSC 1P03 and 1P12 (see program note 1); MATH 1P66 and 1P67; one credit in the co-major; one Science and one Social Science context credit (see program note 7).

Year 2

COSC 2P03, 2P13, 2P32 and 2P50; two credits in the co-major; one Humanities context credit (see program note 7).

Year 3

COSC 2P91, 3F00 and 3P01; MATH 1P97 and 1P98; two credits in the co-major.

Year 4

Two COSC credits numbered 3(alpha)90 or above; two credits in the co-major numbered 3(alpha)90 or above; one elective credit.

BA (honours) or BSc (honours) Computer Science and Economics*Year 1*

COSC 1P03 and 1P12 (see program note 1); ECON 1P91 and 1P92; MATH 1P66, 1P67, 1P97 and 1P98; one Science context credit (see program note 8).

Year 2

COSC 2P03, 2P13, 2P32 and 2P50; ECON 2P21, 2P22, 2P31 and 2P32; one Humanities context credit.

Year 3

COSC 2P91, 3F00 and 3P01; ECON 2P90; one and one-half ECON credits numbered 2(alpha)90 or above; one elective credit.

Year 4

Two COSC credits numbered 3(alpha)90 or above; ECON 3P90, 3P91, 4P13 and 4P14; one elective credit.

BA (honours) Computer Science and Geography*Year 1*

COSC 1P03 and 1P12 (see program note 1); GEOG 1F90; MATH 1P66 and 1P67; one Science and one Humanities context credit.

Year 2

COSC 2P03, 2P13, 2P32 and 2P50; GEOG 2P07 and 2P10; one credit from GEOG 2P02, 2P03, 2P06; MATH 1P97 and 1P98.

Year 3

COSC 2P91, 3F00 and 3P01; GEOG 3P57; one and one-half GEOG credits numbered 2(alpha)90 to 3(alpha)99 from group A or C (see program note 10) (see Geography entry); one elective credit.

Year 4

Two COSC credits numbered 3(alpha)90 or above (see program note 10); GEOG 4F99; one GEOG credit numbered 3(alpha)90 or above from group A or C (see Geography entry); one elective credit.

BSc (honours) Computer Science and Geography*Year 1*

COSC 1P03 and 1P12 (see program note 1); GEOG 1F91; MATH 1P66 and 1P67; one Social Science and one Humanities context credit.

Year 2

COSC 2P03, 2P13, 2P32 and 2P50; GEOG 2P07 and 2P11; one credit from GEOG 2P04, 2P05, 2P09; MATH 1P97 and 1P98.

Year 3

COSC 2P91, 3F00 and 3P01; GEOG 3P56; one and one-half year 3 GEOG credits numbered 2(alpha)90 to 3(alpha)99 from group B or C (see program note 10) (see Geography entry); one elective credit.

Year 4

Two COSC credits numbered 3(alpha)90 or above (see program note 10); GEOG 4F99; one GEOG credit numbered 3(alpha)90 or above from group B or C (see Geography entry); one elective credit.

Computer Science

Prerequisites and Restrictions

Students must check to ensure that prerequisites are met. Students may be deregistered, at the request of the instructor, from any course for which prerequisites and/or restrictions have not been met.

Description of Courses

Note that not all courses are offered in every session. Refer to the applicable term timetable for details. Most courses involve hands-on programming.

COSC 1P02

Introduction to Computer Science

Computers and programming intended for students without computer programming experience. Topics include problems and problem solving, programming language (normally Java) syntax and semantics, routines and basic data structures.

Lectures, 3 hours per week, lab, 2 hours per week; tutorial, 1 hour per week.

Students completing this course will forfeit credit in COSC 1P01.

COSC 1P03

Data Structures and Abstraction

Programming and problem solving in a high-level programming language (normally Java). Data structures including arrays, strings and linked-lists. Modularity, abstraction and abstract data types including stacks, queues and lists. Introduction to searching and sorting, algorithm analysis and object-orientation.

Lectures, 3 hours per week, lab, 2 hours per week; tutorial, 1 hour per week.

Prerequisite: grade 12 computer programming credit or COSC 1P02 (1P01).

Note: students are expected to have considerable prior programming experience in a high-level language such as Pascal, Modula-2, C or Ada. Others should consult the department to determine whether they should complete COSC 1P02 prior to taking this course.

Students completing this course will forfeit credit in COSC 1P04.

COSC 1P12

Computer Organization and Assembly Language

Basic computer organization including functional units, instruction cycle, control, buses and memory. Assembly-level programming including machine representation, instruction sets and addressing modes. The role of assemblers, linkers and loaders.

Lectures, 3 hours per week, lab 2 hours per week; tutorial 1 hour per week.

Prerequisite: COSC 1P03 (1P04).

Students completing this course will forfeit credit in COSC 2P12.

COSC 1P90

Microcomputers and Applications

An introduction to computers and the use of microcomputers in academia and industry for students with no computing experience. Various computer packages (such as word processing and presentation software) are presented, giving the student hands-on experience.

Lectures, 2 hours per week, lab, 2 hours per week.

Restriction: not open to COSC (single or combined), BCB or CSDT majors.

COSC 1P93

Introduction to Computer Programming

Modern software techniques: problem solving and design of effective algorithms; structured program design methodology; subprogram library usage; documentation; correctness; floating-point arithmetic; error analysis. Programming assignments are implemented in a high-level language (such as C or FORTRAN).

Lectures, 3 hours per week, lab, 2 hours per week; tutorial, 1 hour per week.

Restriction: not open to COSC (single or combined), BCB or CSDT majors.

Prerequisite: OAC mathematics credit.

COSC 1P98

Intermediate Computer Applications

Contemporary computer software technology and applications. Important application areas in industry, science, education, and research. Labs give practical experience in applications such as spreadsheet, graphics and multimedia software.

Lectures, 3 hours per week, lab, 2 hours per week.

Restriction: not open to COSC (single or combined), BCB or CSDT majors.

Prerequisite: previous computer experience (e.g., high school computer science, COSC 1P90 or extensive experience with microcomputers).

COSC 1P99

The Internet and Intranets

The use of the Internet for research and for enterprise-wide computing. Topics include history and composition of the Internet; fundamental communication concepts; LANs and client-server; basic UNIX; security, privacy, viruses and network etiquette; electronic mail, World Wide Web, telnet, ftp; searching and evaluation techniques. Some prior computer experience is preferred.

Lectures, 3 hours per week, lab, 2 hours per week.

Restriction: not open to COSC (single or combined), BCB or CSDT majors.

COSC 2P03

Advanced Data Structures

The implementation and usage of data structures. Topics include trees, graphs, advanced list structures, sorting and searching, analysis of algorithms, program proofs.

Lectures, 3 hours per week, lab, 2 hours per week; tutorial, 1 hour per week.

Restriction: open to COSC (single or combined), BCB and CSDT majors.

Prerequisites: COSC 1P03 (1P04); MATH 1P66 and 1P67.

COSC 2P13

Introduction to Operating Systems

Operating systems from a user's viewpoint. Emphasis on the functionality of operating systems rather than their implementation. Topics include file, processor, I/O and memory management; concurrent processes; mainframe and microcomputer operating systems; UNIX.

Lectures, 3 hours per week.

Prerequisite: COSC 1P03.

Note: may be taken concurrently or after COSC 1P12.

COSC 2P32

File and Database Systems

File organizations and access methods, fundamental data base concepts: specification and design of databases and applications; the relational model and processing with SQL; the CODASYL DBTG model; database administration. Practical database (normally ORACLE) experience.

Lectures, 3 hours per week, lab 2 hours per week.

Prerequisite: COSC 2P03.

COSC 2P50

The Computing Professional

Professional issues in computing including historic and social perspectives; legal issues, licensing and copyright; social and ethical issues; professional conduct; technical writing and presentations.

Lectures, 3 hours per week, seminar, 2 hours per week.

Prerequisite: COSC 1P03 (1P04).

Note: this course involves seminars and considerable written work. A good command of written and spoken English is required.

COSC 2P89

Advanced Internet and Intranet

Concepts and techniques required for building and maintaining advanced interactive Web sites. Topics include XML and SGML, database connectivity and forms handling, basic animation, graphics optimization for the Web, scripting, advanced searching, Web design for accessibility.

Lectures, 3 hours per week, lab/seminar, 2 hours per week.

Prerequisite: COSC 1P99 or 1P03.

COSC 2P91

Programming Languages

The fundamental concepts of programming languages including syntax, semantics, control, data, types, abstraction. Pro-

gramming paradigms including imperative, applicative, logic, object-oriented. Procedural languages such as Ada, C and COBOL.

Lectures, 3 hours per week, lab, 2 hours per week.

Prerequisite: COSC 1P03 (1P04).

COSC 2P92

Object-oriented Programming

Fundamental concepts of object-orientation; analysis and design; object-oriented languages and programming. Object-oriented languages such as Java, Eiffel and C++.

Lectures, 3 hours per week, seminar, 2 hours per week.

Prerequisites: COSC 2P03 and 2P91.

COSC 2P93

Logic Programming

Predicate logic, symbolic and declarative programming, resolution theorem proving, applications. Introduction to logic languages such as Prolog.

Lectures, 3 hours per week.

Prerequisites: COSC 2P03 and 2P91.

COSC 3F00

Software Engineering

Scientific principles and managerial skills required for the construction of reliable software. Attributes of large complex software systems and software process models for managing the phases of software development; software requirements: analysis, tools and document preparation; software specification methods, software design concepts and alternate methodologies such as prototyping and object-oriented paradigms; several software testing, verification and validation methods.

Lectures, 3 hours per week, lab, 2 hours per week.

Prerequisites: COSC 2P03 and 2P32.

Note: this course requires considerable written work and presentations. A good command of written and spoken English is required. Completion of COSC 2P50 and 2P91 is recommended before taking this course. A major group project is required.

COSC 3P01

Data Communications

Concepts of data communications including data transmission and encoding; data link control; multiplexing; circuit and packet switching; local area networks.

Lectures, 3 hours per week.

Prerequisites: COSC 1P12; MATH 1P67 and 1P97.

COSC 3P04

Introduction to User Interfaces

Design of human/computer interfaces. Topics include human factors (design and support of systems for human use), command languages, grammars, menu and window systems, user documentation and on-line help systems.

Lectures, 3 hours per week, lab/seminar, 2 hours per week.

Restriction: students must have a minimum of 10.0 overall credits.

Prerequisite: COSC 1P03.

Computer Science

COSC 3P71

Artificial Intelligence

Topics include heuristic programming, analysis of solution space, searching, pattern recognition, machine learning, game playing, genetic algorithms and problem solving.

Lectures, 3 hours per week.

Prerequisite: COSC 2P03.

Note: completion of COSC 2P93 is recommended before taking this course.

COSC 3P92

Computer Architecture

Variations in computer architectures including buses, internal and external memory, I/O and interfacing, computer arithmetic, instruction sets, RISCs, microprogrammed control, parallel organization.

Lectures, 3 hours per week.

Prerequisites: COSC 1P12 and 2P13.

COSC 3P93

Parallel Computing

Origins of parallelism, classification of designs, characterization of performance. Pipelined computers: selection and comparison, case studies. Processor arrays: switching networks, case studies. Parallel languages: general principles, parallel constructs, vectorizing compilers, issues of portability. Practical exposure to a parallel programming language and parallel computing hardware. Parallel algorithms: general principles, recurrences, parallel approach to data structures and computational structures. Future trends: technology, design limitations, future supercomputers.

Lectures, 3 hours per week.

Prerequisite: COSC 2P13.

COSC 3P96

Human Factors

The effect of machines on individuals and groups. Machine designs and the quality of life of the machine user. Automation and group interaction. The design of machines and systems in the human context.

Lectures, 3 hours per week.

Restriction: students must have a minimum of 10.0 overall credits.

Note: does not involve any computer programming.

COSC 3P98

Computer Graphics

Topics in computer graphics including 2-D and 3-D graphics, curve and surface fitting, animation, fractals, and hardware issues. (Knowledge of C or Pascal assumed.)

Lectures, 3 hours per week.

Prerequisites: COSC 2P03; MATH 1P67.

Note: completion of MATH 1P12 is recommended before taking this course. Successful completion of COSC 3P98 normally affords the student the opportunity to complete Level 2 Animation Certification.

COSC 3P99

Computing Project

A half-year development project under faculty supervision. Students may propose their own projects for departmental approval or may apply for a project proposed by a faculty member.

Seminar, 2 hours per week.

Restriction: permission of project co-ordinator.

Prerequisites: COSC 2P03 and 2P91.

Note: further information (including project guidelines and project list) is available on the department Web pages.

COSC 3V90-3V99

Computing Topics I

Selected topics in computer science.

Restriction: permission of the Chair.

COSC 4F90

Computing Project

A full-year project under the supervision of a faculty member. Students may propose their own projects for departmental approval or may apply for a project proposed by a faculty member.

Seminar, 2 hours per week.

Restriction: permission of project co-ordinator.

Prerequisite: COSC 3F00.

Note: students must consult with faculty at the end of year 3 regarding supervision of projects. Further information (including project guidelines and project list) is available on the department Web pages.

COSC 4P13

Operating Systems: Design and Implementation

The design and implementation of operating systems including user interface, process management, I/O device control, memory management and file systems. Several versions of UNIX and other operating systems are studied and compared from the viewpoint of OS design principles. (Knowledge of C assumed.)

Lectures, 3 hours per week.

Prerequisites: COSC 1P12, 2P13 and 2P91.

COSC 4P14

Computer Networks

The principles of computer network design and implementation with examples from the Internet, Asynchronous Transfer Mode (ATM) and wireless networks. Topics include network routing and congestion control algorithms, internetworking, transport layer protocols such as TCP/UDP and ATM AAL, network performance evaluation and Internet applications such as E-mail, multimedia and the Web.

Lectures, 3 hours per week.

Prerequisites: COSC 2P13, 3P01; MATH 1P98 and 3F65.

COSC 4P32

Programming Personal Computers

Modern microcomputer system, primarily from the perspective of the operating system; programming to interact with the

operating system. Topics include memory management, file management, windows, menus, events and graphics. (Knowledge of C and Pascal assumed.)

Lectures, 3 hours per week.

Prerequisite: COSC 2P13.

COSC 4P70

Cognitive Science

(also offered as PHIL 4P70 and PSYC 4P70)

Interdisciplinary study of the mind. Computer models of the human mind are examined in three ways: as a branch of computer science related to artificial intelligence, as a form of psychological theory, and a source of philosophical puzzles about the mind.

Lectures, 3 hours per week, lab, 1 hour per week.

Restriction: permission of the instructor.

Note: a previous knowledge of computer programming is not necessary for registration in the course.

COSC 4P75

Compiler Construction

Topics include lexical, syntactic and semantic analysis of high-level languages; symbol table organization; code generation and optimization.

Lectures, 3 hours per week.

Prerequisites: COSC 1P12, 2P03 and 2P91.

COSC 4P78

Robotics

Computer control aspects of robots with special emphasis on some applicable artificial intelligence techniques. Topics include manipulator kinematics and dynamics, sensors and perception, object location, mobile robot investigation, task planning, control architectures, multiple robot systems and robot programming.

Lectures, 3 hours per week, lab, 1 hour per week.

Prerequisites: COSC 1P12 (2P12), 3P71 and MATH 1P12.

Note: completion of PHYS 1F90 is recommended before taking this course. Practical experience via weekly robotics laboratories. Students with appropriate electronics background (e.g., CSDT students) may opt to build a robot in place of the weekly laboratories.

COSC 4P79

Expert Systems

Development of expert systems. Topics include recognition of problems solvable by an expert system; knowledge engineering; languages for expert systems development. Students will experiment with expert system development using an expert system shell and expert system building tool. (Knowledge of Prolog assumed.)

Lectures, 3 hours per week.

Prerequisites: COSC 2P93 and 3P71.

COSC 4V50-4V59

Topics in Multimedia

Selected topics in multimedia.

Restriction: permission of the Chair.

COSC 4V90-4V99

Computing Topics II

Selected topics in computer science.

Lectures, seminar, 3 hours per week.

Restriction: permission of the Chair.

COSC 4V91

2000-2001: Machine Learning

Fundamental machine learning techniques with emphasis on using these techniques to design and implement small practical learning systems. Topics include learning as a search, inductive bias, concept learning, computational learning, explanation-based learning and reinforcement learning.

Prerequisite: COSC 3P71

COSC 4V92

2000-2001: Advanced Algorithms

Classical and evolving problems and algorithms in Computer Science. Topics include classical design and analysis techniques, cryptography, combinatorics.

Prerequisite: COSC 2P03.

Note: Completion or concurrent enrolment in MATH 3F65 is recommended.

COSC 4V93

2000-2001: Evolutionary Computation

Topics include genetic algorithms, genetic programming, evolution strategies, comparison of natural and artificial evolution and applications in problem solving, engineering and design. A variety of applications will be developed.

Prerequisite: COSC 3P71

NON-CREDIT

COSC 0N01

Co-op Work Placement I

First co-op work placement (4 months) with an approved employer.

Restriction: open to Co-op students.

COSC 0N02

Co-op Work Placement II

Second co-op work placement (4 months) with an approved employer.

Restriction: open to Co-op students.

COSC 0N03

Co-op Work Placement III

Third co-op work placement (4 months) with an approved employer.

Restriction: open to Co-op students.

COSC 0N04

Co-op Work Placement IV

Fourth co-op work placement (4 months) with an approved employer.

Restriction: open to Co-op students.

Computer Science

COSC 2N90

Internship

Work placement of 8-16 months duration with an approved employer.

Restriction: only open to students accepted into the Internship option.

Note: interviews with employer and student and completion, by the student, of a work report.

Computing and Business

This program is co-ordinated by the Department of Computer Science.

Co-ordinator

David Hughes, Department of Computer Science

Advisers

Sanjay Putrevu, Faculty of Business

David Hughes, Department of Computer Science

Co-operating Faculty

Accounting and Finance; Computer Science; Management, Marketing and Human Resources

General Information

Administrative Assistant, extension 3513

Mackenzie Chown, J314

<http://www.cosc.brocku.ca/>

Computing and Business is a four-year honours program leading to a Bachelor of Computing and Business degree, designed for students with an interest in computer science and its application in business. With the current trends to outsourcing and contracting for the provision of computing resources in business, it is imperative that computing practitioners have a strong grounding in business and business practices. These practitioners need entrepreneurial skills as they will often have to establish themselves as independent consultants and compete for contracts. This degree is intended to prepare students to compete in this market.

The program requires a minimum admission average of 80 percent on 6 OACs. The normal entry to the Computing and Business program is one grade 12 computer programming credit. Students without such a credit must complete COSC 1P02 prior to taking COSC 1P03. Students with minimal programming experience should consult with the Computer Science Department to determine whether they should complete 1P02 prior to taking 1P03. The COSC 1P02 credit will be in addition to the 20 credits normally required for an honours degree. In addition, BCB majors are required to maintain a minimum 75 percent major average in order to continue in the program.

There is also a program leading to a BSc in Computer Science offered by the Computer Science department. (See separate calendar entry.)

An Internship option is available in this program. See the Computer Science entry for a description.

Program Notes

1. In all 20 credit degree programs, at least 12 credits must be numbered 2(alpha)00 or above, six of which must be numbered 2(alpha)90 or above and of these, three must be numbered 3(alpha)90 or above.

Honours Program

Year 1

COSC 1P03 and 1P12; ACTG 1P91; MGMT 1P91 and 1P92; MATH 1P66, 1P67 and 1P97; ECON 1P91 and 1P92.

Year 2

COSC 2P03, 2P32 and 2P50; ACTG 1P92 and 2P40; one credit from ENTR 2P51, FNCE 2P91, MKTG 2P91, OBHR 2P91; MATH 1P98; one Humanities or Science context credit.

Year 3

COSC 2P13, 2P91 and 3F00; one credit from ENTR 2P51, FNCE 2P91, MKTG 2P91, OBHR 2P91 not taken in year 2; one credit from COSC or business; the Humanities or Science context credit not taken in year 2.

Year 4

COSC 4F90; one credit from business (see program note 1); one credit from COSC or business whichever was not taken in year 3; two elective credits (see program notes 1).

Prerequisites and Restrictions

Students must check to ensure that prerequisites are met. Students may be deregistered, at the request of the instructor, from any course for which prerequisites and/or restrictions have not been met.

Description of Courses

See relevant calendar entries for course descriptions.

Computing and Solid-state Device Technology

This program is co-ordinated by the Department of Physics.

Co-ordinator

Edward Sternin, Department of Physics

Advisers

Edward Sternin, Department of Physics

V. Wojck, Department of Computer Science

Co-operating Faculty

Physics, Computer Science

General Information

Administrative Assistant, extension 3412

Mackenzie Chown B210

<http://www.physics.brocku.ca/>

Computing and Solid-state Device Technology is a unique undergraduate program of studies combining a thorough training in physics and natural sciences with an extensive education in computing. The program emphasizes practical aspects of computing; use of computer-based and other solid-state electronic devices in control, manufacturing and research; and the skills needed to interface and use solid-state devices in real-world applications. Students participating in this program should expect a considerable lab load. The faculty encourage and facilitate students' summer internship placement in relevant industrial positions.

This is an interdisciplinary program with emphasis on the practical aspects of computing and applications of solid-state device technology. Students who want a deeper theoretical understanding might want to consider a Physics and Computer Science combined major program.

Students are urged to give careful consideration to their choice of program, keeping in mind their areas of interest and capabilities, as well as their long-term career goals. Students should consult a faculty adviser when planning years 3 and 4 of the BSc programs.

Program Notes

1. Computing and Solid-state Device Technology students are recommended to take COSC 2P50 and one of COSC 3P71, 3P92, 3P93, 3P98, 4P14.

2. In all 20 credit degree programs, at least 12 credits must be numbered 2(alpha)00 or above, six of which must be numbered 2(alpha)90 or above and of these, three must be numbered 3(alpha)90 or above. In all 15 credit degree programs, at least seven credits must be numbered 2(alpha)00 or above, three of which must be numbered 2(alpha)90 or above.

Honours Program

Year 1

COSC 1P03 and 1P12; MATH 1P93, 1P94, 1P66 and 1P67; PHYS 1F25 or 1F90 (preferred); one Humanities or Social Science context credit.

Year 2

COSC 2P03, 2P13, 2P32 and 2P91; MATH 2F95; PHYS 2P31 and 2P92; the Humanities or Social Science context credit not taken in year 1.

Year 3

CHEM 1P90 (preferred) or 1P80; COSC 3F00, 3P01 and 2P92; MATH 1P12; PHYS 2P50, 2P51 and 3P92; one-half elective credits (see program note 1).

Year 4

COSC 4P78; one-half credit from PHYS 3P35, 3P36, 3P41; PHYS 3P70, 3P93 and 4P92; COSC 4F90 or PHYS 4F90; one and one-half elective credits (see program note 1).

Prerequisites and Restrictions

Students must check to ensure that prerequisites are met. Students may be deregistered, at the request of the instructor, from any course for which prerequisites and/or restrictions have not been met.

Description of Courses

See relevant calendar entries for course descriptions.

Drama and Theatre in Education

This program is co-ordinated by the Department of Fine Arts.

Chair
Murray Kropf

General Information

*Administrative Assistant, extension 3214
Thistle west 135
<http://www.brocku.ca/finearts/>*

Drama in Education and Theatre in Education are distinct but complementary theoretical and practical disciplines which facilitate learning over a wide educational range, and provide pedagogical tools for teachers, childhood studies professionals, theatre therapists and others (see the description of the certificate below). The focus is on learning through practice as well as about the principles, processes and practices of drama and theatre in education.

Drama in Education/Theatre

The combined honours programs combines the core courses of the Drama and Theatre in Education and theatre courses in performance and playwriting, with the combined honours program in Dramatic Literature. The program would be of particular interest to students planning a career in teaching, as well as to students planning a career in social work, drama therapy, psychotherapy, volunteer training, personnel management, union organizing and market consulting.

The pass program combines the core courses of the Drama and Theatre in Education curriculum with theatre courses in performance and play writing. The program would be of interest to students planning a career in social work, drama, therapy, psychotherapy, volunteer training, personnel management, union organizing and market consulting.

Program Notes

1. Some DIEE and DRAM courses are cycled every two years. Students should consult with the Undergraduate Program Adviser in planning course patterns.

2. An audition is required prior to enrolment in THEA 1F99.
3. A minimum of 60 percent in both DRAM 1F93 and THEA 1F99 is required in order to proceed as a major.
4. Students must satisfy context requirements before year 3.
5. In all 20 credit degree programs at least 12 credits must be numbered 2(alpha)00 or above, six of which must be numbered 2(alpha)90 or above and of these three must be numbered 3(alpha)90 or above. In all 15 credit degree programs, at least seven credits must be numbered 2(alpha)00 or above, three of which must be numbered 2(alpha)90 or above.

Pass Program

DIEE 2P01, 2P02, 3P03, 3P06, 3P07 and 3F12; DRAM 1F93; THEA 1F99, 3F00 and 3F91; THEA 2F04 or 2F50; one of DRAM 2F95, 2F97, 2F98.

Combined Major Program

Honours Program

Drama in Education/Theatre and Dramatic Literature: DIEE 2P01, 2P02, 3P03, 3P04, 3P06, 3P07 and 3F12; DRAM 1F93 and 4F90; DRAM 3F93 or 3F97; THEA 1F99, 2F50, 3P50, 3F91 and 4F56; three credits from DRAM 2F95, 2F97 or 2M93, 2F98, 3F00, 4F94.

Certificate program

The Certificate in Drama in Education would be of particular interest to social workers, drama therapists, psychotherapists, prison counsellors, people who train volunteers, personnel managers, union organizers and market consultants who wish to add to existing qualifications or to acquire courses which might later be applied to a degree. The DIEE certificate will develop skills such as assessing and evaluating what is perceived, generating ideas, making connections, predicting outcomes, empathizing, abstracting the core from the periphery, questioning, accommodating and compromising, self-presentation. University admission standards apply. Prospective students should consult the Theatre and Dramatic Literature program entries.

The certificate is awarded upon completion of at least five credits as set out below with a minimum 60 percent overall average.

Drama and Theatre in Education

Required courses:

DIEE 2P01, 2P02, 3F12, 3P04, 3P07.

Additional courses:

Two credits from BIOL 1F25, CANA 1F91, FILM2F04, MUSI 1F00, PSYC 1F90, RECL 1F91, VISA 1F90.

Concentration in Drama in Education

Students can earn a Concentration in Drama in Education by including the courses listed below as part of their academic work leading to an honours degree in an academic department or program. The words "Concentration in Drama in Education" will be added to the student's transcript if the required courses are successfully completed. Students are advised to consult the Drama in Education co-ordinator.

Students must complete a total of six credits:

DIEE 2P01, 2P02, 3P03, 3P04, 3P05, 3P06, 3P07, 3F12, ENGL 2P10 and THEA 3F91.

Prerequisites and Restrictions

Students must check to ensure that prerequisites are met. Students may be deregistered, at the request of the instructor, from any course for which prerequisites and/or restrictions have not been met.

Description of Courses

Note that not all courses are offered in every session. Refer to the applicable term timetable for details.

DIEE 2P01

Foundations in Drama in Education

Introduction to theory and practice: for theatre and child and youth studies students, teachers and future teachers, social and community workers and potential therapists. Focus on basic theatre elements, practical strategies and active participation.
Lectures, workshop, 3 hours per week.

Restriction: open to students with a minimum of 4.0 overall credits and DIEE certificate students.

Note: enrolment limited to 20 students per section. Materials fee required.

DIEE 2P02

Role-playing, Role Drama and Story

The art and structuring of story and other literary sources as catalysts for drama. Combined theory and practice including work experience.

Lectures, workshop, 3 hours per week.

Prerequisite: DIEE 2P01.

Note: enrolment limited to 20 students per section. Materials fee required.

DIEE 3F12

Theatre in Education: Alternative Forms of Theatre

Literature-based, focussing on personal and group presentation through story theatre, readers' theatre, public speaking, choral speaking, dramatization and ensemble theatre; design, preparation and presentation of a group production in a genre of choice.
Lectures, workshop, 3 hours per week; additional production and rehearsal time as required.

Restriction: permission of the instructor.

Prerequisite: DIEE 2P01 or THEA 1F99.

Note: students with equivalent experience may register without prerequisite. Materials fee required.

DIEE 3M90-3M99

Advanced Special Studies in Drama and Theatre in Education

Topics to be announced by the department.

DIEE 3P03

Structuring for Drama: Creating the Fictional Context

Composing contexts for cross-curricular learning through the arts.

Workshops, seminar, 3 hours per week.

Prerequisite: DIEE 2P01.

Note: materials fee required.

DIEE 3P04

Mantle of the Expert: An Approach to Classroom Learning

Theory and practice of Dorothy Heathcote's innovation in student-centred research and critical thinking.

Lectures, workshop, 3 hours per week.

Prerequisite: DIEE 2P01.

Note: enrolment limited to 20 students per section. Materials fee required.

DIEE 3P05

Drama in the Language Arts and History Classroom

For intermediate and senior teachers: the use of drama to motivate and enrich learning.

Workshops, seminar, 3 hours per week.

Prerequisite: DIEE 2P01.

Note: materials fee required.

DIEE 3P06

Theatre in Education: Children's Theatre

A theoretical study and practical analysis of professional theatre for young audiences.

Lectures, workshop, 3 hours per week.

Restriction: permission of the instructor.

Note: enrolment limited to 15 students. Materials fee required.

Field trips will be required.

DIEE 3P07

Theatre in Education: Theatre for a Community

The processes of putting on a play for a community: the place of the play in the community; choosing the play; finding the production team; running rehearsals; play-building around a theme or topic.

Lectures, workshop, 3 hours per week. Additional production and rehearsal time as required.

Restriction: permission of the instructor.

Prerequisite: DIEE 2P01.

Note: students with equivalent experience may register without prerequisite. Enrolment limited to 20 students. Materials fee required.

Dramatic Literature

This program is co-ordinated by the Department of Fine Arts.

Chair
Murray Kropf

General Information

*Administrative Assistant, extension 3214
Thistle west 135
<http://www.brocku.ca/finearts/>*

The Dramatic Literature Program is an interlocking series of courses, with the objective of helping the student to develop a critical awareness of drama both as text and as performance; and to recreate the play imaginatively from a study of the text itself and from the context of its conventions, traditions and stage history.

Program Notes

1. Some DRAM courses are cycled every two years. Students should consult with the Undergraduate Program Adviser in planning course patterns.
2. An audition is required prior to enrolment in THEA 1F99.
3. A minimum of 60 percent in DRAM 1F93 is required in order to proceed as a major.
4. Students must satisfy context requirements before year 3.
5. ENGL 1F91 is recommended as an elective for students in the Dramatic Literature Program.
6. Year 3 courses are normally restricted to students with at least three 2(alpha)00 credits or special permission of the instructor.
7. In all 20 credit degree programs, at least 12 credits must be numbered 2(alpha)00 or above, six of which must be numbered 2(alpha)90 or above and of these, three must be numbered 3(alpha)90 or above. In all 15 credit degree programs, at least seven credits must be numbered 2(alpha)00 or above, three of which must be numbered 2(alpha)90 or above.

Honours Program

DRAM 1F93, 2F95, 2F98, 3F00, 3F93, 3F97, 4F90 and 4F94; DRAM 2F97 or 2M93; THEA 1F99; two additional Fine Arts credits.

Pass Program

DRAM 1F93; four credits from DRAM 2F95, 2F97 or 2M93, 2F98, 3F93, 3F97; THEA 1F99 and 3F00; one additional Fine Arts credit.

Combined Major Programs

Honours

DRAM 1F93 and 4F90; DRAM 3F93 or 3F97; THEA 1F99; three credits from DRAM 2F95, 2F97 or 2M93, 2F98, 3F00, 4F94.

Pass

DRAM 1F93; four credits from DRAM 2F95, 2F97 or 2M93, 2F98, 3F00, 3F93, 3F97.

Dramatic Literature and English Language and Literature

A student reading for a combined degree in English and Drama must: (i) meet the requirements of each department for a combined major; (ii) take at least seven credits from each department for an honours degree, five from each department for a pass degree.

Prerequisites and Restrictions

Students must check to ensure that prerequisites are met. Students may be deregistered, at the request of the instructor, from any course for which prerequisites and/or restrictions have not been met.

Description of Courses

Note that not all courses are offered in every session. Refer to the applicable term timetable for details.

*DRAM Dramatic Literature course that may be taken for credit in English.

†DRAM Dramatic Literature course which is cycled every two years.

*DRAM 1F93

Introduction to Drama

Fundamentals of dramatic criticism. Study of selected dramatic texts from ancient Greece to the present; emphasis on genre, convention and historical context.

Lectures, seminar, 3 hours per week.

*†DRAM 2F95

The Forms of Comedy

Comedy and related dramatic forms (e.g., farce) in their theatrical and social contexts and in relation to the development of ideas about comedy. May include parallel forms in the drama of the Orient.

Lectures, seminar, 3 hours per week.

Prerequisite: DRAM 1F93 or permission of the instructor.

*†DRAM 2F97

Canadian Drama

The Canadian experience as expressed on stage, in radio and on television, using English-language plays and French-language plays (in translation).

Lectures, seminar, 3 hours per week.

Prerequisite: DRAM 1F93 or permission of the instructor.

Note: students with year 2 standing in ENGL are permitted to register without the prerequisite.

Students completing this course will forfeit credit in DRAM 2P91.

*†DRAM 2F98

The Forms of Tragedy

Two major periods in the development of the genre: the Classical period and the Renaissance; and the modern dramatic response to the problems of the tragic vision.

Lectures, seminar, 3 hours per week.

Prerequisite: DRAM 1F93 or permission of the instructor.

Note: students with year 2 standing in ENGL are permitted to register without the prerequisite.

DRAM 2M90-2M99

Special Studies in Drama

Topics to be announced by the department.

Lectures, seminar, 3 hours per week.

Prerequisite: DRAM 1F93 or permission of the instructor.

†DRAM 2P91

Canadian Radio and Television Drama

The aesthetics and distinctive characteristics of Canadian radio and television anthology drama.

Lectures, seminar, 3 hours per week.

Prerequisite: DRAM 1F93 or FILM 2P20 and 2P21 or permission of the instructor.

Note: year 3 students in the Humanities are permitted to register in this course without the prerequisite.

Students completing this course will forfeit credit in DRAM 2F97.

DRAM 3F00

Theatre History and Theory

(also offered as THEA 3F00)

Studies in theatre history and theoretical perspectives on theatre, emphasizing the relation of theatre to social process.

Lectures, seminar, 3 hours per week.

Prerequisite: THEA 1F99 (1P40 and 1P50) or DRAM 1F93 or permission of the instructor.

Note: theatre majors must take this course as THEA 3F00.

*†DRAM 3F93

Twentieth-Century Drama

Major dramatic and theatrical movements of the period, with special attention to expressionism and theatricalism, the absurdists and contemporary dramatists.

Lectures, seminar, 3 hours per week.

Prerequisite: one of DRAM 2F95, 2F97, 2F98 or permission of the instructor.

Note: students with year 3 standing in ENGL are permitted to register in this course without the prerequisite.

*†DRAM 3F97

Shakespeare

A critical study of Shakespeare's works in their literary and theatrical context.

Lectures, seminar, 3 hours per week.

Prerequisite: one of DRAM 2F95, 2F97, 2F98 or permission of the instructor.

Note: students with year 3 standing in ENGL are permitted to register without the prerequisite. Students may take ENGL 2F97 in place of DRAM 3F97.

Students completing this course will forfeit credit in DRAM 3F10 or ENGL 2F97.

DRAM 3F99

Honours Tutorial

Advanced study in an area of mutual interest to the student and the instructor.

Restriction: permission of a faculty supervisor.

Note: a written proposal must be approved by the Chair before registration.

DRAM 4F90

Critical Theory and Practice

(also offered as THEA 4F90)

An advanced study of critical theory, its roots and its applica-

Dramatic Literature

tion to theatre, dramatic literature and television.

Seminars, 3 hours per week.

Restriction: open to DRAM (single or combined) and THEA (single or combined) majors with a minimum of 14.0 overall credits and a minimum 70 percent major average and a minimum 60 percent non-major average and approval to year 4 (honours).

DRAM 4F94

Honours Thesis in Applied Critical Theory

A critical, historical or contemporary thesis.

Restriction: open to DRAM (single or combined) majors with a minimum of 14.0 overall credits and a minimum 70 percent major average and a minimum 60 percent non-major average and approval to year 4 (honours).

Prerequisite: DRAM 4F90 (may be taken concurrently).

Note: subject and supervision must be approved by a faculty supervisor before September 15.

Earth Sciences

Chair

Gregory C. Finn

Undergraduate Program Adviser

Richard J. Cheel

Professors

Uwe Brand, Richard J. Cheel, Simon J. Haynes, Wayne T. Jolly, John Menzies, Keith Tinkler

Associate Professors

Gregory C. Finn, Jean-Jacques Flint, Frank Fueten, Daniel McCarthy, Francine McCarthy, Kent Novakowski

Adjunct Professors

Andy Panko, Hans Tammemagi

General Information

Administrative Assistant, extension 3526

Mackenzie Chown D410

<http://www.brocku.ca/earthsciences>

The field of earth sciences is central in solving current problems such as waste disposal, pollution, groundwater management, volcanoes and earthquake hazards. It is also vital in the exploration and utilization of natural resources such as oil and gas, minerals and aggregates. The Department of Earth Sciences offers four-year programs of study leading to a BSc honours in Earth Sciences, a BSc with a Major in Earth Sciences and a three-year BSc pass degree program. Each of the above prepares students for a variety of career opportunities in Earth Sciences. Combined BSc honours programs with other departments are available.

The four-year BSc honours and BSc with a Major programs consists of a set of core courses in year 1, year 2 and part of year 3. During year 3 students choose from elective courses to specialize in a curriculum reflecting their personal interests. In the BSc honours program students carry out independent research in year 4. Students normally enter directly into the BSc honours program and are required to maintain at least second-class honours standing. Students not meeting this requirement may continue in the BSc with a Major program.

Students considering concentrations in Quaternary geology, environmental geology, paleoecology, sedimentology, hydrology or hydrogeology are advised to select electives from the following courses: ERSC 2P64, 3P24, 3P25, 3P43, 3P61, 3P92, 3P97, 4P10, 4P28, 4P31, 4P41 and 4P61.

Students wishing to pursue a career in petrology, economic geology, volcanology, structure or tectonics are advised to select electives from the following courses: ERSC 3P94, 3P98, 4P01, 4P16, 4P22, 4P52.

Specializations are also available in carbonate geochemistry, petroleum geology, Precambrian geology, paleontology or stratigraphy. Those interested should consult the department for suggested course programs in these disciplines.

Students in programs other than science may take ERSC 2P61, 2P64 and 2P99 as general electives.

The department has teaching and research laboratories in the above mentioned fields, including facilities such as radiocarbon dating, X-ray diffraction and fluorescence, cathodoluminescence microscopic analysis, atomic absorption spectrometry, halogen analysis, image analysis, digitizer, fluorometric analysis and stable isotope preparation. These are supported by rock specimen preparation and drafting facilities, dark rooms and cold rooms. The department has a network of PCs, Macs, a Silicon Graphics work station and printers, all linked to the University computing facilities. The department shares the facilities of electronic, woodworking and glass blowing shops with other departments.

Program Notes

1. The unspecified science elective credit is to be taken from BIOL, CHEM, COSC, MATH or PHYS (except ASTR 1F00, BIOL 1F25, MATH 1F92 or SCIE 1F30).
2. ERSC 3P99 or BIOL 3P71 is required for entry to year 4.
3. ERSC 3P99 is normally required at the end of year 3.
4. Students enrolled in the BSc honours program are required to maintain at least second-class honours standing (minimum average of 70 percent in all major credits and 60 percent in the remaining credits).
5. Students wishing to transfer from the BSc with a Major program into BSc honours program are required to have at least second-class honours standing (minimum average of 70 percent in all major credits and 60 percent in the remaining credits).
6. In all 20 credit degree programs, at least 12 credits must be numbered 2(alpha)00 or above, six of which must be numbered 2(alpha)90 or above and of these, three must be numbered 3(alpha)90 or above. In all 15 credit degree programs, at least seven credits must be numbered 2(alpha)00 or above, three of which must be numbered 2(alpha)90 or above.

Earth Sciences

Honours Program

Year 1

ERSC 1F95; CHEM 1P80 and 1P81 or CHEM 1P90 and 1P91; MATH 1P98; one-half credit from MATH 1P12, 1P93, 1P97; one Humanities or one Social Science context credit; one Science credit (see program notes 1 and 4).

Year 2

ERSC 2P01, 2P21, 2P22, 2P31, 2P32 and 2P61; one Science credit numbered 2(alpha)00 to 2(alpha)99 (see program note 1); the Humanities or Social Science context credit not taken in year 1.

Year 3

ERSC 3P21, 3P31 and 3P71; two and one-half ERSC credits numbered 2(alpha)90 to 3(alpha)99; one elective credit (see program note 3).

Year 4

Four ERSC credits numbered 2(alpha)90 or above including ERSC 4F90 and 4F91 or ERSC 4F92; one elective credit (see program note 6).

BSc with a Major Program

Year 1

ERSC 1F95; CHEM 1P80 and 1P81 or CHEM 1P90 and 1P91; MATH 1P98; one-half credit from MATH 1P12, 1P93, 1P97; one Humanities or one Social Science context credit; one Science credit (see program notes 1 and 5).

Year 2

ERSC 2P01, 2P21, 2P22, 2P31, 2P32 and 2P61; one Science credit numbered 2(alpha)00 to 2(alpha)99 (see program note 1); the Humanities or Social Science context credit not taken in year 1.

Year 3

ERSC 3P21, 3P31 and 3P71; two and one-half ERSC credits numbered 2(alpha)90 to 3(alpha)99; one elective credit (see program note 3).

Year 4

Four ERSC credits numbered 2(alpha)90 or above; one elective credit (see program note 6).

Pass Program

Satisfactory completion of the first three years of the 20 credit program entitles a student to apply for a pass degree.

Concurrent BSc/BEd

The Faculty of Mathematics and Science and the Faculty of Education co-operate in offering a concurrent Pass BSc/BEd program for students interested in teaching mathematics or science at the elementary level to grade 8. Refer to the Education-Concurrent BSc/BEd Program listing for additional information.

Environmental Sciences Program

Brock offers honours and pass programs in Environmental Sciences. Within these programs students must specialize in either Biological Sciences, Chemistry, Earth Sciences or Physical Geography. Refer to the Environmental Sciences listing for additional information.

Combined Major Programs

The Department of Earth Sciences, in co-operation with other departments, offers combined major programs in Earth Sciences with Biology, Chemistry, Environmental Policy, Geography and Physics. Prospective students should have their programs approved by the two departments concerned and are advised to follow one of the following patterns:

Earth Sciences and Biology

Honours

Year 1

ERSC 1F95; BIOL 1F90; one of CHEM 1P80 and 1P81, CHEM 1P90 and 1P91, PHYS 1F20; MATH 1P97 and 1P98; one Humanities or Social Science context credit.

Year 2

ERSC 2P31, 2P32; two credits from BIOL 2F01, 2P05, 2P92, 2P93, 2P96, 2P98, 2Q04; one ERSC credit numbered 2(alpha)00 to 2(alpha)99; the Humanities or Social Science context credit not taken in year 1.

Year 3

Two BIOL credits numbered 2(alpha)90 to 3(alpha)99; two ERSC credits numbered 2(alpha)00 to 3(alpha)99; one elective credit in BIOL or ERSC (see Program note 2).

Year 4

One and one-half BIOL credits numbered 2(alpha)90 or above; one and one-half ERSC credits numbered 2(alpha)90 or above; either BIOL 4F90 and 4F91 or 4F92 plus one elective credit or ERSC 4F90 and 4F91 or 4F92 plus one elective credit.

Pass

Satisfactory completion of the first three years of the honours program entitles a student to apply for a pass degree.

Earth Sciences and Chemistry**Honours***Year 1*

ERSC 1F95; CHEM 1P80 and 1P81 or CHEM 1P90 and 1P91; MATH 1P93 and 1P94; PHYS 1F90; one Humanities or Social Science context credit.

Year 2

ERSC 2P21 and 2P22; CHEM 2P12, 2P20, 2P32, and 2P42; one ERSC credit numbered 2(alpha)00 to 2(alpha)99; the Humanities or Social Science context credit not taken in year 1.

Year 3

ERSC 3P31; CHEM 2P21 and 3P40; one credit from CHEM 3P20, 3P21, 3P30, 3P31, 3P41, 3P51, 3P53, 3P60; one and one-half ERSC credits numbered 2(alpha)00 to 3(alpha)99; one elective credit in CHEM or ERSC (see Program note 3).

Year 4

One CHEM credit numbered 2(alpha)90 or above; one ERSC credit numbered 2(alpha)90 or above; either CHEM 4F90 and 4F91 or ERSC 4F90 and 4F91, or 4F92 plus one ERSC credit numbered 2(alpha)90 or above; one elective credit.

Pass

Satisfactory completion of the first three years of the honours program entitles a student to apply for a pass degree.

Earth Sciences and Geography**Honours***Year 1*

ERSC 1F95; GEOG 1F91; MATH 1P97 and 1P98; one Social Science context credit (GEOG 1F90 strongly recommended); one Humanities context credit.

Year 2

ERSC 2P01, 2P21, 2P61 and 2P64; GEOG 2P11; one and one-half credits from GEOG 2P04, 2P05, 2P07, 2P09; one elective credit.

Year 3

ERSC 2P31; one and one-half ERSC credits numbered 2(alpha)00 to 3(alpha)99; GEOG 3P56; one and one-half GEOG credits numbered 2(alpha)90 to 3(alpha)99 from groups B and C (see Geography department); one Science credit from BIOL, CHEM, COSC, MATH or PHYS (see program note 1).

Year 4

Two ERSC credits numbered 2(alpha)90 or above; GEOG 4F99; one GEOG credit numbered 3(alpha)90 or above from group B; one elective credit. The courses selected must include either ERSC 4F90 and 4F91, or 4F92 or GEOG 4F90 and at least three credits numbered 3(alpha)99 or above.

Pass

Satisfactory completion of the first three years of the honours program entitles a student to apply for a pass degree.

Earth Sciences and Physics**Honours***Year 1*

ERSC 1F95; MATH 1P93 and 1P94; one of PHYS 1F20, 1F25, 1F90 (preferred); one Humanities and one Social Science context credit.

Year 2

ERSC 2P01; one and one-half ERSC credits numbered 2(alpha)00 to 2(alpha)99; MATH 2F95; two PHYS credits numbered 2(alpha)00 to 2(alpha)99.

Year 3

Two ERSC credits numbered 2(alpha)00 to 3(alpha)99; one PHYS credit numbered 2(alpha)00 to 2(alpha)99; one PHYS credit numbered 2(alpha)90 to 3(alpha)99; one elective credit in ERSC or PHYS (see Program note 3).

Year 4

ERSC 4F90 and 4F91, or 4F92 plus one ERSC credit numbered 2(alpha)90 or above; one PHYS credit numbered 2(alpha)90 to 3(alpha)99 or one credit from PHYS 3P20, 4P41, 4P70 or 4P71; one PHYS credit numbered 2(alpha)99 or above; one elective credit.

or

Two ERSC credits numbered 2(alpha)99 or above; PHYS 4F90; one PHYS credit numbered 2(alpha)90 to 3(alpha)99 or one credit from PHYS 3P20, 4P41, 4P70 or 4P71; one elective credit.

Pass

Satisfactory completion of the first three years of the honours program entitles a student to apply for a pass degree.

Master of Science (MSc) Program

Candidates will normally have an honours BSc or BA degree for admission to the program.

Earth Sciences

Candidates without an honours degree will be required to take a qualifying year similar to year 4 of the honours program before formally enrolling for the MSc degree.

Candidates with an honours degree, or who have completed a qualifying year, require a minimum of one year to complete the MSc.

The following are possible focusses of this program: Quaternary geology, sedimentology, surface hydrology, hydrogeology, geomorphology, geochemistry, limnogeology, sedimentary processes, fluvial geology, palynology, geochronology, paleoecology, volcanology, structural geology, ore genesis and tectonics.

For details, see the Graduate Calendar or consult the chair of the department.

Prerequisites and Restrictions

Students must check to ensure that prerequisites are met. Students may be deregistered, at the request of the instructor, from any course for which prerequisites and/or restrictions have not been met.

Description of Courses

Note that not all courses are offered in every session. Refer to the applicable term timetable for details. Students should plan their programs accordingly and are required to have their program plans approved by the departmental undergraduate adviser.

ERSC 1F90

Geology and the Environment

Intended primarily for non-science majors. Current hypotheses about the history of planet Earth; the significance of understanding modern environments in interpreting ancient settings and predicting future developments. Topics include earthquake prediction, hazardous waste disposal, floods, erosion, landslides, glaciation, global climate change and historical geology.

Lectures, 2 hours per week; lab, 2 hours per week alternating weeks.

Note: secondary school sciences are not a prerequisite. Students achieving an exceptional level of performance in ERSC 1F90 may, at the discretion of the department, register in upper year courses.

Students completing this course will forfeit credit in ERSC 1F95.

ERSC 1F95

Introduction to Earth and Environmental Science

The earth as a member of the solar system; chemical and physical properties of the earth and originating processes; the fossil record and the history of life; energy and hydrocarbon formation and exploitation; environmental geology, global warming and paleoclimatology, acid precipitation, natural-anthropogenic weathering of rocks, minerals and soils; hydroenvironmental geology, soil-groundwater contamination, radioactive and general waste disposal, elemental toxicology.

Lectures, lab or local field trip, 5 hours per week.

Prerequisites: any two of biology, chemistry, environmental science, earth science, mathematics or physics beyond grade 11 or equivalent.

Students completing this course will forfeit credit in ERSC 1F90.

ERSC 2P01

Structural Geology

The measurement and effects of stress and strain. Genesis of brittle and ductile structural features and their classification. Methods of structural analysis and examination of hand specimens.

Lectures, lab, 5 hours per week.

Prerequisite: ERSC 1F95.

ERSC 2P21

Mineralogy

Crystal systems, symmetry operations, introduction to the 32 crystal classes; mineral composition and structure; physics and chemistry of minerals; mineral identification.

Lectures, lab, 5 hours per week.

Prerequisite: ERSC 1F95.

ERSC 2P22

Optical Mineralogy

Properties of light and its interaction with mineral grains: reflection, refraction, polarization, interference phenomena, extinction, colour and pleochroism. Refractometry; isotropic, uniaxial and biaxial optics; interpretation of interference figures. Transmitted light petrography in the identification of and familiarization with major rock-forming minerals in grain mounts and in thin section.

Lectures, lab, 5 hours per week.

Prerequisite: ERSC 2P21.

ERSC 2P31

Clastic Sedimentology

The description and elementary interpretation of sedimentary materials. Topics include the textural characteristics of sediment, porosity and permeability of granular materials, classification of sedimentary rocks, fluid flow and sediment transport, bedforms and stratification. Laboratories will illustrate common techniques employed in the study of sediments and sedimentary rocks.

Lectures, lab, local field trip, 5 hours per week.

Prerequisite: ERSC 1F95.

ERSC 2P32

Paleontology

Fossil preservation and bias in the fossil record; ontogeny and growth of invertebrates; functional morphology of selected invertebrate groups; an introduction to population ecology; speciation; paleoecology; mass extinctions in the fossil record. Labs deal with the classification and morphology of the major invertebrate groups and principles of taxonomy.

Lectures, lab, local field trip, 5 hours per week.

Prerequisite: ERSC 1F95 or BIOL 1F90 or permission of the instructor.

ERSC 2P61

Environmental Geology

(also offered as ENVI 2P61)

Philosophy and principles of environmental geology. Natural geologic processes and hazards: flooding, landslides, earthquakes, volcanic activity, glacial and coastal phenomena. Hydrogeology and human activity: water supply and use, solid waste and hazardous waste disposal. Mineral and energy resource utilization and possible consequent pollution.

Lectures, seminar, lab, 4 hours per week.

Prerequisite: ERSC 1F90 or 1F95.

Note: year 2 students enrolled in the ENVS program are permitted to register in this course provided they have successfully completed CHEM 1P81 or 1P91.

ERSC 2P64

Urban Geology

The interaction of urban activity with geology. How applied Quaternary geology, engineering geology and economic geology affect modern habitation and living (large subdivisions, plazas, sewage disposal, reservoirs), energy plants, transportation routes (road, rail and water), construction materials and industrial mineral resources and disposal dumps. Implications for business and society. The Niagara Peninsula as a natural field laboratory.

Lectures, seminar, field trip, 6 hours per week.

Prerequisite: ERSC 1F90 or 1F95.

ERSC 2P99

Dinosaurs and the History of Life

An introduction to paleontology, with emphasis on the evolutionary history of the vertebrates. Topics include vertebrate origins; evolutionary history of fish, fossil amphibians, marine reptiles of the Mesozoic era, dinosaurs and other archosaurs, origin of birds, origin and evolution of the mammals, human evolution, evolutionary history of land plants.

Lectures, 3 hours per week.

Prerequisite: one of ERSC 1F90, 1F95, BIOL 1F25, 1F90 or permission of the instructor.

ERSC 3P21

Introductory Petrography and Petrology

Igneous rocks: nomenclature and classification; magmatic processes. Application of one, two and three component phase diagrams to interpret the formation of igneous rocks. Metamorphic rocks: types, classification, mineral parageneses. Labs include the study of rocks in thin section, their mineralogy,

textures, origin and classification.

Lectures, lab, 5 hours per week.

Prerequisites: ERSC 2P22; CHEM 1P80 and 1P81 or CHEM 1P90 and 1P91.

ERSC 3P24

Glacial Geomorphology/Geology

(also offered as GEOG 3P24)

Introduction to glaciology; glacial processes, glacial deposits; their genesis and sedimentology. Relationship of glacial processes to landforms and surface topography. Glacial systems and facies associations. Applied aspects of glacial geology, such as drift exploration.

Lectures, lab, field work, 5 hours per week.

Prerequisite: GEOG 2P05 or permission of the instructor.

ERSC 3P25

Pleistocene Geology

(also offered as GEOG 3P25)

Glaciations in the geological record, causes of glaciations, biotic responses to climatic changes, eustatic and isostatic sea level changes in response to glaciation, Quaternary stratigraphy and correlation of glacial and non-glacial events, application of Quaternary geology to economic and environmental problems, methods of paleoclimatic reconstruction.

Lectures, lab, 5 hours per week.

Prerequisite: ERSC 2P31 or 3P24 or permission of the instructor.

ERSC 3P31

Geochemistry

History of geochemistry; elemental nucleosynthesis and cosmic abundances; classification of elements; crystal chemistry, bond energy, crystal defects and elemental partitioning; kinetic chemistry, elemental diffusion, nucleation and transformation; aqueous geochemistry, water-mineral interactions; Gibbs free energy and the formation, weathering of igneous, metamorphic and sedimentary rocks; principles of carbon, oxygen, hydrogen and strontium isotopes and hydrogeochemical applications.

Lectures, lab, 5 hours per week.

Prerequisites: CHEM 1P80 and 1P81 or CHEM 1P90 and 1P91.

Note: students must supply their own safety equipment (safety glasses and lab coats).

ERSC 3P43

Physical Geology

Temporal evolution and denudation of land masses in relation to tectonic, sedimentologic and climatic changes. Analysis and geologic interpretation of aerial photography, including remote sensing data from airborne and satellite imagery.

Lectures, lab, 5 hours per week.

Prerequisite: ERSC 2P01.

ERSC 3P50

Geology of Viticultural Regions

(also offered as OEVI 3P50)

The influence of bedrock, unconsolidated sediments and groundwater in glaciated, temperate and semi-desert terroirs.

Earth Sciences

Field examination of Niagara appellation vineyards and the geological environs of the sub-appellations.

Lectures, lab, 6 hours per week.

Prerequisite: ERSC 1F90 or 1F95 or permission of the instructor.

Note: students enrolled in the OEVI program and OEVI certificate students are permitted to register without the prerequisite. Major credit will not be granted to ERSC majors.

ERSC 3P61

Groundwater Geology

Occurrence, movement, exploration and exploitation of groundwater including the study of groundwater flow and principles of well hydraulics.

Lectures, lab, 5 hours per week.

Prerequisites: ERSC 1F95 and MATH 1P97.

ERSC 3P71

Stratigraphy and Carbonate Sedimentology

The North American Stratigraphic Code, introduction to sedimentary facies models and subsurface stratigraphy. Petrography of carbonate grains; recent carbonate environments; textural, structural and chemical limestone diagenesis; dolomitisation; silification and pyritisation of carbonate grains.

Lectures, lab, local field trip, 5 hours per week.

Prerequisites: ERSC 2P01, 2P22, 2P31 and 2P32.

ERSC 3P92

Computer Modelling in Groundwater Hydrology

Application of finite difference, finite element and numerical methods to simulate groundwater movement and solute transport. Applications and limitations of advanced computer programs to model; groundwater hydraulics for confined and unconfined aquifers, two-dimensional flownets, well head protection and three-dimensional groundwater flow in homogeneous and multilayer aquifers. Simulation of transport processes and attenuation mechanisms in contaminant migration. Modelling of remedial treatments.

Lectures, lab, 5 hours per week.

Prerequisite: ERSC 3P61.

ERSC 3P94

Igneous Petrology

Igneous petrogenesis, with emphasis on the physical chemistry of igneous processes; igneous rock complexes; studies of a number of petrologically important areas.

Lectures, lab, 5 hours per week.

Prerequisite: ERSC 3P21.

ERSC 3P95

Special Topics in Earth Sciences

A course in which a student may explore areas not represented by existing courses. Under certain circumstances, a student may carry out, under faculty supervision, a detailed research project, the results of which will be presented in a major essay and a formal seminar.

Restriction: consult the Chair and supervising instructor regarding permission to register. Open to ERSC (single or

combined) majors with a major average of 70 percent and a minimum of 10.0 overall credits.

Note: this course may be taken once for credit.

ERSC 3P97

Applied Micropaleontology

Taxonomy, biostratigraphy and paleoecological significance of calcareous, siliceous, phosphatic and organic-walled microfossils. Methods of collection, preparation, observation and identification of fossils of marine and freshwater benthos and plankton, and terrestrial spores and pollen. Application of microfossil assemblages to solving geological, ecological and biological problems, such as paleoenvironmental, paleoclimatological and paleogeographic reconstruction, dating events in earth history, exploring for fossil fuels and understanding evolution and speciation.

Lectures, lab, 5 hours per week.

Prerequisite: ERSC 2P32.

Note: year 3 students enrolled in the ENVS program are permitted to register in ERSC 3P97 provided they have successfully completed the ERSC requirements in year 2 of the program.

ERSC 3P98

Economic Geology

Principles and processes of the formation of metallic ore deposits, ore microscopy and ore petrology, metallogeny and theories of metallogenesis.

Lectures, lab, seminar, 6 hours per week.

Prerequisite: ERSC 3P21.

Note: ERSC 3P31 is recommended.

ERSC 3P99

Field Geology

A two-week immersion course offered after final examinations in year 3 introducing students to collecting, recording and synthesizing field data, airphoto mapping, preparing geologic maps and reports. The field area, situated in northern Ontario, consists of Archaean, Proterozoic and Paleozoic lithologies. Restriction: consult the department regarding permission to register. Students must have a minimum of 13.0 overall credits. Note: registrants are expected to defray the cost of travel, accommodation and other expenses.

ERSC 4F90

Literature Research and Seminar

A detailed study of the scientific literature relevant to the topic of the 4F91 thesis.

Restriction: open to ERSC honours (single or combined) majors with a minimum of 13.5 overall credits and a minimum major average of 75 percent.

Co-requisite: ERSC 4F91.

Note: the study will be included in the thesis and will be presented as a seminar.

ERSC 4F91

Thesis

Research on geological problems involving field or laboratory study under faculty supervision. Submission and oral defence

of thesis is required.

Restriction: open to ERSC honours (single or combined) majors with a minimum of 13.5 overall credits and a minimum major average of 75 percent.

Co-requisite: ERSC 4F90.

ERSC 4F92

Library Research Essays

Two detailed studies of the scientific literature under faculty supervision. The results of these two studies will be presented in major essays and as formal seminars. One research topic to be completed each term.

Restriction: open to ERSC honours (single or combined) majors with approval to year 4 (honours).

ERSC 4P01

Advanced Structural Geology

Deformation mechanisms; the use of kinematic indicators; relationships between micro and macrostructures; emphasis on recent topics and methods in structural geology.

Lectures, seminar, lab, 5 hours per week.

Prerequisite: ERSC 2P01.

ERSC 4P10

Advanced Clastic Sedimentology

Paleoenvironmental reconstruction of terrestrial and marine deposits. A lab project will consist of a detailed study of the subsurface geology of a part of southern Ontario.

Lectures, seminar, lab, 3 hours per week.

Prerequisites: ERSC 2P31 and ERSC 3P71.

ERSC 4P16

Precambrian Geology

Archaean and Proterozoic evolution of the Earth examining: geology, tectonics, stratigraphy and history of the Precambrian; evolution of the Earth's crust; Precambrian time scale; and evolution of life, oceans and atmospheres.

Lectures, seminar, 4 hours per week.

Prerequisite: ERSC 3P21.

ERSC 4P22

Metamorphic Petrology

Synthesis of metamorphic textures, compositional variations and field characteristics with emphasis on the temperature-pressure relations of the metamorphic rocks and the role of fluids in metamorphism.

Lectures, lab, 5 hours per week.

Prerequisite: ERSC 3P21.

ERSC 4P23

Advanced Paleontology

Evolutionary paleobiology; ecology of modern and ancient marine benthic communities, taphonomic models, macroevolutionary patterns in the fossil record, hierarchical approaches to evolutionary theory; heterochrony and evolution.

Lectures, lab, 5 hours per week.

Prerequisite: ERSC 2P32.

ERSC 4P28

Advanced Glacial Sedimentology I

(also offered as GEOG 4P28)

The sedimentology of present day glacial environments and of Quaternary sediments. Thermo-mechanical principles of glacier physics as applied to past and present glacier ice conditions. Glacial lithofacies associations. Glacio-tectonics and diagenesis. Principles of glacial erosion, entrainment and deposition.

Lectures, lab, local field trip, 5 hours per week.

Prerequisite: ERSC 3P24.

ERSC 4P31

Applied Environmental Geochemistry

Principles of availability, mobility and accumulation of metals in the lithosphere and hydrosphere. Cycling of metals in sediments, chemical weathering and element migration, anthropogenic influences on metal concentration in sediments; quality assurance of sampling procedures. Practical field work on local hydrological systems.

Lectures, lab, local field work, 5 hours per week.

Prerequisite: ERSC 3P31 or CHEM 2P42.

Note: students must supply their own safety equipment (safety glasses and lab coats).

ERSC 4P41

Quaternary Paleoecology/Paleoclimatology

Methods of reconstructing past environments, both physical/chemical and paleontological; principles of terrestrial, marine and freshwater ecosystems and their recognition in the geologic record; computer-assisted reconstruction of paleoclimates and their implications for future climatic change. Methods of dating Quaternary sediments.

Lectures, lab, 5 hours per week.

Prerequisite: ERSC 2P32.

Note: year 3 students enrolled in the ENVS program are permitted to register in ERSC 4P41 provided they have successfully completed the ERSC requirements in year 2 of the program.

ERSC 4P52

Advanced Economic Geology

Non-metallic mineral deposits, industrial minerals, structural control, exploitation of ore deposits, grade and tonnage calculation.

Lectures, lab, seminar, field trip, 6 hours per week.

Prerequisite: ERSC 3P98.

ERSC 4P61

Surface Hydrology

Distribution and variation of run-off, recurrence of floods and droughts; fluvial processes and sediment transport; hydrologic and water management techniques; computer models for hydrologic and sediment analysis.

Lectures, lab, local field trip, 5 hours per week.

Prerequisite: ERSC 2P31 or permission of the instructor.

Economics

Chair

Robert W. Dimand

Professors Emeriti

Maurice F. Perkins, Gabriel Temkin

Professors

Robert W. Dimand, Mohammed H. Dore, Joseph Kushner, Isidore J. Masse, Roberta E. Robb, Lewis A. Soroka

Associate Professors

Diane P. Dupont, Zisimos Koustas, David R. F. Love, Felice F. Martinello, Steven J. Renzetti, William Veloce, Anthony J. Ward

Assistant Professor

Hasan Imam

General Information

Administrative Assistant, extension 3325

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Economics studies how scarce resources are allocated to produce goods and services and the distribution of those goods and services across individuals and different groups in society. The basic theoretical framework is divided into two parts: microeconomic theory, where the focus is on the determination of prices and the allocation of scarce resources among competing uses; and macroeconomic theory, where the focus is on the levels of utilization of resources, especially the levels of employment, unemployment and inflation. The theoretical tools are applied to issues in the labour market, industrial organization, international trade, economic development, urban studies, taxation and government expenditure. The analysis yields insights and predictions that are used to develop public policy on a wide range of issues.

The honours program provides students with an opportunity for a more intensive examination of issues in the field and prepares students for graduate studies in economics.

Mathematics is an important analytical tool for economists. All students, but especially those intending to pursue graduate studies, are encouraged to take additional MATH courses. Students should consult the department regarding appropriate choices. (MATH 1P93 satisfies the MATH 1P97 prerequisite that is specified for some ECON courses.)

Computer literacy is required for some Economics courses. Students who are not computer literate should take COSC 1P90 or 1P98, or both, as elective credits.

Program Notes

1. ECON 1P91 and 1P92 may be taken concurrently or in either order.
2. Students should consider ECON 3P92, 3P95, 3P58, 3P59, 4P58, 4P59 or MATH 2P20, 4F21 for their ECON and MATH electives.
3. In all 20 credit degree programs, at least 12 credits must be numbered 2(alpha)00 or above, six of which must be numbered 2(alpha)90 or above and of these, three must be numbered 3(alpha)90 or above. In all 15 credit degree programs, at least seven credits must be numbered 2(alpha)00 or above, three of which must be numbered 2(alpha)90 or above.

Honours Program

Year 1

ECON 1P91 and 1P92; MATH 1P93 or 1P97; MATH 1P98; one Humanities and one Science context credit; one elective credit (see program note 1).

Year 2

ECON 2P21, 2P22, 2P31, 2P32, 2P90 and 2P92; one-half ECON credit; one and one-half elective credits.

Year 3

ECON 3P91; two and one-half ECON credits numbered 2(alpha)90 or above; two elective credits.

Year 4

ECON 3P90, 4P13 and 4P14; one ECON credit numbered 3(alpha)90 or above; one-half ECON credit; two elective credits.

International Political Economy (honours only)

Consult International Political Economy entry for a listing of course requirements.

Pass Program

Years 1 and 2

As in the honours program.

Year 3

One ECON credit; two ECON credits numbered 2(alpha)90 or above; two elective credits.

Combined Major Programs

Students may take Economics as part of a combined major. Students should consult the department about other possible programs.

Economics and Business (honours only)**Year 1**

ECON 1P91 and 1P92; ACTG 1P91 and 1P92; MGMT 1P93 and 1P96; MATH 1P93 or 1P97; MATH 1P98; one Science context credit or Humanities context credit. (See program notes 1 and 2.)

Year 2

ECON 2P21 (or 2P23), 2P22, 2P31 and 2P90; ACTG 2P40; FNCE 2P91; MKTG 2P91; OBHR 2P91; the Humanities context credit or Science context credit not taken in year 1.

Year 3

ECON 2P32, 3P90 and 3P91; FNCE 3P93; MGMT 3P82; MKTG 3P24; OBHR 3P42; one-half ECON credit; one elective credit.

Year 4

ECON 4P13 and 4P14; OPER 2P91; one ECON credit numbered 2(alpha)90 or above; one ACTG, ENTR, FNCE, MGMT, MKTG or OBHR credit; one-half ACTG, ENTR, FNCE, MGMT, MKTG or OBHR credit numbered 3(alpha)90 or above; one elective credit.

Economics and Computer Science (honours only)

Consult the Computer Science entry for a listing of course requirements.

Economics and Geography**Honours****Year 1**

ECON 1P91 and 1P92; GEOG 1F90; MATH 1P93 or 1P97; MATH 1P98; one Humanities context credit and one Science context credit (see program note 1).

Year 2

ECON 2P21, 2P22, 2P31 and 2P32; GEOG 2P10; one and one-half credits from GEOG 2P02, 2P03, 2P06, 2P07; one elective credit.

Year 3

ECON 2P90; GEOG 3P57; one and one-half ECON credits numbered 2(alpha)90 or above; one and one-half GEOG credit numbered 2(alpha)90 to 3(alpha)99 from group A or C (see Geography department calendar entry); one elective credit.

Year 4

ECON 3P90, 3P91, 4P13 and 4P14; GEOG 4F99; one GEOG credit numbered 3(alpha)90 or above from group A or C (see Geography department calendar entry); one elective credit.

Pass

Satisfactory completion of the first three years of the honours program entitles a student to apply for a pass degree.

Economics and Labour Studies (pass only)**Year 1**

LABR 1P91 and 1P92; ECON 1P91 and 1P92; MATH 1P93 or 1P97; MATH 1P98; one POLI credit numbered 1(alpha)90 to 1(alpha)99 or SOCI 1F90; one Science context credit or Humanities context credit (see program note 1).

Year 2

ECON 2P21, 2P22, 2P31 and 2P32; LABR 2F00 and 2P15; one-half LABR credit; the Science context credit or Humanities context credit not taken in year 1.

Year 3

ECON 2P90; LABR 3F00, 3P24 and 3P25; one and one-half ECON credits numbered 2(alpha)90 or above; one elective credit.

Economics and Mathematics**Honours****Year 1**

ECON 1P91 and 1P92; MATH 1P12, 1P93 and 1P94; COSC 1P03 or 1P93; one Humanities context credit and one Science context credit (see program note 1).

Year 2

ECON 2P21, 2P22, 2P31 and 2P32; MATH 2F00 or 2F95; MATH 2F96 and 2P60; one-half elective credit.

Year 3

MATH 2F10; two ECON credits numbered 2(alpha)90 or above; one MATH credit numbered 2(alpha)90 or above (see program note 2); one elective credit.

Year 4

ECON 3P90, 4P13 and 4P14; MATH 3P95 and 3P96; one-half ECON credit numbered 3(alpha)90 or above; one MATH credit numbered 2(alpha)90 or above; one elective credit.

Economics

Pass

Satisfactory completion of the first three years of the honours program entitles a student to apply for a pass degree.

Concentrations

Concentration in Statistics and Econometrics

To obtain the notation "Concentration in Statistics and Econometrics" as part of the ECON and MATH (honours) combined major on the official transcript, the year 2 MATH requirements are: MATH 2F00 or 2F95 or MATH 2P01 and 2P60; MATH 2F96. In year 4 students must choose ECON 3P92 or 3P95 as the one-half ECON credit, MATH 4P22, 4P23 and one MATH credit (MATH 4F21 recommended).

Prerequisites and Restrictions

Students must check to ensure that prerequisites are met. Students may be deregistered, at the request of the instructor, from any course for which prerequisites and/or restrictions have not been met.

Description of Courses

Note that not all courses are offered in every session. Refer to applicable term timetable for details.

ECON 1P91

Principles of Microeconomics

Introduction to microeconomics. Topics include the nature of economics, the price system, demand, production and cost, markets and pricing, factor pricing and the distribution of income.

Lectures, tutorial, 4 hours per week.

Note: may be taken concurrently with, before or after ECON 1P92.

ECON 1P92

Principles of Macroeconomics

Introduction to macroeconomics. Topics include the nature of economics, the determination and control of national income, money, banking and monetary policy, macroeconomic policy and the balance of payments.

Lectures, tutorial, 4 hours per week.

Note: may be taken concurrently with, before or after ECON 1P91.

ECON 2P09

Canadian Economic History

Growth and change in the Canadian economy, from the earliest European contact to the 20th century. Theories of growth, and of technical, institutional and demographic change. Topics include early fish, fur and timber trades, agriculture, the development of the West and the National Policy.

Lectures, 3 hours per week.

Prerequisites: ECON 1P91 and 1P92.

ECON 2P10

United States Economic History

United States economic development from the colonial era to the late 20th century. Topics include the effect of British mercantilist policy on the colonial economy, westward expansion, financial development under central and free banking, comparison of Northern and Southern agriculture, slavery and emancipation, industrialization and industrial organization, transportation, impact of wars, the changing role of women and the interaction of government and market.

Lectures, 3 hours per week.

Prerequisites: ECON 1P91 and 1P92.

ECON 2P11

European Economic History

The commercial expansion of Europe in the 16th century, the 17th-century depression and the Industrial and Agricultural revolutions of the late 18th and the 19th centuries. Technical progress, capital accumulation, growth of demand and new forms of economic organization as sources of economic change. The spread of industrialization between countries, the role of Europe in the world economy and the changing economic role of the state.

Lectures, 3 hours per week.

Prerequisites: ECON 1P91 and 1P92.

ECON 2P15

The Economics of Unions

(also offered as LABR 2P15)

Labour unions in the marketplace. How unions affect, and are affected by, the labour and product markets. Topics include the effects of unions on wages, fringe benefits, turnover, inequality, productivity and the profitability of firms; union behaviour; who belongs to unions and why; collective bargaining; strikes; interest arbitration; public-sector unionism.

Lectures, 3 hours per week.

Prerequisites: ECON 1P91 and 1P92.

ECON 2P17

Economic Development

The economic factors affecting the growth of developing countries. Topics include growth models, inequality and poverty, education, urbanization, agriculture, international trade and the historical emergence of today's underdeveloped nations.

Lectures, 3 hours per week.

Prerequisites: ECON 1P91 and 1P92.

ECON 2P21

Intermediate Microeconomics I

Topics include the theory of the consumer and producer, willingness to pay, index numbers, the structure of a perfectly competitive industry and an introduction to imperfectly competitive markets. Applications are emphasized.

Lectures, tutorial, 4 hours per week.

Prerequisite: ECON 1P91.

Note: MATH 1P97 is strongly recommended.

Students completing this course will forfeit credit in ECON 2P23.

ECON 2P22

Intermediate Macroeconomics I

The main determinants of aggregate output and national income in an open economy. Topics include money and interest, effects of fiscal and monetary policies, and trade and capital flows under different exchange rate regimes.

Lectures, tutorial, 4 hours per week.

Prerequisite: ECON 1P92.

ECON 2P23

Managerial Economics

The application of microeconomic concepts to business decision making. Topics include sales taxes and subsidies, consumer theory, production theory and various market structures such as discriminating monopoly, oligopoly and dominant firms.

Lectures, tutorial, 4 hours per week.

Restriction: not open to ECON (single or combined) majors.

Prerequisite: ECON 1P91.

Note: this course is primarily designed for students in the Business Administration program. MATH 1P97 is strongly recommended.

Students completing this course will forfeit credit in ECON 2P21.

ECON 2P28

Economics of the Environment

(also offered as ENVI 2P28)

Environmental problems and natural resource management. Real world applications and case studies including sustainable development, pollution, taxes, the crisis in Canada's commercial fisheries and valuing improvements to environmental quality.

Lectures, 3 hours per week.

Restriction: open to students with a minimum of 4.0 overall credits.

Students completing this course will forfeit credit in ENVP 2P28.

ECON 2P31

Intermediate Microeconomics II

Topics include models of market structure such as monopoly, duopoly, oligopoly and monopolistic competition; the demand and supply of factors of production under perfect and imperfect

markets. Introduction to the general equilibrium model and welfare theory. Applications are emphasized.

Lectures, 3 hours per week.

Prerequisite: ECON 2P21 or 2P23.

ECON 2P32

Intermediate Macroeconomics II

An extension of the macroeconomic model to include the price level. Both aggregate demand and aggregate supply are studied. Topics include money demand and supply, inflation, unemployment and the effectiveness of monetary and fiscal policy in an open economy.

Lectures, 3 hours per week.

Prerequisite: ECON 2P22.

ECON 2P41

Economics of Tourism and Leisure Activities

(also offered as RECL 2P41 and TOUR 2P41)

The nature and structure of the entertainment industry including professional sports, film, television, music and broadcasting industries; how the demand for tourism and leisure activities is affected by age, fluctuations in income levels, work practices and exchange rates. Government funding for education-related activities and leisure activities.

Lectures, 3 hours per week.

Restriction: open to students with a minimum of 4.0 credits.

Not open to ECON (single or combined) majors, BBE or ENEC students.

ECON 2P86

Women in the Economy

(also offered as LABR 2P86, SOCI 2P86 and WISE 2P86)

Women in the Canadian labour market. Topics include the allocation of time between the household and the labour market; gender segregation in the work place; how earnings are determined; causes of occupational and earnings difference by gender; the role of investment in education and discrimination; recent developments in the labour market and their impact on women and men; selected policy issues.

Lectures, 3 hours per week.

Restriction: open to WISE majors until date specified in the BIRT guide. Students must have a minimum of 4.0 overall credits.

ECON 2P90

Introduction to Econometrics

Probability, random variables and density functions; correlation analysis; estimation and hypothesis testing in the classical linear regression model. Practical applications to different areas of economics and business.

Lectures, lab, 4.5 hours per week.

Restriction: not open to MATH (single or combined) majors.

Prerequisites: ECON 1P91 and 1P92, MATH 1F92 or 1P98.

Economics

ECON 2P91

Decision Analysis

Linear programming, decision trees using Bayes theorem, expected value under uncertainty. Multiple regression analysis with applications to forecasting and business decisions. Dynamic simulation

Lectures, lab, 4.5 hours per week.

Prerequisites: ECON 1P91, 1P92, MATH 1P97 and 1P98.

ECON 2P92

Research Methods in Economics

Locating economic data and published research, planning the project and defining a hypothesis, reasoning and argument in economics, uses and abuses of theory and quantitative methods, selection of appropriate methods, presentation of the findings.

Lectures, seminar, lab, 4 hours per week.

Restriction: open to ECON (single or combined), BBE and ENEC majors.

Prerequisites: ECON 2P21, 2P22 and 2P90.

ECON 2P94

Canadian Economic Issues

(also offered as LABR 2P94)

Canadian economic and business problems and policies. Topics may include stabilization, competition, taxation, foreign trade and exchange rate policies.

Lectures, 3 hours per week.

Prerequisites: ECON 1P91 and 1P92.

ECON 2V60-2V69

Topics in Canadian Economic Policy

Study of a particular area or theme in Canadian economic policy.

ECON 3P01

History of Economic Thought I

The development of economic analysis to 1870, including mercantilism, the classical school of political economy, and Marx.

Lectures, 3 hours per week.

Prerequisite: ECON 2P21 or 2P23.

Students completing this course will forfeit credit in ECON 3F02.

ECON 3P02

History of Economic Thought II

The development of economic analysis since 1870, including marginalism, Keynes and the founders of modern economics.

Lectures, 3 hours per week.

Prerequisites: ECON 1P92; ECON 2P21 or 2P23.

Note: ECON 3P01 is recommended.

Students completing this course will forfeit credit in ECON 3F02.

ECON 3P03

Money and Banking I

Financial markets, understanding interest rates, portfolio choice, the capital asset pricing model, the behaviour of interest

rates, the risk and term structure of interest rates, the foreign exchange market. Economic analysis of banking structure, the banking firm and the management of financial institutions.

Lectures, 3 hours per week.

Prerequisites: ECON 2P21 or 2P23; ECON 2P22.

Students completing this course will forfeit credit in ECON 3F03.

ECON 3P04

Money and Banking II

Financial derivatives and risk management. Central banking and the conduct of monetary policy, the demand for money, the transmission mechanisms of monetary policy, money and inflation, theory of rational expectations and efficient capital markets.

Lectures, 3 hours per week.

Prerequisites: ECON 2P21 or 2P23; ECON 2P22.

Note: ECON 3P03 is recommended.

Students completing this course will forfeit credit in ECON 3F03.

ECON 3P06

Industrial Organization I

Markets and the economic environment affecting strategic pricing and non-pricing behaviour of firms. Topics include the determinants of market structure, oligopoly pricing including game theory, predatory pricing, resale price maintenance, limit pricing, price fixing, advertising and research and development.

Lectures, 3 hours per week.

Prerequisite: ECON 2P21 or 2P23.

Students completing this course will forfeit credit in ECON 3F06.

ECON 3P07

Comparative Economic Systems I

Alternative economic systems, including centrally directed economies. Emphasis on planning as a substitute for markets.

Lectures, 3 hours per week.

Prerequisite: ECON 2P21 or 2P23.

Students completing this course will forfeit credit in ECON 3F07.

ECON 3P08

Comparative Economic Systems II

Changing economic systems: globalization and economic integration (NAFTA, the European Union); the transition from plan to market in Central and Eastern Europe, the former Soviet Union, and China; the Japanese economy.

Lectures, 3 hours per week.

Prerequisite: ECON 2P21 or 2P23.

Note: ECON 3P07 is recommended.

Students completing this course will forfeit credit in ECON 3F07.

ECON 3P13

Economics of the Multinational Enterprise

Economic theory of and public policy towards the multina-

tional enterprise. Topics include theories of foreign direct investment, macroeconomic and microeconomic effects of direct investment in host countries, home country issues, industry studies, public policy towards multinationals.

Lectures, 3 hours per week.

Prerequisite: ECON 2P21 or 2P23.

Note: ECON 3P93 is recommended.

ECON 3P14

Public Sector Economics: Expenditure

The role and nature of the government sector; economics of public expenditure with reference to equity and efficiency considerations; techniques of public expenditure analysis; intergovernmental fiscal relations and economics of public debt.

Lectures, 3 hours per week.

Prerequisite: ECON 2P21 or 2P23.

ECON 3P15

Public Sector Economics: Taxation

An introduction to the theory of taxation; economic consequences of federal and provincial taxes; theory of optimum taxation; analysis of Canadian tax system.

Lectures, 3 hours per week.

Prerequisite: ECON 2P21 or 2P23.

ECON 3P16

Industrial Organization II

The evolution of competition policy in Canada and the application of the present Competition Act to affect market structure, market conduct and market performance. Other policy approaches such as public regulation and public ownership.

Lectures, 3 hours per week.

Prerequisite: ECON 3P06.

Students completing this course will forfeit credit in ECON 3F06.

ECON 3P18

Urban Economics

Theories of location, city formation and urban spatial structure. Topics include housing, transportation, poverty, financing of municipal governments and the economics of city size. Social welfare implications of problems and policies.

Lectures, 3 hours per week.

Prerequisite: ECON 2P21 or 2P23.

ECON 3P19

Regional Economics

Theories of regional income determination; classical and other theories of regional growth; regional business cycles. Canadian regional disparities and the nature of the "Canadian Economic Union." Regional development policies in Canada, the UK and France.

Lectures, 3 hours per week.

Prerequisite: ECON 2P22.

ECON 3P24

Labour Economics

(also offered as LABR 3P24)

The economics of the labour market. Topics include the demand for labour, the supply of labour and investment in human capital. Policy applications.

Lectures, 3 hours per week.

Prerequisite: ECON 2P21 or 2P23.

ECON 3P25

Topics in Labour Economics

(also offered as LABR 3P25)

Topics vary from year to year and may include unemployment and the impact of unemployment insurance in the labour market, discrimination in the labour market, labour migration and the economic impact of immigration, economics of the family, the distribution of income and wealth in Canada, the economic impact of unions on wages and non-wage outcomes, issues in retirement and pensions.

Lectures, 3 hours per week.

Prerequisite: ECON 2P21 or 2P23.

ECON 3P27

The Economics of Natural Resources

Economic analysis of the extraction of non-renewable resources (such as oil or minerals) and the harvest of renewable resources (such as water, fish or forests). Development of socially optimal extraction or harvesting rules. Examination of recent government resource policies.

Lectures, 3 hours per week.

Prerequisite: ECON 2P21 or 2P23.

ECON 3P28

Environmental Economics

Economic analysis of environmental degradation. The theory of externalities applied to environmental policy design for air, water, soil and toxic pollutants. International and distributional impacts.

Lectures, 3 hours per week.

Prerequisite: ECON 2P21 or 2P23.

ECON 3P58

Operations Research Methods A

(also offered as MATH 3P58)

Principles of operations research; Lagrange multipliers, with applications to LP; network models; elements of dynamic programming; scheduling (criteria and algorithms); integer programming (theory and practice); elements of quadratic programming; optimization and quasi-Newton methods; discussion and analysis of selected cases.

Lectures, 4 hours per week.

Prerequisite: MATH 2P60.

Economics

ECON 3P59

Operations Research Methods B

(also offered as MATH 3P59)

Principles of modelling; decision theory, subjective probability and Bayesian statistics; simulation; discussion and analysis of selected cases.

Lectures, 4 hours per week.

Prerequisite: MATH 2P60 or permission of the instructor.

ECON 3P90

Econometrics

The regression model in applied economics. The classical model and its extensions such as auto correlation and heteroscedasticity. Model specification and introduction to dynamic models. Theory and application of the regression model including a variety of practical examples.

Lectures, lab, 4 hours per week.

Prerequisites: ECON 2P21 or 2P23; ECON 2P22; ECON 2P90 or MATH 2F96; MATH 1P97 or 1P93 or permission of the instructor.

ECON 3P91

Mathematical Economics I

The application of quantitative techniques to economic theory and business problems. Quantitative techniques include matrix algebra, differential calculus, multivariate optimization without constraints and constrained optimization. Applications include the Leontief input-output model, the matrix representation of the classical least squares model in econometrics, profit and utility maximization, cost minimization, derivation of fiscal and monetary multipliers of nonlinear macroeconomic models, comparative statistics and efficiency wages.

Lectures, 3 hours per week.

Restriction: not open to MATH (single or combined) majors or general studies students.

Prerequisites: ECON 2P21 or 2P23; ECON 2P22; MATH 1P93 or 1P97.

ECON 3P92

Forecasting in Economics

Forecasting methods in business and economics such as time series extrapolative methods, Box-Jenkins and econometric model-based approaches. Combined forecasting methods and evaluation of forecasts. Practical applications in business and economics.

Lectures, lab, 4 hours per week.

Prerequisite: ECON 2P90 or MATH 2F96.

ECON 3P93

International Trade

The pure theory of international trade and commercial policy. Topics include the gains from trade, specialization, determinants of trade flows and impacts of tariffs and quotas.

Lectures, 3 hours per week.

Prerequisite: ECON 2P31.

ECON 3P94

International Payments

Adjustment in the balance of payments and the role of international monetary institutions. International capital flows, interest rate arbitrage and exchange rates. International asset portfolio diversification.

Lectures, 3 hours per week.

Prerequisites: ECON 2P21 or 2P23; ECON 2P32.

ECON 3P95

Topics in Applied Econometrics

Topics may include time series econometrics, simultaneous equation model, unit root problem, trend modelling in economic time series, co-integration, Granger causality testing, vector auto regressions and dummy dependent variable models.

Lectures, lab, 4 hours per week.

Prerequisites: ECON 3P90 and 3P91.

ECON 3P96

Economic Growth and Business Cycles

The characteristics of business cycles. Theories attempting to explain the cyclical fluctuation of total output, employment and inflation. Criteria for judging the validity of business cycle theories in explaining actual fluctuations.

Lectures, 3 hours per week.

Prerequisites: ECON 2P22 and 2P90.

ECON 3P97

Cost-Benefit Analysis

Analysis of welfare economics and its application to project evaluation. Emphasis on measurement of non-market activities such as benefits from environmental improvements and valuation of unemployed resources.

Lectures, 3 hours per week.

Prerequisite: ECON 2P31.

ECON 3P99

Mathematical Economics II

The application of quantitative techniques to economic theory and business problems. Quantitative techniques include optimization with inequality constraints, the envelope theorem, game theory, difference and differential equations. Applications include labour-leisure choice, duality, sequential bargaining models, macroeconomic rational expectations models and economic growth models.

Lectures, 3 hours per week.

Prerequisite: ECON 3P91.

ECON 3V60-3V69

Field Courses in Economics

Application of economic analysis to special topics.

ECON 4F28

Advanced Environmental Economics

Advanced analysis of environmental and natural resource economics with emphasis on the integration of economic research methods and ecological models. Topics may include sustain-

able development, ethically flexible policy evaluation and non-market valuation.

Lectures, 3 hours per week.

Restriction: open to ENEC majors.

Prerequisites: ECON 3P27, 3P28 and 3P90 or permission of the instructor.

ECON 4F90

Honours Essay

A program of reading and research under the supervision of a Faculty member.

Restriction: open to ECON (single or combined) majors with approval to year 4 (honours).

Note: for more information students should consult the ECON 4F90 co-ordinator.

ECON 4P13

Advanced Macroeconomics

Advanced macro theory supplemented with readings and discussions of recent literature.

Lectures, 3 hours per week.

Prerequisites: ECON 2P32 and 3P91 or permission of the instructor.

ECON 4P14

Advanced Microeconomics

Advanced micro theory. Topics may include theory of consumer behaviour, theory of the firm, imperfect competition, general equilibrium and welfare economics, behaviour under uncertainty, risk and asymmetric information.

Lectures, 3 hours per week.

Prerequisites: ECON 2P31 and 3P91 or permission of the instructor.

ECON 4P58

Operations Research Applications

(also offered as MATH 4P58)

Practice of operations research, investment and applications of LP to project selection; capital growth; further dynamic programming; location problems; inventory problems; actuarial problems; discussion and analysis of selected cases.

Lectures, 4 hours per week.

Prerequisite: ECON 3P58 or permission of the instructor.

ECON 4P59

Game Theory

(also offered as MATH 4P59)

Applications of modelling; review of elementary decision theory and subjective probability theory; game theory (Nash equilibrium; two player NZS games; Nash cooperative solution); shapley value; voting power. Selected cases from economics and other applications.

Lectures, 4 hours per week.

Prerequisite: ECON 3P91 or MATH 2P60 or permission of the instructor.

Faculty of Education

Dean

Michael Manley-Casimir

Continuing Studies Program

Director

Donald H. Dworet

Academic Co-ordinator, Adult Education

Michael Kompf

Co-ordinator, Adult Education

Phyllis Stanley

Instructors for the Continuing Studies Program are selected from the departments of Graduate and Undergraduate Studies in Education and Pre-service Education. Part-time instructors are employed as required.

Department of Graduate and Undergraduate Studies in Education

Chair

Rosemary E. Young

Professors

R. Terrance Boak, Ronald W. Common, Susan Drake, Michael Manley-Casimir, John M. Novak, G. Patrick O'Neill, Alan E. Wheeler

Associate Professors

Richard Bond, Kristian Kirkwood, Michael Kompf, Hedy McGarrell, Coral Mitchell, Jonathan Neufeld, James Wagner, Vera Woloshyn, Rosemary Young

Assistant Professors

Sandra Bosacki, Susan A. Tilley

Department of Pre-service Education

Chair

Raymond T. Chodzinski

Professors

Ralph D. Connelly, Anthony S. Mollica, Eric R. Muller, Sybil E. Wilson

Associate Professors

Rodger Beatty, Joyce Castle, W. L. Roger Crane, Donald H. Dworet, Anne Elliott, Lynette Fast, James W. Kerr, Merle Richards, Ruth L. Scott, Adele Thomas

Assistant Professors

Sharon Abbey, Sheila M. Bennett, David Hutchison, John Kearns, Susan Sydor

Lecturers

Tony DiPetta, Joe Engemann

Adjunct Professor

Eugene Luczkiw

Co-ordinators

Raymond Chodzinski (Intermediate/Senior Program, Hamilton Campus), Robert Moulton (Technological Studies), Merle Richards (French Teaching Specialization Program), Claudine VanEvery-Albert (Native Teacher Education Programs), Sybil E. Wilson (Intermediate/Senior Program, St. Catharines Campus) Sybil Wilson (Enterprise Education Extended Program)

General Information

Administrative Assistants, Education Room 126

Continuing Studies Program, extension 3342

<http://www.ed.brocku.ca/Departments/aded.html/>

<http://www.ed.brocku.ca/Departments/conti.html/>

Graduate and Undergraduate Studies in Education, extension 3340

<http://www.ed.brocku.ca/Departments/grad/>

Pre-service Education, extension 3341

<http://www.ed.brocku.ca/Departments/preserv/>

The Faculty offers programs and courses leading to BEd and MEd degrees at both the main St. Catharines campus and a satellite campus in the Hamilton area, with some selected continuing studies and MEd courses offered in Mississauga and Hamilton. The Faculty also provides courses which can be used as electives in undergraduate programs in the University.

Bachelor of Education programs are field-oriented and are based on an approach unique in Ontario. Much of the orientation to and instruction in professional practice takes place under the supervision of counsellors working with groups of students in internship centres located in schools throughout the Niagara Peninsula and the regions of Hamilton-Wentworth, Haldimand and Halton. Candidates who are accepted into the BEd program to teach in secondary schools are assigned to work with specialized subject area tutors in high schools throughout this same area.

Those interested in a teaching career in Ontario are advised to read the Ontario College of Teachers Act (Regulation 184, 1996) with respect to teachable subjects, definitions, basic qualifications and regulations.

Graduate programs

The Faculty of Education offers a Master of Education degree in Curriculum Studies; Studies in Teaching and Learning; Organizational and Administrative Studies; and Integrated Studies. For further information and course listings, refer to the Graduate Calendar or contact the Office of the Registrar.

Undergraduate courses

Undergraduate courses for those interested in obtaining a greater understanding of the field of education are offered for both full- and part-time students. Undergraduate degree credit may be given for EDUC 1F90, 2F00, 2F01, 3F01, 3P40, 3P50, 3P52, 4P01, 4P02, 4P03.

Bachelor of Education Programs

The Faculty offers three programs leading to the conferring of the BEd degree. In addition, the Faculty co-operates with other departments in offering concurrent programs leading to the conferring of a BA/BEEd, BSc/BEEd or BPhEd/BEEd. All Pre-service Education students are advised to refer to the policies and procedures in the *Handbook for Pre-service Teachers*. The Handbook is mailed along with information from the Office of the Registrar to those who have been offered admission into the Pre-service Program.

Program I: Pre-service Education

A consecutive degree program leading to a BEd and an Ontario Certificate of Qualification (OCQ) for students who already hold a university degree. Note that the OCQ replaces the Ontario MET certification to teach in the province, that is, the Ontario Teacher's Certificate (OTC).

Program II: Continuing Studies

A BEd program open to educators wishing to further their professional education beyond the basic level in specialized areas. Although the program is designed specifically for candidates who already hold an undergraduate degree and certification to teach in Ontario, enquiries from those with an equivalent background are welcomed. Equivalence granted by the OCT will be accepted by the Continuing Studies Program for entrance into any of our courses.

Under the condition noted in program requirements, candidates who hold an OTC or OCQ on admission to Continuing Studies, and who successfully complete specified courses and have appropriate prerequisites, will be recommended to the Ontario College of Teachers (OCT) for additional qualifications recommendation.

Program III: First degree BEd

A BEd program leading to the conferring of the BEd as a first degree.

Concurrent degrees

Brock University offers five concurrent programs: an honours BA/BEEd program in French (Intermediate/Senior), an honours BPhEd/BEEd (Primary/Junior), a pass BA/BEEd program in Child and Youth Studies (Primary/Junior), a pass BSc/BEEd program in Science (Junior/Intermediate) and a pass BSc/BEEd program in Mathematics (Junior/Intermediate).

Program I: Pre-service Bachelor of Education Program

Admission requirements

Candidates are expected to have some experience in working with children and youth of the age group in the program for which they are applying.

Enrolment in the Faculty of Education is limited to approximately 600 positions for both concurrent and consecutive programs. Applicants for the consecutive year program must have completed the requirements for a bachelor's degree acceptable to Brock prior to the beginning of classes in September. Selection is based on the academic average of the best 10 university credits, on experience as submitted on the Brock Work Experience Profile Form and on acceptable references. Only candidates with a minimum B average (75 percent at Brock) on their top 10 credits will be considered. Because the experience profile is a significant part of the selection process, applicants should complete the form with care.

Applications must be received by the Ontario Universities' Application Centre (OUAC) by the date specified in the OUAC 205 application form, to be considered for admission to the September 2001 program. All supporting documentation (Work Experience Profile and letters of reference) must be received at the Registrar's Office, Brock University, by the date specified in the OUAC application form. Only information received by those dates, will be considered part of the admission file.

Primary/Junior (Grades K-6)

Candidates are encouraged to have an area of concentration related to school curriculum. Some preference will be given to Primary/Junior candidates with a major in Child and Youth Studies.

Education

In 2001 - 2002, preference will be given to candidates who have completed some or all Grade 12/OAC courses in mathematics, science, English, geography and history. For those candidates who have not completed these secondary school courses, the following courses or equivalents will be accepted:

- MATH 2P02 Principles of Mathematics for Primary and Junior Teachers;
- SCIE 1P10 Principles of Science for Primary and Junior Teachers;
- LING 1P95 Principles of Language Structure for Primary and Junior Teachers;
- one-half university Canadian geography credit;
- one-half university Canadian history credit.

Students are also encouraged to take arts and physical education courses. Some preference will be given to Primary/Junior candidates with a major in Child and Youth Studies.

Commencing in 2002 - 2003, candidates must have completed Grade 12 courses in mathematics, science, English, geography and history. For those candidates who have not completed these secondary school courses, the following courses or equivalents will be accepted:

- MATH 2P02 Principles of Mathematics for Primary and Junior Teachers;
- SCIE 1P10 Principles of Science for Primary and Junior Teachers;
- LING 1P95 Principles of Language Structure for Primary and Junior Teachers;
- one-half university Canadian geography credit;
- one-half university Canadian history credit.

Students are also encouraged to take arts and physical education courses. Some preference will be given to Primary/Junior candidates with a major in Child and Youth Studies.

Junior/Intermediate (Grades 4-10)

Candidates must have at least three credits, averaging 75 percent, in one of the teachable subjects as listed under program components.

Intermediate/Senior (Grades 7-12/OAC)

Candidates must have at least five credits, averaging 75 percent, in one teachable area (see Clarification of Teachable Subjects for Business Studies below) and three credits, averaging 70 percent, in a second teachable subject as listed under program components. During the pre-service year, each candidate will participate in two tutorials, one in each teachable subject.

Students should note that:

1. An extension of the secondary program is offered in cooperation with the University of Waterloo. Admission is limited to students enrolled at the University of Waterloo and Brock University with a major in French. For details see the Co-ordinator, French Teaching Specialization.

2. An extension of the secondary program is offered in partnership with the Institute for Enterprise Education. Successful candidates will receive a Professional Certificate in Enterprise Education, a BEd and, on the recommendation of the Dean of the Faculty of Education to the Ontario College of Teachers, an Ontario Certificate of Qualification. The program (the equivalent of 10 university credits) runs from September to July. Candidates will also complete an extended practicum of 28 weeks. For details see the Co-ordinator, Enterprise Education Extended Program.

Note: Program not offered 2000-2001.

3. In addition to the general requirements outlined above, candidates for the BEd and certification to teach in Ontario must submit the following:

- (a) a certificate of birth or baptism, or other acceptable proof of the date and place of birth;
- (b) a certificate of change of name where applicable;
- (c) proof of freedom from active tuberculosis (Ont. Reg. 184).

Candidates must also:

- (a) be able to demonstrate an acceptable level of fluency and accuracy in spoken and written English; and/or attend an interview and/or submit a written résumé if requested;
- (b) have a basic level of computer skills.

Applicants who are not Canadian citizens or landed immigrants may be admitted to the program for a BEd degree. Such persons are eligible for the Ontario Certificate of Qualification program where they show evidence of authorization to work in teaching in Canada. Such persons receive a Certificate of Qualification (Limited/Restricted), (Ont. Reg. 184).

Because of the highly integrated nature of the program, candidates who have preregistered must be present for orientation and confirmation of registration.

Candidates who have already completed part of their teacher training elsewhere may be accepted for the BEd on a part-time basis. For regulations and program details, see the Chair.

Program components:

1. Candidates specializing in Grades 4-10 must identify one teachable subject at the Junior/Intermediate level. Depending on the students' undergraduate major, Junior/Intermediate certification recommendations will be as follows:

- Dramatic Arts
- English
- Environmental Science
- French (second language)
- Geography
- History
- Mathematics
- Music-Vocal

Physical and Health Education
 Science-General
 Visual Arts;

Candidates specializing in Grades 7-12/OAC must select two teachable subjects (two tutorials in the range EDUC 8P65 - 8P88, 8F76) at the Intermediate/Senior level. Teaching subjects offered are as follows:

Business Studies — Accounting
 Business Studies — Data Processing
 Business Studies — Marketing and Merchandising
 Business Studies — Information Management
 Computer Science
 Dramatic Arts
 English (first language)
 French (second language)
 Geography
 History
 International Languages — Italian
 Mathematics
 Physical and Health Education
 Religious Education
 Science-Biology
 Science-Chemistry
 Science-General
 Science-Physics
 Visual Arts;

Clarification of teachable subjects:

(a) For Business Studies (Accounting, Data Processing, Marketing and Merchandising, Information Management), all candidates must provide evidence of having current knowledge of computer applications in business. This can be evidenced on the university transcript, the Work Experience Profile or other supplementary material. To have a first teachable subject, candidates require two credits from the specified subject area and an additional three credits from either the specified or other business studies subject(s). A second teachable subject requires two credits from the specified subject area and a third credit from either that area or other business studies subjects.

(b) For Science - General, Junior/Intermediate, candidates must present a minimum of three credits from biology, chemistry and physics, including two credits in one of the areas and a third credit in one of the remaining areas. For Intermediate/Senior, as a first teachable subject, the five credits must be from at least two of biology, chemistry and physics. As a second teachable subject, an additional three credits must be from at least two of biology, chemistry and physics.

(c) For History, preference will be given to candidates who have at least one credit in Canadian history.

(d) For French as a Second Language, students taking EDUC 8F76 as one of their tutorials must select a second tutorial;

2. Teaching methods designed to meet individual needs of pupils;
3. The acts and regulations governing education;
4. A review of the curriculum guidelines related to all of the divisions and a study of curriculum development; and
5. At least 10 weeks of practical experience in schools.

The Pre-service Education Program schedule differs from the academic calendar due to practice-teaching requirements. For further information, candidates should consult the *Handbook for Pre-service Teachers*.

Program requirements

The candidates in Program I are expected to select one of the following areas of concentration:

- (a) Primary/Junior level (Grades K-6), or
- (b) Junior/Intermediate level (Grades 4-10), or
- (c) Intermediate/Senior level (Grades 7-12/OAC).

The program requirements as outlined may be met through the successful completion of a combination of compulsory and optional courses. For full-time students, these courses are co-requisite and must be taken concurrently.

Note: students will be required to attend some off-campus courses and programs. Transportation to these courses and programs is the responsibility of the student.

Compulsory Foundation Courses for all students:
 EDUC 8D09, 8F08 (or 8F09 or 8D10 or 8P08 and 8F11), 8P06 (or 8P07), 8Y04, 8Y05.

Primary/Junior compulsory Curriculum Studies courses:
 EDUC 8P30, 8P33, 8Y31, 8Y36, 8Y38, 8Y39.

Junior/Intermediate compulsory Curriculum Studies courses:
 EDUC 8P20, 8P23, 8Y21, 8Y26, 8Y28.

Intermediate/Senior compulsory Curriculum Studies courses:
 EDUC 8P70; one credit from EDUC 8F76, 8P65, 8P66, 8P67, 8P68, 8P69, 8P72, 8P73, 8P74, 8P77, 8P80, 8P81, 8P82, 8P83, 8P84, 8P86, 8P87, 8P88, 8P89.

Enterprise Education Extended Program:
 Compulsory courses for the BEd: EDUC 8D09, 8D10, 8P06, 8P61, 8P64, 8P70, 8P71, 8Y04, 8Y05; one credit from EDUC 8F76, 8P65, 8P66, 8P67, 8P68, 8P69, 8P72, 8P73, 8P74, 8P77, 8P80, 8P81, 8P82, 8P83, 8P84, 8P86, 8P87, 8P88, 8P89.
 Note: program not offered 2000-2001.

Compulsory courses for the Professional Certificate in Enterprise Education: EDUC 6F91, 6F92, 6F93.

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In addition to the above requirements, the Faculty offers a limited number of optional courses: Outdoor/Environmental Education, Aboriginal Studies, Early Primary Education, Early Secondary Education, Children's Literature (Advanced), Student Assessment, French as a Second Language, Religion (Roman Catholic) and Religion (non-Roman Catholic). Special topics courses may be added. An additional tuition cost is levied for optional credit courses.

An essential part of the Pre-service Education Program takes place in schools with at least 10 weeks of observation and teaching (EDUC 8D09). When performance in EDUC 8D09 is regarded as seriously inadequate, the student will be assessed by the Co-ordinator of Practice Teaching or designate. That assessment will determine eligibility to proceed in EDUC 8D09. In the interest of the pupils' welfare, the Faculty will not place a student teacher in a classroom or will remove a student teacher from the classroom where performance so warrants.

Students who have successfully completed all required courses in the program for a BEd, and who have obtained a P1 or P2 in EDUC 8D09 (mark range is P1, P2, P3, F) will normally be recommended to the Ontario College of Teachers for an Ontario Certificate of Qualification. Those who receive a P3 in EDUC 8D09 may not be recommended to the Ontario College of Teachers for an Ontario Certificate of Qualification.

For further information regarding Program I, candidates should contact the Chair, Department of Pre-service Education.

Ontario College of Teachers Criminal Records Screening Policy

1. The Ontario College of Teachers requires both a criminal record check and a criminal record declaration by the applicant as necessary components of registration for new applicants.
2. The costs associated with the provision of the criminal record check and any appeals are to be borne by the applicant.
3. All positive reports of criminal offences will be examined by the Ontario College of Teachers' Registrar to determine whether the record of offence(s) is relevant to the applicant's honesty, integrity and/or suitability to practise the profession and whether the offence(s) constitute reasonable grounds for refusal to issue a certificate of qualification and registration, or to impose terms, conditions or limitations on registration, in accordance with Section 18(2) of the *Ontario College of Teachers Act*.
4. Applicants for registration by the Ontario College of Teachers will be advised of the reasons for the decisions of the OCT Registrar to refuse certification or to impose terms, conditions or limitations and that appeals to these decisions will be

determined in accordance with Part III of the *Ontario College of Teachers Act*.

Questions regarding the policy should be directed to the Ontario College of Teachers.

Technological Education Program

There are two streams in this program:

1. Technological Studies
2. Design and Technology

Admission requirements for the Technological Studies stream for Degree Holding Candidates:

Applicants who hold a degree from a recognized university must meet the following admission requirements:

1. Competence in one area of Technological Studies at both the basic and related advanced level or both areas of Technological Studies at the basic level.
 2. One of:
 - (i) a combination of education related to the area or areas of technological studies selected as options in the program of professional education beyond that referred to in clause (a) and business or industrial experience in the area or areas of technological studies selected as options in the program of technological studies that totals five years, including at least 2 years of wage-earning experience, no less than 16 months of which is continuous employment;
 - (ii) at least 3700 hours of wage-earning experience and successful completion of a post-secondary education program acceptable to the College that includes at least 24 months of academic studies, if the wage-earning experience and the education program are related to the area or areas of technological studies selected as options in the program of professional education.
 3. A Certificate of Qualification (trade certificate/licence) from the regulated and provincially licenced trades that is associated with manufacturing, transportation, or construction, or equivalent work related experience for hospitality services, technological design and communications.
- Work experience must be supported by sworn statements or official documents from personnel managers and/or other appropriate persons, on company letterhead and must specify the nature of the work and experience, and years and months of experience. It must be in the subject area or areas in which the student wishes to teach.

Self-employed applicants must provide an official sworn statement attesting to the specific nature and duration of their work

experience, including a letter from their accountant. They will also be subject to an interview process by which they will be able to demonstrate or prove their competency in a specific technology area.

Admission Requirements for the Technological Studies Stream for Non-Degree Holding Candidates:

Candidates holding a minimum of a diploma from a College of Applied Arts and Technology or equivalent, and meeting all other admissions criteria as outlined above, may be considered for admission to the Technological Studies stream. Preference will be given to those applicants who hold a degree. Those admitted without a degree will be ineligible to receive the Bachelor of Education degree.

Admission Requirements for the Design and Technology Stream

A candidate must hold a degree from a recognized university and have a proven aptitude for workshop technology. The candidate must have a definite interest and experience in technology. The degree must include at least three credits in an academic teachable subject.

Students admitted to both the Technological Studies and Design and Technology streams must submit the following before classes begin:

- (a) a full résumé;
- (b) a certificate of birth or baptism or other acceptable proof of date and place of birth;
- (c) a certificate of name change where applicable;
- (d) evidence satisfactory to the University of academic qualifications;
- (e) proof of freedom from active tuberculosis (Ont. Reg. 184).

Candidates must also:

- (a) demonstrate an acceptable level of fluency and accuracy in spoken and written English; and/or attend an interview and/or submit a résumé if requested;
- (b) have a basic level of computer skills.

Application procedure

Applications are available in the Registrar's Office and must be received by the date specified in the OUAC 205 application form. Supporting documentation including a university transcript, an experience profile, résumé of technological experience, proof of wage earning experience and two letters of reference must be received by the date specified in the OUAC 205 application form.

Program description

There are two phases in the Technological Teacher Intermediate/Senior Education program:

Phase I - Hamilton Board of Education

EDUC 9F24

This is a 100-hour course offered in July. It is a hands-on technology program in Construction, Manufacturing Design and Technology including design process and problem-solving for eight hours per day. An additional 25 hours of assignment work is required.

The course is equivalent to an additional basic qualifications course in design and technology and it will be accredited on an Ontario Certificate of Qualification, upon successful completion of the Pre-service program and recommendation by the Dean of the Faculty of Education.

EDUC 9F25

This 100-hour course is also offered in July. It is a hands-on workshop technology program in Communications and Technological Design for eight hours per day. An additional 25 hours of assignment work is required. The course will give students Part II of Design and Technology, after one year of successful teaching.

Phase II - Brock BEd program

Compulsory courses for all students: EDUC 8D09, 8D10, 8P06, 8P70, 8Y04, 8Y05.

In the Technological Studies stream, students take two teachable subjects (in the range EDUC 8R00-8R67) from the areas of communications, computer, construction, manufacturing, transportation, hospitality services, personal services and technological design. One teachable subject must be a broad-based technology and one must be a related course. One or both subjects are taken at the basic (instruction at Grades 9 and 10) level and only one may be taken at the advanced (instruction at Grades 11, 12/OAC where indicated) level, depending on the extent of technological ability as determined by the Program Co-ordinator.

In the Design and Technology stream, students take EDUC 8R98 as the first teachable subject and an academic teachable subject from EDUC 8P65-8P88 and 8F76 (if French as a teachable) (Schedule A of Ont. Reg. 184, Ontario Teacher Qualifications.)

Broad-based designations and related technology. (There are basic and advanced courses for the technologies listed.)

Communications Technology

- Electronic Communications Technology
- Graphic Communications Technology
- Live Communications Technology

Computer Technology

- Computer Engineering Technology
- Computer and Information Technology

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Construction Technology

Commercial Construction Technology
Industrial Construction Technology
Recreational Construction Technology
Residential Construction Technology

Hospitality Services

Food Preparation
Tourism
Travel and Accommodation

Manufacturing Technology

Manufacturing Process Technology
Process and Production Planning Technology
Product Design Technology

Personal Services

Child Care Services
Geriatric Care Services
Health Care Services
Personal Grooming Services

Technological Design

Design Systems Technology
Problem Solving Technology
Process Technology
Real World Applications of Technology

Transportation Technology

Freight Transportation Systems Technology
Mass Transit Systems Technology
Personal Transportation Technology

Program completion

Successful candidates holding a degree will be awarded a BEd and non-degree candidates will be awarded an Ontario Certificate of Qualification and may be recommended by the Dean of the Faculty of Education to the Ontario College of Teachers for certification to teach in Ontario.

In addition, for Design and Technology candidates, a BEd and certification to teach design and technology, plus a second academic subject area, will be awarded provided they meet the necessary prerequisite requirements. Also, students will receive a Design and Technology Additional Qualification for Part I (EDUC 9F24), after completion of the Pre-service program, and Part II (EDUC 9F25), after completion of the Pre-service program and one year of successful teaching experience in that field.

For Technological Education, degree candidates will be awarded a BEd and non-degree candidates will be awarded an Ontario Certificate of Qualification and certified to teach two subjects from one of the following areas: communications, computer, construction, technological design, hospitality services, manufacturing, personal services and transportation technology. Candidates must meet all additional Ontario College of Teachers requirements. Candidates will receive a Design and

Technology Additional Qualification for Part I (EDUC 9F24) after completion of the BEd and Part II (EDUC 9F25) after completion of the BEd and one year of successful teaching experience in that field.

Technological Education Methodology Courses

All courses are offered at the Basic (instruction of Grades 9 and 10) level and the Advanced (instruction of Grades 11, 12/OAC) level and consist of 40 contact hours.

Students are placed in a Basic or Advanced course according to their technological background and ability. In addition to satisfactorily completing the course, students must pass a Technical Proficiency Examination (TPE) at the basic or advanced level. Students who complete the Basic course and the TPE satisfactorily may, upon graduating and receiving the Ontario Certificate of Qualifications, enrol in an Additional Qualifications course, where available, to obtain advanced level certification.

Program II: Continuing Studies Bachelor of Education Program

Admission requirements

Candidates for admission must be certified to teach in Ontario and must hold an undergraduate degree acceptable to Brock.

Note: the Program II BEd degree does not lead to teacher certification in Ontario. Those interested in obtaining an OCQ should refer to the Program I BEd description.

All candidates admitted to the BEd Program II should note:

- (a) Recommendation to the Ontario College of Teachers may not be dependent on completing the total requirement for the BEd degree.
- (b) EDUC courses numbered 9(alpha)00 and above may not be used for initial basic certification purposes.

Advanced standing

Candidates for admission to Program II may be granted advanced standing in one credit at the time of initial application. Advanced standing is for Brock BEd credit only. Candidates are requested to contact the Ontario College of Teachers if they believe their academic background is equivalent to a Brock Additional Qualifications course. Advanced standing will be based on the relationship between work already completed and the content of courses required for the Brock degree. Advanced standing will not be granted on the basis of courses credited towards a completed degree or diploma unless such courses have been taken as electives beyond the minimum requirement for the degree or diploma. Students who completed Continuing Studies courses prior to June 30, 1979, cannot count these

courses toward the Program II BEd degree. For further information, contact the Director of the Continuing Studies Program.

The University has been advised that the Qualifications Evaluation Council of Ontario (QECO) normally accepts each course in the BEd (Program II) program as either a university credit or an Ontario College of Teachers course credit depending upon how the individual wishes the course applied. However, the University cannot guarantee the applicability of any specific course to QECO insofar as salary evaluation is concerned. Students who have concerns in this regard should contact QECO directly.

Where provincial regulations require documentation of qualifications (i.e., experience, specialized employment), it is the responsibility of the student to provide this documentation to the Director of the Continuing Studies Program in the Faculty of Education. Documentation must be complete before any recommendation can be made to the Ontario College of Teachers.

Program requirements

Candidates entering Program II are required to complete a minimum of five credits numbered EDUC 9(*alpha*)00 or above, of which a minimum of three will be in a specialized area of study. Specialized areas of study may be identified in the course descriptions by sequential titling, e.g., EDUC 9F11 (Teaching French as a Second Language I); EDUC 9F12 (Teaching French as a Second Language II); EDUC 9F13 (Teaching French as a Second Language III). Students who already hold the Ontario Certificate of Qualifications and who successfully complete courses numbered 9(*alpha*)00 or above will be recommended to the Ontario College of Teachers for their Additional Qualifications.

Normally, candidates in this program will hold certification to teach in Ontario and an acceptable undergraduate degree. Candidates holding neither of the above qualifications may be admitted as special students. Special students may not receive OCT recognition for courses taken prior to holding the Ontario Certificate of Qualifications or Interim Ontario Certificate of Qualification. University regulations require that a copy of your valid certificate be on file and, for those students proceeding toward the BEd Program II degree, an official copy of a transcript showing the conferring of an appropriate university degree.

All Continuing Studies courses have minimum and maximum enrolments. Courses with enrolments of fewer than 20 students may be canceled. Candidates are encouraged to apply early. For further information and details of Program II requirements, candidates should consult the Director of the Continuing Studies Program.

Program III: BEd as a First Degree

(This program does not lead to an Ontario Certificate of Qualification.)

Admission requirements

Generally speaking, the admission requirements for the BEd Program III are the same as those for admission to other undergraduate degrees offered by the University. In addition, the Department of Graduate and Undergraduate Studies normally requires that candidates provide evidence of sustained and continuing career interest in an education-related occupation. Potential candidates should first contact the Chair of the Department of Graduate and Undergraduate Studies in the Faculty of Education.

Program requirements

Programs of study are individually approved by the Department of Graduate and Undergraduate Studies and are usually greater than the minimum requirements outlined below, dependent on the applicant's background. The minimum requirement is ten credits including the following:

- (a) Five arts and/or science credits beyond introductory or year 1 level;
- (b) Three credits beyond introductory or first-year level from the Faculty of Education or others as approved by the Department of Graduate and Undergraduate Studies.

Bachelor of Education in Adult Education

(This program does not lead to an Ontario Certificate of Qualification.)

The Brock BEd in adult education has been designed to give community college personnel and other interested participants an opportunity to enhance their abilities to deliver educational services consistent with the demands of adult student learners. Along with the practical aspects of college teaching, environment and challenges inherent in the college of applied arts and technology (CAAT) system, this program addresses the demands of working with the adult learner in a variety of educational contexts.

In addition to the BEd in adult education stream, Brock offers a BEd in adult education Aboriginal stream. The Aboriginal stream is designed to enhance the abilities and understanding of those involved or interested in Aboriginal adult education and training. This site-based program integrates Aboriginal and

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contemporary theorists and world views, and recognizes Aboriginal learning preferences, and diverse cultures. This community-based curriculum model will use qualified local Native educators and Elders for facilitation and guidance during course and program delivery.

Admission requirements

Any employee (faculty, support staff and/or administrator) of a CAAT is eligible to apply. Other individuals may apply providing they can demonstrate admission criteria and necessary experience.

In order to meet the needs of candidates, there are three programs available.

Program A:

For those who already hold an undergraduate degree.

Program B:

For those who do not hold an undergraduate degree but have completed undergraduate credits or hold a CAAT diploma.

Program C:

For those who hold neither an undergraduate degree nor a CAAT diploma.

Program notes

1. Undergraduate credits required in Program B or Program C may be taken on a Letter of Permission (LOP). Students electing this method should familiarize themselves with LOP regulations.
2. Brock will accept a maximum of ten transfer credits. Students offering transfer credits should consult the Admissions section of this Calendar for further information.
3. All candidates must take the five adult education credits through Brock.

Program requirements

Program A:

Five adult education credits prepared by Brock and CAAT or other appropriate personnel as follows:

Adult Education Aboriginal stream: ADED 4F84, 4F85, 4F86, 4F87 and 4F88.

Adult Education stream: ADED 4F94 and 4F98; ADED 4F95 or ADED 4F51 and 4P52; ADED 4F96 or ADED 4P61 and 4P62; ADED 4F97 or ADED 4P71 and 4P72.

Upon successful completion of these requirements a BEd in Adult Education will be awarded.

Program B:

Fifteen credits are required: College of Applied Arts and Technology diploma may give students a maximum of five undergraduate credits. In some cases, where programs at the College and Brock are quite compatible, up to seven credits may be awarded for a three-year diploma. Transfer credit is not awarded for Certificate programs with the exception of a Certificate in the Teaching of Adults, where a maximum of one credit may be awarded. Depending on how many undergraduate credits are given for College of Applied Arts and Technology diploma work, additional undergraduate credits, to a total of 10 credits, must be completed: five credits numbered 1(alpha)90 or above of which three must satisfy the Humanities, the Science and the Social Science context requirement and five credits numbered 2(alpha)00 or above. In addition, five ADED credits must be completed (see Program A). Upon successful completion of these requirements a BEd in Adult Education will be awarded.

Program C:

Fifteen credits are required: five credits numbered 1(alpha)00 to 1(alpha)99 of which three credits must be used to satisfy the Humanities, the Science and the Social Science context requirement, and five credits must be at the 2(alpha)00 level or above; five ADED credits must be completed (see Program A); five elective credits. Upon successful completion of these requirements a BEd in Adult Education will be awarded.

Certificate in Adult Education

The Adult Education Program also offers a Certificate in Adult Education. It provides an overview for interested persons who do not wish to proceed to a degree. It is of special interest to people working in a related field. The admission requirements are the same as for the degree program. Prospective students should contact the Co-ordinator of Adult Education before beginning the certificate program.

The certificate is awarded upon completion of the five ADED credits listed below, with an overall average of 60 percent.

Required courses:

Adult Education Aboriginal stream: ADED 4F84, 4F85, 4F86, 4F87 and 4F88.

Adult Education stream: ADED 4F94 and 4F98; ADED 4F95 or ADED 4P51 and 4P52; ADED 4F96 or ADED 4P61 and 4P62; ADED 4F97 or ADED 4P71 and 4P72.

Native Teacher Education Programs

Brock offers programs to prepare Native elementary school teachers.

Program A:

Program A, leading to a BEd degree and on the recommendation of the Dean of the Faculty of Education, certification to teach in Ontario (OCQ), is open to graduates holding an accredited bachelor's degree. Five and one-half credits are required. Successful candidates can qualify for teaching at the elementary level. Aboriginal candidates may opt to participate in a group emphasizing Native issues in teaching and culture.

Program B:

Program B leads to, on the recommendation of the Dean of the Faculty of Education, an OCQ at the Primary/Junior level. The following seven and one-half credits are required: EDUC 8D09, 8P06, 8P08, 8P10, 8P30, 8P31, 8P32, 8P33, 8P93, 8P94, 8P96, 8P99, 8Y04, 8Y05.

This program is designed to meet the need for Aboriginal teachers. It includes the above courses and at least eight weeks of practice teaching. The courses are similar to those in the standard program, but adapted to the needs of teachers working in Aboriginal schools. Course work focuses on the Ontario curriculum from Kindergarten to Grade 6, and includes Aboriginal culture and language methods. Candidates may be admitted to this program with Grade 12 or equivalent.

Program C:

Program C leads to certification in Native as a Second Language (NSL). This is a three-summer program open to speakers fluent in an Onkwehonwe language. It prepares teachers to instruct language classes in elementary or secondary schools. The following five and one-half credits are required: EDUC 8P08, 8P10, 8P11, 8P33, 8P91, 8P93, 8P94, 8P96, 8P97, 8P98, 8P99.

To qualify for the NSL certificate, candidates must complete at least one year of successful teaching after the first summer session.

To be admitted, candidates must be fluent in an Onkwehonwe language.

Prerequisites and Restrictions

Students must check to ensure that prerequisites are met. Students may be deregistered at the request of the instructor, from any course for which prerequisites and/or restrictions have not been met.

Description of Courses

Note that not all courses are offered in every session. Refer to the applicable term timetable for details.

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EDUC 1F90, 2F00, 2F01, 3F01, 3P40, 3P50 and 3P52 are available either as electives or as part of a General, Integrated Studies program. Participants need not be teachers, nor do they need to take these courses to enter a teacher certification program.

EDUC 1F90

Introduction to Education Studies

Major issues and problems in the organization, staffing and planning of schools and school services today.

Lectures, seminar, 3 hours per week.

EDUC 2F00

Curriculum Theory and Design

Theoretical conceptions of curriculum and how these connect with philosophies of education and practices of curriculum design and curriculum change.

Lectures, seminar, 3 hours per week.

EDUC 2F01

School Learning

(also offered as CHYS 2F01)

The psychological processes involved in learning in a school setting. Cognitive theories of learning applied to examples in each of the major school subject areas with emphasis on the specific nature of the learning associated with each subject. Topics may include individual differences and problems in evaluating school learning.

Lectures, seminar, 3 hours per week.

Prerequisite: CHYS (CHST) 1F90 or PSYC 1F90.

EDUC 3F01

The Process of Teaching

An introduction to the study of teacher behaviour through a systematic exploration of the assumptions, educational purposes, teaching strategies, curricular designs and materials and the social and psychological theory underlying selected models

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of teaching. The alternative patterns by which teachers may model their behaviour. Students will be required to familiarize themselves with current educational concepts and recent literature in the field.

Lectures, seminar, 3 hours per week.

EDUC 3P40

Family, Schools and Literacy

Research and issues in family literacy and parental involvement in education. Strategies for intervention and home-school collaboration in literacy development.

Lectures, seminar, 3 hours per week.

EDUC 3P50

Focus on Early Childhood Education I

(also offered as CHYS 3P50)

Early childhood education programs for children from birth to age eight. Topics include the historical and societal influences on early childhood education, program models derived from theories of learning and child development and research on the effectiveness of these programs.

Lectures, seminar, 3 hours per week.

Prerequisite: CHYS (CHST) 2F10.

EDUC 3P52

Focus on Early Childhood Education II

(also offered as CHYS 3P52)

Methods in early childhood education programs for children from birth to age eight. Topics include curricula, instructional strategies and evaluative techniques.

Lectures, seminar/lab, 4 hours per week.

Prerequisite: EDUC 3P50.

Note: enrolment limited to 25 students to be determined by academic standing. Students will be involved in a field placement working with young children in a community setting.

EDUC 4P01

Mathematical and Scientific Learning and Teaching

Children's mathematical and scientific thinking in relation to developments in cognitive science, together with instructional strategies, materials and evaluation procedures. Topics include developmental perspectives on children's scientific reasoning, general vs. domain-specific problem solving, the role of individual differences and learning styles, cognitive process evaluation methods, computer applications in mathematics and science instruction.

Lectures, seminar, 3 hours per week.

Restriction: open to BSc/BEd majors.

Note: a school-based practicum is required.

EDUC 4P02

Student Assessment

Enhancement of prospective teachers' skills in the area of measurement and evaluation emphasizing teacher-made tests. Types, purposes and interpretations of standardized tests and

issues and concerns related to testing and measurement. Review of authentic or alternative assessment and classroom, school and regional evaluation policies.

Lectures, seminar, 3 hours per week.

Restriction: open to BPhEd(honours)/BEd majors.

Students completing this course will forfeit credit in EDUC 8P04.

EDUC 4P03

Reflection on Practice

Classroom interactions in relation to beliefs, values and pedagogy. Students will plan classroom actions, act, observe their plans in action and reflect on the results before using the experience to replan. The reflective process will include both group interactions and individuals responses.

Lectures, seminar, 3 hours per week.

Restriction: open to BA/BEd, BPhEd(honours)/BEd and BSc/BEd majors with a minimum of 15.0 credits.

ADULT EDUCATION

ADED 4F01

Learning Styles and Diversity

The role and impact of learning style on the adult learner, particularly in the context of adults from a diversity of backgrounds. Theoretical, psychological, sociological, and educational perspectives are examined. Implications for personal and institutional theory and practice.

Facilitated discussion, 6 hours per week.

Restriction: open to students admitted to the Adult Education Programs.

ADED 4F84

Foundations of Teaching and Learning in the Aboriginal Adult Education Context

An overview and application of basic adult education theory to the types of circumstances and responsibilities educators encounter before, during, and after contact with students, peers, administrators and community groups. Emphasis on a variety of perspectives for critical and personal analysis of issues related to teaching behaviour in Native institutions.

Facilitated discussion, 6 hours per week.

Restriction: open to students admitted to the Adult Education Aboriginal stream.

ADED 4F85

Curriculum Theory and Design: The Aboriginal Context

Individual learning needs, instructional variations and integrated methods of evaluation using an integrative, task-centered and student-centered approach. Design and development of a relevant curriculum unit, focusing on the needs of the adult learner in a variety of Aboriginal contexts.

Facilitated discussion, 6 hours per week.

Restriction: open to students admitted to the Adult Education Aboriginal stream.

Prerequisite: ADED 4F84.

ADED 4F86

Instructional Approaches for Aboriginal Adult Learner

Implementation of curriculum units. Seminars and observations by a teaching adviser will assist self-evaluation and determine the need for curriculum change in order to enhance student learning. Practice in the development and use of a variety of assessment techniques.

Facilitated discussion, 6 hours per week.

Restriction: open to students admitted to the Adult Education Aboriginal stream.

Prerequisite: ADED 4F85.

ADED 4F87

Organization and Leadership Studies in Aboriginal Adult Education

Theoretical, structured and functional basis of administrative roles, issues, problems and techniques, leadership, management principles, practices, tasks and models. Attention to ways that individual group and organizational characteristics affect behaviour in educational organizations.

Facilitated discussion, 6 hours per week.

Restriction: open to students admitted to the Adult Education Aboriginal stream.

Prerequisite: ADED 4F84.

ADED 4F88

Development Issues and Adult Educators: The Aboriginal Context

Teaching and learning issues from Aboriginal teachings and adult lifespan psychology are used to formulate a personal developmental framework understood through the use of life-mapping techniques. Renewal, reflection and critical awareness are used as ways of understanding life and career paths and other effects on adult teaching and lifelong learning.

Facilitated discussion, 6 hours per week.

Restriction: open to students admitted to the Adult Education Aboriginal stream.

Prerequisite: ADED 4F84.

ADED 4F94

Foundation of Teaching and Learning in Adult Education

Developmental processes experienced by teachers in adult education including the development of personal theories of education, knowledge of the learning milieu, familiarity with the student community, intellectual issues with reference to ethics and equity. Focus on the adult learner and diverse personal and social background issues which facilitate or complicate the learning process.

Facilitated seminars, 6 hours per week.

Restriction: open to students admitted to the Adult Education stream.

ADED 4F95

Curriculum Theory and Design

Study of individual learning needs, instructional variations and integrated methods of evaluation using an integrative, task-centred and student-centred approach. Design and develop-

ment of a relevant curriculum unit equivalent to a college level course of study.

Facilitated seminars, 6 hours per week.

Restriction: open to students admitted to the Adult Education stream.

Prerequisite: ADED 4F94.

Students completing this course will forfeit credit in ADED 4P51 and 4P52.

ADED 4F96

Instructional Approaches for Adult Learners

Implementation of curriculum units. Seminars and observations by a teaching adviser will assist self-evaluation and determine the need for curriculum change in order to enhance student learning. Practice in the development and use of a variety of assessment techniques.

Facilitated seminars, 6 hours per week.

Restriction: open to students admitted to the Adult Education stream.

Prerequisite: ADED 4F95 or 4P51 and 4P52.

Students completing this course will forfeit credit in ADED 4P61 and 4P62.

ADED 4F97

Administrative and Organizational Issues

An historical-developmental perspective on education in Ontario. Topics include funding and policy-making processes, student and teacher rights and responsibilities, administrative structures and the role of the teacher of adults in the wider context of education.

Facilitated seminars, 6 hours per week.

Restriction: open to students admitted to the Adult Education stream.

Prerequisite: ADED 4F94.

Students completing this course will forfeit credit in ADED 4P71 and 4P72.

ADED 4F98

Professional and Personal Developmental Issues

The personal and social constructions of the multiple roles of the teacher of adults. Topics include organizational membership, professionalism, collective bargaining, leadership, change and external relations, personal and professional development. Design, implementation and reporting of a mini-research project.

Facilitated seminars, 6 hours per week.

Restriction: open to students admitted to the Adult Education stream.

Prerequisite: ADED 4F94.

ADED 4P51

Curriculum Theory

Study of individual learning needs, instructional variations and integrated methods of evaluation using an environment, task and learning approach. Curriculum design for special interest groups in adult education.

Facilitated discussion, 3 hours per week.

Restriction: open to students admitted to the Adult Education stream.

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Prerequisite: ADED 4F94.

Students completing this course will forfeit credit in ADED 4F95.

ADED 4P52

Curriculum Design

Development of a specific curriculum unit with relevance to a chosen population in an adult learning context through the use of needs assessment of topics and methods. Integrating content and process through distance learning and teaching methods.

Facilitated discussion, 3 hours per week.

Restriction: open to students admitted to the Adult Education stream.

Prerequisite: ADED 4F94.

Students completing this course will forfeit credit in ADED 4F95.

ADED 4P61

Curriculum Development and Adaptation

Delivery and evaluation of observational techniques by students, peers and course supervisors. Field placements will be arranged as appropriate.

Facilitated discussion, 3 hours per week.

Restriction: open to students admitted to the Adult Education stream.

Prerequisite: ADED 4F95 or 4P51 and 4P52.

Students completing this course will forfeit credit in ADED 4F96.

ADED 4P62

Curriculum Delivery and Evaluation

Analysis and assessments for revision and adaptation to include a variety of delivery modes according to community needs expressed through evaluative methods during placements.

Facilitated discussion, 3 hours per week.

Restriction: open to students admitted to the Adult Education stream.

Prerequisite: ADED 4F95 or 4P51 and 4P52.

Students completing this course will forfeit credit in ADED 4F96.

ADED 4P71

Organizational Theory in Adult Learning and Teaching

The role of organizations (formal and informal) in the design, development, delivery and accreditation of adult learning courses and programs. An historical view of organizations in specific adult learning and teaching settings are critically examined from a futurist perspective which examines implications for practices.

Facilitated discussion, 3 hours per week.

Restriction: open to students admitted to the Adult Education stream.

Prerequisite: 4F94.

Students completing this course will forfeit credit in ADED 4F97.

ADED 4P72

Administrative Studies in Adult Learning and Teaching

Studies of traditional and non-traditional educational delivery services focussing on funding, policy-making processes, student and teacher rights and responsibilities and leadership issues. Examines innovative programs for adaptive analyses.

Facilitated discussion, 3 hours per week.

Restriction: open to students admitted to the Adult Education stream.

Prerequisite: ADED 4F94.

Students completing this course will forfeit credit in ADED 4F97.

PROFESSIONAL CERTIFICATE

Enterprise Education

EDUC 6F91

Business Studies: Entrepreneurship Studies I

Familiarity with the subject matter and relevant teaching materials for the major concepts of the provincial *Entrepreneurship Curriculum Guide* and awareness of available community resources. Practice in the development and implementation of an entrepreneurial plan.

Lectures, seminar, practicum, 3 hours per week.

Restriction: open to students admitted to the Enterprise Education Extended Program.

Students completing this course will forfeit credit in EDUC 9F06 and 9F91.

EDUC 6F92

Business Studies: Entrepreneurship Studies II

Practice in the development and improvement of course outlines and curriculum support materials for a variety of target groups and purposes. Familiarity with participative student-centred teaching styles and the development of methodologies for teaching relevant enterprise skills and of processes for acquiring motivation and commitment to these skills.

Lectures, seminar, practicum, 3 hours per week.

Restriction: open to students admitted to the Enterprise Education Extended Program.

Prerequisite: EDUC 6F91.

Students completing this course will forfeit credit in EDUC 9F92.

EDUC 6F93

Business Studies: Entrepreneurship Studies III

Development of skills in constructing curriculum units, components and themes for the study of entrepreneurship at the basic, general and advanced level of the secondary school. Practice in leadership roles in sourcing and adapting information and resource materials. Advanced study of entrepreneurship literature and research as well as the role of entrepreneurship in the economy.

Lectures, seminar, practicum, 3 hours per week.

Restriction: open to students admitted to the Enterprise Educa-

tion Extended Program.

Prerequisite: EDUC 6F92.

Students completing this course will forfeit credit in EDUC 9F93.

PRE-SERVICE

Courses EDUC 8(alpha)00 to 8(alpha)99 are for students enrolled in the Program I BEd. In addition to the required courses, students must select a minimum number of methods courses according to the level at which they seek certification.

EDUC 8D09

Field Studies, Individualized Instruction and Practicum

Practical experiences in observing and teaching in schools. These are integrated with courses, counselling groups and teaching centre/internship activities (EDUC 8F08 or 8D10 or 8P11). Students will be guided in practice teaching for at least 10 weeks throughout the year. Successful completion of the in-school practice teaching is essential to this course.

Lectures, seminar, 5.5 hours per week; plus practicum.

Restriction: open to students admitted to the Ontario Certificate of Qualification Native Teacher Education, French Teaching Specialization, Pre-service Education and Technological Studies Education programs and to BA/BEEd, BPhEd(honours)/BEEd and BSc/BEEd majors with a minimum of 15.0 overall credits.

Co-requisite: EDUC 8D09.

EDUC 8D10

Instructional Strategies: Intermediate/Senior

Planning and implementation, management, instructional approaches, curriculum development and delivery and current issues. Integrated with internship/practicum (EDUC 8D09), requiring close collaboration and interaction with students and teachers. Observation, experience in the classroom, time management, self- and peer-evaluation and practical application of pedagogical theory. Independent projects, tutoring, reflection and journal writing.

Lectures, seminar, 4 hours per week; plus practicum.

Restriction: open to students admitted to the Intermediate/Senior program. Consult the instructor regarding permission to register.

Co-requisite: EDUC 8D09.

Note: credit will not be given for this course unless EDUC 8D09 is successfully completed.

EDUC 8F08

Teaching Techniques for the Classroom

Components of the act of teaching identified and presented in a modular format. The student is guided through a series of specified tasks to practice and gain mastery in each of the required teaching skills.

Lectures, seminar, 4 hours per week; plus practicum.

Restriction: open to students admitted to Pre-service Education and to BA/BEEd, BPhEd (honours)/BEEd and BSc/BEEd majors with a minimum of 15.0 overall credits.

Co-requisite: EDUC 8D09.

Note: credit will not be given for this course unless EDUC 8D09 is successfully completed.

EDUC 8F09

Instructional Strategies: Early Primary

For candidates focussing on early primary education. Methods developed specifically for early primary education and for the junior level. Topics presented in collaboration with practicing early childhood teachers include play-based early childhood learning environments, literature-based theme planning, observation through journals, emergent literacy. Teacher-led sessions on play-based learning.

Lectures, seminar, 4 hours per week; plus practicum.

Restriction: open to students admitted to Pre-service Education and to BA/BEEd majors.

Co-requisite: EDUC 8D09.

Note: credit will not be given for this course unless EDUC 8D09 is successfully completed.

EDUC 8F11

Instructional Strategies - Intermediate/Senior: French Teaching Specialization

Sequential to EDUC 8P08. Reflection upon and application of experience in preceding practicum in areas of planning, management, methodological approaches, current social and educational issues and evaluation processes. Integrated workshops/seminars in context of continued practical experience in schools.

Lectures, seminar, 4 hours per week.

Restriction: open to students admitted to the French Teaching Specialization Education program.

Co-requisite: EDUC 8D09.

Note: credit will not be given for this course unless EDUC 8D09 is successfully completed.

EDUC 8F76

French as a Second Language: Intermediate/Senior

The theory of and approaches to teaching and learning a second language; the methodological approaches involved in teaching French as a second language at the intermediate and senior levels.

Lectures, seminar, 4 hours per week.

Restriction: open to students admitted to the French Teaching Specialization and Intermediate/Senior programs.

Students completing this course will forfeit credit in EDUC 8P76.

EDUC 8P04

Student Assessment

Enhancement of prospective teachers' skills in measurement and evaluation emphasizing teacher-made tests. Types, purposes and interpretations of standardized tests and issues and concerns related to testing and measurement. Authentic or alternative assessment and classroom, school and regional evaluation.

Lectures, seminar, 3 hours per week.

Restriction: open to students admitted to Pre-Service Education

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and to BA/BEd, BPhEd(honours)/BEd and BSc/BEd majors with a minimum of 15.0 credits.
Students completing this course will forfeit credit in EDUC 4P02.

EDUC 8P06

Classroom Dynamics: Teaching and Learning

Basic principles of child development and learning which guide the teacher in making decisions about classroom performance. Topics include perception of self, motivation, conditioning, cognition, intelligence and creativity and general principles of human development and behaviour modification. Modular approach with lecture, independent study, seminar simulations and guided classroom observations.

Lectures, seminar, practicum, 2 hours per week.

Restriction: open to students admitted to the Ontario Certificate of Qualification Native Teacher Education, Pre-service Education and Technological Studies Education programs and to BSc/BEd majors with a minimum of 5.0 overall credits, and to BPhEd(honours)/BEd majors with a minimum of 10.0 overall credits.

EDUC 8P07

Applied Classroom Dynamics

Through analysis of classroom cases, students must apply understandings of child development, principles of learning and motivation, self-concept and student evaluation. In the context of teacher decision making, students identify and evaluate a range of effective teaching strategies, while exploring roles assumed by teachers within schools and in partnership with families.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to Primary/Junior and Junior/Intermediate programs and to BA/BEd majors with a minimum of 5.0 overall credits.

Note: in place of EDUC 8P06 for students with a background in psychology. Offered in St. Catharines only.

EDUC 8P08

Instructional Strategies I

The planning and preparatory aspects of teaching, addressing the ongoing process of diagnosis as essential to such elements of instruction as motivation, classroom management and discipline within the expository discussion and inquiry models of teaching.

Seminar, 4 hours per week.

Restriction: open to students admitted to the French Teaching Specialization and the Native Teacher Education programs.

EDUC 8P10

Instructional Strategies II

Sequential to EDUC 8P08. Planning, management, methodological approaches, social and educational issues, evaluation processes.

Seminar, 4 hours per week.

Restriction: open to students admitted to the Native Teacher Education programs.

EDUC 8P11

Computers in Education

Overview of computer technology as it presently exists in many school systems. Examination of computer software packages and evaluation of their use for application in effective curriculum design. Technology across the curriculum, word processing, software evaluation, and the application of spreadsheets and data bases.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Native Teacher Education Certificate program.

EDUC 8P12

Educational Psychology

May include metacognitive strategies, motivational issues, the role of self-concept, creativity, critical thinking and social issues.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the French Teaching Specialization program.

EDUC 8P13

French as a Second Language for Pre-service Teachers

An introduction to basic principles of teaching French as a Second Language. May include lesson and unit development and pedagogical approaches.

Lectures, seminar, 2 hours per week; plus at least a three-week supervised practicum in FSL teaching.

Restriction: open to students admitted to the Junior/Intermediate program and to BSc/BEd majors with a minimum of 15.0 overall credits and may also be open as an option to students admitted to the Primary/Junior Program and BPhEd(honours)/BEd majors with a minimum of 20.0 credits and BA/BEd majors with a minimum of 15.0 credits.

Note: all candidates must have 3.0 university credits in French and must qualify by successful completion of an oral and written test. Course credit will not be given without a successful three-week supervised practicum in FSL teaching.

EDUC 8P20

Junior/Intermediate Language

Basic principles of language learning are examined and applied to the teaching of listening, speaking, reading and writing as interrelated abilities. Emphasis is placed on using language in a variety of contexts for different purposes and audiences, and on the developmental nature of language learning. Teaching strategies which encourage language use across the curriculum and the world outside of school.

Lectures, seminar, 2.5 hours per week.

Restriction: open to students admitted to the Junior/Intermediate program and to BSc/BEd majors with a minimum of 15.0 overall credits.

EDUC 8P23

Junior/Intermediate Arts

An introduction to education in and through the arts (dramatic arts, music, visual arts and dance) as defined in provincial documents. Examples of methods for integration of common

components of form, function, meaning and communication are presented, with practical applications across the arts, the broader school curriculum and the life of students in the junior and intermediate grades.

Lectures, seminar, 2.5 hours per week.

Restriction: open to students admitted to the Junior/Intermediate program and to BSc/BEEd majors with a minimum of 15.0 overall credits.

EDUC 8P28

Special Topics in Junior/Intermediate Education

Topics selected vary on the basis of specific areas of instructional expertise and candidate interest.

Lectures, seminar, 2 hours per week.

EDUC 8P30

Primary/Junior Language

Strategies for the development of communicative competence in listening, speaking, reading and writing. Emphasis on the use of language for learning and thinking across the curriculum. The role and purpose of children's literature in enhancing the learning to read process.

Lectures, seminar, 2.5 hours per week.

Restriction: open to students admitted to the Ontario Certificate of Qualification Native Teacher Education and Primary/Junior programs, BA/BEEd majors with a minimum of 15.0 overall credits, and BPhEd(honours)/BEEd majors with a minimum of 20.0 credits.

Note: offered as a summer course for the Native Teacher Education Program.

EDUC 8P33

Primary/Junior Arts

An introduction to education in and through the arts (dramatic arts, music, visual arts and dance) as defined in provincial documents. Examples of methods for integration of common components of form, function, meaning and communication, with practical applications across the arts, the broader school curriculum and the life of students in the primary and junior grades.

Lectures, seminar, 2.5 hours per week.

Restriction: open to students admitted to the Native Teacher Education and Primary/Junior programs, BA/BEEd majors with a minimum of 10.0 credits and BPhEd(honours)/BEEd majors with a minimum of 20.0 overall credits.

Note: offered as a summer course for the Native Teacher Education programs.

EDUC 8P34

Language (Advanced)

The critical relationship between theory and practice in the teaching of listening, speaking, reading and writing. Emphasis on strategies for integrating instruction across the curriculum in the Primary/Junior levels.

Lectures, seminars, 2 hours per week.

Restriction: open to students admitted to Pre-service Education and to BA/BEEd, BPhEd(honours)/BEEd and BSc/BEEd majors with a minimum of 15.0 credits.

EDUC 8P35

Children's Literature

Various genres of children's literature; a variety of methods for integration into the curriculum at primary, junior and intermediate levels. Specific reference to both Canadian and multicultural selections.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to Pre-service Education and to BA/BEEd, BPhEd(honours)/BEEd and BSc/BEEd majors with a minimum of 15.0 credits.

EDUC 8P36

Arts (Advanced)

Issues and directions in contemporary arts education, with a concentration on planning for a primary, junior or intermediate level, according to the precepts in provincial curriculum documents and on serving the learner as well as the subject.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to Pre-service Education and to BA/BEEd, BPhEd(honours)/BEEd and BSc/BEEd majors with a minimum of 15.0 credits.

EDUC 8P37

Mathematics, Science, and Technology (Advanced)

Current issues and trends in mathematics, science and technology education, focussing on changes in curriculum, instructional strategies and assessment practices for Primary/Junior/Intermediate students.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to Pre-service Education and to BA/BEEd, BPhEd (honours)/BEEd and BSc/BEEd majors with a minimum of 15.0 credits.

EDUC 8P38

Special Topics in Primary/Junior Education

Topics selected vary on the basis of specific areas of instructional expertise and candidate interest.

Lectures, seminar, 2 hours per week.

EDUC 8P39

Personal and Social Studies (Advanced)

The interconnections between current events and social studies, guidance and physical education as these relate to the four broad categories outlined in provincial curriculum documents; meaningful participation of individuals in society; understanding diversity and valuing equity; understanding systems and functioning in the age of information.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to Pre-service Education and to BA/BEEd, BPhEd(honours)/BEEd and BSc/BEEd majors with a minimum of 15.0 credits.

EDUC 8P40

Family Literacy and Parent Involvement in Education

Current research and practice in the fields of family literacy and parent involvement in education. Students will apply their knowledge to investigate specific school practices for family literacy development and to design practical, school-based

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parent involvement strategies.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to Pre-service Education and to BA/BEd, BPhEd (honours)/BEd and BSc/BEd majors with a minimum of 15.0 credits.

EDUC 8P41

Societal Issues and Schooling

How current societal issues (e.g., child abuse, drug use) influence the schooling environment, students' lives and teachers' lives. The impact of selected issues on curriculum, teaching and learning with the intent of creating interventions for change in the classroom.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to Pre-service Education and to BA/BEd, BPhEd (honours)/BEd and BSc/BEd majors with a minimum of 15.0 credits.

EDUC 8P42

Reflection on Practice

Classroom interactions in relation to beliefs, values and pedagogy. Students will plan classroom actions, act, observe their plans in action and reflect on the results before using the experience to replan. The reflective process will include both group interactions and individual responses.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to Pre-service Education and to BA/BEd, BPhEd (honours)/BEd and BSc/BEd majors with a minimum of 15.0 credits.

Students completing this course will forfeit credit in EDUC 4P03.

EDUC 8P43

Adult Education

A comparative study of pedagogy and androgogy with a focus on what teachers may learn from various comparisons to inform their decisions about how to teach at elementary and secondary school levels.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to Pre-service Education and to BA/BEd, BPhEd (honours)/BEd and BSc/BEd majors with a minimum of 15.0 credits.

EDUC 8P44

Gender Issues

Students will be encouraged to confront their own assumptions, family roles, cultural conditions and stereotypes related to gender, sexuality and power; to reflect on how such experiences and biases affect the classroom environment and schooling; and to become aware of strategies intended to bring about change and positive role modeling.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to Pre-service Education and to BA/BEd, BPhEd (honours)/BEd and BSc/BEd majors with a minimum of 15.0 credits.

EDUC 8P45

Teaching in the Inner City

Population of inner city schools and how they might differ from suburban schools, and how social needs have affected the school's academic function and the relationship between teachers, pupils and parents. Concepts such as equity and equality, social and economic class, urban life, multiculturalism, culture, family, cultural capital, poverty, disadvantage, change and empowerment are included.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to Pre-service Education and to BA/BEd, BPhEd (honours)/BEd and BSc/BEd majors with a minimum of 15.0 credits.

EDUC 8P46

Psychology of Computers in Education

Uses of computers in education in light of current theories of child development.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to Pre-service Education and to BA/BEd, BPhEd (honours)/BEd and BSc/BEd majors with a minimum of 15.0 credits.

Students completing this course will forfeit credit in PSYC/CHYS (CHST) 3P74.

EDUC 8P47

Outdoor Education

Strategies and curriculum related to environmental education. Students will be expected to participate in a variety of school-related outdoor education experiences.

Lectures, seminar, 3 hours per week.

Restriction: open to students admitted to Pre-service Education and to BA/BEd, BPhEd (honours)/BEd and BSc/BEd majors with a minimum of 15.0 credits.

EDUC 8P48

Teaching on Reserves

Native pedagogy and curriculum necessary for effective instruction on both northern and southern Ontario reserves.

Lectures, seminar, 3 hours per week.

Restriction: open to students admitted to Pre-service Education and to BA/BEd, BPhEd (honours)/BEd and BSc/BEd majors with a minimum of 15.0 credits.

EDUC 8P61

Technology, Change and the Curriculum

Historical and current technological changes that impact the school curriculum; accommodation of and resistance to incorporation in the curriculum; the ethics of adopting technology.

Lecture, seminar, 2 hours per week.

Restriction: open to students admitted to the Enterprise Education Extended Program.

EDUC 8P64

Guidance and Career Education

Prevailing theories of career development applied to guidance programs and practices in Ontario schools.

Lecture, seminar, field work, 2 hours per week.

Restriction: open to students admitted to the Enterprise Education Extended Program.

EDUC 8P65

Marketing and Merchandising: Intermediate/Senior

Teaching methods and curriculum materials for marketing and other resources for information management courses in secondary schools.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Intermediate/Senior program.

EDUC 8P66

Information Management: Intermediate/Senior

Teaching methods and curriculum materials and other resources for information management courses in secondary schools.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Intermediate/Senior program.

EDUC 8P67

Accounting: Intermediate/Senior

Teaching methods and curriculum materials for accounting courses in secondary schools.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Intermediate/Senior program.

EDUC 8P68

Data Processing: Intermediate/Senior

Teaching methods and curriculum materials for courses in data processing in the secondary schools.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Intermediate/Senior program.

EDUC 8P69

Science (Physics): Intermediate/Senior

Teaching physics in secondary schools; Ontario Ministry, board and school curriculum documents and other resources are examined.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Intermediate/Senior program.

EDUC 8P70

Transition Years

Policies and perspectives that underlie organizational structures, curriculum guidelines and teaching practices in the intermediate grades (7-10).

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Intermediate/Senior and Technological Studies Education programs.

EDUC 8P71

Co-operative Education

A survey of co-operative education programs currently in place in Ontario secondary schools with reference to the OCT stance and guidelines; school/workplace articulation; outcomes for the students assessed within the framework of experiential learning.

Seminars, field work, 2 hours per week.

Restriction: open to students admitted to the Enterprise Education Extended Program.

EDUC 8P72

Computer Science: Intermediate/Senior

Implementing computer science skills and methods of instruction in a secondary classroom; integrating use of the computer into any department; detailed look at computer science and technology.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Intermediate/Senior program.

EDUC 8P73

Theatre Arts: Intermediate/Senior

The purposes of a theatre program in schools and the practice of skills required for managing a theatre class. Practical experience in theatre work or some formal training at the post secondary level is required.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Intermediate/Senior program.

EDUC 8P74

English (First Language): Intermediate/Senior

The development of teaching methodology and a personal philosophy of education through active participation and preparation of course material; may include research on the development of curricular units that deal with poetry, the short story, the novel, use and impact of the media.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Intermediate/Senior program.

EDUC 8P77

Geography: Intermediate/Senior

Development of a working knowledge of the skills, procedures and content involved in teaching geography at the secondary school level.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Intermediate/Senior program.

EDUC 8P80

International Languages (Italian): Intermediate/Senior

The theory of and approaches to teaching and learning a second language; the methodological approaches involved in teaching Italian at the intermediate and senior levels.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Intermediate/Senior program.

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EDUC 8P81

Mathematics: Intermediate/Senior

Teaching techniques and curriculum materials in mathematics with some focus on teaching mathematics to general level students.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Intermediate/Senior program.

EDUC 8P82

Physical and Health Education: Intermediate/Senior

The philosophy of physical and health education in grades 7-12/OAC; limitations on the physical education program, management in the different learning areas, curriculum and teaching methods and use of audio-visual aids in health education.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Intermediate/Senior program.

EDUC 8P83

Science (General): Intermediate/Senior

Teaching science in the intermediate and senior division; Ontario ministry, board and school curriculum documents and other resources are examined.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Intermediate/Senior program.

EDUC 8P84

Visual Arts: Intermediate/Senior

Studio activity, skills and art forms appropriate for students in grades 7-12/OAC; course planning and teaching methods for group and individual activities in the classroom.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Intermediate/Senior program.

Note: experience or course work in studio art is a helpful background.

EDUC 8P85

Religious Knowledge: Intermediate/Senior

The history and development of Roman Catholic religious education as an academic discipline; the curriculum for grades 7-12/OAC and methods for teaching that curriculum.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Intermediate/Senior program.

EDUC 8P86

Science (Biology): Intermediate/Senior

Teaching biology in secondary schools; Ontario Ministry, board and school curriculum documents and other resources are examined.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Intermediate/Senior program.

EDUC 8P87

Science (Chemistry): Intermediate/Senior

Teaching chemistry in secondary schools; Ontario Ministry, board and school curriculum documents and other resources are examined.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Intermediate/Senior program.

EDUC 8P88

History: Intermediate/Senior

The nature of history in the secondary school program. Emphasis on development of history skills, curriculum design, analysis of subject guidelines from grades 7-12/OAC.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Intermediate/Senior program.

Students completing this course will forfeit credit in EDUC 8P79.

EDUC 8P91

Introduction to the Hodinohsonni Grammar for Teaching

The rudiments of Hodinohsonni grammar and the way it is taught in a school setting. Pronoun and verb morphologies are emphasized.

Restriction: open to students admitted to the Native Teacher Education Certificate programs.

EDUC 8P93

Introduction to the Hodinohsonni Language Teaching Methods

Introduces active methods of second-language instruction using Hodinohsonni language samples. Student produced peer teaching and language tutoring.

Restriction: open to students admitted to the Native Teacher Education programs.

EDUC 8P94

Materials Development for Language Teaching

Students develop teaching materials suitable to their career settings and consistent with the language methods taught in the program. Reproducible materials are distributed to all students.

Restriction: open to students admitted to the Native Teacher Education programs.

EDUC 8P96

Advanced Languages Teaching Methods

Designed for teachers of advanced-level NSL proficiency. Methods for improving oral fluency, developing formal registers and teaching grammar and literature are demonstrated.

Restriction: open to students admitted to the Native Teacher Education programs.

EDUC 8P97

Advanced Hodinohsonni Grammar for Teaching

Hodinohsonni grammars differ fundamentally from English,

and bilingual teachers need to understand the differences. The course uses contrastive analysis to illustrate grammatical difficulties of NSL learners.

Restriction: open to students admitted to the Native Teacher Education Certificate programs.

EDUC 8P98

Instructional Practice

Students apply the methods developed in EDUC 8P99 in a classroom setting. Videotapes of their teaching performance are used for self- and peer-evaluation.

Labs, 40-hours.

Restriction: open to students admitted to the Native Teacher Education Certificate programs.

EDUC 8P99

Intensive Language Teaching Methods

Intensive methods of second language teaching emphasizes high learner involvement in communicative language use. Methods such as total physical response and language experience are demonstrated.

Restriction: open to students admitted to the Native Teacher Education programs.

EDUC 8R00

The Teaching of Electronic Communications Technology (Basic)

May include television production, editing and transmission (airwaves and cable); audio recording and amplification; telephone, facsimile, computer modem and other communications devices. Transmission and receiving of communications signals using radio waves, line-of-sight signals, microwaves, satellites, fibre optics, cable or any other means as part of the communications system.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education Program.

Students completing this course will forfeit credit in EDUC 8Q00.

EDUC 8R01

The Teaching of Live Communications Technology (Basic)

May include photography (moving and still) and stage productions. Lighting, art work, carpentry (set design and construction) and other aspects of the problem solving and design challenges of creating illusions and functional environments for the live communications systems.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education Program.

EDUC 8R02

The Teaching of Graphic Communication Technology (Basic)

Print materials, desktop publishing, computer graphics, drafting methods and printing systems may all form part of the graphic communications systems.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education Program.

EDUC 8R03

The Teaching of Communications Technology (Advanced)

An overview of the communication industry; the technical knowledge and skills required to teach such component areas as television and video production, art, broadcasting, photography, computer communication and print and graphic production at the senior level.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education Program.

Students completing this course will forfeit credit in EDUC 9G10.

EDUC 8R05

The Teaching of Electronic Communications Technology (Advanced)

May include an in-depth study of television production, editing and transmission (airwaves and cable), audio recording and amplification, telephone, facsimile, computer modem and other communications devices. Transmission and receiving of communication signals using radio waves, line-of-sight signals, microwaves, satellites, fibre optics, cable and other means of communication.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education Program.

EDUC 8R06

The Teaching of Live Communications Technology (Advanced)

May include an in-depth study of photography (moving and still) and stage productions. Lighting, art work, carpentry (set design and construction) and other aspects of the problem solving and design challenges of creating illusions and functional environments for the live communications systems.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education Program.

EDUC 8R07

The Teaching of Graphic Communication Technology (Advanced)

In-depth study of print materials, desktop publishing, computer graphics, drafting methods, printing systems.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education Program.

EDUC 8R09

The Teaching of Construction Technology (Advanced)

An overview of the construction industry; technical knowledge, and skills and teaching strategies for the construction

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services, architectural design and drafting, electricity, environmental control, plumbing, sheet metal, trowel trades and wood-working at the senior level.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education Program.

Students completing this course will forfeit credit in EDUC 9G30.

EDUC 8R10

The Teaching of Residential Construction Technology (Basic)

May include house and cottage designs, multi-family dwellings, construction techniques and electrical and water installation, utility systems, sewage and waste disposal, internal environmental system and rural/urban comparisons.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education Program.

EDUC 8R11

The Teaching of Commercial Construction Technology (Basic)

May include zoning regulations, stores, gas and service stations, office buildings, farm buildings, construction techniques, utility systems, sewage and waste disposal and internal and external environmental systems.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education Program.

EDUC 8R12

The Teaching of Industrial Construction Technology (Basic)

May include zoning regulations, types of buildings, construction techniques, utility systems and sewage and waste disposal systems.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education Program.

EDUC 8R13

The Teaching of Recreational Construction Technology (Basic)

Recreational building or facilities construction which may include arenas, sports stadiums, boat storage facilities and docks and marinas.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education Program.

EDUC 8R15

The Teaching of Residential Construction Technology (Advanced)

May include an in-depth study of house and cottage designs, multi-family dwellings, construction techniques and electrical and water installation, utility systems, sewage and waste disposal, internal environmental system and rural/urban comparisons.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education Program.

EDUC 8R16

The Teaching of Commercial Construction Technology (Advanced)

May include an in-depth study of zoning regulations, stores, gas and service stations, office buildings, farm buildings, construction techniques, utility systems, sewage and waste disposal and internal and external environmental systems.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education Program.

EDUC 8R17

The Teaching of Industrial Construction Technology (Advanced)

May include an in-depth study of zoning regulations, types of buildings, construction techniques, utility systems and sewage and waste disposal systems.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education Program.

EDUC 8R18

The Teaching of Recreational Construction Technology (Advanced)

May include an in-depth study of arenas, sports stadiums, boat storage facilities, docks and marinas.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education Program.

EDUC 8R19

The Teaching of Technological Design (Advanced)

An in-depth study of a variety of design processes that may be used in solving any technological challenge or problem. It builds on and forms a continuum with the science and technology programs in grades 7 and 8 and the Integrated Technology program in grade 9.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education Program.

EDUC 8R20

The Teaching of Design Systems Technology (Basic)

Exposes the candidates to diverse and complex design problems and processes and includes study of a variety of design strategies that may be used to solve any technological problem or challenge.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education Program.

EDUC 8R21

The Teaching of Process Technology (Basic)

Includes the workshop conversion of a representative product design into a functional product. A knowledge of materials,

manipulation and application of machine tools and logical manufacturing processes is required to produce working models and/or prototypes.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education Program.

EDUC 8R22

The Teaching of Problem-solving Technology (Basic)

Candidates should be capable of identifying their own design problems and developing optimum solutions independently or as a member of a design and problem-solving group. Much of the program and process planning will require a co-operative and collaborative involvement.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education Program.

EDUC 8R23

The Teaching of Applications of Technology (Basic)

Candidates will be provided with opportunities to integrate their own real world experiences with those of their colleagues. This activity will permit the candidates to apply, using theoretical and practical means, a variety of design processes that may be used to solve technological challenges and problems in the areas of communications, construction, hospitality services, manufacturing, personal services and transportation.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education Program.

EDUC 8R25

The Teaching of Design Systems Technology (Advanced)

Includes an in-depth study of a variety of design strategies that may be used to solve any technological problem or challenge.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education Program.

EDUC 8R26

The Teaching of Process Technology (Advanced)

Includes an in-depth study of the workshop conversion of a representative product design into a functional product. The knowledge of materials, manipulation and application of machine tools and logical manufacturing processes is required to produce working models and/or prototypes.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education Program.

EDUC 8R27

The Teaching of Problem-solving Technology (Advanced)

Candidates identify their own design problems and develop optimum solutions independently or as a member of a design and problem-solving group. Much of the program and process planning require a co-operative and collaborative involvement.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education Program.

EDUC 8R28

The Teaching of Applications of Technology (Advanced)

Candidates are provided with opportunities to integrate their own real world experiences with those of their colleagues. This activity permits the candidates to apply, using theoretical and practical means, a variety of design processes that may be used to solve technological challenges and problems in the areas of communications, computer, construction, hospitality services, manufacturing, personal services and transportation.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education Program.

EDUC 8R29

Hospitality Services (Advanced)

In-depth study of teaching strategies and skills required for the planning, operation and development of services for the study of tourism and guiding, travel and accommodation and food preparation and serving, plus other hospitality issues at the senior level.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education Program.

EDUC 8R30

Tourism (Basic)

May include wilderness travel, hunting and fishing, heritage attractions, communications and environmental issues.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education Program.

EDUC 8R31

Travel and Accommodation (Basic)

May include hotel management, travel booking systems and travel methods.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education Program.

EDUC 8R32

Food Preparation (Basic)

May include quantity food preparation, baking, the preparation of fast foods, gourmet cooking, table serving and restaurant management.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education Program.

EDUC 8R35

Tourism (Advanced)

Advanced program in tourism and guiding which may include an in-depth study of wilderness travel, hunting and fishing

Education

locations and access, heritage attractions, communications systems and environmental issues.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education Program.

EDUC 8R36

Travel and Accommodation (Advanced)

May include an in-depth study of hotel management, hotel reservation systems, travel booking systems and travel methods.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education Program.

EDUC 8R37

Food Preparation (Advanced)

May include an in-depth study of quantity food preparation, baking, the preparation of fast foods, gourmet cooking, table serving and restaurant management.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education Program.

EDUC 8R39

The Teaching of Manufacturing Technology (Advanced)

Overview of strategies for teaching control systems, engineering drafting design, foundry and moulding practice, industrial electronics, metal fabrication and precision machining at the senior level.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education Program.

EDUC 8R40

The Teaching of Product Design Technology (Basic)

May include drafting and design processes, statics and dynamics, kinematics and mechanisms, strength of materials, mechanics of materials and structures. May also include topics such as cost analysis and product marketing and sales.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education Program.

EDUC 8R41

The Teaching of Process and Production Planning Technology (Basic)

May include conventional and production machine tools, materials handling, control systems including hydraulics, pneumatics, PLC's, heat treatment of metals, CAD/CAM systems, flow charts, Program Evaluation and Review Techniques (PERT) systems, statistical quality control and product control procedures.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education Program.

EDUC 8R42

The Teaching of Manufacturing Process Technology (Basic)

May include the cutting (shearing), forming, bending, removal, joining and finishing of solid materials and the chemical, thermal and physical change to liquid and gaseous materials.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education Program.

EDUC 8R45

The Teaching of Product Design Technology (Advanced)

May include an in-depth study of drafting and design processes, statics and dynamics, kinematics and mechanisms, strength of materials, mechanics of materials, and structures. May also include topics such as cost analysis and product marketing and sales.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education Program.

EDUC 8R46

The Teaching of Process and Production Planning Technology (Advanced)

May include an in-depth study of conventional and production machine tools; materials handling; control systems including hydraulics, pneumatics, PLC's, heat treatment of metals, CAD/CAM systems, flow charts, Program Evaluation and Review Techniques (PERT) systems, statistical quality control and product control procedures.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education Program.

EDUC 8R47

The Teaching of Manufacturing Process Technology (Advanced)

May include an in-depth study of the cutting (shearing), forming, bending, removal, joining and finishing of solid materials and the chemical, thermal and physical change to liquid and gaseous materials.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education Program.

EDUC 8R49

Personal Services (Advanced)

An overview of the personal services industry. Teaching strategies and skills required at the senior level for the planning, operation and development of services for the study of health care, personal grooming, child care and geriatric care.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education Program.

EDUC 8R50

Health Care Services (Basic)

May include biotechnology, home care, dental care, nursing fundamentals, dietary study and rules, exercise and disease prevention.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education Program.

EDUC 8R51

Personal Grooming Services (Basic)

May include hair care and styling, make-up and manicures and personal hygiene.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education Program.

EDUC 8R52

Child Care Services (Basic)

May include prenatal and postnatal care, growth and development, childhood illnesses, parental responsibilities and nutrition.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education Program.

EDUC 8R53

Geriatric Care Services (Basic)

May include disabilities and diseases, diets and nutrition, exercise, bed care and social contact.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education Program.

EDUC 8R55

Health Care Services (Advanced)

May include an in-depth study of biotechnology, home care, dental care, nursing fundamentals, dietary study and rules, exercise and disease prevention.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education Program.

EDUC 8R56

Personal Grooming Services (Advanced)

May include an in-depth study of hair care and styling, make-up and manicures and personal hygiene.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education Program.

EDUC 8R57

Child Care Services (Advanced)

May include an in-depth study of prenatal and postnatal care, growth and development, childhood illnesses, parental responsibilities and nutrition.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education Program.

EDUC 8R58

Geriatric Care Services (Advanced)

May include an in-depth study of disabilities and diseases, diets and nutrition, exercise, bed care and social contact.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education Program.

EDUC 8R59

The Teaching of Transportation Technology (Advanced)

An overview of the transportation industry. Strategies for teaching motive power and its application to mobile vehicles, including automobiles, aircraft, farm equipment, small engines, water craft and space at the senior level.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education Program.

EDUC 8R60

The Teaching of Personal Transportation Technology (Basic)

May include bicycles, motorcycles, cars, snowmobiles, recreational vehicles, motor boats, small aircraft and fuel comparisons. Candidates using practical and theoretical means, demonstrate the knowledge, skills and values needed to consider the impact of various vehicles on human/social and environmental systems.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education Program.

EDUC 8R61

The Teaching of Mass Transit Systems Technology (Basic)

May include the study of commercial aircraft, buses, trains, subways, streetcars, cruise ships, escalators and elevators.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education Program.

EDUC 8R62

The Teaching of Freight Transportation Systems Technology (Basic)

May include tractor trailers, freight trains, cargo ships, rocket ships, farm equipment, pipe lines and conveyors.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education Program.

EDUC 8R65

The Teaching of Personal Transportation Technology (Advanced)

May include an in-depth study of bicycles, motorcycles, cars, snowmobiles, recreational vehicles, motor boats, small aircraft and fuel comparisons. Candidates using practical and theoretical means, demonstrate the knowledge, skills and values needed to consider the impact of various vehicles on human/social and environmental systems.

Lectures, seminar, 2 hours per week.

Education

Restriction: open to students admitted to the Technological Education Program.

EDUC 8R66

The Teaching of Mass Transit Systems Technology (Advanced)

May include an in-depth study of commercial aircraft, buses, trains, subways, streetcars, cruise ships, escalators and elevators.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education Program.

EDUC 8R67

The Teaching of Freight Transportation Systems Technology (Advanced)

May include an in-depth study of tractor trailers, freight trains, cargo ships, rocket ships, farm equipment, pipelines and conveyors.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education Program.

EDUC 8R70

The Teaching of Computer Technology

An overview of the computer industry; technical knowledge and skills and strategies for the computer services industry; problem solving, logic gate functions and programming constructs including an examination of computer hardware and control systems from an engineering and programming perspective.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education program.

EDUC 8R71

The Teaching of Computer Engineering Technology (Basic)

Study of key computer components and peripherals, logic gates, fundamental programming concepts, internal numbering and character representation systems and operating systems and networks.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education program.

EDUC 8R72

The Teaching of Computer and Information Technology (Basic)

Study of computer science concepts including software design, fundamental programming constructs of sequence, selection and repetition; the functions of internal and external components; the relationships among networks, operating systems, and applications of software and their uses; the evolution of programming languages.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education program.

EDUC 8R73

The Teaching of Computer Engineering Technology (Advanced)

May include an in-depth study of the function of key computer components and peripherals, logic gates, fundamental programming concepts, internal numbering and character representation systems and operating systems and networks; related career opportunities.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education program.

EDUC 8R74

The Teaching of Computer and Information Technology (Advanced)

May include an in-depth study of computer science concepts including software design; fundamental programming constructs of sequence, selection and repetition; the functions of internal and external components; the relationships among networks, operating systems, and application of software and their uses; the evolution of programming languages; and related career opportunities.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education program.

EDUC 8R98

The Teaching of Design and Technology (Advanced)

An overview of technology and its application relative to design, development and production. Areas include information technology, communication, fabrication, design processes, engineering concepts, and the processing of materials like wood, metal and plastic. Program emphasis is on problem solving and on student-centred and activity-based learning.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Technological Education Program.

EDUC 8Y04

Current Trends and Issues in Special Education

Current legislation and recent developments related to the education of exceptional students.

Lectures, seminar, practicum, 2 hours per week.

Restriction: open to students admitted to the BSc/BEd, French Teaching Specialization, Ontario Certificate of Qualification Native Teacher Education, Pre-service Education and Technological Studies Education programs, BPhEd(honours)/BEd and BA/BEd majors with a minimum of 5.0 overall credits.

EDUC 8Y05

The Education Enterprise

Contemporary theories, issues and innovations in education. The relationship between philosophical principles and the aims of education evidenced in selected educational systems. Study of the acts and regulations regarding education.

Lectures, seminar, practicum, 2 hours per week.

Restriction: open to students admitted to the BSc/BEd, French Teaching Specialization, Ontario Certificate of Qualification Native Teacher Education, Pre-service Education and Techno-

logical Studies Education programs, BPhEd(honours)/BEEd and BA/BEEd majors with a minimum of 5.0 overall credits.

EDUC 8Y15

Environmental/Outdoor Education

Approaches to and philosophies of outdoor/environmental education and its development. Application of skills and knowledge in curricular decision-making processes.

Lectures, seminar, 2 hours alternate weeks.

Restriction: open as an option to students admitted to Primary/Junior and Junior/Intermediate programs and Concurrent Education students with a minimum of 15.0 credits.

Note: course not required for Outdoor Education teaching placement. An additional fee is levied for this course. This course is an option for credit.

EDUC 8Y21

Junior/Intermediate Mathematics

Teaching mathematics at the Junior and Intermediate levels: resources, curriculum and methods.

Lectures, seminar, 2 hours alternate weeks.

Restriction: open to students admitted to the Junior/Intermediate program and to BSc/BEEd majors with a minimum of 15.0 overall credits.

Students completing this course will forfeit credit in EDUC 8P21.

EDUC 8Y26

Junior/Intermediate Health and Physical Education

Focus on the implementation at the Ontario health and physical education curriculum in junior and intermediate grades. Fundamental movement skills, active participation, concepts of healthy living, appropriate teaching methods and a philosophical orientation which fosters learning by all.

Lectures, seminar, 2 hours alternate weeks.

Restriction: open to students admitted to the junior/intermediate program and to BSc/BEEd major with a minimum of 10.0 overall credits.

Students completing this course will forfeit credit in EDUC 8P22.

EDUC 8Y28

Junior/Intermediate Science and Technology

An integrated approach to teaching science and technology at the junior and intermediate levels; focuses on instructional strategies appropriate to the expectations in the Ontario curriculum.

Lectures, 2 hours alternate weeks, lab, 2 hours alternate weeks.

Restriction: open to students admitted to the junior/intermediate program and to BSc/BEEd majors with a minimum of 15.0 overall credits.

Students completing this course will forfeit credit in EDUC 8P21.

EDUC 8Y29

Junior/Intermediate Social Studies, History and Geography

Teaching strategies appropriate to the Ontario curriculum. Key social science concepts; inquiry and communication skills to

examine and understand communities, various heritages and citizenship. Emphasis on Canadian identity and democratic values. The study of history as a preparation for life in a complex society. A focus on geography as the study of the interdependency of people and their environment.

Lectures, seminar, 2 hours alternate weeks.

Restriction: open to students admitted to the Junior/Intermediate program and to BSc/BEEd majors with a minimum of 10.0 overall credits.

Students completing this course will forfeit credit in EDUC 8P22.

EDUC 8Y31

Primary/Junior Mathematics

Teaching mathematics at the junior and intermediate levels: resources, curriculum, and methods.

Lectures, seminar, 2 hours alternate weeks.

Restriction: open to students admitted to the Ontario Certificate of Qualification Native Teacher Education and Primary/Junior programs, BA/BEEd majors with a minimum of 15.0 credits, and BPhEd (honours)/BEEd majors with a minimum of 20.0 credits. Students completing this course will forfeit credit in EDUC 8P31.

EDUC 8Y36

Primary/Junior Health and Physical Education

Focus on the implementation of the Ontario health and physical education curriculum in primary and junior grades. Fundamental movement skills, active participation, concepts of healthy living, appropriate teaching methods and a philosophical orientation which fosters learning by all.

Lectures, seminar, 2 hours alternate weeks.

Restriction: open to students admitted to the Native Teacher Education and Primary/Junior programs, BA/BEEd and BPhEd (honours)/BEEd majors with a minimum of 15.0 overall credits. Students completing this course will forfeit prior credit in EDUC 8P32.

EDUC 8Y38

Primary/Junior Science and Technology

An integrated approach to teaching science and technology at the primary and junior levels; focuses on instructional strategies appropriate to the expectations in the Ontario curriculum.

Lectures, 2 hours alternate weeks, lab, 2 hours alternate weeks.

Restriction: open to students admitted to the Ontario Certificate of Qualification Native Teacher Education and Primary/Junior programs, BA/BEEd majors with a minimum of 15.0 credits and to BPhEd (honours)/BEEd majors with a minimum of 20.0 overall credits.

Note: offered as an off-campus course for the Native Teacher Education Program.

Students completing this course will forfeit credit in EDUC 8P31.

EDUC 8Y39

Primary/Junior Social Studies

Teaching strategies appropriate to the Ontario curriculum. Emphasis on knowledge, skills and attitudes for examining and understanding communities, various heritages and citizenship.

Education

Key social science concepts; inquiry and communication skills. Focus on Canadian identity and democratic values.

Lectures, seminar, 2 hours alternate weeks.

Restriction: open to students admitted to the Native Teacher Education and Primary/Junior programs, BA/BEEd and BPhEd (honours)/BEEd majors with a minimum of 15.0 overall credits. Students completing this course will forfeit credit in EDUC 8P32.

EDUC 8Y50 - 8Y60

Special Topics in Pre-service Education

Topics will vary on the basis of specific areas of instructional expertise and candidate interest. They will not normally be counted in the course credits for the Pre-service program.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Native Teacher Education Programs, Pre-service Education and Technological Studies Education Programs, BPhEd (honours)/BEEd, BSc/BEEd and BA/BEEd majors with a minimum of 15.0 credits.

Note: these courses are options for credit.

EDUC 8Y51

2000-2001: Early Primary Education

Instructional strategies relevant to learners from Junior Kindergarten to Grade 1; current Ontario initiatives and curriculum for the early primary years.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Pre-service Education program and to BA/BEEd, BSc/BEEd majors with a minimum of 15.0 overall credits and to BPhEd (honours)/BEEd majors with a minimum of 20.0 overall credits.

Note: this course is an option for credit.

EDUC 8Y52

2000-2001: Early Secondary School Education

Instructional strategies relevant to learners in Grades 9 and 10; current Ontario initiatives and curriculum for the early secondary school years.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Pre-service Education program and to BA/BEEd, BSc/BEEd majors with a minimum of 15.0 overall credits and to BPhEd (honours)/BEEd majors with a minimum of 20.0 overall credits.

Note: This course is an option for credit but does not give students intermediate/senior basic teaching.

EDUC 8Y53

2000-2001: Aboriginal Studies for the Junior/Intermediate School

Survey of cultural, linguistic, political and socio-economic issues of Aboriginal people in Canada as outlined in the Ontario curriculum. Topics include the involvement of Aboriginal people in the development of Canada from pre-history to the present. Emphasis on contemporary Aboriginal issues.

Lectures, seminar, 2 hours per week.

Restriction: open to students admitted to the Pre-service Education and to BA/BEEd, BSc/BEEd majors with a minimum of 15.0 overall credits and to BPhEd (honours) BEEd majors with a minimum of 20.0 overall credits.

Note: This course is an option for credit.

EDUC 8Y96

Religious Education (Roman Catholic)

The reality of Christian belief and behaviour is examined specifically as it pertains to the curriculum and instruction process as found in the Canadian Catechism program. Designed to implement the *Guidelines in Preparation of Students to Teach Religion in Catholic Schools* approved by the Ontario English Catholic Teachers Association and the Ontario Separate School Trustees Association.

Lectures, seminar, 2 hours per week.

Note: open to all Education students. This course is not a substitute for Part I of the OECTA/OSSTF Religion course. A materials fee will be charged. This course is an option for credit.

EDUC 8Y97

Religious Education (non-Roman Catholic)

Designed for those who might be responsible for religious education in public, private, or church schools. Because of our pluralistic society, teachers are increasingly called upon to understand the world view of students from a mosaic of religious traditions and to help students understand and respect these traditions, including their own, and to understand the role of religion in the experiences of being human.

Lectures, seminar, 2 hours alternate weeks.

Note: open to all Education students. This course is an option for credit.

IN-SERVICE (Additional Qualifications)

Courses numbered 9(alpha)00 to 9(alpha)99 are for students in the Program II BEEd. Five credits are required, three of which must be in a specialized series.

In accordance with the Ontario College of Teachers requirements, Additional Qualification courses must consist of 125 hours of work of which 100 hours must be contact time (Reg. 184/97). Please consult the BIRT guide for specific course schedule.

EDUC 9F01

Adult Education

The needs and characteristics of adult learners and the social systems established to assist them. Preparing learning materials, planning, implementing and evaluating programs; consulting and communicating effectively with adult learners.

Lectures, seminar, practicum.

Prerequisite: Ontario Certificate of Qualification.

EDUC 9F02

Assessment of Teaching Performance

Counselling, supervision and evaluation of student teacher performance. The practicum component allows associate teachers to work with student teachers enrolled in the Pre-service program at the Faculty of Education.

Lectures, seminar, practicum.

Note: open to certified teachers.

EDUC 9F03

Childhood Education

Evaluation of the child aged four to eight. Topics include characteristics of developmental stages, appropriate learning environments, curriculum and evaluation techniques; multicultural education, sex role stereotyping, early identification of special learning problems, child abuse and community school relations.

Lectures, seminar, practicum.

Note: open to certified teachers.

EDUC 9F08

Teaching Writing

Development of understanding of the writing process and its implications for teaching writing in the classroom. An examination of responses to student writing at a variety of stages and for a variety of purposes.

Lectures, seminar.

EDUC 9F11

Teaching French as a Second Language I

The aims of the French program in Ontario schools, methodology; an introduction to linguistics, audio-visual devices, demonstration classes and practice teaching.

Lectures, seminar, practicum.

Restriction: registration open to certified teachers and qualified individuals until the date specified in the BIRT guide. On and after that date, permission of department.

Note: open to certified teachers as well as other individuals who qualify by successful completion of an oral and written test.

EDUC 9F12

Teaching French as a Second Language II

Teaching French as a second language in core and immersion programs at the primary, junior and intermediate levels including Ontario Ministry guidelines, language development, curriculum and unit development, language materials and visits to immersion classes.

Lectures, seminar, practicum.

Prerequisite: EDUC 9F11.

EDUC 9F13

Teaching French as a Second Language III

Advanced techniques for programs at the primary, junior and intermediate divisions in teaching French as a second language; leadership skills and styles, program organization, professional development and sequencing of programs.

Lectures, seminar, practicum.

Prerequisite: EDUC 9F12 and a transcript showing at least five credits in French at the university level, or equivalent course or experience acceptable to the Director.

EDUC 9F14

Music (Vocal) Primary/Junior I

Concepts of music including singing, listening, reading, playing, creating, moving and dramatizing; the Tonic Solfa method. Concentration will be at the primary level.

Lectures, seminar, practicum.

Note: open to certified teachers as well as other individuals who qualify by successful completion of an oral and written test.

EDUC 9F15

Music (Vocal) Primary/Junior II

Teaching strategies and materials required for a well-balanced classroom music program. Planning a one-year curriculum that provides for continuity in the development of musical skills and the understanding of concepts. Concentration will be at the junior level.

Lectures, seminar, practicum.

Prerequisite: EDUC 9F14.

EDUC 9F16

Music (Vocal) Primary/Junior III

The organization and administration of music programs in a variety of school settings in the primary and junior levels; curriculum building, the selection of materials and resources, choral repertoire and vocal techniques for performance. Examinations and comparison of contemporary approaches to music education.

Lectures, seminar, practicum.

Prerequisite: EDUC 9F15.

EDUC 9F17

Science Education Primary/Junior I

An introduction to the teaching of science in the primary and junior divisions based on Ontario curriculum documents. The development of teaching models, programs, materials and their evaluation.

Lectures, seminar, practicum.

Note: open to certified teachers.

EDUC 9F18

Science Education Primary/Junior II

Planning programs in primary/junior science with emphasis on implementing learning strategies; evaluating the science component of a balanced and integrated program at the primary/junior level.

Lectures, seminar, practicum.

Prerequisite: EDUC 9F17.

EDUC 9F19

Science Education Primary/Junior III

The study of leadership skills in the organization, administration and supervision of a science education program for the primary/junior level.

Lectures, seminar, practicum.

Prerequisite: EDUC 9F18.

EDUC 9F21

Reading I

An introduction to the language processes of reading and writing. Basic assessment procedures and the improvement of reading skills.

Education

Lectures, seminar, practicum.

Note: open to certified teachers.

EDUC 9F22

Reading II

Further study of the components involved in the act of reading and the techniques used in the diagnosis and remediation of reading problems.

Lectures, seminar, practicum.

Prerequisite: EDUC 9F21.

EDUC 9F23

Reading III

Advanced instruction in the theory and practice of reading instruction; the design and implementation of reading programs.

Lectures, seminar, practicum.

Prerequisite: EDUC 9F22.

EDUC 9F24

Design and Technology I

Laboratory-centred activity on material and processes; an analysis of curriculum theory as it applies to elementary school programs. Topics include materials and matter, applied design, structures and mechanisms, and the implementation of elementary technology programs.

Lectures, seminar, practicum.

Note: open to certified teachers or permission of the Director.

EDUC 9F25

Design and Technology II

Laboratory-centred activity focused on curriculum development, assessment and evaluation practices in technology programs. Topics include the basic concepts of technology, developing the skills, strategies and habits of mind, relating scientific and technological knowledge to each other and to the world outside of school.

Lectures, seminar, practicum.

Prerequisite: EDUC 9F24.

EDUC 9F26

Design and Technology III

Organization and curriculum development as they apply to technology programs and the implementation of a technology program focused on the Ontario curriculum, science and technology, grades 1 to 8. Emphasis on the development of a classroom ready program that addresses the new Ontario curriculum and incorporating current assessment and evaluation principles.

Lectures, seminar, practicum.

Prerequisite: EDUC 9F25.

EDUC 9F27

Teacher-Librarianship I

Understanding the role of the teacher-librarian and the collaborative process in developing teaching strategies for resource-based learning. Topics include utilizing and integrating basic library information technology, collection development, print

and non-print resource evaluation, introduction to child and adolescent literature, systems, policies and procedures for organizing and distributing resources.

Lectures, seminar, practicum.

Note: open to certified teachers or permission of the Director.

EDUC 9F28

Teacher-Librarianship II

Practical applications of the role of the teacher-librarian and the collaborative process. Interpreting and utilizing a variety of print and non-print media. Developing a wider knowledge of resources including print (non-fiction, reference, child and adolescent literature) and non-print (video, CD ROM, computer software, Internet resources). Further development in utilizing and integrating library information technology, collection development, systems, policies and procedures for organizing and distributing resources.

Lectures, seminar, practicum.

Prerequisite: EDUC 9F27.

EDUC 9F29

Teacher-Librarianship III

Advanced practical applications of the role of the teacher-librarian and the collaborative process in resource-based learning. Organizing and presenting workshops in Library and Information Technologies. Awareness of current developments in library organization, design and distribution systems. Integrating current technologies in the learning process.

Lectures, seminar, practicum.

Prerequisite: EDUC 9F28.

EDUC 9F31

Environmental Science I

The development and implementation of courses of study and learning experiences in environmental science within the community, neighbourhood and outdoor areas to which a school has access.

Lectures, seminar, practicum.

Note: open to certified teachers.

EDUC 9F32

Environmental Science II

Planning programs of environmental science (outdoor education) in a K to 12/OAC continuum with emphasis on implementation at the three divisional levels.

Lectures, seminar, practicum.

Prerequisite: EDUC 9F31.

EDUC 9F33

Environmental Science III

The organization, administration and supervision of environmental science programs; their design, development and implementation in elementary and secondary schools.

Lectures, seminar, practicum.

Prerequisite: EDUC 9F32.

EDUC 9F37

Primary Education I

Basic teaching strategies with emphasis on communication (language arts and mathematics); a consideration of curriculum matters of concern to primary teachers in these subject areas; and an examination of provincial curriculum documents and theories of child development as they relate to communications.

Lectures, seminar, practicum.

Note: open to certified primary grade teachers.

EDUC 9F38

Primary Education II

Basic teaching strategies with emphasis on social and environmental sciences and the arts (drama, music, visual arts and physical and health education); a consideration of curriculum matters. Provincial curriculum documents and current principles of child development and learning as they relate to these subject areas.

Lectures, seminar, practicum.

Prerequisite: EDUC 9F37.

EDUC 9F39

Primary Education III

Leadership skills involved in the professional development of teachers; principles of curriculum construction; the diagnosis and remediation of learning difficulties; the examination of relevant case studies and the pursuit of individual interests.

Lectures, seminar, practicum.

Prerequisite: EDUC 9F38.

EDUC 9F41

Physical and Health Education Primary/Junior I

Activities and practices for teachers of the primary/junior grades, with attention to current theory and philosophy. The primary program and motor skills development in dance, gymnastics and games; health education and organizational procedures. Intramural activities, planned by students and faculty.

Lectures, seminar, practicum.

Note: open to certified teachers.

EDUC 9F42

Physical and Health Education Primary/Junior II

Fitness and activity sessions for children at the junior level including movement education in dance, gymnastics and games. Intramural activities.

Lectures, seminar, practicum.

Prerequisite: EDUC 9F41.

EDUC 9F43

Physical and Health Education Primary/Junior III

Program content and development; current problems, both personal and programmatic and the development of leadership skills.

Lectures, seminar, practicum.

Prerequisite: EDUC 9F42.

EDUC 9F44

Physical and Health Education Intermediate/Senior I

Activities and philosophies related to current practices at the intermediate division; program development in dance, gymnastics and games; anatomy and athletic injuries; individual games and activities suitable for these age levels. Intramural activities.

Lectures, seminar, practicum.

Note: open to certified teachers.

EDUC 9F45

Physical and Health Education Intermediate/Senior II

Activities and philosophies related to the senior division; program development; teaching strategies in dance, gymnastics and games, appropriate health topics and the organization of suitable programs for the involvement of students at this level. Intramural activities.

Lectures, seminar, practicum.

Prerequisite: EDUC 9F44.

EDUC 9F46

Physical and Health Education Intermediate/Senior III

Advanced instruction in the organization and administration of physical and health education programs at the intermediate and senior levels. Curriculum development, teaching strategies, evaluation techniques, leadership and supervision.

Lectures, seminar, practicum.

Prerequisite: EDUC 9F45.

EDUC 9F47

Attendance Counsellor

Important aspects of the attendance counsellor training program as defined by the OCT guidelines including philosophy of attendance counsellor training; change agent theory and practice; counselling theory and practicum; developmental psychology; law and education.

Lectures, seminar, practicum.

Note: open to potential attendance counsellor candidates, practising attendance counsellors, certified teachers, social workers, BEd candidates (limited enrolment).

EDUC 9F48

Business Studies: Data Processing

Teaching data processing concepts at the Intermediate/Senior level. Introduction to and practice in spreadsheet, database, word processing, desktop publishing and data communication transfer, in particular on the Internet.

Lectures, seminar, practicum.

Note: open to certified teachers.

EDUC 9F51

Visual Arts I

Methodology and strategies for visual arts education stressing problem-solving, including creative work, theory, critical analysis, and visual awareness in the context of a total school experience of the student.

Lectures, seminar, practicum.

Note: open to certified teachers. Familiarity with the Ministry document "The Arts".

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EDUC 9F52

Visual Arts II

Emphasis on planning, delivering and assessing an inclusive arts program for a divisional level. Topics include workshops in media processes and design, and art appreciation, enhanced by gallery and museum visits.

Lectures, seminar, practicum.

Prerequisite: EDUC 9F51.

EDUC 9F53

Visual Arts III

Curriculum design and implementation, stressing historical, multi-cultural, and current issues, leadership skills in managing a visual arts department, planning and conducting advanced level workshops in visual arts and evaluating visual arts programs.

Lectures, seminar, practicum.

Prerequisite: EDUC 9F52.

EDUC 9F57

Junior Education I

Curriculum matters of concern to junior teachers; an examination of basic teaching strategies in the various subject areas and the development of skills associated with a recognized system of interpersonal relationships.

Lectures, seminar, practicum.

Note: open to certified junior level teachers or those with credit in EDUC 9F77.

EDUC 9F58

Junior Education II

Principles of child development and learning; a more detailed examination of curricula and a finer analysis of techniques of instruction and evaluation in one specific area of the curriculum (communications, environmental studies or arts).

Lectures, seminar, practicum.

Prerequisite: EDUC 9F57.

EDUC 9F59

Junior Education III

Leadership skills involved in the professional development of teachers, the principles of curriculum construction and the diagnosis and remediation of learning difficulties.

Lectures, seminar, practicum.

Prerequisite: EDUC 9F58.

EDUC 9F61

Computers in the Classroom I

An introduction to the microcomputer and its educational application for the classroom teacher; the architectural, historical and pedagogical aspects of microcomputers; basic computer literacy; elementary program development; students select, review and field test educational computer courseware.

Lectures, seminar, practicum.

Note: open to certified teachers.

Students completing this course will forfeit credit in EDUC 9Y01-9Y22.

EDUC 9F62

Computers in the Classroom II

Further development of computer literacy skills; instruction and practice in evaluating software and designing instructional materials to enhance learning.

Lab.

Prerequisite: EDUC 9F61.

Students completing this course will forfeit credit in EDUC 9Y01-9Y22.

EDUC 9F63

Computers in the Classroom III

Advanced techniques in the evaluation, design and implementation of computer-aided learning materials. Instruction and practice in the design and delivery of computer based professional development activities.

Lab.

Prerequisite: EDUC 9F62.

Note: The major project involves the creation and delivery of professional development materials. On-line sessions will be included.

Students completing this course will forfeit credit in EDUC 9Y01-9Y22.

EDUC 9F64

Guidance I

Emphasis on the counselling, consultation, instruction and program design.

Lectures, seminar, practicum.

Note: open to certified teachers.

EDUC 9F65

Guidance II

Emphasis on the development and design of program, career - work - life education and community and global perspectives while also enhancing skills and experience in all five strands.

Lectures, seminar, practicum.

Prerequisite: EDUC 9F64.

EDUC 9F66

Guidance III

Emphasis on the implementation of program and leadership and change in school.

Lectures, seminar, practicum.

Prerequisite: EDUC 9F65.

EDUC 9F67

English as a Second Language/English Language Development I

An introduction to the study of English as a Second Language/English Language Development (ESL/ELD). The role of the teacher in a multilingual, multicultural, multiracial teaching and learning environment. A view of curriculum development and delivery from three perspectives: sociocultural, linguistic and academic.

Lectures, seminar, practicum.

Note: may include Saturdays. Applicants must be able to communicate well in both written and spoken English.

EDUC 9F68

English as a Second Language/English Language Development II

Further development of methodology - teaching techniques, modification, and the delivery of instruction. Assessment, evaluation and a focus on best practice.

Lectures, seminar, practicum.

Prerequisite: EDUC 9F67.

Note: may include Saturdays.

EDUC 9F69

English as a Second Language/English Language Development III

The design, implementation and evaluation of an effective ESL/ELD program. The development of a theoretical framework for the field of ESL/ELD and the role of advocacy and leadership surrounding ESL/ELD issues.

Lectures, seminar, practicum.

Prerequisite: EDUC 9F68.

Note: may include Saturdays.

EDUC 9F71

Co-operative Education I

An analysis of a variety of co-operative education programs currently being used in the schools of Ontario. Students will plan, implement, supervise and evaluate a co-operative education course at the classroom level with reference to provincial curriculum documents (OSIS: Ontario Schools Intermediate and Senior division programs).

Lectures, seminar, practicum.

Note: open to certified teachers.

EDUC 9F72

Co-operative Education II

The development, implementation and evaluation of co-operative education programs at the department and school-wide level; social and vocational needs, values and programs; community and work-site reactions to the concept of co-operative education.

Lectures, seminar, practicum.

Prerequisite: EDUC 9F71.

EDUC 9F73

Co-operative Education III

Organizing and leading workshops in co-operative education; planning, coordinating and implementing co-operative education programs (including in-school and out-of-school components) at the school and board level.

Lectures, seminar, practicum.

Prerequisite: EDUC 9F72.

EDUC 9F74

Dramatic Arts I

Basic methodologies in teaching dramatic arts; the preparation of an introductory course in dramatic arts and appropriate methods of student evaluation.

Lectures, seminar, practicum.

Note: open to all teachers.

EDUC 9F75

Dramatic Arts II

Advanced consideration of the preparation and evaluation of courses in dramatic arts.

Lectures, seminar, practicum.

Prerequisite: EDUC 9F74.

EDUC 9F76

Dramatic Arts III

Organizing and teaching workshops in dramatic arts: planning, implementing and evaluating dramatic arts programs.

Lectures, seminar, practicum.

Prerequisite: EDUC 9F75.

EDUC 9F77

Junior Basic Curriculum and Instruction

Basic teaching strategies in all subject areas taught at the junior level. Current principles of child development and learning and curriculum at the junior level.

Lectures, seminar, practicum.

Prerequisite: an undergraduate degree and valid certification to teach in Ontario.

Note: for teachers who are seeking qualification in an additional area of concentration in the junior division (Ont. 184/97, Section 30 and 31).

EDUC 9F78

Primary Basic Curriculum and Instruction

Basic teaching strategies in all subject areas taught at the primary level. Current principles of child development and learning and curriculum at the primary level.

Lectures, seminar, practicum.

Prerequisite: an undergraduate degree and valid certification to teach in Ontario.

Note: for teachers who are seeking qualification in an additional area of concentration in the primary division (Ont. 184/97, Section 28 and 29).

EDUC 9F84

Mathematics Primary/Junior I

Developmental and learning theories as they apply to the teaching strategies for mathematics, including learning processes, organization, motivation and concept development. Mathematics in other subject areas and in practical applications.

Lectures, seminar, practicum.

Note: open to certified teachers.

EDUC 9F85

Mathematics Primary/Junior II

Various assessment strategies and an introduction to diagnostic techniques and remedial procedures. Technology related to the teaching of mathematics at the primary and junior levels.

Lectures, seminar, practicum.

Prerequisite: EDUC 9F84.

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EDUC 9F86

Mathematics Primary/Junior III

Additional teaching strategies for the review, development and implementation of changes in the mathematics curriculum. Assessment strategies for student achievement, diagnostic techniques and programming for students with special needs.

Lectures, seminar, practicum.

Prerequisite: EDUC 9F85.

EDUC 9F87

Intermediate Education I

Principles of adolescent development and learning; resource materials available to intermediate teachers; basic teaching strategies appropriate to the intermediate level. The various modes of communication, consultation and co-operative action in the development of curricula.

Lectures, seminar, practicum.

Note: open to certified intermediate grade teachers.

EDUC 9F88

Intermediate Education II

Theories of adolescent growth and development; curriculum design principles, teaching strategies and effective learning materials appropriate to the intermediate level; evaluation techniques and counselling procedures used at this level.

Lectures, seminar, practicum.

Prerequisite: EDUC 9F87.

EDUC 9F89

Intermediate Education III

Alternate patterns of teaching strategies, evaluation techniques and curricular concerns examined in EDUC 9F87 and 9F88 with the focus on adolescent exceptionality, career awareness and social adjustment. Instruction and practice in leadership skills which enhance effective communication with students, parents, colleagues and administrators.

Lectures, seminar, practicum.

Prerequisite: EDUC 9F88.

EDUC 9F91

Business Studies: Entrepreneurship Studies I

Familiarity with the subject matter and relevant teaching materials for the major concepts of the Ministry of Education's *Entrepreneurship Curriculum Guide* and awareness of available community resources. Practice in the development and implementation of an entrepreneurial plan.

Lectures, seminar, practicum.

Students completing this course will forfeit credit in EDUC 6F91.

EDUC 9F92

Business Studies: Entrepreneurship Studies II

Practice in the development and improvement of course outlines and curriculum support materials for a variety of target groups and purposes. Familiarity with participative student-centred teaching styles and the development of methodologies for teaching relevant enterprise skills and of processes for acquiring motivation and commitment to these skills.

Lectures, seminar, practicum.

Prerequisite: EDUC 9F91.

Students completing this course will forfeit credit in EDUC 6F92.

EDUC 9F93

Business Studies: Entrepreneurship Studies III

Development of skills in constructing curriculum units, components and themes for the study of entrepreneurship at the basic, general and advanced level of the secondary school. Practice in leadership roles in sourcing and adapting information and resource materials. Advanced study of entrepreneurship literature and research as well as the role of entrepreneurship in the economy.

Lectures, seminar, practicum.

Prerequisite: EDUC 9F92.

Students completing this course will forfeit credit in EDUC 6F93.

EDUC 9P99

Program Measurement and Evaluation

Measurement and evaluation of program and student achievement with a focus on methods of data collecting, formulating measurement instruments and techniques for analysing and communicating results. Content for the course will be based on the Ministry of Education and Training's Ontario Assessment Instrument Pool (OAIP).

Lectures, seminar, practicum.

Note: open to teachers and administrators. This course does not carry Ontario College of Teachers credit.

EDUC 9V91-9V95

Special Topics in Education

Topics vary from year to year on the basis of specific areas of instructional expertise and candidate interest.

Lectures, seminar.

Prerequisite: permission of the Director.

EDUC 9Y01-9Y22

Special Topics in Computers in the Classroom

Basic strategies for teaching computer skills at the primary to senior divisions.

Lectures, lab, practicum.

Restriction: permission of the Director.

Prerequisite: an Ontario Certificate of Qualification.

Students completing any of these courses will forfeit credit in EDUC 9F61, 9F62 or 9F63.

9Y01	Introduction to Computers in the Classroom
9Y02	Using Computers in the Language Program
9Y03	Integration of Computers with Self and Society
9Y04	Computer Applications in Math, Science and Technology
9Y05	Word Processing and Publishing in the Classroom
9Y06	Using a Data Base in the Classroom (Basic)
9Y07	Mathematical Applications of Computers Across the Curriculum

- 9Y08 Computer Applications in the Arts
 9Y09 Using a Data Base in the Classroom (Advanced)
 9Y10 Research Using CD-Roms and the Internet
 9Y11 The Internet: Designing World Wide Web Documents
 9Y12 Understanding a School Network
 9Y13 Evaluating Software
 9Y14 Use of Spreadsheets in the Classroom
 9Y15 On-line Computer Course
 9Y16 The Internet in the Elementary Classroom I
 9Y17 The Internet in the Elementary Classroom II
 9Y18 Presentation Software in the Elementary Classroom I
 9Y19 Presentation Software in the Elementary Classroom II
 9Y20 Ministry of Education Licensed Software in the Elementary Classroom I
 9Y21 Ministry of Education Licensed Software in the Elementary Classroom III
 9Y22 Arts Software in the Elementary Classroom

TECHNOLOGICAL EDUCATION

Note: The following prerequisite is required for all EDUC 9G00 to 9G89 courses.

An Ontario Certificate of Qualification or Interim Certificate of Qualification indicating initial qualifications at the intermediate and senior divisions in Technological Studies. For applicants whose Ontario Certificate of Qualification or Interim Certificate of Qualification does not indicate intermediate and senior divisions in Technological Studies, evidence of at least five years of wage-earning experience related to the subject for which qualification is sought. (Pertinent education may substitute for some wage-earning experience.)

EDUC 9G00

Communications Technology: Basic

An overview of the communication industry; the technical knowledge and skills required to teach such subjects as television and video production, art, broadcasting, photography, print and graphic production and computer communication.
Lectures, seminar, lab.

EDUC 9G10

Communication Technology: Advanced

An overview of the communication industry; the technical knowledge and skills required to teach such component areas as television and video production, art, broadcasting, photography, print and graphic production and computer communication at the senior division.
Lectures, seminar, lab.

Prerequisite: EDUC 9G00.

Students completing this course will forfeit credit in EDUC 8R03.

EDUC 9G15

Technological Design: Basic

A variety of design processes applicable in solving any technological challenge or problem. It builds on and forms a continuum with the Grades 1 - 8 science and technology and integrated technologies program.

Lectures, seminar.

EDUC 9G16

Technological Design: Advanced

An in-depth study of a variety of design processes applicable in solving any technological challenge or problem. It builds on and forms a continuum with the Grades 1 - 8 science and technology and the Grade 9 integrated technologies program.

Lectures, seminar.

EDUC 9G20

Construction Technology: Basic

An overview of the construction industry; technical knowledge, and skills and teaching strategies for the construction services, architectural design and drafting, electricity, environmental control, plumbing, sheet metal, trowel trades and wood-working.

Lectures, seminar, lab.

EDUC 9G30

Construction Technology: Advanced

An overview of the construction industry; technical knowledge, and skills and teaching strategies for the construction services, architectural design and drafting, electricity, environmental control, plumbing, sheet metal, trowel trades and wood-working at the senior division.

Lectures, seminar, lab.

Prerequisite: EDUC 9G20.

Students completing this course will forfeit credit in EDUC 8R09.

EDUC 9G40

Manufacturing Technology: Basic

An overview of the manufacturing process. Strategies for teaching specific subject areas such as control systems, engineering drafting and design, foundry and moulding practice, industrial electronics, metal fabrication and precision machining.

Lectures, seminar, lab.

EDUC 9G60

Transportation Technology: Basic

Overview of the field of transportation. Strategies for teaching motive power and its application to mobile vehicles, including automobiles, aircraft, farm equipment and small engines.

Lectures, seminar, lab.

EDUC 9G80

Services Technology: Basic

An overview of the services field. Teaching strategies required for the planning, operation and development of services and technologies in hospitality, home maintenance, forestry, agri-

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culture, entrepreneurship and small business operations.
Lectures, seminar, lab.

EDUC 9G85

Hospitality Services: Basic

The teaching strategies and skills required for the planning, operation and development of services in the study of tourism and guiding, travel, accommodation, food preparation and serving, plus other hospitality issues.

Lectures, seminar.

EDUC 9G86

Hospitality Services: Advanced

An in-depth study of the teaching strategies and skills required for the planning, operation and development of services in the study of tourism and guiding, travel, accommodation, food preparation and serving, plus other hospitality issues at the senior level.

Lectures, seminar.

EDUC 9G87

Personal Services: Basic

Teaching strategies and skills required for the planning, operation and development of services in the study of health care, personal grooming, child care and geriatric care.

Lectures, seminar.

EDUC 9G88

Personal Services: Advanced

An in-depth study of the teaching strategies and skills required for the planning, operation and development of services in the study of health care, personal grooming, child care and geriatric care at the senior level.

Lectures, seminar.

EDUC 9G90

Honours Specialist: Technological Education

Designed to prepare teachers of technological education for specialist and supervisory roles in the secondary school. Administration, organization, human relations, measurement, computer awareness and communication skills.

Lectures, seminar, lab.

Prerequisites: an Ontario Certificate of Qualification or Interim Certificate of Qualification indicating qualification in at least three of the subjects listed in Schedule B of the Ontario College of Teachers Act Reg. 184.97 including at least one at the advanced level or, four of the subjects listed in Schedule B at the basic level and an entry indicating the Specialist qualification in one of the subjects in Schedule D listed in sub-clause 34cIII; a Secondary School Honours Graduation Diploma or has successfully completed the equivalent of one year's full-time study in a program in respect of which a SSHD or its equivalent is required for admission and evidence of at least two years of successful teaching experience, including at least one year in technological studies.

EDUC 9M00-9M09

Intermediate Basic Curriculum and Instruction

Basic strategies for teaching at the intermediate division. An overview of current principles of student development and learning, curriculum development and implementation for the intermediate level.

Lectures, seminar, practicum, 3 hours per week.

Prerequisite: an acceptable undergraduate degree that includes two credits in the teachable subject area and a valid certification endorsed with primary, junior or senior additional basic qualification.

(9M00) Language Arts (English)

(9M01) Mathematics

(9M02) Science

(9M03) History

(9M04) Geography

(9M08) French

Consult the Continuing Studies Program regarding teachable subject areas to be offered.

EDUC 9M20-9M29

Senior Basic Curriculum and Instruction (Major)

Basic strategies for teaching at the senior division. An overview of current principles of student development and learning, curriculum development and implementation for the senior level.

Lectures, seminar, practicum.

Prerequisites: an acceptable undergraduate degree with a major of at least five credits in the teachable subject area and valid certification endorsed at the primary, junior or intermediate level.

Note: candidates may be asked to successfully complete three weeks of practice teaching as assigned by the Faculty of Education during a scheduled block in winter term or spring session.

(9M20) English

(9M21) Mathematics

(9M22) Science

(9M23) History

(9M24) Geography

(9M25) Computer Science

(9M26) Individual and Society

(9M27) Physical Education

(9M28) French

Consult the Continuing Studies Program regarding teachable subject areas to be offered.

EDUC 9M30-9M39

Senior Basic Curriculum and Instruction (Minor)

Basic strategies for teaching at the senior division. An overview of current principles of student development and learning, curriculum development and implementation for the senior level.

Lectures, seminar, practicum.

Prerequisites: an acceptable undergraduate degree with at least three credits in the teachable subject area and valid certification endorsed at the senior level.

Note: candidates may be asked to successfully complete three weeks of practice teaching as assigned by the Faculty of Education during a scheduled block in winter term or spring session.

- (9M30) English
- (9M31) Mathematics
- (9M32) Science
- (9M33) History
- (9M34) Geography
- (9M35) Computer Science
- (9M36) Individual and Society
- (9M37) Physical Education
- (9M38) French

Consult the Continuing Studies Program regarding teachable subject areas to be offered.

EDUC 9M50-9M59

Honours Specialist: Senior Division

Advanced knowledge of curriculum guidelines from kindergarten to 12/OAC and increased ability to develop remedial, regular and advanced programs and to evaluate student achievement. Increased knowledge of child and adolescent development related to the subject will also be included.

Lectures, seminar, practicum.

Prerequisites: an Ontario Certificate of Qualification or Interim Certificate of Qualification, an acceptable honours degree with at least a second class or equivalent standing in nine credits in the subject or subject areas and at least two years of successful teaching with at least one year in the subject area of the qualification being sought.

- (9M50) English
- (9M51) Mathematics
- (9M52) Science
- (9M53) History
- (9M54) Geography
- (9M55) Computer Science
- (9M56) Individual and Society
- (9M57) Physical Education
- (9M58) French

SPECIAL EDUCATION

To be recommended to the Ontario College of Teachers for Special Education I, candidates must complete EDUC 9P01 plus one basic elective half credit; for Special Education II, EDUC 9P02 and a second elective (either part II or another part I); for Special Education III, EDUC 9P03 and a third elective (see EDUC 9P04-9P15). Students with previous credits in Special Education should consult the Director regarding their further studies.

EDUC 9P01

Special Education: Foundations I

The identification of students with special educational needs; characteristics of the five main exceptionalities: behavioural, communicative, intellectual, physical and multiple. Models, theories and approaches of educational exceptionalities, their

classroom implications, available community resources and effective school/student/parent communication.

Lectures, seminar, practicum.

Note: open to certified teachers.

EDUC 9P02

Special Education: Foundations II

Further studies of the educational implications of multiple exceptionalities; formal and informal assessment of exceptional students and their particular needs; the design and implementation of appropriate educational programs for students at a more advanced level; reporting techniques, the Identification, Placement and Review Committee (IPRC) process and the teacher's role in it.

Lectures, seminar, practicum.

Prerequisites: EDUC 9P01 and basic elective.

Co-requisite: EDUC 9P12.

EDUC 9P03

Special Education: Foundations III

Leadership and consultation in special education at the school and board level. The design of workshops or training sessions language disabilities; identification of these exceptionalities, their subclassifications and relationship to other exceptionalities.

Lectures, seminar, practicum.

Prerequisite: EDUC 9P04.

EDUC 9P06

Special Education: Teaching the Developmentally Disabled (Basic)

The development of programs for teaching the developmentally disabled; the history and causes of intellectual developmental disabilities; the response of the family and society to the special child. The planning of effective learning environments, instructional approaches, behavioural management and evaluative processes.

Lectures, seminar, practicum.

Prerequisite: EDUC 9P01.

EDUC 9P07

Special Education: Teaching the Developmentally Disabled (Advanced)

Issues surrounding screening, identification and education of students with developmental disabilities; studies of curriculum development, gross motor and physical development, language and communication skills. Living skills.

Lectures, seminar, practicum.

Prerequisite: EDUC 9P06.

EDUC 9P08

Special Education: Gifted I (Basic)

The nature of educational giftedness; basic screening and identification procedures; the design and implementation of appropriate educational programs.

Lectures, seminar, practicum.

Prerequisite: EDUC 9P01.

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EDUC 9P09

Special Education: Gifted II (Advanced)

Theories and strategies for teaching gifted students; the identification of this exceptionality and its subclassifications and its relationship to other exceptionalities.

Lectures, seminar, practicum.

Prerequisite: EDUC 9P08.

EDUC 9P10

Special Education: Behaviour I (Basic)

Issues in the education of the behaviourally exceptional student; basic screening and identification procedures; the design and implementation of appropriate educational programs.

Lectures, seminar, practicum.

Prerequisite: EDUC 9P01.

EDUC 9P11

Special Education: Behaviour II (Advanced)

Theories and strategies for teaching the behaviourally exceptional student; the identification of this exceptionality and its subclassifications and its relationship to other exceptionalities.

Lectures, seminar, practicum.

Prerequisite: EDUC 9P10.

EDUC 9P12

Special Education: Combined Electives I (Basic)

The identification of students with learning disabilities, behavioural exceptionalities and giftedness and provision of appropriate programming for them. This elective course will be offered whenever specific special education basic courses are not available.

Lectures, seminar, practicum.

Prerequisite: EDUC 9P01.

Corequisite: EDUC 9P02.

EDUC 9P13

Special Education: Combined Electives II (Advanced)

Theories and strategies for teaching students with learning disabilities, behavioural exceptionalities and giftedness.

Lectures, seminar, practicum.

Prerequisite: EDUC 9P12.

Note: offered whenever specific special education advanced courses are not available.

EDUC 9P14

Physical Exceptionalities (Basic)

Basic methodologies in teaching children with physical and health-related disabilities.

Lectures, seminar, practicum.

Prerequisite: EDUC 9P01.

EDUC 9P15

Physical Exceptionalities (Advanced)

Planning, implementing and evaluating programs for children with physical and health-related disabilities.

Lectures, seminar, practicum.

Prerequisite: EDUC 9P14.

Education - Concurrent BA/BEEd (Child and Youth Studies)

Director

Christine Blais, Department of Child and Youth Studies

Co-ordinator

Rosamund Battye

General Information

Administrative Assistant, extension 3740

Mackenzie Chown D332

<http://www.brocku.ca/childandyoungstudies/>

The Department of Child and Youth Studies and the Faculty of Education co-operate in offering a concurrent four-year program combining a (pass) BA degree with a BEEd for students interested in teaching at the Primary/Junior level (grades K - 6).

Students in the program must be registered full-time and follow the prescribed program. Any exceptions must have the approval of the Director. Students must maintain a minimum 75 percent overall average each year in all academic grade-marked courses.

Application forms for the Child and Youth Studies BA/BEEd program are available from the Child and Youth Studies office from April 1. The forms must be completed and returned to the office by June 1. Late applications will not be accepted. Students in the Child and Youth Studies BA/BEEd program should consult the Child and Youth Studies Co-ordinator regarding program requirements and continuance in the program. For further information about the Child and Youth Studies BA/BEEd program see the *Child and Youth Studies Handbook*.

Because the BA/BEEd program integrates teacher education courses with academic courses, the student should note that the Pre-service Education courses are credited toward the BEEd while the remaining courses are credited to the BA. For this reason, a student who transfers out of the BA/BEEd program may not have credit in Pre-service Education courses applied to a BA degree. Students should note that credits for the concurrent BA/BEEd program are not evenly distributed between the years because of the structure of Education courses. Students are responsible to note Calendar and scheduling differences between the Undergraduate and Pre-service departments.

Successful graduates of the Child and Youth Studies program will receive a Bachelor of Arts pass degree and a Bachelor of Education degree. The Dean of the Faculty of Education may recommend that the Ontario College of Teachers grant an OAC Ontario Certificate of Qualification certifying them to teach K - 6.

Ontario College of Teachers Criminal Records Screening Policy

1. The Ontario College of Teachers requires both a criminal record check and a criminal record declaration by the applicant as necessary components of registration for new applicants.
2. The costs associated with the provision of the criminal record check and any appeals are to be borne by the applicant.
3. All positive reports of criminal offences will be examined by the Ontario College of Teachers Registrar to determine whether the record of offence(s) is relevant to the applicant's honesty, integrity and/or suitability to practise the profession and whether the offence(s) constitute reasonable grounds for refusal to issue a certificate of qualification and registration, or to impose terms, conditions or limitations on registration, in accordance with Section 18(2) of the *Ontario College of Teachers Act*.
4. Applicants for registration by the Ontario College of Teachers will be advised of the reasons for the decisions of the Ontario College of Teachers Registrar to refuse certification or to impose terms, conditions or limitations and that appeals to these decisions will be determined in accordance with Part III of the *Ontario College of Teachers Act*.

Questions regarding the policy should be directed to the Ontario College of Teachers.

Admissions

Students interested in the Child and Youth Studies BA/BEEd program apply to a common year 1 in Child and Youth Studies. Students should note that this is a limited enrolment program and admission is not guaranteed by attainment of the minimum requirements.

Students who achieve a minimum 75 percent overall academic average with a minimum of 4.0 credits and a maximum of 8.0 credits are eligible to apply. Students must have completed CHYS 1F90, PSYC 1F90 and SOCI 1F90.

**Education - Concurrent BA/BEd
Child and Youth Studies**

Program Notes

1. Students are encouraged to use elective credits (including context credits) to take courses relevant to Education.
 2. The elective credit must be completed in the evening or taken during the Spring or Summer session.
 3. In all 15 credit degree programs, at least seven credits must be numbered 2(*alpha*)00 or above, three of which must be numbered 2(*alpha*)90 or above.
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Pass Program

Year 1

CHYS 1F90; PSYC 1F90; SOCI 1F90; one Humanities or one Science context credit; one elective credit (see program note 1).

Year 2

CHYS 2F10, 2P35 and 2P38; EDUC 8P07, 8Y04 and 8Y05; MATH 1F92 or PSYC 2F23; the Humanities or Science context credit not taken in year 1; one-half elective credit (see program note 1).

Year 3

CHYS 3P10, 3P15 and 3P50; EDUC 8P33; one-half credit from CHYS 3P11, 3P25, 3P65; one-half credit from CHYS 3P20, 3P35, 3P90, 3P94, 3P96; one-half credit from CHYS 3P34, 3P38, 3P91, 3P92, 3P93, 3P94; one credit from EDUC 2F00, 2F01, 3F01; one-half elective credit (see program note 1).

Year 4

EDUC 8D09, 8P30, 8Y31, 8Y36, 8Y38 and 8Y39; EDUC 8F08 or 8F09; one elective credit (see program note 1 and 2).

Prerequisites and Restrictions

Students must check to ensure that prerequisites are met. Students may be deregistered, at the request of the instructor, from any course for which prerequisites and/or restrictions have not been met.

Description of Courses

See relevant calendar entries for course descriptions.

Education - Concurrent BA/BEd (French Teaching Specialization)

Co-ordinator
Merle Richards

General Information

Administrative Assistant, extension 4112
Education 126

The Department of French, Italian and Spanish and the Faculty of Education co-operate in offering a concurrent five-year program combining an (honours) BA degree with a BEd for students interested in teaching at the Intermediate/Senior level (grades 7-12/OAC). It will include a year of study in a French-speaking environment either at the Université de Perpignan in France or the Université du Québec in Chicoutimi.

Students in the program must be registered full-time and follow the prescribed program. Any exceptions must have the approval of the Co-ordinator.

Application forms for the French Teaching Specialization BA/BEd program are available from the French, Italian and Spanish office from April 1. The forms must be completed and returned to the office by June 1. Late applications will not be accepted. Students in the French Teaching Specialization BA/BEd program should consult the French Teaching Specialization Co-ordinator regarding program requirements and continuance in the program.

Because the BA/BEd program integrates teacher education courses with academic courses, the student should note that the Pre-service Education courses are credited toward the BEd while the remaining courses are credited to the BA. For this reason, a student who transfers out of the BA/BEd program may not have credit in Pre-service Education courses applied to a BA degree. Students should note that credits for the concurrent BA/BEd program are not evenly distributed between the years because of the structure of Education courses. Students are responsible to note Calendar and scheduling differences between the Undergraduate and Pre-service departments.

Successful graduates of the French Teaching Specialization program will receive a Bachelor of Arts honours degree in French and a Bachelor of Education degree. The Dean of the Faculty of Education may recommend that the Ontario College of Teachers grant an Ontario Certificate of Qualification certifying them to teach 7 - 12/OAC.

Ontario College of Teachers Criminal Records Screening Policy

1. The Ontario College of Teachers requires both a criminal record check and a criminal record declaration by the applicant as necessary components of registration for new applicants.

2. The costs associated with the provision of the criminal record check and any appeals are to be borne by the applicant.

3. All positive reports of criminal offences will be examined by the Ontario College of Teachers Registrar to determine whether the record of offence(s) is relevant to the applicant's honesty, integrity and/or suitability to practise the profession and whether the offence(s) constitute reasonable grounds for refusal to issue a certificate of qualification and registration, or to impose terms, conditions or limitations on registration, in accordance with Section 18(2) of the *Ontario College of Teachers Act*.

4. Applicants for registration by the Ontario College of Teachers will be advised of the reasons for the decisions of the Ontario College of Teachers Registrar to refuse certification or to impose terms, conditions or limitations and that appeals to these decisions will be determined in accordance with Part III of the *Ontario College of Teachers Act*.

Questions regarding the policy should be directed to the Ontario College of Teachers.

Admissions

Students interested in the French Teaching Specialization BA/BEd program apply to a common year 1 in French. Students should note that this is a limited enrolment program and admission is not guaranteed by attainment of the minimum requirements.

Students who achieve a minimum 75 percent overall academic average with a minimum of 4.0 credits and a maximum of 8.0 credits are eligible to apply. Students must have completed FREN 1F90.

Program Notes

1. FREN credits should be in language and literature to be chosen in consultation with the department.

**Education - Concurrent BA/BEEd
French Teaching Specialization**

2. This will be a teacher placement term. Transportation will be the student's responsibility.

3. In all 20 credit degree programs, at least 12 credits must be numbered 2(alpha)00 or above, six of which must be numbered 2(alpha)90 or above and of these, three must be numbered 3(alpha)90 or above.

Honours Program

Year 1

FREN 1F90; one Science and one Social Science context credit; two elective credits.

Spring or Summer Term: one FREN credit numbered 3(alpha)00 or above.

Year 2

FREN 2F00 and 2F03; one FREN credit numbered 2(alpha)90 or above; two elective credits.

Spring or Summer Term: one FREN credit numbered 3(alpha)00 or above.

Year 3

four FREN credits (see program notes 1 and 3); one of FREN 4V60 - 4V99

Summer Term: one-half elective credit.

Year 4

Fall Term: EDUC 8F76; FREN 4P03; one and one-half FREN credits numbered 4(alpha)00 or above.

Winter Term: (see program note 2).

Spring and Summer Term: EDUC 8P08; one elective credit.

Year 5

Fall Term: (see program note 2).

Winter Term: EDUC 8D09, 8F11, 8P12, 8P70, 8Y04 and 8Y05; one-half credit from EDUC 8P65, 8P66, 8P67, 8P68, 8P69, 8P72, 8P73, 8P74, 8P77, 8P80, 8P81, 8P82, 8P83, 8P84, 8P86, 8P87, 8P88, 8P89.

Prerequisites and Restrictions

Students must check to ensure that prerequisites are met. Students may be deregistered, at the request of the instructor, from any course for which prerequisites and/or restrictions have not been met.

Description of Courses

See relevant calendar entries for course descriptions.

Education - Concurrent BPhEd(Honours)/BEd

Director

Nancy R. Murray, Department of Physical Education
Anna H. Lathrop (as of July 1, 2000)

Co-ordinator

Stephanie Brooks

General Information

Administrative Assistant, extension 4358
Physical Education 257
<http://arnie.pec.brocku.ca/~phed/>

The Department of Physical Education and the Faculty of Education co-operate in offering a concurrent five-year program combining an (honours) BPhEd degree with a BEd for students interested in teaching at the Primary/Junior level (grades K - 6).

Students in the program must be registered full-time and follow the prescribed program. Any exceptions must have the approval of the Director. Students must maintain a 75 percent overall average each year in all academic grade-marked courses.

Application forms for the BPhEd/BEd program are available from the Physical Education office from March 15. The forms must be completed and returned to the office by May 15. Late applications may be considered. Students in the BPhEd/BEd program should consult the Director or Co-ordinator regarding program requirements and continuance in the program. Students are strongly recommended to take an emergency First Aid/CPR course.

Because the BPhEd/BEd program integrates teacher education courses with academic courses, the student should note that the Pre-service Education courses are credited toward the BEd while the remaining courses are credited to the BPhEd. For this reason, a student who transfers out of the BPhEd/BEd program may not have credit in Pre-service Education courses applied to a BPhEd degree. Students should note that credits for the concurrent BPhEd/BEd program are not evenly distributed between the years because of the structure of Education courses. Students are responsible to note Calendar and scheduling differences between the Undergraduate and Pre-service departments.

Successful graduates of the program will receive a Bachelor of Physical Education honours degree and a Bachelor of Education degree. The concurrent BPhEd(Honours)/BEd degree complies with the National accreditation standards established by the Canadian Council of University Physical Education and Kinesiology Administrators. The Dean of the Faculty of Education may recommend that the Ontario College of Teachers grant an Ontario Certificate of Qualification certifying them to teach grades K - 6.

Ontario College of Teachers Criminal Records Screening Policy

1. The Ontario College of Teachers requires both a criminal record check and a criminal record declaration by the applicant as necessary components of registration for new applicants.
2. The costs associated with the provision of the criminal record check and any appeals are to be borne by the applicant.
3. All positive reports of criminal offences will be examined by the Ontario College of Teachers Registrar to determine whether the record of offence(s) is relevant to the applicant's honesty, integrity and/or suitability to practise the profession and whether the offence(s) constitute reasonable grounds for refusal to issue a certificate of qualification and registration, or to impose terms, conditions or limitations on registration, in accordance with Section 18(2) of the *Ontario College of Teachers Act*.
4. Applicants for registration by the Ontario College of Teachers will be advised of the reasons for the decisions of the Ontario College of Teachers Registrar to refuse certification or to impose terms, conditions or limitations and that appeals to these decisions will be determined in accordance with Part III of the *Ontario College of Teachers Act*.

Questions regarding the policy should be directed to the Ontario College of Teachers.

Admissions

Students must complete the common first year in the Physical Education program before applying for admission to the BPhEd(honours)/BEd program. Admission will be based on a minimum of 75 percent overall average on a minimum of five credits, a minimum grade of 70 percent in both PHED 1P90 and 1P93 and the successful completion of PHED 0N08.

Education - Concurrent BPhEd(Honors)/BEd

In addition, a letter of interest/experience, references and an interview may be used to determine eligibility to enter the program. Students should note that this is a limited enrolment program and admission is not guaranteed by attainment of the minimum requirements.

Program Notes

1. Recommended to be taken in Spring or Summer Session, prior to year 5, to avoid conflicts with Education requirements.
2. Unless otherwise indicated, elective credits must be taken outside the Department of Physical Education.
3. In all 20 credit degree programs, at least 12 credits must be numbered 2(*alpha*)00 or above, six of which must be numbered 2(*alpha*)90 or above and of these, three must be numbered 3(*alpha*)90 or above.

Honours Program

Year 1

PHED 1P90 and 1P93; COSC 1P90 or 1P98; PHED ON08; one Science context credit; one Humanities context credit; one Social Science context credit; one-half elective credit.

Year 2

PHED 2P04, 2P05, 2P08, 2P09, 2P84 and 2P92; one credit from PHED 2P00, 2P03, 2P06; EDUC 8Y04 and 8Y05; one elective credit.

Year 3

PHED 2P95, 2P97, 3P32, 3P70; PHED 3P08 or 3P18; CHYS 2F10; EDUC 8P06; one elective credit.

Year 4

PHED 3P10, 3P41, 3P93, 3P97, 4P31 and 4P32; EDUC 8Y36 and 8Y39; one of PHED 4F90, 4F91, 4F93; one-half elective credit.

Year 5

EDUC 4P02, 8D09, 8F08, 8P30, 8P33, 8Y31 and 8Y38; one-half elective credit (see program note 1).

Education - Concurrent BSc/BEEd

Director

Eric Muller, Department of Mathematics

Co-ordinator

Rosamund Battye

General Information

Program inquiries, extension 4271

Mackenzie Chown D332

<http://www.brocku.ca/bscbed/>

The Faculty of Mathematics and Science and the Faculty of Education co-operate in offering a concurrent four-year program combining a (pass) BSc degree with a BEd for students interested in teaching mathematics or science at the elementary level to grade 8.

Students in the BSc/BEEd program must be registered full-time and follow the prescribed program. Any exceptions must have the approval of the Program Director. Students must maintain a minimum 75 percent overall average each year in all academic grade-marked courses.

Students will have program approval to accept an International Exchange program if they have maintained a minimum 75 percent overall average.

Each student must choose to concentrate in either Mathematics or in one of the following sciences: Biological Sciences, Chemistry, Earth Sciences, Physics. For all students, the BSc/BEEd program combines a focus on contemporary science and mathematics with the development and application of pedagogical techniques.

Because the BSc/BEEd program integrates teacher education courses with academic courses, the student should note that the Pre-service Education courses are credited toward the BEEd while the remaining courses are credited to the BSc. For this reason, a student who transfers out of the BSc/BEEd program may not have credit in Pre-service Education courses applied to a BSc degree. Students should note that credits for the concurrent BSc/BEEd program are not evenly distributed between the years because of the structure of Education courses. Students are responsible to note Calendar and scheduling differences between the Undergraduate and Pre-service departments.

Successful graduates of the four-year program will receive a Bachelor of Science degree in Integrated Studies and a Bachelor of Education degree (5.5 credits). After graduation from the BSc/BEEd program, students may proceed to an honours Bachelor of Science degree in Intergrated Studies. The Dean of the Faculty of Education may recommend that the Ontario College of Teachers grant an Ontario Certificate of Qualification certifying them to teach grades 4 - 10.

Ontario College of Teachers Criminal Records Screening Policy

1. The Ontario College of Teachers requires both a criminal record check and a criminal record declaration by the applicant as necessary components of registration for new applicants.
2. The costs associated with the provision of the criminal record check and any appeals are to be borne by the applicant.
3. All positive reports of criminal offences will be examined by the Ontario College of Teachers Registrar to determine whether the record of offence(s) is relevant to the applicant's honesty, integrity and/or suitability to practise the profession and whether the offence(s) constitute reasonable grounds for refusal to issue a certificate of qualification and registration, or to impose terms, conditions or limitations on registration, in accordance with Section 18(2) of the *Ontario College of Teachers Act*.
4. Applicants for registration by the Ontario College of Teachers will be advised of the reasons for the decisions of the Ontario College of Teachers Registrar to refuse certification or to impose terms, conditions or limitations and that appeals to these decisions will be determined in accordance with Part III of the *Ontario College of Teachers Act*.

Questions regarding the policy should be directed to the Ontario College of Teachers .

Admissions

Those applying to the science concentration of the program must have six OAC credits and an overall average of at least 80 percent in two science OAC credits, one mathematics OAC credit (OAC calculus is required for a concentration in Chemistry or Physics and strongly recommended for Biology and Earth Sciences) and one English OAC credit. Those applying to the mathematics concentration must have six OAC credits and an overall average of at least 80 percent in two mathematics OAC credits, including calculus, one science OAC credit and one English OAC credit.

Education - Concurrent BSc/BEd

Students may apply to enter year 2 if their overall year 1 average is 75 percent or above and their year 1 program has closely matched that of the year 1 course requirements of the BSc/BEd program. The program has a limited enrolment and therefore admission into year 2 is limited.

Program Notes

1. CHYS 2F10 has a placement in the schools and must be taken during the Fall/Winter Session.
2. Practice teaching may have to be scheduled in May and June of year 4.
3. The elective credit should be taken in spring, summer or evenings to allow for practice teaching in year 4. ENGL or HIST recommended if not taken in year 1.
4. MATH 2P50, 2P51, 3P50 and 3P51 must be taken when offered).
5. In all 20 credit degree programs, at least 12 credits must be numbered 2(alpha)00 or above, six of which must be numbered 2(alpha)90 or above and of these, three must be numbered 3(alpha)90 or above. In all 15 credit degree programs, at least seven credits must be numbered 2(alpha)00 or above, three of which must be numbered 2(alpha)90 or above.

Honours Program

Students may register for an honours program in Integrated Studies after completing their BSc/BEd with a concentration in Mathematics.

BSc/BEd students with a concentration in Biological Sciences, Chemistry, Earth Science or Physics should consult with those departments regarding an honours degree.

Programs for Science BSc/BEd

Biological Sciences

Year 1
BIOL 1F90; CHEM 1P80 and 1P81 or CHEM 1P90 and 1P91; EDUC 8Y04 and 8Y05; MATH 1P98; PSYC 1F90; one Humanities context credit.

Year 2
BIOL 2P05 and 2Q04; one credit from BIOL 2P92, 2P93, 2P96, 2P98; CHYS 2F10; EDUC 8P06; MATH 1P97; PHYS 1F25 or 1F90.

Year 3
One-half credit from BIOL 2P92, 2P93, 2P96, 2P98; one and one-half BIOL credits numbered 3(alpha)00 to 3(alpha)99; EDUC 2F01 or 3F01; EDUC 8Y26 and 8Y29; SCIE 3P91; ERSC 1F95.

Year 4
EDUC 4P01, 8D09, 8F08, 8P20, 8P23, 8Y21 and 8Y28; one elective credit (see program note 3).

Chemistry

Year 1
CHEM 1P90 and 1P91; EDUC 8Y04 and 8Y05; BIOL 1F90; MATH 1P93; PSYC 1F90; one Humanities context credit.

Year 2
CHEM 2P12 or 2P63; CHEM 2P20, 2P32 and 2P42; CHYS 2F10; EDUC 8P06; MATH 1P94; PHYS 1F25 or 1F90.

Year 3
Two CHEM credits numbered 3(alpha)00 to 3(alpha)99; EDUC 3F01, 8Y26 and 8Y29; ERSC 1F95; SCIE 3P91.

Year 4
EDUC 4P01, 8D09, 8F08, 8P20, 8P23, 8Y21 and 8Y28; one elective credit (see program note 3).

Earth Sciences

Year 1
ERSC 1F95; CHEM 1P80 and 1P81 or CHEM 1P90 and 1P91; EDUC 8Y04 and 8Y05; MATH 1P97 or 1P98; PSYC 1F90; one Humanities context credit.

Year 2
Two credits from ERSC 2P01, 2P21, 2P22, 2P31, 2P32, 2P61, 2P64; BIOL 1F90; CHYS 2F10; EDUC 8P06; MATH 1P97 or 1P98.

Year 3
Two credits from ERSC 3P21, 3P24, 3P25, 3P31, 3P43, 3P61, 3P71, 3P92, 3P94, 3P97, 3P98, 3P99, 4P31; EDUC 2F01 or 3F01; EDUC 8Y26 and 8Y29; PHYS 1F25 or 1F90; SCIE 3P91.

Year 4
EDUC 4P01, 8D09, 8F08, 8P20, 8P23, 8Y21 and 8Y28; one elective credit (see program note 3).

Physics

Year 1

PHYS 1F90; CHEM 1P80 or 1P90; EDUC 8Y04 and 8Y05; MATH 1P93 and 1P94; PSYC 1F90; one Humanities context credit.

Year 2

PHYS 2P20, 2P31, 2P50 and 2P51; CHEM 1P81 or 1P91; CHYS 2F10; EDUC 8P06; MATH 2F95.

Year 3

Two PHYS credits numbered 3(*alpha*)00 or above; BIOL 1F90 or ERSC 1F95; EDUC 2F01 or 3F01; EDUC 8Y26 and 8Y29; SCIE 3P91.

Year 4

EDUC 4P01, 8D09, 8F08, 8P20, 8P23, 8Y21 and 8Y28; one elective credit (see program note 3).

Mathematics

Year 1

MATH 1P93, 1P94 and 1P12; BIOL 1F90 or ERSC 1F95; PSYC 1F90; EDUC 8Y04 and 8Y05; one Humanities context credit.

Year 2

MATH 1P66; MATH 1P98, 2P01 and 3F92, or MATH 2P50, 2P51, 3P50 and 3P51(see program note 4); CHYS 2F10; EDUC 8P06; one of CHEM 1P80 and 1P81, CHEM 1P90 and 1P91, PHYS 1F25 or 1F90.

Year 3

MATH 3P91; MATH 1P98, 2P01 and 3F92, or MATH 2P50, 2P51, 3P50 and 3P51 (whichever was not taken in year 2); EDUC 2F01 or 3F01; EDUC 8Y26 and 8Y29; any year 1 science credit in a discipline not taken in years 1 and 2.

Year 4

EDUC 4P01, 8D09, 8F08, 8P20, 8P23, 8Y21 and 8Y28; one elective credit numbered 2(*alpha*)00 or above (see program note 3).

Honours program

Year 5

MATH 2F96, 2P20, 2P60 and 4P20; one-half EDUC credit numbered 3(*alpha*)90 or above; two elective credits.

Prerequisites and Restrictions

Students must check to ensure that prerequisites are met. Students may be deregistered, at the request of the instructor, from any course for which prerequisites and/or restrictions have not been met.

Description of Courses

See relevant calendar entries for course descriptions.

English Language and Literature

Chair

Marilyn J. Rose

Professor Emeritus

Michael S. Hornyansky

Professors

David W. Atkinson, Marilyn J. Rose, Elizabeth Sauer

Associate Professors

Brian Crick, John Lye, Ian C. Shaw, Susan Spearey, Angus A. Somerville

Assistant Professors

Klay Dyer, John Killoran, Barbara K. Seeber

General Information

Administrative Assistant, extension 3469

Mackenzie Chown A310

<http://www.brocku.ca/english/>

The Department of English Language and Literature aims to foster an informed and critical intelligence. To achieve this end our programs require choices from a broad range of historical period courses, as well as from various genre courses and courses in the history of the language, criticism, and critical theory. The department offers two four-year programs leading to a BA honours in English Language and Literature and a three-year program leading to the BA pass degree. In addition the department offers courses on writing which are available as electives to all Brock students who wish to improve their writing and demonstrate competence in writing and rhetoric at the university level. Study of the management, organization, presentation and critical reception of information and text will enhance degree studies of all kinds. As well a Certificate and a Concentration in Writing are offered for those wishing to earn a designation in writing which will appear on their university transcripts as a complement to their major program of study.

Seminars (discussion groups) are the rule in all English courses, for they encourage the student to become an active participant in the study of literature. With essay assignments and our close criticism of these assignments, students should learn to write in a literate, subtle and disciplined way.

The Department of English Language and Literature offers credit for those Drama courses included among the list of

English courses offered, subject to the conditions noted below under honours and pass programs.

English majors are free to take any elective which their timetable will allow, but the following are recommended as most useful: Classics (classical civilization), Drama, Film, History, Great Books/Liberal Studies, other languages (including Greek and Latin), Philosophy.

Before registering in ENGL courses numbered 2(alpha)00 to 2(alpha)99, students must have successfully completed one ENGL credit numbered 1(alpha)00 to 1(alpha)99 or have received permission from the instructor; students may register in an ENGL course numbered 3(alpha)90 or above after completing one ENGL credit numbered 1(alpha)00 to 1(alpha)99 and three credits numbered 2(alpha)90 to 3(alpha)99, at least two of which are ENGL courses, or after receiving the permission of the instructor; ENGL courses numbered 3(alpha)90 or above level are designed to be the critical and scholarly culmination of the English program and are normally restricted to year 4 English students; other students may be admitted by permission of the instructor.

Students in other disciplines who have not taken an ENGL credit numbered 1(alpha)90 to 1(alpha)99 may take a senior English course as an elective with permission of the instructor.

Students intending to take a degree in English should discuss their program with a member of the department.

Core courses:

(The following lists describe a range of different periods or types of literature with which students will become familiar.)

List A: Literature before 1800: ENGL 2F97, 2P21, 2P22, 2P24, 2P25, 3P10, 3P22, 3P25, 3P95, 4V00-4V09.

List B: Literature of the 19th Century: ENGL 2P30, 2P31, 2P61, 2P91, 3F40, 3P30, 3P31, 3V92 (2000-2001), 4V30-4V39, 4V70, 4V71.

List C: Literature of the 20th Century: ENGL 2F55, 2P51, 2P52, 2P53, 2P62, 2P92, 3F42, 3P38, 3P39, 3V70, 4V40-4V49, 4V60-4V69.

Language Requirement for Humanities Majors

English majors must complete one credit in a language other than English or, in special cases, ENGL 3F92. Where one-half credit courses are used to satisfy the requirement, both half credits must be in the same language.

Program Notes

1. A maximum of three DRAM credits may be taken for English credit towards an honours degree and a maximum of two credits may be taken towards a pass degree.
2. The department recommends that students take one credit in dramatic literature from DRAM 1F93 (or 2F95 or 2F98), DRAM 2F97, 3F93 (ENGL 2F97, ENGL 2M90 or DRAM 3F97 recommended).
3. The Department recommends that all honours students take at least one of ENGL 3F93 or 4F70.
4. Students in an honours program must take two credits from List A; two credits from List B, one of which must be from ENGL 2P30, 2P31, 3P30, 3P31, 4V30-4V39, 4V70, 4V71; one credit from List C. Students in a pass program must take one credit from List A; one credit from List B; one credit from List C; one additional credit from List A or List B.
5. Students in the English Plus program must have their program approved by the Chair of the Department of English Language and Literature.
6. In the English Plus program, if the teachable area satisfies language or context requirements, another elective becomes available.
7. See program requirements under Faculty of Education listing.
8. Students must choose from LING 3P92, 3P93, 3P94, 3P95 for the LING credit.
9. Students must choose from COMM 1F90, 2F92, 3F10, 4P23 for the COMM credit and from FILM 1F94, 2F04, 2F90, 2F97, 2P20, 2P21, 3F27, 3F28, 3F50, 3P93, 3P95, 3P96 for the FILM credit.
10. In all 20 credit degree programs, at least 12 credits must be numbered 2(alpha)00 or above, six of which must be numbered 2(alpha)90 or above and of these, three must be numbered 3(alpha)90 or above. In all 15 credit degree programs, at least seven credits must be numbered 2(alpha)00 or above, three of which must be numbered 2(alpha)90 or above.

Honours Program

Year 1

One ENGL credit numbered 1(alpha)90 to 1(alpha)99 (ENGL 1F91 recommended); one Science and one Social Science context credit; two elective credits (see language requirement).

Year 2

Three ENGL credits (see program note 4), two elective credits (see language requirement).

Year 3

Three ENGL credits (see program note 4); two elective credits.

Year 4

ENGL 3F91 or 3F92; one ENGL credit; two credits from ENGL 3F91, 3F92, 3F93, 3P90, 3P95, 3V90-3V99, 4F70, 4F99, 4P98, 4P99, 4V00-4V09, 4V30-4V39, 4V40-4V49, 4V60-4V69, 4V70-4V79, 4V90-4V99; one elective credit (see program note 4).

Pass Program

Satisfactory completion of the first three years of an honours program entitles a student to apply for a pass degree.

English Plus

English Plus is an alternative four-year honours program. The equivalent of the traditional single honours program in English Language and Literature, English Plus offers students a varied pattern of academic discipline and preparation, one which, while developed with a particular set of needs in mind (those of the intermediate/senior English teacher), transcends these to address the changed situation of critical discourse today, involving, as this now does, the possible study of film, video, and language theory. The traditional discipline of English literary criticism is provided by nine of the 11 ENGL credits normally required of all honours students; in addition to the nine credits, however, English Plus students take courses for ENGL credit in linguistics, contemporary media, and communications, as well as three credits in a second teachable area (see program note 6). English Plus offers a student an honours degree in English with a difference.

Year 1

One ENGL credit numbered 1(alpha)90 to 1(alpha)99 (ENGL 1F91 recommended); one Science and one Social Science context credit; LING 1F94; one Humanities language credit.

Year 2

Three ENGL credits (see program note 4); one credit from COMM or FILM (see program note 9); one credit in a second teachable area.

Year 3

Three ENGL credits (see program note 4); one credit from LING (see program note 8); one credit in a second teachable area.

English Language and Literature

Year 4

ENGL 3F91 or 3F92; one credit from ENGL 3F91, 3F92, 3F93, 3P90, 3P95, 3V90-3V99, 4F70, 4F99, 4P98, 4P99, 4V00-4V09, 4V30-4V39, 4V40-4V49, 4V60-4V69, 4V70-4V79, 4V90-4V99; two credits from COMM or FILM (see program note 9); one credit in a second teachable area (see program note 5).

Combined Major Programs

Honours

One ENGL credit numbered 1(*alpha*)90 to 1(*alpha*)99 (ENGL 1F91 recommended); ENGL 3F91 or 3F92; two ENGL credits numbered 2(*alpha*)00 to 2(*alpha*)99; two ENGL credits numbered 2(*alpha*)90 to 3(*alpha*)99; one ENGL credit numbered 3(*alpha*)90 or above. Must include one credit from List A, one credit from List B and one credit from List C (see language requirement).

Pass

Satisfactory completion of the first three years of an honours program entitles a student to apply for a pass degree.

English and Drama

A student reading for a combined degree in English and Drama must: (i) meet the requirements of each department for a combined major; (ii) take at least seven credits from each department for an honours degree, five from each department for a pass degree.

English and Linguistics

Consult the Applied Language Studies entry for a listing of course requirements.

Certificate and Concentration in Writing

The Department of English Language and Literature offers both a Certificate and the Concentration in Writing. These programs will be of considerable advantage to a large range of students, both full- and part-time. Students will acquire a broad, practical experience and understanding of the management, organization and presentation of information and text. Both programs will be of use to those engaged in a wide spectrum of communicative occupations. All WRIT courses are open to students not engaged in either the certificate or the concentration.

Certificate students require three credits from the WRIT courses, as well as two credits from the listed non-WRIT courses.

Students aiming at the concentration require four credits from the WRIT courses, as well as two credits from the listed non-WRIT courses.

A certificate is awarded upon the successful completion of the designated courses with a cumulative overall average of 70 percent.

WRIT courses:

WRIT 1P80, 1P81, 2P15, 2P16, 3P05, 3P09, 3P12, 3P63, 4F99, 4P98, 4P99.

Note: ENGL 1F91, 1F95 or 1F99 may be substituted for WRIT 1P80 and 1P81.

Non-WRIT courses:

COMM 1F90, 2P90, 2P91, LING 3P94, 3P95.

Prerequisites and Restrictions

Students must check to ensure that prerequisites are met. Students may be deregistered, at the request of the instructor, from any course for which prerequisites and/or restrictions have not been met.

Description of Courses

Note that not all courses are offered in every session. Refer to the applicable term timetable for details.

ENGL 1F91

Survey of Major English Writers

Major authors in English literature from the 14th to the 20th century. Authors may include such writers as Chaucer, Shakespeare, Milton, Swift, Austen, Dickens, Eliot. Special attention will be given to students' writing.

Lectures, seminar, 3 hours per week.

ENGL 1F95

Literature in English: Forms and Approaches

Close reading of selected works of fiction, poetry and drama, drawn largely from the 19th and 20th centuries, with attention to the conventions of genre and emphasis on perceptive reading and effective writing.

Lectures, seminar, 3 hours per week.

ENGL 1F99

Language and Thought

The critical analysis of selected writings in literature, natural science and social science. Special attention will be given to students' writing.

Lectures, seminar, 3 hours per week.

Students completing this course will forfeit credit in ENGL 1P97 or 1P98.

ENGL 2F55

Modern Fiction

Forms and techniques of fiction in selected writers in English of the 20th century.

Lectures, seminar, 3 hours per week.

Prerequisite: one ENGL credit numbered 1(alpha)00 to 1(alpha)99 or permission of the instructor.

ENGL 2F92

Popular Narrative

(also offered as COMM 2F92 and PCUL 2F92)

Archetypal and mythic dimensions of popular literary genres such as the detective novel, Gothic fiction, science fiction, the romance novel; comparison and contrast with other media.

Lectures, seminar, 3 hours per week.

Prerequisite: one of one ENGL credit numbered 1(alpha)90 to 1(alpha)99, COMM 1F90, FILM 1F94 or permission of the instructor.

ENGL 2F97

Shakespeare

(also offered as GBLS 2F97)

Plays and Sonnets; representative plays from all genres: histories, comedies, tragedies and romance; a selection of Sonnets.

Lectures, seminar, 3 hours per week.

Prerequisite: one ENGL credit numbered 1(alpha)90 to 1(alpha)99 or GBLS 1F90 or permission of the instructor.

Note: students may take DRAM 3F97 in place of ENGL 2F97. Students completing this course will forfeit credit in DRAM 3F97 (3F10).

ENGL 2M90-2M99

English Area Studies

Studies in a specialized area of English literature.

Lectures, seminar, 3 hours per week.

Prerequisite: one ENGL credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

ENGL 2M90

2000-2001: English Drama to the Closing of The Theatres in 1642

Selected plays from medieval miracle cycles to such playwrights as Marlowe, Tourneur and Ford.

ENGL 2P10

Young People's Literature to 1914

Critical study of fairytales, folk tales, poetry and novels adapted for or directed toward children and young people from the folk-tale heritage to 1914.

Lectures, seminar, 3 hours per week.

Prerequisite: one ENGL credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

ENGL 2P11

Young People's Literature after 1914

Critical study of fairytales, folk tales, poetry and novels written for children and young people during the 20th century.

Lectures, seminar, 3 hours per week.

Prerequisite: one ENGL credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

ENGL 2P21

Sixteenth-Century Literature

Prose and poetry from 1500 to 1590, including popular and courtly traditions.

Lectures, seminar, 3 hours per week.

Prerequisite: one ENGL credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

ENGL 2P22

Spenser and the Age of Elizabeth

Elizabethan literature of the 1590s, with particular emphasis on Spenser.

Lectures, seminar, 3 hours per week.

Prerequisite: one ENGL credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

ENGL 2P24

Early 17th-Century Literature

Early modern drama, poetry and prose, 1603 to the English Revolution, including writers such as Webster, Donne, Jonson and Lanyer.

Lectures, seminar, 3 hours per week.

Prerequisite: one ENGL credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

Students completing this course will forfeit credit in ENGL 3P21.

ENGL 2P25

The Age of Sensibility

Prose, poetry and drama 1740-1798, including writers such as Johnson, Cowper and Sterne.

Lectures, seminar, 3 hours per week.

Prerequisite: one ENGL credit numbered 1(alpha)00 to 1(alpha)99 or permission of the instructor.

Students completing this course will forfeit credit in ENGL 2P41.

ENGL 2P30

Early Romantic Literature

Poetry of Blake, Wordsworth and Coleridge; selected literary criticism and other prose.

Lectures, seminar, 3 hours per week.

Prerequisite: one ENGL credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

English Language and Literature

ENGL 2P31

Later Romantic Literature

Poetry of Byron, Shelley and Keats; selected letters and other prose.

Lectures, seminar, 3 hours per week.

Prerequisite: one ENGL credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

ENGL 2P51

Literature of the British Empire

Literature, both popular and canonical, which reflects the ongoing relationship between British imperialism, literary forms and cultural politics, from the 17th century to the present.

Lectures, seminar, 3 hours per week.

Prerequisite: one ENGL credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

ENGL 2P52

Postcolonial Literature

Literatures of resistance and emergence written in English in former British territories, such as those in Africa and the West Indies.

Lectures, seminar, 3 hours per week.

Prerequisite: one ENGL credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

ENGL 2P53

Southern African Literatures of Transition

Literary explorations of and interventions in the political and socio-cultural transitions from white regimes to majority-rule politics. Emphasis on histories of trauma, displacement and dispossession.

Lectures, seminars, 3 hours per week.

Prerequisite: one ENGL credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

ENGL 2P61

American Literature to 1900

Literature and literacy culture from early European contact through Henry James and Edith Wharton. Emphasis on such writers as Emerson, Thoreau, Poe and Dickinson.

Lectures, seminar, 3 hours per week.

Prerequisite: one ENGL credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

ENGL 2P62

American Literature after 1900

Literature and literary culture from Henry James and the beginnings of modernism to the present time. Emphasis on the broadening of the canon.

Lectures, seminar, 3 hours per week.

Prerequisite: one ENGL credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

ENGL 2P91

Canadian Literature to 1920

Poetry, fiction and prose from Moodie and Haliburton to Lampman, Leacock and Pratt.

Lectures, seminar, 3 hours per week.

Prerequisite: one ENGL credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

ENGL 2P92

Canadian Literature after 1920 to the Present

Poetry, fiction and prose from Grove and Callaghan to Ondaatje, Atwood and Findley.

Lectures, seminar, 3 hours per week.

Prerequisite: one ENGL credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

ENGL 2P94

Women Writers to 1900

(also offered as WISE 2P94)

Prose, poetry and drama by women from the 17th to the 19th century including Anne Bradstreet, Katherine Philips, Lucy Hutchinson, Aphra Behn, Mary Wollstonecraft, Mary Shelley and Charlotte Brontë.

Lectures, seminar, 3 hours per week.

Prerequisite: one ENGL credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

ENGL 2P95

Twentieth-Century Women Writers

(also offered as WISE 2P95)

Prose, poetry and drama by women in the 20th century including Edith Wharton, Virginia Woolf, Sylvia Plath, Margaret Atwood, Joan Didion, Fay Weldon, Angela Carter, Denise Levertov.

Lectures, seminar, 3 hours per week.

Prerequisite: one ENGL credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

ENGL 2V90-2V99

English Area Studies

Studies in a specialized area of literature in English.

Prerequisite: one ENGL credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

ENGL 3F40

The Novel

Major English novelists and the development of the form from its origins (Bunyan) to the close of the 19th century (Hardy and/or James).

Lectures, seminar, 3 hours per week.

Prerequisites: one ENGL credit numbered 1(alpha)90 to 1(alpha)99 and two ENGL credits numbered 2(alpha)00 to 2(alpha)99 or permission of the instructor.

ENGL 3F42

Modern Poetry

Modernism and its alternatives in poetry of the 20th century, including contemporary poetry. Major poets include Yeats, Eliot, Auden, Stevens.

Lectures, seminar, 3 hours per week.

Prerequisites: one ENGL credit numbered 1(alpha)90 to 1(alpha)99 credit and two ENGL credits numbered 2(alpha)00 to 2(alpha)99 or permission of the instructor.

ENGL 3F91

History of the Language

The development of the English language from its origins to the present state of English in North America. The nature and cause of major internal changes in the language will be examined, together. The influence of external cultural and linguistic forces in the shaping of modern English. Selected literary models will be used to illustrate the stylistic development of English.

Lectures, seminar, 3 hours per week.

Prerequisites: one ENGL credit numbered 1(alpha)90 to 1(alpha)99 and two ENGL credits numbered 2(alpha)00 to 2(alpha)99 or permission of the instructor.

ENGL 3F92

Old English

Literature and language; a close reading of prose and several major poems in Old English, including passages from *The Parker Chronicle, Wanderer, Seafarer, Deor, The Battle of Maldon, The Dream of the Rood.*

Seminar, 3 hours per week.

Prerequisites: one ENGL credit numbered 1(alpha)90 to 1(alpha)99 and two ENGL credits numbered 2(alpha)00 to 2(alpha)99 or permission of the instructor.

ENGL 3F93

Literary Criticism

History, principles and practice of literary criticism. Emphasis on the Classical tradition (Plato, Aristotle, the Renaissance, Neoclassicism); Romantic and late 19th-century developments; 20th-century revitalization.

Seminars, 3 hours per week.

Prerequisites: one ENGL credit numbered 1(alpha)90 to 1(alpha)99 and two ENGL credits numbered 2(alpha)00 to 2(alpha)99 or permission of the instructor.

ENGL 3P05

Creative Writing

(also offered as WRIT 3P05)

The craft of creative writing, for selected students in any discipline.

Seminar, 3 hours per week.

Restriction: permission of the instructor.

Prerequisite: one of ENGL 1F91, 1F95, 1F99, WRIT (ENGL) 1P80 and 1P81.

Note: students must apply in writing, with portfolio, at least two weeks before the beginning of classes. Details from the department.

Students completing this course will forfeit credit in ENGL 3F05.

ENGL 3P10

Chaucer: The Poetry

From *The Book of the Duchess* to *The Canterbury Tales.*

Lectures, seminar, 3 hours per week.

Prerequisites: one ENGL credit numbered 1(alpha)90 to 1(alpha)99 and two ENGL credits numbered 2(alpha)00 to 2(alpha)99 or permission of the instructor.

ENGL 3P22

The Literature of Milton's Time

Poetry and prose from the Civil War to the early Restoration period, with particular emphasis on Milton.

Lectures, seminar, 3 hours per week.

Prerequisites: one ENGL credit numbered 1(alpha)90 to 1(alpha)99 and two ENGL credits numbered 2(alpha)00 to 2(alpha)99 or permission of the instructor.

ENGL 3P25

Restoration and Augustan Literature

Prose, poetry and drama 1660-1740, including Dryden, Pope and Swift.

Lectures, seminar, 3 hours per week.

Prerequisites: one ENGL credit numbered 1(alpha)90 to 1(alpha)99 and two ENGL credits numbered 2(alpha)00 to 2(alpha)99 or permission of the instructor.

Students completing this course will forfeit credit in ENGL 2P40.

ENGL 3P30

Early Victorian Literature

Poetry, fiction and prose to the 1860s, including Tennyson, the Brontës, Arnold, Dickens and the Brownings.

Lectures, seminar, 3 hours per week.

Prerequisites: one ENGL credit numbered 1(alpha)90 to 1(alpha)99 and two ENGL credits numbered 2(alpha)00 to 2(alpha)99 or permission of the instructor.

ENGL 3P31

Later Victorian Literature

Poetry, fiction and prose from the pre-Raphaelites to the end of the century, including the Rossettis, Meredith, Swinburne, Pater, Hardy and Wilde.

Lectures, seminar, 3 hours per week.

Prerequisites: one ENGL credit numbered 1(alpha)90 to 1(alpha)99 and two ENGL credits numbered 2(alpha)00 to 2(alpha)99 or permission of the instructor.

ENGL 3P38

Twentieth-Century Literature: The Modern Period

Modernist writing in English, from its experimental beginnings through its engagement with radical social thought in the 1960s.

Lectures, seminar, 3 hours per week.

Prerequisites: one ENGL credit numbered 1(alpha)90 to 1(alpha)99 and two ENGL credits numbered 2(alpha)00 to 2(alpha)99 or permission of the instructor.

Students completing this course will forfeit credit in ENGL 3P33, 3P34 and 3P35.

ENGL 3P39

Contemporary Literature in English

The postmodern period, with an emphasis on the forms, approaches and cultural responses which have characterized writing in English in the later 20th century.

Lectures, seminar, 3 hours per week.

Prerequisites: one ENGL credit numbered 1(alpha)00 to 1(alpha)99 and two ENGL credits numbered 2(alpha)00 to 2(alpha)99 or permission of the instructor.

English Language and Literature

pha)99 or permission of the instructor.

Students completing this course will forfeit credit in ENGL 3P36.

ENGL 3P90

Life Writing

Biographical and autobiographical writings: types, reception, theoretical aspects.

Lectures, seminar, 3 hours per week.

Prerequisites: one ENGL credit numbered 1(*alpha*)00 to 1(*alpha*)99 and two ENGL credits numbered 2(*alpha*)00 to 2(*alpha*)99 or permission of the instructor.

ENGL 3P95

Literature of the 14th and 15th Centuries

The northern alliterative revival: Langland and Malory.

Seminar, 4 hours per week.

Prerequisite: ENGL 3P10.

Students completing this course will forfeit credit in ENGL 4P10.

ENGL 3V70-3V79

Theoretical Issues in the Study of Literature

ENGL 3V90-3V99

English Area Studies

Studies in a specialized area of literature in English.

Lectures, seminar, 3 hours per week.

Prerequisites: one ENGL credit numbered 1(*alpha*)00 to 1(*alpha*)99 and two ENGL credits numbered 2(*alpha*)00 to 2(*alpha*)99 or permission of the instructor.

ENGL 3V92

2000-2001: Nature Writing and Ecological Philosophies in 19th-Century North America

The conceptualization of nature and the natural world by North American writers within the diverse intellectual climate of the 19th century. Includes well and less well-known first-person accounts, formal nature essays and animal stories.

ENGL 4F70

Contemporary Literary Theory

The major schools and the essential issues of contemporary literary theory.

Seminar, 3 hours per week.

Restriction: open to English Plus and ENGL (single or combined) majors with either a minimum of 14.0 overall credits, a minimum 70 percent major average and a minimum 60 percent non-major average or approval to year 4 (honours) or permission of the instructor.

ENGL 4F99

Senior Research Tutorial or Thesis

Either tutorial combined with individual research or a thesis on a specialized topic or major author, of mutual interest to the student and the instructor.

Restriction: open to English Plus and ENGL (single or combined) majors with a minimum of 14.0 overall credits, a minimum 70 percent major average and a minimum 60 percent

non-major average or approval to year 4 (honours) and permission of the department.

Note: the Chair must approve proposals for projects and circulate approved projects to the Department.

ENGL 4P98

Senior Tutorial or Research Paper

Either tutorial combined with individual research or a research paper on a specialized topic or major author, of mutual interest to the student and the instructor.

Restriction: open to English Plus and ENGL (single or combined) majors with either a minimum of 14.0 overall credits and a minimum 70 percent major average and a minimum 60 percent non-major average or approval to year 4 (honours) and permission of the department.

Note: the Chair must approve proposals for projects and circulate approved projects to the Department.

ENGL 4P99

Senior Tutorial or Research Paper

Either tutorial combined with individual research or a research paper on a specialized topic or major author, of mutual interest to the student and the instructor.

Restriction: open to English Plus and ENGL (single or combined) majors with either a minimum of 14.0 overall credits, a minimum 70 percent major average and a minimum 60 percent non-major average or approval to year 4 (honours) and permission of the department.

Note: the Chair must approve proposals for projects and circulate approved projects to the Department.

ENGL 4V00-4V09

Topics in English Literature Before 1800

Restriction: open to English Plus and ENGL (single or combined) majors with either a minimum of 14.0 overall credits, a minimum 70 percent major average and a minimum 60 percent non-major average or approval to year 4 (honours) or permission of the instructor.

ENGL 4V00

2000-2001: Literature of the English Revolution

(also offered as HIST 4V00)

Literary, critical, historical and theoretical perspectives on texts from the 1640s to the Restoration, including *Apeopagitica*, *Eikon Basilike*, female prophecy and *Agreement of the People*.
Seminar, 3 hours per week.

Restriction: open to English Plus, ENGL (single or combined) and HIST (single or combined) majors with either a minimum of 14.0 overall credits, a minimum 70 percent major average and a minimum 60 percent non-major average or approval to year 4 (honours) or permission of the instructor.

ENGL 4V30-4V39

Topics in 19th-Century Literature

Restriction: open to English Plus and ENGL (single or combined) majors with either a minimum of 14.0 overall credits, a minimum 70 percent major average and a minimum 60 percent non-major average or approval to year 4 (honours) or permission of the instructor.

ENGL 4V40-4V49

Topics in Contemporary Literature

Restriction: open to English Plus and ENGL (single or combined) majors with either a minimum of 14.0 overall credits, a minimum 70 percent major average and a minimum 60 percent non-major average or approval to year 4 (honours) or permission of the instructor.

ENGL 4V60-4V69

Topics in Contemporary Canadian Writing

Restriction: open to English Plus and ENGL (single or combined) majors with either a minimum of 14.0 overall credits, a minimum 70 percent major average and a minimum 60 percent non-major average or approval to year 4 (honours) or permission of the instructor.

ENGL 4V62

2000-2001: Elsewhere in Contemporary Canadian Fiction

The rendition of non-Canadian space in recent Canadian fiction by such authors as Atwood, Ondaatje, Urquhart, Van Herk and Mistry, and its relation to theories of space and locality and to questions of ideology, identity and agency.

Seminar, 3 hours per week.

ENGL 4V63

2000-2001: Historical Inscription in Contemporary Canadian Poetry

The re-textualization and re-contextualization of historical persons and events, as found in poetic sequences by such contemporary poets as Ondaatje, Clarke, Bolster, and Crozier.

Seminar, 3 hours per week.

ENGL 4V70-4V79

Text and Context

Topics in literature and intellectual history.

Restriction: open to English Plus and ENGL (single or combined) majors with either a minimum of 14.0 overall credits, a minimum 70 percent major average and a minimum 60 percent non-major average or approval to year 4 (honours) or permission of the instructor.

ENL 4V70

2000-2001: Early 19th-Century Thought

(also offered as GBLS 4V70)

Writings in social criticism, aesthetics, education, science and philosophy from Burke and Coleridge to Carlyle and Mill.

Seminar, 3 hours per week.

Restriction: open to English Plus, ENGL (single or combined) and GBLS (LBST) (single or combined) majors with either a minimum of 14.0 overall credits, a minimum 70 percent major average and a minimum 60 percent non-major average or approval to year 4 (honours) or permission of the instructor. Students completing this course will forfeit credit in ENGL 4P30.

ENGL 4V71

2000-2001: Later 19th-Century Thought

(also offered as GBLS 4V71)

Writings in social criticism, aesthetics, education, science and

philosophy from Arnold and Darwin to Pater and Wilde.

Seminar, 3 hours per week.

Restriction: open to ENGL Plus, ENGL (single or combined) and GBLS (LBST) (single or combined) majors with either a minimum of 14.0 overall credits, a minimum 70 percent major average and a minimum 60 percent non-major average or approval to year 4 (honours) or permission of the instructor. Students completing this course will forfeit credit in ENGL 4P31.

ENGL 4V90-4V99

English Area Studies

Studies in a specialized area of literature in English.

Restriction: open to English Plus and ENGL (single or combined) majors with either a minimum of 14.0 overall credits, a minimum 70 percent major average and a minimum 60 percent non-major average or approval to year 4 (honours) or permission of the instructor.

WRITING

WRIT 1P80

Introduction to Writing

Exploration of the connections among careful reading, writing and thinking: introduction to the analytical, grammatical and editorial tools needed for clear and forceful expression in well-articulated essays, from the narrative to the expository.

Lectures, lab, 3 hours per week.

Students completing this course will forfeit credit in ENGL 1P80.

WRIT 1P81

Academic Writing

Writing undergraduate papers, expression and organization of arguments, presentation of evidence, how and why styles and conventions differ across disciplines.

Lectures, lab, 3 hours per week.

Prerequisite: WRIT (ENGL) 1P80 or permission of the instructor.

Students completing this course will forfeit credit in ENGL 1P81.

WRIT 2P15

Technical Writing

Processes of technical writing and editing. Document design for scientific, corporate and industrial communication. Practical experience in the production of technical documents.

Lectures, lab, 3 hours per week.

Prerequisite: one of WRIT (ENGL) 1P80 and 1P81, ENGL 1F91, 1F95, 1F99 or permission of the instructor.

Students completing this course will forfeit credit in ENGL 2P15.

WRIT 2P16

Communication for Organizations

Theory, strategies and practice of writing for both business and public organizations.

Lectures, lab, 3 hours per week.

English Language and Literature

Prerequisite: one of WRIT (ENGL) 1P80 and 1P81, ENGL 1F91, 1F95, 1F99 or permission of the instructor.

WRIT 3P05

Creative Writing

(also offered as ENGL 3P05)

The craft of creative writing, for selected students in any discipline.

Seminar, lab, 3 hours per week.

Students completing this course will forfeit credit in ENGL 3F05.

WRIT 3P09

Journalism

Analysis of and practice in writing for print and electronic media.

Lectures, lab, 3 hours per week.

Prerequisite: one of WRIT (ENGL) 1P80 and 1P81, ENGL 1F91, 1F95, 1F99 or permission of the instructor.

Students completing this course will forfeit credit in ENGL 3P09.

WRIT 3P12

Information Literacy

Concepts and theories in communication and information retrieval with reference to a variety of media and information sources, including the Internet. The role of scholars and journalists in producing information. Strategies for acquiring, evaluating and communicating information.

Labs, 3 hours per week.

Prerequisite: WRIT (ENGL) 1P80 and 1P81 or permission of the instructor.

Students completing this course will forfeit credit in ENGL 3P12.

WRIT 3P63

Desktop Publishing and Design

(also offered as COMM 3P63)

Practicum in desktop publishing, layout and design.

Lectures, lab, 3 hours per week.

Prerequisite: COMM 2F50 or one WRIT credit numbered 2(alpha)00 or above or permission of the instructor.

WRIT 4F99

Independent Studies in Writing

A research project related to writing chosen by the student in consultation with a faculty member. The student will produce a substantial body of work on a writing and communications issue.

Restriction: permission of the instructor.

Note: students must have a minimum 75 percent average in two WRIT credits numbered 2(alpha)00 level or above. The Chair must approve proposals for projects and circulate approved projects to the Department.

WRIT 4P98

Independent Studies in Writing

A research project related to writing chosen by the student in consultation with a faculty member. The student will produce a substantial body of work on a professional writing and communications issue.

Restriction: permission of the instructor.

Note: students must have a minimum 75 percent average in two WRIT credits numbered 2(alpha)00 level or above. The Chair must approve proposals for projects and circulate approved projects to the Department.

WRIT 4P99

Independent Studies in Writing

A research project related to writing chosen by the student in consultation with a faculty member. The student will produce a substantial body of work on a writing and communications issue.

Restriction: permission of the instructor.

Note: students must have a minimum 75 percent average in two WRIT credits numbered 2(alpha)00 level or above. The Chair must approve proposals for projects and circulate approved projects to the Department.

Drama Courses Available for English Credit

DRAM 1F93

Introduction to Drama

DRAM 2F95

The Forms of Comedy

DRAM 2F97

Canadian Drama

DRAM 2F98

The Forms of Tragedy

DRAM 3F93

20th-Century Drama

DRAM 3F97

Shakespeare

Only one of DRAM 1F93, 2F95 or DRAM 2F98 may be taken for English credit.

For course descriptions, see Fine Arts.

Environment

Director

William G. Webster

Professor Emeritus

Robert C. Hoover

Professor

Mohammed H. Dore

Associate Professors

David T. Brown, Diane P. Dupont, Francine McCarthy, John Middleton, Steven J. Renzetti, Anthony J. Ward

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Co-operating Faculty

Biological Sciences, Chemistry, Earth Sciences, Economics, Geography, Political Science, and Sociology.

General Information

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The Centre for the Environment offers programs in conjunction with seven other departments. It consolidates the former Environmental Sciences and Environmental Policy programs, and coordinates them with Environmental Economics. The Centre provides a core of interdisciplinary courses shared by BA and BSc students. The interdisciplinary core is complemented by courses from other academic disciplines, required context courses, and free elective space. The Centre offers four-year programs of study leading to a BA and BSc honours in Environment and three-year BA and BSc pass degree programs with the following options: BA in Environment, with streams in Economics, Geography, Political Science, or Sociology; BSc in Environment with streams in Biological Sciences, Chemistry, Earth Sciences, or Geography. As well the Centre offers a Concentration and Certificate in Environment.

The Bachelor of Arts in Environmental Economics is a four-year honours degree designed for students who wish to apply the methods and techniques of economics to environmental issues. The program includes courses in physical geography, which focus on the scientific methods used for obtaining evidence of air, water and ground pollution. Economic courses provide the foundation for assessing the socio-economic calculations and the institutional aspects affecting environmental policy and regulation. In year one, students choose a secondary but related area of study in Biological Sciences, Environment, Human Geography or any other secondary area of study

with the approval of the Director. This cross-disciplinary program is designed for students contemplating a career with government, public interest groups or firms involved in environmental assessment, monitoring and review or the cost-benefit analysis of environmental regulation. A graduate of this program may pursue graduate work in environmental studies, law, public policy or other interdisciplinary studies.

Programs of Study

Program Notes

1. Due to their primary focus on environmental sciences the following are designated as ENVI Science List courses: ENVI 1P10, 2P04, 2P05, 2P09, 2P61, 2P92, 2P93, 2Q04, 3P01, 3V10-15.
2. Environmental Economics students planning to pursue graduate studies in Economics should include ECON 3P91, 4P13 and 4P14 among their ECON electives.
3. In all 20 credit degree programs, at least 12 credits must be numbered 2(alpha)00 or above, six of which must be numbered 2(alpha)90 or above and of these, three must be numbered 3(alpha)90 or above. In all 15 credit degree programs, at least seven credits must be numbered 2(alpha)00 or above, three of which must be numbered 2(alpha)90 or above.

BSc Honours Program

Biological Sciences stream

Year 1

ENVI 1P90 and 1P91; MATH 1P97 and 1P98; CHEM 1P80 and 1P81 or CHEM 1P90 and 1P91; BIOL 1F90; one Humanities context credit.

Year 2

ENVI 2P28, 2P91 and 2Q04; CHEM 2P42; one-half credit from ENVI Science list (see program note 1); two credits from BIOL 2P05, 2P92, 2P93, 2P96, 2P98; one-half elective credit.

Year 3

ENVI 3P01 and 3P02; one-half ENVI credit; one-half credit from ENVI 3V10-3V15, 3V20-3V24, 3V25-3V29, 3V30-34; two BIOL credits numbered 2(alpha)90 or above; one elective credit.

Year 4

ENVI 4F90 and 4F91 or BIOL 4F90 and 4F91; ENVI 4P88; one BIOL credit; one BIOL credit numbered 3(alpha)90 or above; one-half elective credit.

Environment

Chemistry stream

Year 1

ENVI 1P90 and 1P91; CHEM 1P80 and 1P81 or CHEM 1P90 and 1P91; MATH 1P93 and 1P94 or MATH 1P97 and 1P98; one Humanities context credit; one elective credit.

Year 2

ENVI 2P28, 2P91 and 2Q04; CHEM 2P12, 2P20, 2P32 and 2P42; one-half credit from ENVI Science list (see program note 1); PHYS 1F20 or 1F90.

Year 3

ENVI 3P01 and 3P02; one-half ENVI credit; one-half credit from ENVI 3V10-3V15, 3V20-3V24, 3V25-3V29, 3V30-34; one additional CHEM credit; one credit from CHEM 3P20, 3P30, 3P31, 3P60; one elective credit.

Year 4

ENVI 4F90 and 4F91 or CHEM 4F90 and 4F91; ENVI 4P88; one CHEM credit; one CHEM credit numbered 3(alpha)90 or above; one-half elective credit.

Earth Sciences stream

Year 1

ENVI 1P90 and 1P91; CHEM 1P80 and 1P81 or CHEM 1P90 and 1P91; ERSC 1F95; MATH 1P97 and 1P98; one Humanities context credit.

Year 2

ENVI 2P28, 2P91 and 2Q04; CHEM 2P42; ERSC 2P21, 2P31, 2P61 and 2P64; one-half credit from ENVI Science list (see program note 1); one-half elective credit.

Year 3

ENVI 3P01 and 3P02; ERSC 3P31, 3P61 and 3P92; ERSC 3P97 or 4P41; one-half ENVI credit; one-half credit from ENVI 3V10-3V15, 3V20-3V24, 3V25-3V29, 3V30-34; one credit from ENVI 2P04, 2P05, 2P09, ERSC 2P01.

Year 4

ENVI 4F90 and 4F91 or ERSC 4F90 and 4F91; ENVI 4P88; one ERSC credit numbered 2(alpha)90 or above; one ERSC credit numbered 3(alpha)90 or above; one-half elective credit.

Geography stream

Year 1

ENVI 1P90 and 1P91; CHEM 1P80 and 1P81 or CHEM 1P90 and 1P91; GEOG 1F91; MATH 1P97 and 1P98; one Humanities context credit.

Year 2

ENVI 2P28, 2P91 and 2Q04; one-half credit from ENVI Science list (see program note 1); CHEM 2P42; GEOG 2P11; one and one-half credits from ENVI 2P04, 2P05, 2P09, GEOG 2P07; one-half elective credit.

Year 3

ENVI 3P01 and 3P02; GEOG 3P56; one-half ENVI credit; one-half credit from ENVI 3V10-3V15, 3V20-3V24, 3V25-3V29, 3V30-34; one GEOG credit numbered 2(alpha)90 to 3(alpha)99 from Group B (see Geography department calendar entry); one-half GEOG credit numbered 2(alpha)90 to 3(alpha)99 from Group B or C (see Geography department calendar entry); one elective credit.

Year 4

ENVI 4F90 and 4F91 or GEOG 4F90 and one GEOG credit from group B or C (see Geography department calendar entry); GEOG 4F99; one GEOG credit numbered 2(alpha)90 or above from group B or C (see Geography department calendar entry); one elective credit.

BSc Pass Program

Satisfactory completion of the first three years of the honours program entitles a student to apply for a pass degree.

BA Honours Program

Geography stream

Year 1

ENVI 1P90 and 1P91; GEOG 1F90; MATH 1P98; one Humanities context credit; one science context credit (GEOG 1F91 strongly recommended); one-half elective credit.

Year 2

ENVI 2P28 and 2P91; one ENVI credit; one and one half credits from GEOG 2P02, 2P03, 2P06, 2P07; GEOG 2P10; one elective credit.

Year 3

ENVI 3P02; one-half credit from ENVI 3V10-3V15, 3V20-3V24, 3V25-3V29, 3V30-34; one ENVI credit numbered 2(alpha)90 or above; GEOG 3P57; one GEOG credit numbered 2(alpha)90 to 3(alpha)99 from Group A (see Geography department calendar entry); one-half GEOG credit numbered 2(alpha)90 to 3(alpha)99 from group A or C (see Geography department calendar entry); one elective credit.

Year 4

ENVI 4F90 and 4F91 or GEOG 4F90 and one GEOG credit from group A or C (see Geography department calendar entry); GEOG 4F99; one GEOG credit numbered 2(alpha)90 from group A or C (see Geography department calendar entry); one elective credit.

Political Science stream

Year 1

ENVI 1P90 and 1P91; MATH 1P98; one POLI credit numbered 1(alpha)90 to 1(alpha)99; one Humanities context credit; one Science context credit; one-half elective credit.

Year 2

ENVI 2P28 and 2P91; POLI 2P80; one ENVI credit; one-half credit from POLI 2P91, 2P92, 2P93; one POLI credit; one elective credit.

Year 3

ENVI 3P02 and 3P66; one-half credit from ENVI 3V10-3V15, 3V20-3V24, 3V25-3V29, 3V30-34; one ENVI credit numbered 2(alpha)90 or above; POLI 3P91 or 3P92; one POLI credit numbered at the 2(alpha)90 level or above; one elective credit.

Year 4

ENVI 4F90 and 4F91, or POLI 4F99, one-half elective credit and one-half ENVI credit at the 3(alpha)90 level or above; ENVI 4P88; two POLI credits numbered at the 3(alpha)90 level or above; one-half elective credit.

Sociology stream

Year 1

ENVI 1P90 and 1P91; MATH 1P98; SOCI 1F90; one Humanities context credit; one Science context credit; one-half elective credit.

Year 2

ENVI 2P28 and 2P91; one ENVI credit; SOCI 2F10; one SOCI credit; one elective credit.

Year 3

ENVI 3P02; one-half credit from ENVI 3V10-3V15, 3V20-3V24, 3V25-3V29, 3V30-34; one ENVI credit numbered 2(alpha)90 or above; SOCI 3P00 and 3P01; one SOCI credit; one elective credit.

Year 4

ENVI 4F90 and 4F91, or SOCI 4F90, SOCI 4P01 and one-half SOCI credit; one of SOCI 4F10, 4F91, one credit from SOCI 4P02 or 4P70, 4P15, 4P16; one SOCI credit; one-half SOCI credit numbered 3(alpha)90 or above; one-half elective credit.

Environmental Economics (honours only)

Year 1

ECON 1P91 and 1P92; GEOG 1F91; MATH 1P97 and 1P98; one Humanities context credit; one credit from the chosen secondary area of study.

Year 2

ENVI 2P09 or 2Q04; ENVI 2P28; ECON 2P21, 2P22, 2P31, 2P32 and 2P90; one of ENVI 2P04, 2P05, GEOG 2P11, 3P32; one credit from the chosen area of study.

Year 3

ENVI 3P02; ECON 3P27, 3P28, 3P90 and 3P97; GEOG 3P81 (when offered, otherwise GEOG 3P32 or 3P33); one-half ECON credit numbered 2(alpha)00 or above; one-half ECON credit numbered 2(alpha)90 or above (see program note 2); one credit from the chosen area of study.

Year 4

ECON 4F28; one ECON credit numbered 2(alpha)90 or above; one ECON credit numbered 3(alpha)90 or above (see program note 2); two elective credits.

Secondary area of study

Students choose a secondary area of study, normally in Biological Sciences, Environment, or Human Geography. Alternative areas of study may be pursued with the approval of the Director.

For Biological Sciences: BIOL 1F90, 2P05 and 2Q04; one elective credit.

For Human Geography: GEOG 1F90; one credit from GEOG 2P02, 2P03, 2P06, 2P07, 2P10; one elective credit.

For Environment: ENVI 1P90 and 1P91; two ENVI credits numbered 2(alpha)90 or above.

BA Pass Program

Satisfactory completion of the first three years of the honours program entitles a student to apply for a pass degree.

Combined Major Programs

Combinations with other departments may be allowed subject to a coherent plan of study approved in advance by both academic units. Please consult the Director for more information.

Certificate

The Certificate in Environment provides focused training for those who already hold a degree, or have equivalent professional experience. The admission requirements are the same as for the degree programs. Prospective students should consult with the Director before beginning the certificate program.

The Certificate is awarded upon completion of the five credits with a minimum 60 percent overall average.

Environment

Required courses:

Four ENVI credits numbered 2(*alpha*)90 or above (chosen in consultation with the Director); MATH 1P98 and one-half credit in COSC.

The MATH/COSC requirement will be waived if equivalent courses have already been taken. Courses cannot be counted twice; therefore no ENVI course can count for both a degree and a certificate. (See "Certificate Requirements" under Academic Regulations.)

Concentration

Students earn a Concentration in Environment by successfully completing the courses listed below together with the requirements for a BSc or BA honours degree.

Required courses:

ENVI 1P90, 1P91 and 4P88

Additional courses:

One and one-half ENVI or approved credits; two ENVI or approved credits numbered 2(*alpha*)00 level or above; one credit from BIOL 1F90, ECON 1P91 and 1P92, ERSC 1F90 or 1F95, GEOG 1F90 or 1F91, POLI 1F90, SOCI 1F90.

Note: the additional courses must be taken from at least three different Departments/Centres/Programs.

The words "Concentration in Environment" will be added to the student's transcript if the program is approved by the Director.

Approved Courses With Environmental Content:

BIOL 1P90
BIOL 2P05, 2Q04
BIOL 3P63, 3P64, 3P65, 3P71, 3P72, 3P80, 3P82
BIOL 4P60, 4P62, 4P64
ECON 1P91, 1P92
ECON 3P27, 3P28, 3P97
ECON 4F28
ENVI (all courses)
ERSC 1F90, 1F95
ERSC 2P64
GEOG 1F90, 1F91
GEOG 3P32, 3P33, 3P53, 3P74, 3P81, 3P83, 3P84, 3P88
GEOG 4P34, 4P35
MGMT 2P82
POLI 1F90
POLI 3P11, 3P33
SOCI 1F90
SOCI 2P41, 2P43, 2P73, 2P85
TOUR 2P08

TOUR 3P18, 3P78

TOUR 4F01

Any other course approved by the Director.

Prerequisites and Restrictions

Students must check to ensure that prerequisites are met. Students may be deregistered, at the request of the instructor, from any course for which prerequisites and/or restrictions have not been met.

Description of Courses

Note that not all courses are offered in every session. Refer to the applicable term timetable for details.

ENVI 1P10

Fluids, Heat and Light

(also offered as PHYS 1P10)

Newton's laws and their consequences: work-energy relationship, energy conservation, momentum-impulse relationship and momentum conservation. Application of Newton's laws to fluids: fluids in equilibrium (pressure and Pascal's principle, surface tension and capillary action); fluids in motion (Bernoulli's equation, viscosity, turbulent flow); principles of centrifuge. Heat and heat flow, phase-changes, heat pumps/refrigeration. Wave nature of light.

Lectures, 3 hours per week; tutorial, 1 hour per week.

Restriction: open to ENVI (ENVS) (single or combined) or OEVI majors or permission of the instructor.

ENVI 1P90

Introduction to Sustainability

Definitions, key characteristics and basic value assumptions of sustainability. Energy, materials and information flows; key components of built and natural environmental systems and our ability to influence them. Concepts of interdisciplinarity. Integration of environmental, economic and sociopolitical factors in policy making. Theoretical bases of decision-making to meet the needs of the present without compromising the ability of future generations to meet their own needs.

Lectures, seminar, 3 hours per week.

Students completing this course will forfeit credit in ENVP 1P90.

ENVI 1P91

Applied Environmental Policy

Key environmental issues and the principles and policies which affect them. Environmental implications of human activity in natural and built environments from local global scales. Case studies of principles of sustainability. Emphasis on policy options, problem solving, possibilities for creative social action

and planned change.

Lectures, seminar, 3 hours per week.

Prerequisite: ENVI (ENVP) 1P90 or permission of the instructor.

Students completing this course will forfeit credit in ENVP 1P91.

ENVI 2P03

Urban Geography

(also offered as GEOG 2P03)

Basic concepts and problems underlying the growth of cities, the urban system, land-use patterns in the city and urban policy making.

Lectures, seminar, 3 hours per week.

Prerequisite: GEOG 1F90 or permission of the instructor.

ENVI 2P04

Introduction to Meteorology

(also offered as GEOG 2P04)

Principles, structure, composition and processes of the atmosphere; its energy budget, moisture balance and motion. Weather forecasting in middle and low latitudes, forecasting techniques and special problems in applied meteorology.

Lectures, lab, 3 hours per week.

Prerequisites: GEOG 1F91 or permission of instructor.

ENVI 2P05

Global Geomorphology

(also offered as GEOG 2P05)

Introductory geomorphology with an emphasis on basic principles and their application to global environments.

Lectures, lab, field work, 5 hours per week.

Prerequisites: GEOG 1F91 or permission of the instructor

ENVI 2P09

Principles of Biogeography

(also offered as GEOG 2P09)

Autoecological aspects of soils and plants including the human impact at all scales. Study of the patterns of soils and plants and their explanation. Spatial patterns of soils and vegetation communities and their explanation.

Lectures, lab, 4 hours per week.

Prerequisites: GEOG 1F91 and MATH 1P98, or CHEM 1P80 and 1P81, or CHEM 1P90 and 1P91 or permission of the instructor.

ENVI 2P28

Economics of the Environment

(also offered as ECON 2P28)

An introduction to how economists think about environmental problems and natural resource management. Emphasis is on real world applications and case studies. Issues to be discussed will vary and may include: sustainable development, pollution taxes, the crisis in Canada's commercial fisheries, and valuing improvements to environmental quality.

Lectures, 3 hours per week.

Restriction: open to students with a minimum of 4.0 overall credits.

Students completing this course will forfeit credit in ENVP 2P28.

ENVI 2P61

Environmental Geology

(also offered as ERSC 2P61)

Philosophy and principles of environmental geology. Natural geologic processes and hazards: flooding, landslides, earthquakes, volcanic activity, glacial and coastal phenomena. Hydrogeology and human activity: water supply and use, solid waste and hazardous waste disposal. Mineral and energy resource utilization and possible consequent pollution.

Lectures, seminar, lab, 4 hours per week.

Prerequisite: ERSC 1F90 or 1F95.

Note: students enrolled in the BSc ENVI program are permitted to register in this course provided they have successfully completed CHEM 1P81 or 1P91.

ENVI 2P91

Ethics, Equity and Environmental Thought

The meaning of terms and distinctions in ethical theory as they apply to environmental issues. Background theory on equity, and case studies illustrating its place in developing sustainable approaches to environmental issues. Introduction to major ecophilosophies and their contributions, limitations and significance.

Lectures, seminar, 3 hours per week.

Prerequisites: ENVI (ENVP) 1P90 and 1P91 or permission of the instructor.

ENVI 2P92

Conservation Planning

(also offered as TOUR 2P92)

Application of ecological theory to environmental planning for conservation of species and ecosystems in a world dominated by human activities. Attitudes, values, and approaches: conservation, preservation, utilitarianism, stewardship and management. Co-existence of humans and wild life in parks, reserves, zoos, and productive landscapes. Conservation and development. Conservation programs, policies and legislation.

Lectures, seminar, workshop, 3 hours per week.

Prerequisites: ENVI (ENVP) 1P90, 1P91, and MATH 1P98 or permission of the instructor.

Students completing this course will forfeit credit in ENVP 2P92.

ENVI 2P93

Materials, Waste and Recycling

An overview of materials life cycles, waste management and recycling. Traditional waste management methods, technological disposal, modern integrated waste management. The logistics and limits of recycling. Waste reduction and environmentally sensible design. Disposables versus reusables. Composting and organic waste management. Optimal materials use and life cycle analysis. Waste management policy and legislation.

Lectures, seminar, workshop, 3 hours per week.

Prerequisites: ENVI (ENVP) 1P90, 1P91 and MATH 1P98 or

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permission of the instructor.

Students completing this course will forfeit credit in ENVP 2P93.

ENVI 2P94

Global Conventions on Environment and Development

(also offered as INTL 2P94 and TOUR 2P94)

Attempts of the global community to set policy through processes such as the World Conservation Strategy, the Brundtland Commission, Agenda 21 and the Commission on Sustainable Development.

Workshop, seminar, 3 hours per week.

Prerequisites: ENVI (ENVP) 1P90 and 1P91 or INTL 1P95, and MATH 1P98, or permission of the instructor.

Students completing this course will forfeit credit in ENVP 2P94 and 3P44.

ENVI 2P95

Human Services Planning

Environmental policy decisions that integrate ecological and social service issues. Fulfilling human rights and obligations through universal access to basic necessities; realizing community objectives for enhanced quality of life through provision of social services. Policy planning to reduce the decline of communities and social services and to prevent crime, poverty, illness and illiteracy.

Lectures, seminar, workshop, 3 hours per week.

Prerequisites: ENVI (ENVP) 1P90 and 1P91 or permission of the instructor.

Students completing this course will forfeit credit in ENVP 2P95 and 3P57.

ENVI 2Q04

Principles of Community and Environmental Biology

(also offered as BIOL 2Q04)

Principles of evolutionary ecology; biological processes at the community level of biological organization; patterns and diversity in natural ecosystems in terms of environmental toxins and their bioaccumulation in food webs; factors influencing community structure, biotic diversity and energy flow through ecosystems.

Lectures, 2 hours per week; lab, 3 hours per week during the Fall Term.

Restriction: students must have a minimum of 3.0 overall credits.

Prerequisite: BIOL 1F90.

Note: one-half year 1 credit in MATH strongly recommended. Year 2 students enrolled in the ENEC program are permitted to register in ENVI 2Q04 provided they have successfully completed the MATH and GEOG requirement in year 1 of the program.

Students completing this course will forfeit credit in BIOL 2P04.

ENVI 3P01

Environmental Chemistry

Sources and sinks of natural and synthetic toxic chemicals. The physical and chemical properties of persistent and transient toxins, their modes of transport in the environment. Spe-

cific examples include dioxins, PCBs, PAHs, mercury, chlorinated pesticides. Introduction to chemical toxicology.

Lectures, seminar, 4 hours per week.

Restriction: open to ENVI (ENVS) (single or combined) majors with a minimum of 9.0 overall credits.

Prerequisite: CHEM 2P42 or permission of the instructor

Students completing this course will forfeit credit in ENVS 3P01.

ENVI 3P02

Environmental Legislation and Case Studies

Existing legislation pertaining to environmental planning and remediation of concern to environmental scientists. Case studies of Canadian environmental problems; the role of environmental scientists in implementing legislated regulations during the remediation process.

Lectures, seminar, 3 hours per week.

Restriction: open to ENVI (ENVP and ENVS) (single or combined) majors with a minimum of 9.0 overall credits or permission of the instructor.

Students completing this course will forfeit credit in ENVP 3P02 and ENVS 3P02.

ENVI 3P49

Gender and Environment

(also offered as TOUR 3P49 and WISE 3P49)

The intersection between gender and the environment. Theoretical perspectives on feminism and ecophilosophies such as ecofeminism, deep ecology, and social ecology. Implications for local, national and global policy.

Lectures, seminar, 3 hours per week.

Restriction: open to ENVI (ENVP) (single or combined) majors, ENVI (ENVP) certificate students, TOUR and WISE (single or combined) majors.

Prerequisite: one of ENVI (ENVP) 1P90 and 1P91, WISE 2F90, 2P91, or permission of the Instructor

Students completing this course will forfeit credit in ENVP 3P49.

ENVI 3P66

(also offered as POLI 3P66)

Environmental Policy, Law, and Administration

The development of the issue of pollution, including perceptions of the problem of different actors, public participation, governmental reactions and legislation, the implementation of potential solutions and international cooperation. Seminar topics may include toxic wastes, acid rain, energy, the Great Lakes, risk assessment and ideologies.

Lectures, seminar, 3 hours per week.

Prerequisite: one POLI credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

ENVI 3P90

Directed Studies I

Topics and readings to be chosen in consultation with a faculty member who is willing to supervise the student.

Restriction: open to ENVI (ENVP) (single or combined) majors with a minimum of 9.0 overall credits and permission of the Director.

Prerequisites: ENVI (ENVP) 1P90 and 1P91 or permission of the Director.

Students completing this course will forfeit credit in ENVP 3P90.

ENVI 3P91

Directed Studies II

Topics and readings to be chosen in consultation with a faculty member who is willing to supervise the student.

Restriction: open to ENVI (ENVP) (single or combined) majors with a minimum of 9.0 overall credits and permission of the Director.

Prerequisites: ENVI (ENVP) 1P90 and 1P91 or permission of the Director.

Students completing this course will forfeit credit in ENVP 3P91.

ENVI 3V10-3V15

Interdisciplinary Perspectives on Pollution

Specific topics to be selected. Each course in this series uses guest speakers from a variety of disciplines and backgrounds to explore one aspect of pollution.

Lectures, seminar, 3 hours per week.

Prerequisites: ENVI (ENVP) 1P90 and 1P91 or permission of the Director.

Students completing this course will forfeit credit in ENVP 3V10-3V15.

ENVI 3V20-3V24

Interdisciplinary Perspectives on Human Settlements

Specific topics to be selected. Each course in this series uses guest speakers from a variety of disciplines and backgrounds to explore one aspect of human settlements.

Lectures, seminar, 3 hours per week.

Prerequisites: ENVI (ENVP) 1P90 and 1P91 or permission of the Director

Students completing this course will forfeit credit in ENVP

ENVI 3V25-3V29

Interdisciplinary Perspectives on International Issues

Specific topics to be selected. Each course in this series uses guest speakers from a variety of disciplines and backgrounds to explore one aspect of international environmental policy issues.

Lectures, seminar, workshop, 3 hours per week.

Prerequisites: ENVI (ENVP) 1P90 and 1P91 or permission of the Director.

Students completing this course will forfeit credit in ENVP 3V25-3V29.

ENVI 3V30-3V34

Interdisciplinary Perspectives on Environmental Issues

Specific topics to be selected. Each course in this series uses guest speakers from a variety of disciplines and backgrounds to explore one aspect of an environmental policy issue.

Lectures, seminar, 3 hours per week.

Prerequisites: ENVI (ENVP) 1P90 and 1P91 or permission of the Director.

Students completing this course will forfeit credit in ENVP 3V30-3V34.

ENVI 3V31

2000-2001: Agriculture and Sustainability

Students completing this course will forfeit credit in ENVP 3V31.

ENVI 3V60-3V65

Selected Issues in Urban Policy

An examination of specific issues of urban policy. These may vary from year to year.

Lectures, seminar, 3 hours per week.

Prerequisites: ENVI (ENVP) 1P90 and 1P91 or permission of the Director.

Students completing this course will forfeit credit in ENVP 3V60-3V65.

ENVI 3V64

2000-2001: Third World Cities

(also offered as TOUR 3V64)

Sustainable development policy for cities in the Third World, in the context of the 1996 HABITAT II Conference; principles of the city as an ecosystem; ecological, economic, political and social constraints and opportunities for creative change.

Lectures, seminar, 3 hours per week.

Prerequisites: ENVI (ENVP) 1P90 and 1P91 or permission of the instructor.

Students completing this course will forfeit credit in ENVP 3V64.

ENVI 3V90-3V99

Special Topics

A tutorial/seminar/special projects or directed readings course in an area of environment and development not represented by other courses.

Restriction: consult the Director for permission to register.

Prerequisites: ENVI (ENVP) 1P90 and 1P91.

Students completing this course will forfeit credit in ENVP 3V90-3V99.

ENVI 4F90

Honours Thesis

An original research project under faculty supervision.

Seminar, 3 hours per week.

Restriction: open to ENVI (ENVP and ENVS) (single or combined) majors with approval to year 4 (honours).

Co-requisite: ENVI 4F91.

Note: scheduled tutorials and class meetings are held throughout the year. An oral defence of the final report will be required.

Consult the Director prior to registration.

Students completing this course will forfeit credit in ENVP 4F90 and ENVS 4F90.

ENVI 4F91

Literature Research and Seminar

A detailed study of the literature relevant to the topic of the

Environment

honours thesis, under faculty supervision.

Seminar, 3 hours per week.

Restriction: open to ENVI (ENVP and ENVS) (single or combined) majors with approval to year 4 (honours).

Co-requisite: ENVI 4F90.

Note: the review will be included in the thesis. Consult the Director prior to registration.

Students completing this course will forfeit credit in ENVP 4F91 and ENVS 4F91.

ENVI 4P21

Issues of the Global System

(also offered as INTL 4P21 and TOUR 4P21)

Emphasis on power relationships, economic factors, business transactions, technological transnationalism, and extra-state phenomena such as pollution and disease. The role and possibilities for leadership, with a view to leadership development.

Seminar, 3 hours per week.

Restriction: minimum of 14.0 overall credits or permission of the Director.

Students completing this course will forfeit credit in ENVP 4P21.

ENVI 4P88

Interdisciplinary Practicum and Seminar

Research on a focused environmental problem or task. Emphasis on problem definition, establishment of terms of reference, report preparation, communication and formal presentation.

Seminar and workshop, 3 hours per week.

Note: carried out under the direction of a faculty member, working either within the university or in collaboration with a government agency, NGO, or private sector agency.

Environmental Policy

(until June 30, 2000)

Director
John Middleton

Professor Emeritus
Robert C. Hoover

Associate Professors
David T. Brown, John Middleton

Assistant Professor
Karen L. Krug

Co-operating faculty from:
Biological Sciences, Chemistry, Earth Sciences, Economics,
Geography, Philosophy, Political Science and Sociology

General Information

Administrative Assistant, extension 3292
Mackenzie Chown F242
<http://www.brocku.ca/epi/>

The Environmental Policy Institute has been consolidated with the Environmental Sciences Program to form the Centre for the Environment. Students interested in pursuing a BA or BSc (honours) in Environment are directed to the Environment entry. The Environmental Policy Program is now closed to new students.

Program Notes

1. ENVI or ENVP courses may be substituted for SOCI 2F10 (honours or pass), or one of SOCI 4F10, 4F90, 4F91, one credit from 4P02 or 4P70, 4P15, 4P16 (honours only). However, the student must take additional SOCI credits at the same level, to total eight SOCI credits for an honours degree or five credits for a pass degree.
2. In all 20 credit degree programs, at least 12 credits must be numbered 2(alpha)00 or above, six of which must be numbered 2(alpha)90 or above and of these, three must be numbered 3(alpha)90 or above. In all 15 credit degree programs, at least seven credits must be numbered 2(alpha)00 or above, three of which must be numbered 2(alpha)90 or above.

Combined Major Programs

Honours

Year 1
Year 1 is closed to new students.

Year 2
Two ENVI credits numbered 2(alpha)00 or above; two credits from the co-major discipline; one elective credit (one-half elective credit and COSC 1P90 or 1P98 if one full MATH credit taken in year 1).

Year 3
One and one-half ENVI credits numbered 2(alpha)90 or above; one-half credit from ENVI 3V10-3V15, 3V20-3V24, 3V25-3V29, 3V30-3V34; two credits from the co-major discipline; one elective credit.

Year 4
ENVI 4F90 and 4F91; two credits from the co-major discipline; one elective credit.

Pass

Satisfactory completion of the first three years of the honours program entitles a student to apply for a pass degree.

Course Requirements for Co-major Disciplines

Biological Sciences

Honours

BIOL 2P05 and 2Q04; one credit from BIOL 2P92, 2P93, 2P96, 2P98; one BIOL credit; two BIOL credits numbered 2(alpha)90 to 3(alpha)99; one BIOL credit numbered 3(alpha)99 or above.

Pass

BIOL 2P05 and 2Q04; one credit from BIOL 2P92, 2P93, 2P96, 2P98; two BIOL credits numbered 2(alpha)90 to 3(alpha)99.

Chemistry

Honours

CHEM 2P12, 2P20, 2P32, 2P42, 3P40 and 3P41; PHYS 1F20 or 1F90; one credit from CHEM 3P20, 3P30, 3P31, 3P60; one CHEM credit numbered 2(alpha)99 or above; one CHEM credit numbered 3(alpha)99 or above.

Environmental Policy

Pass

CHEM 2P12, 2P20, 2P21, 2P32, 2P42, 3P40 and 3P41; one credit from CHEM 3P20, 3P30, 3P31; PHYS 1F20 or 1F90.

Earth Sciences

Honours

ERSC 2P31, 2P61, 2P64, 3P31 and 3P61; CHEM 1P80 and 1P81 or CHEM 1P90 and 1P91; one of ERSC 2P01, 2P21, 3P24, 3P25; one ERSC credit numbered 2(alpha)00 to 3(alpha)99; one ERSC credit numbered 2(alpha)90 or above; one ERSC credit numbered 3(alpha)99 or above.

Pass

ERSC 2P31, 2P61, 2P64, 3P31 and 3P61; CHEM 1P80 and 1P81 or CHEM 1P90 and 1P91; one of ERSC 2P01, 2P21, 3P24, 3P25; one ERSC credit numbered 2(alpha)00 to 3(alpha)99.

Economics

Honours

ECON 2P21, 2P22, 2P31, 2P32, 2P90, 3P90, 3P91, 4P13 and 4P14; one and one-half ECON credits numbered 2(alpha)90 to 3(alpha)99.

Pass

ECON 2P21, 2P22, 2P31, 2P32 and 2P90; one and one-half ECON credits numbered 2(alpha)90 to 3(alpha)99.

Geography - BA

Honours

GEOG 2P10, 3P57 and 4F99; one and one-half credits from GEOG 2P02, 2P03, 2P06, 2P07; one GEOG credit numbered 2(alpha)90 to 3(alpha)99 from group A; one-half GEOG credit from group A or C; one GEOG credit numbered 3(alpha)99 or above from group A or C. (See Geography department calendar entry.) The courses selected cannot include both GEOG 4F90 and ENVI 4F90, 4F91. (GEOG 1F91 is strongly recommended as the Science context credit.)

Pass

GEOG 2P10 and 3P57; one and one-half credits from GEOG 2P02, 2P03, 2P06, 2P07; one year GEOG credit numbered 2(alpha)90 to 3(alpha)99 from group A; one-half GEOG credit from group A or C. (See Geography department calendar entry.) (GEOG 1F91 is strongly recommended as the Science context credit.)

Geography - BSc

Honours

GEOG 2P11, 3P56 and 4F99; one and one-half credits from GEOG 2P04, 2P05, 2P07, 2P09; one 3 GEOG credit numbered 2(alpha)90 to 3(alpha)99 from group B; one-half GEOG credit numbered 2(alpha)90 to 3(alpha)99 from group B or C; one GEOG credit numbered 3(alpha)99 or above from group B or C. (See Geography department calendar entry.) The courses selected cannot include both GEOG 4F90 and ENVI 4F90, 4F91.

Pass

GEOG 2P11 and 3P56; one and one-half credits from GEOG 2P04, 2P05, 2P07, 2P09; one GEOG credit numbered 2(alpha)90 to 3(alpha)99 from group B; one-half GEOG credit numbered 2(alpha)90 to 3(alpha)99 from group B or C. (See Geography department calendar entry.)

Political Science

Honours

POLI 2P80; one of POLI 2P91, 2P92, 2P93; POLI 3P91 or 3P92; one and one-half POLI credits; one and one-half POLI credits numbered 2(alpha)90 or above; one and one-half POLI credits numbered 3(alpha)90 or above.

Pass

POLI 2P80; one of POLI 2P91, 2P92, 2P93; one and one-half POLI credits; one and one-half POLI credits numbered at the 2(alpha)90 or above.

Sociology

Honours

SOCI 2F10, 2P10, 3P00, 3P01 and 3P12; one of SOCI 4F90 (thesis option), 4F91 (practicum option), one credit from 4F10, 4P02 or 4P70, 4P15, 4P16 (course work option); one and one-half SOCI credits; one SOCI credit numbered 3(alpha)90 or above. Students taking 4F90 are required to take 4P01 as part of their additional SOCI credits (see program note 1).

Pass

SOCI 2F10, 3P00 and 3P01; one SOCI credit; one SOCI credit numbered 2(alpha)90 or above (see program note 1).

Prerequisites and Restrictions

Students must check to ensure that prerequisites are met. Students may be deregistered, at the request of the instructor, from any course for which prerequisites and/or restrictions have not been met.

Description of Courses

See relevant calendar entries for course descriptions.

Environmental Sciences

(until June 30, 2000)

Director

Francine M. G. McCarthy, Department of Earth Sciences

Co-operating Faculty

Biological Sciences, Chemistry, Earth Sciences, Geography and Physics

General Information

Administrative Assistant, extension 3526

Mackenzie Chown D410

<http://www.brocku.ca/environmental/>

The Environmental Sciences Program has been consolidated with the Environmental Policy Institute to form the Centre for the Environment. Students interested in pursuing a BSc in Environment are directed to the Environment entry. The Environmental Sciences Program is now closed to new students.

Program Notes

1. In all 20 credit degree programs, at least 12 credits must be numbered 2(alpha)00 or above, six of which must be numbered 2(alpha)90 or above and of these, three must be numbered 3(alpha)90 or above. In all 15 credit degree programs, at least seven credits must be numbered 2(alpha)00 or above, three of which must be numbered 2(alpha)90 or above.

Honours Program

Year 1

Year 1 is closed to new students.

Biological Sciences stream

Year 2

ENVI 1P10, 2P61 and 2Q04; CHEM 2P42; two credits from BIOL 2F01, 2P05, 2P92, 2P93, 2P96, 2P98; one Humanities context credit.

Year 3

ENVI 3P01 and 3P02; one of ENVI 2P04, 2P05, 2P09; two and one-half BIOL credits numbered 2(alpha)90 or above; one elective credit.

Year 4

ENVI 4F90, 4F91 and 4P88; two BIOL credits numbered 2(alpha)90 or above; one-half credit elective (see program note 1).

Chemistry stream

Year 2

ENVI 1P10, 2P61 and 2Q04; CHEM 2P12, 2P20, 2P32 and 2P42; one of ENVI 2P04, 2P05, 2P09; one Humanities context credit.

Year 3

ENVI 3P01 and 3P02; CHEM 3P40 and 3P41; one credit from CHEM 3P20, 3P21, 3P30, 3P31, 3P60; two elective credits.

Year 4

ENVI 4F90, 4F91 and 4P88; two CHEM credits numbered 2(alpha)90 or above; one-half elective credit (see program note 1).

Earth Sciences stream

Year 2

ENVI 1P10, 2P61 and 2Q04; ERSC 2P01, 2P21, 2P31 and 2P64; CHEM 2P42; one Humanities context credit.

Year 3

ENVI 3P01 and 3P02; ERSC 3P31, 3P61 and 3P43; ERSC 3P97 or 4P41; one of ENVI 2P04, 2P05, 2P09; one-half ERSC credit numbered 2(alpha)00 or above; one elective credit.

Year 4

ENVI 4F90, 4F91 and 4P88; ERSC 3P92, 4P31 and 4P61; one-half ERSC credit numbered 2(alpha)90 or above; one-half elective credit.

Physical Geography stream

Year 2

ENVI 1P10, 2P04, 2P05, 2P09 and 2P61; GEOG 2P07 and 2P11; CHEM 2P42; one Humanities context credit.

Year 3

ENVI 2Q04, 3P01 and 3P02; GEOG 3P56; two credits from GEOG 3M91, 3P05, 3P07, 3P10, 3P12, 3P22, 3P23, 3P24, 3P26, 3P31, 3P32, 3P33, 3P81, 3V91, 3V92; one elective credit (GEOG 1F90 recommended).

Year 4

ENVI 4F90, 4F91 and 4P88; two credits chosen from GEOG 4F11, 4P02, 4P03, 4P26, 4P28, 4P29, 4P35, 4P95; one-half elective credit.

Pass Program

Satisfactory completion of the first three years of the honours program entitles a student to apply for a pass degree.

Prerequisites and Restrictions

Students must check to ensure that prerequisites are met. Students may be deregistered, at the request of the instructor, from any course for which prerequisites and/or restrictions have not been met.

Description of Courses

See relevant calendar entries for course descriptions.

Film Studies

This program is co-ordinated by the Department of Communications, Popular Culture and Film.

Undergraduate Program Adviser
Bohdan Szuchewycz

General Information

Administrative Assistant, extension 4290
Mackenzie Chown A225
<http://www.brocku.ca/cpcf/>

The Film Studies Program is a sequence of critical and historical courses which examines a variety of approaches to film. The courses explore the nature of film language and develop an analytical perspective on film as both an art and a medium. Other courses explore issues and theories in popular culture. Students have opportunities to engage in film and video production in upper year courses, in class assignments and as part of the student Spring Festival.

Program Notes

1. Some FILM courses are cycled every two years. Students should consult with the Undergraduate Program Adviser in planning course patterns and for recommended electives.
2. Year 3 courses are normally restricted to students with at least three 2(alpha)00 credits or special permission of the instructor.
3. FILM 4F99 is strongly recommended for honours students intending to continue their studies at the graduate level. Students may not register for this course without permission of the Undergraduate Program Adviser, who should be consulted before June 30 of the previous year.
4. FREN 1F90 is strongly recommended for honours students intending to continue their studies at the graduate level.
5. In all 20 credit degree programs, at least 12 credits must be numbered 2(alpha)00 or above, six of which must be numbered 2(alpha)90 or above and of these, three must be numbered 3(alpha)90 or above. In all 15 credit degree programs, at least seven credits must be numbered 2(alpha)00 or above, three of which must be numbered 2(alpha)90 or above.

Honours Program

Year 1

FILM 1F94; COMM 1F90; one Social Science context credit; one Science context credit; one elective credit.

Year 2

FILM 2F54 or 2F97, FILM 2F90 and 2P94; one-half credit from FILM 2P95, 2V90 - 2V99; one credit from FILM 2P20, 2P21, 2P80, COMM 2F50, 2P15, 2P90; one elective credit.

Year 3

FILM 2F54 or 2F97; FILM 3P20, 3P21 and 3P96; one-half credit from FILM 2P95, 2V90 - 2V99; one credit from FILM 2P20, 2P21, 2P80, 3F27, 3F28, 3F70, 3F97, 3P92, 3P93, 3P95, THEA 3F91; one elective credit.

Year 4

FILM 4P30 and 4P31; three credits from FILM 3F27, 3F28, 3F70, 3F97, 3P80, 3P92, 3P93, 3P95, 4F80, 4F99; one elective credit.

Pass Program

Satisfactory completion of the first three years of the honours program entitles a student to apply for a pass degree.

Combined Major Program

Honours

FILM 1F94, 2F90, 2F54 or 2F97, 2P94, 2P95, 2V90 - 2V99, 3P96, 4P30 and 4P31; two credits from FILM 2F54, 2F97, 2P20 and 2P21, 3F27, 3F28, 3F97, 3P20, 3P21, 3P93, 3P95, 4F80, 4F99.

Pass

FILM 1F94, 2F90, 2P94 and 2P95; two credits from FILM 2F54, 2F97, 3F27, 3F28, 3F97, 3P20, 3P21, 3P93, 3P95, 3P96.

Certificate and Concentration in Writing

It is possible for Film Studies majors to earn either a certificate or a concentration in Writing. For details see the calendar entry for the Department of English Language and Literature.

Prerequisites and Restrictions

Students must check to ensure that prerequisites are met. Students may be deregistered, at the request of the instructor, from any course for which prerequisites and/or restrictions have not been met.

Description of Courses

Note that not all courses are offered in every session. Refer to applicable term timetable for details.

FILM 1F94
Introduction to Film Studies

Critical and historical approaches to world cinema. Close analysis of selected films in relation to their cultural contexts. *Lectures, seminar, 3 hours per week; plus weekly film lab.*

FILM 2F54
Documentary Film

(also offered as COMM 2F54 and SOCI 2F54)

The history, theory, aesthetics and cultural implications of documentary film and other media.

Lectures, seminar, 3 hours per week; plus weekly film lab.

Prerequisite: one of FILM 1F94, COMM 1F90, SOCI 1F90 or permission of the instructor.

FILM 2F90
Film History and Research Methods

Approaches to film history, with emphasis on classical Hollywood cinema, European art cinema and the avant-garde.

Lectures, seminar, 3 hours per week; plus weekly film lab.

Prerequisite: FILM 1F94.

FILM 2F97
Canadian Cinema

(also offered as COMM 2F97)

A critical and historical study of Canadian cinema and selected directors.

Lectures, seminar, 3 hours per week; plus weekly film lab.

Prerequisite: one of FILM 1F94, COMM 1F90, DRAM 2F97 or permission of the instructor.

FILM 2P20
Introduction to Popular Culture

(also offered as COMM 2P20 and PCUL 2P20)

Historical, theoretical and critical approaches to various forms of popular culture (e.g., film, music, television, literature, periodicals and advertising).

Lectures, seminar, lab, 4 hours per week.

Prerequisite: one of FILM 1F94, CANA 1F91, COMM 1F90 or permission of the instructor.

FILM 2P21
Canadian Popular Culture

(also offered as COMM 2P21 and PCUL 2P21)

A survey of the media in Canada. Studies in the popular arts, with special reference to the ways in which institutions (e.g., CBC, NFB) and selected artists identify and express a Canadian cultural imagination.

Lectures, seminar, lab, 4 hours per week.

Prerequisite: FILM 2P20 or permission of the instructor.

FILM 2P80
Italian Cinema

(also offered as ITAL 2P80)

Major film directors and cultural trends in Italian cinema. Films studied include those by De Sica, Fellini, Antonioni and Bertolucci.

Lectures, 3 hours per week, plus film lab.

Note: given in English. Knowledge of Italian not necessary.

Italian majors will complete assignments in Italian.

Students completing this course will forfeit credit in ITAL 2P92.

FILM 2P94
Popular Cinema

(also offered as COMM 2P94 and PCUL 2P94)

Popular cinema as art and institution with emphasis on film genres and cultural contexts.

Lectures, seminar, 3 hours per week; plus weekly film lab.

Prerequisite: FILM 1F94.

Students completing this course will forfeit credit in FILM 3P94.

FILM 2P95
Film Theory

Study of the major film theorists. Application of the theories to selected films.

Lectures, seminar, 3 hours per week; plus weekly film lab.

Prerequisite: FILM 1F94 or permission of the department.

Students completing this course will forfeit credit in FILM 2P91 and FILM 3P91.

FILM 2V90 - 2V99
Special Studies in Film

Studies in a specialized area of film. Topics to be announced by the department.

Lectures, seminar, 3 hours per week; plus weekly film lab.

Prerequisite: FILM 1F94 or permission of the department.

FILM 3F27
Basic Production: Film

Introduction to the theory and practice of film techniques: critique of films and production work.

Workshops, seminar, 3 hours per week; additional production time as required.

Restriction: permission of the department.

Prerequisite: two FILM credits and permission of the instructor.

Note: enrolment is limited to 15 students. Materials fee required.

Film Studies

FILM 3F28

Basic Production: Video

(also offered as COMM 3F28)

Introduction to the theory and practice of video techniques: critique of videos and production work.

Workshops, seminar, 3 hours per week; additional production time as required.

Restriction: permission of the department.

Prerequisite: two FILM credits and permission of the instructor.

Note: enrolment limited to 15 students. Materials fee required.

FILM 3F70

Film Studies: Experiential Learning

(also offered as COMM 3F70)

Internship in professional film, video or media production, distribution or exhibition. Cultural and economic context of media organizations, technology systems and government funding agencies.

Tutorial, 3 hours per week; plus internship placement time.

Restriction: open to FILM (single or combined) and COMM (Media and Culture stream) majors with a minimum of 10.0 overall credits, a major average of 70 percent, a non-major average of 60 percent and permission of the Undergraduate Program Adviser.

Note: enrolment limited to 15 students. An administration fee is required.

FILM 3F97

Screened Women

(also offered as COMM 3F97 and WISE 3F97)

A critical study of women's representation as an aesthetic and cultural subject, from classical Hollywood cinema to contemporary women's cinema, in the context of feminist film theories, and including other popular media (e.g., music videos, television).

Lectures, seminar, 3 hours per week; plus weekly film lab.

Prerequisite: one of FILM 2F90, FILM 2P20 and 2P21, WISE 1F90 and 2P91 or permission of the instructor.

FILM 3P20

Television Studies

(also offered as COMM 3P20 and PCUL 3P20)

Historical, theoretical and critical approaches to television.

Lectures, seminar, lab, 4 hours per week.

Prerequisite: FILM 2P20 and 2P21 or 2F90 or permission of the instructor.

Students completing this course will forfeit credit in FILM 3F50.

FILM 3P21

Canadian Television

(also offered as COMM 3P21 and PCUL 3P21)

Historical theoretical and critical approaches to Canadian television.

Lectures, seminar, lab, 4 hours per week.

Prerequisite: FILM 3P20 or permission of the instructor.

Students completing this course will forfeit credit in FILM 3F50.

FILM 3P92

Technology and Culture

(also offered as COMM 3P92 and PCUL 3P92)

Studies in the effects of technological change on cultural forms and the representations of technology in different media.

Lectures, lab, seminar, 4 hours per week

Prerequisite: FILM 2P20 or 2P21 or permission of the instructor.

FILM 3P93

Authorship in the Cinema

Issues of personal and collaborative creativity in film through the study of the style, themes and development of selected film makers.

Lectures, seminar, 3 hours per week; plus weekly film lab.

Prerequisite: FILM 2F90 or permission of the instructor.

FILM 3P95

National Cinema

Study of selected national cinemas with emphasis on their relationship to national cultural traditions.

Lectures, seminar, 3 hours per week; plus weekly film lab.

Prerequisite: FILM 2F90 or permission of the instructor.

FILM 3P96

Issues in Popular Culture

(also offered as COMM 3P96 and PCUL 3P96)

Specialized studies in different media, or the role of different media in specific, social, historical or theoretical contexts.

Lectures, seminar, lab, 3 hours per week plus weekly film labs.

Prerequisite: FILM 2F90 or FILM 2P20 and 2P21 or permission of the instructor.

FILM 4F80

Directed Reading

Directed individual or group reading in an area of Film Studies.

Restriction: permission of the Undergraduate Program Adviser.

Prerequisite: FILM 3P91.

Note: students are responsible for arranging their course with a faculty member, in consultation with the Undergraduate Program Adviser and must submit a written proposal before registration. The reading may not be on the topic of the student's FILM 4F99 thesis.

FILM 4F99

Honours Thesis

A thesis on a topic of mutual interest to the student and the instructor, with a critical, historical or contemporary focus.

Restriction: open to FILM (single or combined) majors with a minimum of 14.0 overall credits, a minimum 70 percent major average, a minimum 60 percent non-major average, approval to year 4 (honours) and permission of the Undergraduate Program Adviser.

Prerequisite: FILM 4P30 and 4P31 (4F30) (may be taken concurrently).

Note: to register in the honours thesis, the student must consult the Undergraduate Program Adviser about topics, department regulations and the selection of an adviser.

Students completing this course will forfeit credit in FILM 4F94.

FILM 4P30

Theories of Mass Culture

(also offered as COMM 4P30 and PCUL 4P30)

Studies in cultural theory and its application to mass media texts, with special reference to the work of the Frankfurt School, French Structuralism and British Cultural Studies.

Lectures, lab, seminar, 4 hours per week.

Restriction: open to FILM (single or combined), COMM (single or combined) or PCUL (single or combined) majors with approval to year 4 (honours) or permission of the instructor.

Students completing this course will forfeit credit in FILM (COMM/PCUL) 4F30.

FILM 4P31

Theories of the Visible

(also offered as COMM 4P31 and PCUL 4P31)

Central 20th-century developments in the theories of visibility and their relevance to the field of media studies.

Lectures, lab, seminar, 4 hours per week.

Restriction: open to FILM (single or combined), COMM (single or combined) and PCUL (single or combined) with approval to year 4 (honours) or permission of the instructor.

Students completing this course will forfeit credit in FILM (COMM/PCUL) 4F30.

Fine Arts

Chair
Murray Kropf

Dramatic Literature and Theatre

Professors
Mary Jane Miller, Robert C. Nunn

Associate Professor
Peter Feldman

Assistant Professor
Glenys McQueen-Fuentes

Part-time Instructors
Dramatic Literature: Mark Ceolin, Nadine Sivak
Theatre: Virginia Reh (3rd year acting, directing, playwriting), Judith Marquis (scenic painting), Mary Kathryn Newman (voice), Carolyn MacKenzie (theatre administration), Ken Garrett (lighting design), Cindy Emery (make-up and wigs), Kathryn Kerr (props), Meredith Macdonald (stage management)
Drama-in-Education: Debra McLauchlan, Bill Manson, Ann Manson, Javier Soyka, Christina Rozendaal, Helen Zdriluk

Resident Company, Theatre Beyond Words
Terry Judd, Linda Levesque, Shelley Marriage, Harro Maskow, Stephen Miller, Robin Patterson, Christine Stephen, Kevin Stewart

Visual Arts

Associate Professors
Murray Kropf, MeriJean Morrissey-Clayton, Derek Knight

Assistant Professor
Jean Bridge

Visiting Artist
Andy Fabo

Part-time Instructors
David Aurandt, Judith Marquis

General Information

Administrative Assistant, extension 3214
Thistle west 135
<http://www.brocku.ca/finearts/>

At Brock the study of the arts is concerned with their nature, function and history, from the classics to popular culture, from

ancient drawings and rituals to the avant-garde. Through critical analysis of classic works and personal creative development, the student will gain an awareness of the ways in which the artistic media function. Our aim is to contribute to the vitality of the arts by developing sensitive, creative and articulate artists, teachers, audiences and graduates who are disciplined and adaptable, with both research skills and experience at collaborating effort.

The Department of Fine Arts offers honours, pass, single and combined major programs in four fields of study: Dramatic Literature, Drama and Theatre in Education, Theatre and Visual Arts. In addition, the department offers a Bachelor of Arts with a Major in Theatre. These programs represent the student's choice of major within the department. Single honours and pass programs are also offered in Contemporary Cultural Studies. The department also offers a Certificate and Concentration in Drama in Education.

Please consult the relevant entry for a listing of courses and program requirements.

Facilities

The Theatre Program uses the facilities of the Centre for the Arts including the 543-seat Sean O'Sullivan Theatre with its thrust stage, The Studio and The Playhouse. Scenery, properties and construction workrooms are part of the Brock Centre for the Arts complex.

Visual Arts facilities include a slide collection, art studios and a darkroom.

Extracurricular activities

The department presents and sponsors theatre productions, exhibitions, public lectures and an annual spring festival of student work. The University regularly hosts mime performances and workshops by its resident company, the internationally acclaimed *Theatre Beyond Words*.

The Brock Centre for the Arts presents a professional season of international and Canadian artists in theatre, dance and music, family and children's events. In addition, the Visual Arts Program arranges for a variety of visiting artists and with Brock's Fine Arts Committee organizes a program of art exhibitions.

Language Requirement for Humanities Majors

Students in the Department of Fine Arts are required to complete one credit in a language other than English. Where half credit courses are used to satisfy the requirements, both half credits must be in the same language. It is recommended that students fulfil this requirement by year 2. (Theatre students are

urged to fulfill this requirement in year 1.)

Contemporary Cultural Studies

This program is designed for students who wish to gain a critical view of contemporary culture from a number of different perspectives. Students are required to discuss their program with the Department Chair.

Program Notes

1. Students preparing for graduate studies are advised to take DRAM 4F94 or FILM 4F94.
2. In all 20 credit degree programs, at least 12 credits must be numbered 2(alpha)00 or above, six of which must be numbered 2(alpha)90 or above and of these, three must be numbered 3(alpha)90 or above. In all 15 credit degree programs, at least seven credits must be numbered 2(alpha)00 or above, three of which must be numbered 2(alpha)90 or above.

Honours Program

Year 1

DRAM 1F93 or VISA 1F90; CANA 1F91 or COMM 1F90; FILM 1F94; one Humanities language credit; one Science context credit or Social Science context credit.

Year 2

DRAM 1F93 or VISA 1F90; FILM 2P20 and 2P21; two credits from CANA 2F91, COMM 2F92, DRAM 2F97 or 2M93, FILM 2F54, 2F90, 2F97, VISA 2F26, 2P50, 2P51, 3P05, 3P06; the Science context credit or Social Science context credit not taken in year 1.

Year 3

FILM 3P20 and 3P21 or 3F97; two credits from DRAM 3F93, FILM 2P95, VISA 3P90, 3P91; one credit from CANA 3V90-3V94, 3V95-3V99, COMM 3F10, DRAM 2F97, FILM 2F54, 2F97, 3P93, 3P94, 3P95, 3P96, VISA 2P50, 2P51, 3P05, 3P06; one elective credit.

Year 4

DRAM 4F90 or FILM 4P30 and 4P31; three credits from CANA 3V90-3V94, CANA 3V95-3V99, COMM 4P50, 4P51, DRAM 3F93, 4F94, FILM 2P94, 3P20 and 3P21 or 3F97, 3P93, 3P95, 3P96, VISA 3P90, 3P91; one elective credit.

Pass Program

Satisfactory completion of the first three years of the honours program entitles students to apply for a pass degree.

Prerequisites and Restrictions

Students must check to ensure that prerequisites are met. Students may be deregistered, at the request of the instructor, from any course for which prerequisites and/or restrictions have not been met.

Description of Courses

Note that not all courses are offered in every session. Refer to the applicable term timetable for details.

FAPA 2M90-2M99

Special Studies in Fine Arts

Studies of a particular art form (e.g., dance) or of a selected area across a range of forms (e.g., arts administration). Topics to be announced by the department.

Lectures, seminar, 3 hours per week.

FAPA 4F99

Honours Thesis

A critical, historical or creative project in fine arts of mutual interest to the student and the instructor. Students are urged to arrange and plan their projects in the spring for the following year.

Restriction: a written proposal must be approved in the department before registration.

French, Italian and Spanish

Chair

Leonard A. Rosmarin
Leslie A. Boldt-Irons (as of July 1, 2000)

Co-ordinator of programs

Ernesto J. Virgulti
Corrado J. A. Federici (as of July 1, 2000)

Professors

Alexandre L. A. Amprimoz, Sandra L. Beckett, Leslie A. Boldt-Irons, Dennis F. Essar, Leonard A. Rosmarin

Associate Professors

Irene M. F. Blayer, Corrado J. A. Federici, Jane M. Koustas

Assistant Professors

Esther Raventós-Pons, Ernesto J. Virgulti

Visiting Professor

Paolo Cianfrone

General Information

Administrative Assistant, extension 3308
Mackenzie Chown A207
<http://www.brocku.ca/frenitalspan/>

The Department of French, Italian and Spanish aims to provide students with a thorough and comprehensive coverage of language (spoken and written), literature and culture. Students are given encouragement to visit the language environment in which they are interested.

Third-year in France and Spring/Summer Immersion

Through a program offered by the department in collaboration with the University of Winnipeg, third-year students in French have the opportunity of spending one academic year at the Université de Perpignan in Perpignan, France, under the supervision of a resident director chosen alternately from Brock and the University of Winnipeg. In addition, the department favours and facilitates participation by French students at all levels in Spring/Summer French immersion programs offered in France and Québec.

Summer Studies in Italy

The department, in conjunction with York University, offers a summer program in Italy. The courses are held in Florence and Rome and the program runs from mid-May to the end of June. Students have their choice of a half credit course (three weeks) or a full credit course (six weeks). Students must register by the first week of April. See the department for details and registration.

Third-year in Mexico

Students have the opportunity to study during their third year at the Instituto Tecnológico y de Estudios Superiores de Monterrey (ITESM) or the Universidad Regiomontana, Mexico. In addition to studying Spanish language, literature and culture, students may also take courses in Business, the Humanities, the Social Sciences and other areas. Students must apply in their second year and have credit in SPAN 1F90.

Concurrent BA/BEEd

The Department of French, Italian and Spanish and the Faculty of Education co-operate in offering a concurrent BA/BEEd program. The BA/BEEd program combines the BA honours program with teacher education for students interested in teaching at the Intermediate/Senior level (grades 7 - 12/OAC). Refer to the Education - Concurrent BA/BEEd French Teaching Specialization program listing for additional information.

Program Notes

1. Students with OAC standing or equivalent in the language (FREN, ITAL or SPAN) take 1F90 in year 1. They may not take courses numbered 1F00, 1F01, 1P01, 1P02 and 1P03 without permission from the department. Permission is granted only in the most exceptional cases. Français and Immersion students may take FREN 2F00 and 2F03 with permission of the department; normally, they take FREN 1F90.
2. Students without OAC standing or equivalent in the language take courses numbered 1F00, 1F01, 1P01, 1P02 or 1P03, according to their background. See individual course descriptions.

3. Students who register in FREN 1P01, 1P02, 1P03, ITAL 1F00, 1F01 or SPAN 1F00 must bring their official high school transcript to the department to receive departmental confirmation of registration before the end of the first week of classes (see Undergraduate Academic Calendar). If they do not, they will be deregistered.

4. Courses numbered 1F90 and below are taught in the language to the extent possible; courses numbered 2(alpha)00 and above are taught entirely in the language, unless otherwise noted in the course description.

5. FREN 1P01, 1P02, 1P03, ITAL 1F00, 1F01 and SPAN 1F00 may be taken for degree credit, but cannot be used to meet requirements for major programs in the languages concerned.

6. Language courses numbered 1F00, 1F01, 1P01, 1P02, 1P03, 1F90 and 2F00 constitute a sequence. Once credit has been obtained in one of these courses, students are not allowed to take for credit a course in the same language with a lower number in the sequence. Students in French may not take two courses at different levels in the sequence during the same session. Students admitted to any FREN course numbered 2(alpha)00 or above may not concurrently or subsequently take a FREN course at the 1(alpha)00 level. This regulation also applies to courses taken elsewhere which have been granted equivalency to FREN courses numbered 2(alpha)00 or above.

7. In all French major programs, FREN 1F90 is normally taken in year 1; FREN 2F00 and 2F03 are taken concurrently in year 2; FREN 3P03 (or FREN 3E81 in Perpignan) is required in year 3; FREN 4P03 is required in year 4. In Italian major programs, ITAL 2F00 is required in year 2. In Spanish major programs, SPAN 2F00 is required in year 2. Year 3 students studying in Perpignan take FREN 3E81; two FREN credits numbered 3(alpha)00 or above; two elective credits.

8. Students in a single honours or pass program in French must complete at least one credit in language and one credit in literature, at both the 3(alpha)00 and 4(alpha)00 levels respectively.

9. Students in combined major programs in French must similarly complete at least one-half credit in language and one-half credit in literature, at both the 3(alpha)00 and 4(alpha)00 levels respectively.

10. Courses noted as given in English may be included in major programs in French, Italian and Spanish. Seven-credit and eleven-credit major programs may include no more than 1.5 and 2.0 credits respectively. Five-credit major programs may include no more than 1.0 credit of such courses.

11. The department reserves the right to refuse admission to and/or credit for any of its language courses to a student who has, in the view of the department, a level of competence unsuited to that course.

12. In all 20 credit degree programs, at least 12 credits must be numbered 2(alpha)00 or above, six of which must be numbered 2(alpha)90 or above and of these, three must be numbered 3(alpha)90 or above. In all 15 credit degree programs, at least seven credits must be numbered 2(alpha)00 or above, three of which must be numbered 2(alpha)90 or above.

Honours Programs

French

Year 1

FREN 1F90; one Science and one Social Science context credit; two elective credits.

Year 2

FREN 2F00 and 2F03; one credit in FREN numbered 2(alpha)00 or above; two elective credits.

Year 3

FREN 3P03; two and one-half FREN credits numbered 3(alpha)00 or above; two elective credits. (See program note 7 and 8.)

Year 4

FREN 4P03; two and one-half FREN credits numbered 4(alpha)00 or above; one FREN credit numbered 3(alpha)00 or above; one elective credit.

Spanish

The single honours program in Spanish cannot be completed on campus in the normal four-year period. It is intended either to be fulfilled using courses completed at other institutions in Canada or abroad or on a part-time basis over more than four years.

Year 1

SPAN 1F90; one Science and one Social Science context credit; two elective credits.

Year 2

SPAN 2F00, 2P10, 2P11, 2P90; two and one-half elective credits.

Year 3

Three and one-half SPAN credits numbered 3(alpha)90 or above; one and one-half elective credits.

Year 4

Four SPAN credits numbered 3(alpha)90 or above; one elective credit.

French, Italian and Spanish

Pass Programs

French

Satisfactory completion of the first three years of the honours program entitles a student to apply for a pass degree.

Italian

Year 1

ITAL 1F90; one Science and one Social Science context credit; two elective credits:

Year 2

ITAL 2F00; two credits from ITAL 2F50, 2P10, 2P11, 2P80, 2P84, 2P85, 2P90, 2P95; two elective credits.

Year 3

Three ITAL credits numbered 2(alpha)90 and above: two elective credits.

Spanish

Satisfactory completion of the first three years of the honours program entitles a student to apply for a pass degree.

Combined Major Programs

Honours

Year 1

One 1F90 credit from the chosen language; one credit from the co-major discipline; one Science and one Social Science context credit; one elective credit.

Year 2

Two credits from the chosen language (FREN 2F00 and 2F03; ITAL 2F00 and one further credit; SPAN 2F00 and one further credit); two credits from the co-major discipline; one elective credit.

Year 3

Two credits from the chosen language numbered 2(alpha)90 or above (FREN must include 3P03, or 3E81 in Perpignan); two credits from the co-major discipline; one elective credit.

Year 4

Two credits from the chosen language numbered 3(alpha)90 or above (FREN must include 4P03); two credits from the co-major discipline; one elective credit.

Pass

Satisfactory completion of the first three years of the honours program entitles a student to apply for a pass degree.

Prerequisites and Restrictions

Students must check to ensure that prerequisites are met. Students may be deregistered, at the request of the instructor, from any course for which prerequisites and/or restrictions have not been met.

Description of Courses

Note that not all courses are offered in every session. Refer to the applicable term timetable for details.

FRENCH, ITALIAN AND SPANISH

FISP 2P94

Comparative Romance Linguistics

(also offered as LING 2P94)

A comprehensive survey of the Romance languages; in their evolution from Latin (phonetics and phonology); their structures and related concepts (syntax, morphology and semantics); differences and mutual influences. Material is drawn from several Romance languages.

Lectures, seminar, 3 hours per week.

Prerequisite: one of FREN 1F90, ITAL 1F90, SPAN 1F90 or LING 1F94 or permission of the instructor.

Note: may be counted as part of a major program in French, Italian or Spanish.

FISP 2P99

Theories of Translation

Historical and contemporary perspectives on the practice of translation; linguistic, philosophic, semiotic theorization; contrastive, intralingual, interlingual, intercultural approaches; visibility and invisibility of the translator; fidelity and creativity; literary and automatic translation.

Prerequisites: one of FREN 1F90, ITAL 1F90, SPAN 1F90 or permission of the department.

Lectures, 3 hours per week.

Note: the course is taught in English.

FISP 3P90

Romance Linguistics

Linguistic theories, methods and problems as applied to French, Italian and Spanish. Phonetic structure, morphology, syntax and semantics.

Lectures, 3 hours per week.

Prerequisite: one of FREN 2F00, ITAL 2F00, SPAN 2F00.

FISP 4P01

History of Romance Languages

Chronological development of French, Italian and Spanish. Their origins to modern times. The formation and evolution of these languages with some consideration of the sociopolitical factors affecting language change.

Lectures, 3 hours per week.

Prerequisites: FISP 2P94; one of FREN 2F00, ITAL 2F00, SPAN 2F00.

FRENCH

FREN 1F90

Intermediate French

Grammar review; literary, cultural and journalistic readings; practice in reading, writing, oral expression and comprehension.

Lectures, 3 hours per week; language lab, 1 hour per week.

Prerequisite: FREN 1P03 or OAC French or OAC Français or French immersion.

FREN 1P01

Introductory French I

Basic French: vocabulary, structures, pronunciation, spoken French. Oral and written exercises. Language laboratory.

Lectures, 3 hours per week; language lab, 1 hour per week.

Note: may be taken by students who have Ontario grade 9 French or equivalent or less. See program notes regarding departmental confirmation of registration.

FREN 1P02

Introductory French II

Continuation of FREN 1P01. Basic French: vocabulary, structures, pronunciation, spoken French. Oral and written exercises. Language laboratory.

Lectures, 3 hours per week; language lab, 1 hour per week.

Prerequisite: FREN 1P01 or Ontario grade 10 or 11 French or equivalent.

Note: see program notes regarding departmental confirmation of registration.

FREN 1P03

Introductory French III

Continuation of FREN 1P02. Basic French: vocabulary, structures, pronunciation, spoken French. Oral and written exercises. Language laboratory.

Lectures, 3 hours per week; language lab, 1 hour per week.

Prerequisite: FREN 1P02 or Ontario grade 12 French or equivalent.

Note: see program notes regarding departmental confirmation of registration.

FREN 2F00

Grammar and Composition

Intensive grammar review; literary expression; composition; critical written and oral expression through discussion of general topics.

Lectures, 3 hours per week.

Prerequisite: FREN 1F90.

FREN 2F03

Introduction to Literary Studies in French

A selection of works representing different genres, historical periods and cultural traditions. Dissertation, technical vocabulary, rhetorical terminology and interpretative concepts.

Lectures, 3 hours per week.

Prerequisite: FREN 1F90.

Students completing this course will forfeit credit in any French literature course numbered 2(alpha)90 or higher.

FREN 2P44

Children's Literature in French: The Picture Book

Selection of children's picture books from France, Québec and other francophone regions, with emphasis on the contemporary period. Theory of the picture book and its use in the classroom.

Lectures, 3 hours per week.

Prerequisite: FREN 1F90.

FREN 2P57

French Phonetics

Introduction to phonetic theory and the phonetic system of standard French. International Phonetic Alphabet and practical applications: phonetic transcription, pronunciation correction.

Lectures, 3 hours per week; language lab, 1 hour per week.

Prerequisite: FREN 1F90.

FREN 2P65

Culture and Civilization of France to 1700

From prehistory to the end of the 17th century; art, music, architecture and aesthetics; intellectual trends; history, politics and society.

Lectures, 3 hours per week.

Prerequisite: FREN 1F90.

Students completing this course will forfeit credit in FREN 2P60 and 3F82.

FREN 3E81

Principles of Writing

Normative grammar, stylistics; modes of discourse in literary and non-literary texts; writing practice.

Lectures, seminar, 3 hours per week.

Prerequisite: FREN 2F00.

Note: offered in Perpignan, France.

Students completing this course will forfeit credit in FREN 3F81 and FREN 3P03.

FREN 3E82

Contemporary France: Culture and Society

Social, cultural, religious and political institutions; folklore. Cultural excursions in the Languedoc-Roussillon area.

French, Italian and Spanish

Lectures, 3 hours per week.

Prerequisite: one FREN credit numbered 2(*alpha*)00 or above.

Note: offered in Perpignan, France.

Students completing this course will forfeit credit in FREN 3F82.

FREN 3P03

Grammar and Stylistics

Advanced grammar; stylistics and semantics of contemporary French. Applications to composition and translation.

Lectures, seminar, 3 hours per week.

Prerequisite: FREN 2F00.

Students completing this course will forfeit credit in FREN 3E81 and 3F81.

FREN 3P04

Principles of Translation I

Translation theory; principles of professional translation and automatic translation; translation software; cultural analysis of business institutions; applications to advanced composition and translation of technical texts.

Lectures, seminar, 3 hours per week.

Prerequisite: FREN 2F00.

FREN 3P05

French Linguistics

Contemporary linguistic theory from Ferdinand de Saussure to the present including linguistic terms and concepts, the linguistic sign and Indo-European languages. Introduction to various forms of linguistic description including phonology, morphology, syntax, semantics, lexicology, sociolinguistics.

Lectures, 3 hours per week.

Prerequisite: FREN 2F00 or permission of the instructor.

Students completing this course will forfeit credit in FREN 2P55.

FREN 3P31

Seventeenth-Century French Literature

Classicism; religious and moral currents; texts chosen from various genres; authors may include Corneille, Molière, Racine, Mme de La Fayette, La Fontaine, Pascal, Descartes.

Lectures, seminar, 3 hours per week.

Prerequisites: FREN 2F00 and 2F03.

FREN 3P37

Eighteenth-Century French Literature

Narrative, theatre and philosophical writing; critical voices, ideological concerns; authors may include Montesquieu, Marivaux, Voltaire, Diderot, Rousseau, Beaumarchais, Laclos.

Lectures, seminar, 3 hours per week.

Prerequisites: FREN 2F00 and 2F03.

FREN 3P44

Children's Literature in French: Beyond the Picture Book

Novels, poetry and theatre for children from the 17th century to the present, with emphasis on the contemporary period. Texts from France, Québec and other francophone regions. Theory of children's literature.

Lectures, seminar, 3 hours per week.

Prerequisites: FREN 2F00 and 2F03.

Students completing this course will forfeit credit in FREN 2P43 and 3P43.

FREN 3P45

Nineteenth-Century French Literature to 1850

Romanticism, Parnasse and other currents. Texts chosen from various genres. Authors may include Stendhal, Balzac, Vigny, Lamartine, Hugo, Musset.

Lectures, seminar, 3 hours per week.

Prerequisites: FREN 2F00 and 2F03.

FREN 3P53

Twentieth-Century French Literature to 1935

Ideological and aesthetic perspectives. Texts chosen from various genres. Authors may include Proust, Gide, Claudel, Apollinaire, Breton.

Lectures, seminar, 3 hours per week.

Prerequisites: FREN 2F00 and 2F03.

FREN 3P63

African Literature in French

African narrative, poetry and theatre. Historical, cultural, ideological and theoretical concerns.

Lectures, seminar, 3 hours per week.

Prerequisites: FREN 2F00 and 2F03.

Students completing this course will forfeit credit in FREN 3P62.

FREN 3P64

Caribbean Literature in French

Narrative, poetry and theatre. Historical, cultural, ideological and theoretical concerns.

Lectures, seminar, 3 hours per week.

Prerequisites: FREN 2F00 and 2F03.

Students completing this course will forfeit credit in FREN 3P62.

FREN 3P65

Culture and Civilization of France from 1700 to the Present

Art, music, architecture and aesthetics from the beginning of the 18th century to the present day; intellectual trends; history, politics and society.

Lectures, 3 hours per week.

Prerequisites: FREN 2F00 and 2F03.

Students completing this course will forfeit credit in FREN 2P60, 3E82 and 3F82.

FREN 3P73

Canadian Literature in French to 1939

Analysis of major texts chosen from various genres. Historical, sociological and ideological perspectives.

Lectures, seminar, 3 hours per week.

Prerequisites: FREN 2F00 and 2F03.

FREN 3P74

Canadian Literature in French from 1939 to 1960

Analysis of major texts chosen from various genres. Historical, sociological and ideological perspectives.

Lectures, seminar, 3 hours per week.

Prerequisites: FREN 2F00 and 2F03.

FREN 3P85

Women Writers of la francophonie

(also offered as WISE 3P85)

Francophone women writers outside of France. Ideological and aesthetic perspectives. Texts chosen from various genres. Authors may include Hébert, Marchessault, Brossard, Condé, Mariama Bâ.

Lectures, seminar, 3 hours per week.

Prerequisites: FREN 2F00 and 2F03.

FREN 3P86

Women Writers of France

(also offered as WISE 3P86)

Texts chosen from various genres. Authors may include M. de France, M. de Navarre, Sévigné, Sand, Colette, Beauvoir, Duras, Yourcenar.

Lectures, seminar, 3 hours per week.

Prerequisites: FREN 2F00 and 2F03.

FREN 3X83

Literary Analysis and Commentary

Contemporary methodologies of literary analysis: recognition, study and appreciation of the elements of style and content, together with the organization of presentations in both oral and written form.

Lectures, 3 hours per week.

Prerequisites: FREN 2F00 and 2F03.

Note: offered in Perpignan, France.

Students completing this course will forfeit credit in FREN 3P83.

FREN 3X84

Textual Analysis and Commentary

Techniques of analysis and commentary as applied to both literary and non-literary texts. Students will prepare oral and written reports on selected passages.

Lectures, 3 hours per week.

Prerequisites: FREN 2F00 and 2F03.

Note: offered in Perpignan, France.

Students completing this course will forfeit credit in FREN 3P84.

FREN 4P00

History of the Language

Chronological development of French from its origins to modern French. The formation and evolution of the language with some consideration of the sociopolitical factors affecting language change.

Lectures, 3 hours per week.

Prerequisites: FREN 2F00 and two FREN credits numbered 3(alpha)00 or above.

FREN 4P03

Advanced Composition and Stylistics

Advanced composition, formal considerations and writing tools, stylistics, rhetoric, idiomatic expression.

Lectures, 3 hours per week.

Prerequisite: FREN 3P03 or 3E81 (3F81).

Students completing this course will forfeit credit in FREN 4F01, 4P01, 4P02 and 4P15.

FREN 4P04

Principles of Translation II

Continuation of FREN 3P04. Scientific and technical terminology. Introduction to documentation writing and translation. Case studies.

Lectures, 3 hours per week.

Prerequisites: FREN 3P03 and 3P04 or 3E81 (3F81).

Students completing this course will forfeit credit in FREN 4F01, 4P01 and 4P02.

FREN 4P12

French Language and Literature of the Middle Ages

Texts chosen from various genres, from the *chanson de geste* to the 15th century. Introduction to Old French.

Lectures, seminar, 3 hours per week.

Prerequisites: FREN 2F03 and two FREN credits numbered 3(alpha)00 or above, with at least one-half credit in literature.

FREN 4P20

Sixteenth-Century Literature

Humanism within the French Renaissance, *Pléiade* poetry. Authors studied include Rabelais, Du Bellay, Ronsard, Marguerite de Navarre, Montaigne.

Lectures, 3 hours per week.

Prerequisites: FREN 2F03 and two FREN credits numbered 3(alpha)00 or above, with at least one-half credit in literature.

FREN 4P44

Nineteenth-Century French Literature after 1850

Realism, Naturalism, Symbolism. Texts chosen from various genres. Authors may include Flaubert, Zola, Baudelaire, Rimbaud, Verlaine, Mallarmé.

Lectures, seminar, 3 hours per week.

Prerequisites: FREN 2F03 and two FREN credits numbered 3(alpha)00 or above, with at least one-half credit in literature.

FREN 4P55

Twentieth-Century French Literature from 1935 to 1970

Ideological and aesthetic perspectives. Texts chosen from various genres. Authors studied may include Malraux, Camus, Sartre, Giraudoux, Robbe-Grillet, Beckett, Char.

Lectures, seminar, 3 hours per week.

Prerequisites: FREN 2F03 and two FREN credits numbered 3(alpha)00 or above, with at least one-half credit in literature.

French, Italian and Spanish

FREN 4P56

French Literature after 1970

Contemporary aesthetic movements. Texts chosen from various genres. Authors studied may include Le Clézio, Yourcenar, Tournier, Bonnefoy, Modiano, Duras.

Lectures, seminar, 3 hours per week.

Prerequisites: FREN 2F03 and two FREN credits numbered 3(alpha)00 or above, with at least one-half credit in literature.

FREN 4P75

Canadian Literature in French after 1960

Texts from various genres representing major aesthetic movements.

Lectures, seminar, 3 hours per week.

Prerequisites: FREN 2F03 and two FREN credits numbered 3(alpha)00 or above, with at least one-half credit in literature.

FREN 4P94

Advanced French for Teachers

For advanced students presently teaching or intending to teach French. Grammar review from the teaching point of view; pronunciation and expression; cultural concerns.

Lectures, seminar, 3 hours per week.

Prerequisites: FREN 2F00 and two FREN credits numbered 3(alpha)00 or above, with at least one-half credit in language.

FREN 4P96

Critical Theory and Methodology

Twentieth century approaches to literary criticism: sociological, phenomenological, psychoanalytic approaches; structuralism, semiotics, narratology, deconstruction. Bibliographical research.

Lectures, seminar, 3 hours per week.

Prerequisites: FREN 2F03 and two FREN credits numbered 3(alpha)00 or above, with at least one-half credit in literature.

FREN 4V60-4V99

Special Research Topics in French Literature

Course content will vary, depending upon the interests of instructors and students.

Lectures, 3 hours per week.

Prerequisites: FREN 2F03 and two FREN credits numbered 3(alpha)00 or above, with at least one-half credit in literature.

FREN 4V79

2000-2001: Recycling Fairy Tales in Text for Children

Retelling of fairy tales in a variety of genres (picture book, short story, novel, theatre, comic book, film). Ideologies, social and cultural values, Aesthetic conventions and codes.

Lectures, 3 hours per week.

Prerequisites: FREN 2F03 and two FREN credits numbered 3(alpha)00 or above, with a least one-half credit in literature.

ITALIAN

ITAL 1F00

Introductory Italian

A beginner's course for students with no background in Italian. Acquisition of reading and oral skills, basic grammar; conversation and composition.

Lectures, 3 hours per week; language lab, 1 hour per week.

ITAL 1F01

Introductory Italian

A beginner's course for students of Italian background who have not formally studied the language. Acquisition of reading and oral skills; basic grammar, composition and conversation.

Lectures, 3 hours per week; language lab, 1 hour per week.

Credit will not be granted to students who have prior credit in ITAL 1F00.

ITAL 1F90

Intermediate Italian

Grammar review; emphasis on more complex structures; composition and oral practice. Discussions based on selected literary texts.

Lectures, 3 hours per week; language lab, 1 hour per week.

Prerequisite: ITAL 1F00 or 1F01 or OAC Italian or two or more years of high school Italian or permission of the instructor.

ITAL 1P95

Italian Culture and Civilization

The artistic heritage of Italy and the intellectual, political and social forces that have shaped the mentality and way of life of the Italians. Selected texts and multi-media material.

Lectures, 3 hours per week.

Note: given in English.

Students completing this course will forfeit credit in ITAL 1F95.

ITAL 2F00

Language, Literature and Culture

Advanced grammar, oral and written practice. Introduction to the study of film, literary texts and principles of criticism.

Lectures, 3 hours per week.

Prerequisite: ITAL 1F90 or permission of the department.

ITAL 2F50

Italian Language and Culture

Intensive language study designed to develop skills in composition, stylistics and oral expression. The cultural component focuses on the historical, cultural and literary heritage of Florence and Rome.

Prerequisite: ITAL 1F90 or permission of the instructor.

Note: offered in Italy.

ITAL 2P10

Renaissance Art and Thought

Italian Renaissance architecture, painting and sculpture as well as selections from writers such as Machiavelli and Castiglione.

Lectures, 3 hours per week.

Prerequisite: ITAL 1F90 or permission of the instructor.

Students completing this course will forfeit credit in ITAL 2P95.

ITAL 2P11

Modern and Contemporary Italian Culture and Civilization

The historical changes and key issues in 19th- and 20th-century Italy focussing on Italian unification, Fascism and modern Italy. Arts and literature representative of the period.

Lectures, 3 hours per week.

Prerequisite: ITAL 1F90 or permission of the instructor.

Students completing this course will forfeit prior credit in ITAL 2P96.

ITAL 2P80

Italian Cinema

(also offered as FILM 2P80)

Major film directors and cultural trends in Italian cinema. Films studied include those by De Sica, Rossellini, Fellini, Antonioni, Bertolucci, Amelio and Moretti.

Lectures, 3 hours per week, plus film lab.

Note: given in English. Knowledge of Italian not necessary.

Italian majors will complete assignments in Italian.

Students completing this course will forfeit credit in ITAL 2P92.

ITAL 2P84

Art and Literature in Italian Cinema

Italian cinema and its relation to contemporary art and literature. The cinematic adaptation of literary texts. Comparing and contrasting the film language of directors like Fellini, Antonioni and Pasolini with the pictorial language of Italian and North American artists like De Chirico, Pollock, Colville and Hopper.

Lectures: 3 hours per week, plus film lab.

Prerequisite: ITAL 2F00

Note: ITAL 2F00 may be taken concurrently.

ITAL 2P85

Italians in Canada and Italy-Canada Relations

History of Italian immigration in Canada with focus on Ontario. Italian-Canadian literature including such writers as Nino Ricci and Mary Di Michele. Cultural and economic relations between Italy and Canada.

Lectures, 3 hours per week.

Note: given in English.

ITAL 2P90

Translation

The translation of selected material from business correspondence, magazine articles, essays and literary texts. Focus on interference between English and Italian.

Lectures, 3 hours per week.

Prerequisite: ITAL 1F90 or permission of the instructor.

ITAL 2P97

Modern and Contemporary Italian Women Writers

Women novelists and poets; their perspectives and aesthetics. Authors may include Banti, Campo, Ginsburg, Maraini, Morante, Ortese, Romano.

Lectures, 3 hours per week.

Co-requisite: ITAL 2F00.

ITAL 3F96

Dante

The major focus is Dante Alighieri's *La Divina Commedia* and selections from *La Vita Nuova* and other works.

Lectures, 3 hours per week.

Prerequisite: ITAL 2F00 or permission of the instructor.

ITAL 3P90

Italian Romanticism: Prose and Poetry

Major texts of the Italian Romanticism, including Manzoni, *I Promessi Sposi* and selections from Leopardi's *Canti* and the works of Foscolo.

Lectures, 3 hours per week.

Prerequisite: ITAL 2F00 or permission of the instructor.

ITAL 3P92

Contemporary Narrative from 1970 to the Present

The Italian novel and short story: recent trends and forms. Authors may include Calvino, Celati, Corti, De Carlo, Eco, Tabucchi.

Lectures, 3 hours per week.

Prerequisite: ITAL 2F00.

ITAL 3P93

Petrarca and Boccaccio

Selected poems from Francesco Petrarca's *Il Canzoniere* and novellas from Giovanni Boccaccio's *Il Decameron*.

Lectures, 3 hours per week.

Prerequisite: ITAL 2F00 or permission of the instructor.

ITAL 3P94

The Modern Novel

Representative novels from leading modern and contemporary writers such as Pirandello, Moravia, Pavese, Buzzati, Silone, Vittorini, Calvino, Sciascia, Banti, Ginsburg.

Lectures, 3 hours per week.

Prerequisite: ITAL 2F00 or permission of the instructor.

ITAL 3P95

Modern Italian Poetry

Major poets and currents of the 20th century. Selections from the *Crepuscolari*, the *Vociani*, the *Futurists*, Saba, Ungaretti, Montale, Quasimodo, the *Hermetics*, post-Hermeticism.

Lectures, 3 hours per week.

Prerequisite: ITAL 2F00 or permission of the instructor.

French, Italian and Spanish

ITAL 3P97

Italian for Teachers I

Approaches to the teaching of Italian as a second language. Teaching methods, educational materials and multimedia resources.

Lectures, 3 hours per week.

Restriction: open to ITAL (single or combined) majors with a minimum of 8.0 overall credits and a minimum 70 percent major average.

Prerequisites: ITAL 2F00 and one ITAL credit numbered 2(alpha)00 or above or permission of the instructor.

Note: offered under the auspices of the Italian Ministry of Foreign Affairs, through the Dante Alighieri Society, Niagara Region. Lectures by guest speakers.

ITAL 3P98

Principles of Translation

Theories and principles of translation. Structural and semantic differences between Italian and English. Focus on idiomatic and technical language and business correspondence.

Lectures, 3 hours per week.

Prerequisite: ITAL 2F00 or permission of the instructor.

ITAL 3P99

Advanced Grammar and Composition

Principles of syntactical analysis and elements of style; study of figurative language and compositions on literary and non-literary topics.

Lectures, 3 hours per week

Prerequisite: ITAL 2F00 or permission of the instructor.

ITAL 4P97

Italian for Teachers II

Theoretical issues and instructional strategies from elementary to senior levels. Aspects of teaching and learning language, culture and literature.

Lectures, seminar, practicum, 3 hours per week.

Restriction: open to ITAL (single or combined) majors with a minimum of 10.0 overall credits and a minimum 70 percent major average.

Note: offered under the auspices of the Ministry of Foreign Affairs, Italy, through the Dante Alighieri Society, Niagara Region. Participation in a symposium; lectures and seminars by guest speakers. Practice teaching sessions.

SPANISH

SPAN 1F00

Introductory Spanish

For students with no knowledge of Spanish. Elements of Spanish grammar. Oral, written and reading practice. Selected readings, multimedia materials.

Lectures, computer/language lab, 4 hours per week.

SPAN 1F90

Intermediate Spanish

Review of Spanish grammar. Composition and oral practice. Introduction to Spanish literature, cultural subjects and topics of current interest.

Lectures, seminar, computer/language lab, 4 hours per week.

Prerequisite: SPAN 1F00 or two or more years of high school Spanish or permission of the instructor.

SPAN 1P10

Business Spanish

Introduction to commercial, industrial and technical Spanish. Practical writing skills for business in the Spanish-speaking world, with emphasis on Latin America.

Lectures, seminar, 3 hours per week.

Prerequisite: SPAN 1F00 or permission of the instructor.

SPAN 2F00

Language and Literature

Intensive language analysis with oral and written practice. Hispanic literature: periods, movements, significant figures and literary currents in Spain and Spanish America.

Lectures, seminar, 3 hours per week.

Prerequisite: SPAN 1F90.

SPAN 2P10

Spanish-American Civilization

Historical, social and political developments from pre-Columbian times to the present day: history, politics, government, revolution and democracy. Economic and commercial factors. Language, literature and art.

Lectures, seminar, 3 hours per week.

Note: given in English. Knowledge of Spanish not necessary. Spanish majors complete written assignments and exams in Spanish.

SPAN 2P11

Culture and Civilization of Spain

Historical evolution of Spanish culture and civilization, emphasizing history (political, social, economic) and art.

Lectures, seminar, 3 hours per week.

Note: given in English. Knowledge of Spanish not necessary. Spanish majors complete written assignments and exams in Spanish.

SPAN 2P90

Spanish Linguistics

Analysis of the linguistic logic of the Spanish language. Linguistic theories, methods and problems as applied to Spanish. Phonetic structure, morphology, syntax, and semantics. Similarities and differences of the language in the Spanish-speaking world.

Lectures, seminar, 3 hours per week.

Prerequisite: SPAN 1F90 or permission of the instructor.

SPAN 2V90-2V99

History in its Environment in a Spanish Region

Study of the history of a country or region in its own cultural and geographical context. Background preparation research preceding an intensive study period location.

Restriction: permission of the department.

SPAN 2V90

2000-2001: Selected Issues in Mexican History and Culture (also offered as HIST 2V90)

Focuses on one or more of the following topics: colonial architecture, urban growth, muralist art of the early 20th century, Mexican-United States relations, bullfighting, the failure of modernization, and the Mexican Revolution.

Lectures, seminar, 3 hours per week.

Note: students are responsible for travel, accommodations and other expenses.

SPAN 3P64

Caribbean Narratives

Major novels, popular music, painting and poetry. Afro-Caribbean poetry of Nicolás Guillén and paintings of Wilfredo Lam will be points of departure to discuss oral traditions and transculturation. Rewriting of the history, the neo-baroque and the representations of gender, ethnicity and class in the works of Carpentier, Sarduy, Rosario Ferre, Reinaldo Arenas and others.

Lectures, 3 hours per week.

Prerequisite: SPAN 2F00 or permission of the instructor.

SPAN 3P90

Advanced Grammar and Communication

Syntactic analysis and principles involved. Concepts of semantics and style. Applications to advanced writing and oral practice of the Spanish language.

Lectures, seminar, 3 hours per week.

Prerequisite: SPAN 2F00 or permission of the instructor.

SPAN 3P91

Translation

Fundamentals of translation; theoretical and methodological framework; structural contrasts between Spanish and English; practical exercises.

Lectures, discussion session, 3 hours per week.

Prerequisite: SPAN 2F00 or permission of the instructor.

SPAN 3P94

Contemporary Spanish Literature

A study of the development of Spanish narrative from postwar social realism to the present: both its thematic and technical aspects. Authors may include Cela, Matute, Mendoza, Puertolas, Munoz, Molina and Montero.

Lectures, 3 hours per week.

Prerequisite: SPAN 2F00 or permission of the instructor.

SPAN 3P95

Contemporary Latin-American Literature

Multidisciplinary approach (historical, sociological, psycho-

logical, mythical) to the study of texts from different cultures and genres. Authors may include Borges, Cortázar, Rulfo, Márquez, Peri Rossi, Lispector, Castellanos and Mastreta.

Lectures, 3 hours per week.

Prerequisite: SPAN 2F00 or permission of the instructor.

SPAN 3P97

Modern Spanish Literature

Spanish thinkers of the early 20th century. Authors may include Unamuno, Baroja, Azorín. Special attention to methods of literary criticism.

Lectures, seminar, 3 hours per week.

Prerequisite: SPAN 2F00 or permission of the instructor.

SPAN 3Q90

Golden Age I: Poetry and Drama

A general study of dominant themes and trends in 16th- and 17th-century Spanish poetry and drama. Evolution of a national theatre. Meaning and relevance of the plays within the context of Hispanic and Western culture. Authors may include Garcilaso, Sor Juana, Góngora, Lope de Vega, Tirso de Molina and Calderón.

Lectures, 3 hours per week.

Prerequisite: SPAN 2F00 or permission of the instructor.

Students completing this course will forfeit credit in SPAN 3P92 and 3P93.

SPAN 3Q91

Golden Age II: Prose

Second century of the Golden Age. The development of Golden Age prose. Origins of the picaresque novel, the birth of the modern novel. Emphasis on D. Quijote.

Lectures, 3 hours per week.

Prerequisite: SPAN 2F00 or permission of the instructor.

Students completing this course will forfeit credit in SPAN 3P92 and 3P93.

SPAN 3Q94

Twentieth-Century Latin American Revolution

(also offered as HIST 3P94)

The social, economic and intellectual roots of revolutions in Mexico, Bolivia, Guatemala, Cuba and Nicaragua. The seminal role of the Mexican Revolution.

Lectures, seminar, 3 hours per week.

SPAN 3Q97

Nineteenth-Century Literature: Romanticism to Realism

Major texts of the Spanish Romantic and Post-Romantic writers. Particular emphasis on some of the major works of Adolfo Bécquer, Duque de Rivas, Pardo Bazán, Benito Pérez Galdós and Leopoldo Alas.

Lectures, 3 hours per week.

Prerequisite: SPAN 2F00 or permission of the instructor.

Students completing this course will forfeit credit in SPAN 3Q98 and 3Q99.

French, Italian and Spanish

SPAN 4P00

History of the Language

Chronological development of Spanish from its origins to modern Spanish. The formation and evolution of the language with some consideration of the sociopolitical factors affecting language change. Selected readings.

Lectures, seminar, discussion sessions, 3 hours per week.

Prerequisite: SPAN 2F00 or permission of the instructor.

SPAN 4P01

Contemporary Hispanic Women Writers

(also offered as WISE 4P01)

Experimental prose by Hispanic women writers. The study of narrative which challenges the conventions of genre, language, characterization, narration and the act of reading and how these innovations allow women writers to rearticulate the relationships of power, to redefine stereotypes and to reintroduce a feminine voice and field of vision. Authors may include Bombal, Allende, Poniatowska, Moix, Tusquets and Riera.

Lectures, 3 hours per week.

Prerequisite: SPAN 2F00 or WISE 1F90 or permission of the instructor.

Note: given in English. Spanish majors complete written assignments and exams in Spanish.

SPAN 4P10

Medieval Spanish Literature

Prose and verse that reflect the historical and literary factors of the European Middle Ages. Texts: *Mío Cid*, *El Conde Lucanor*, *Libro del buen amor*, *La Celestina*.

Lectures, seminar, 3 hours per week.

Prerequisite: SPAN 2F00 or permission of the instructor.

SPAN 4V60-4V69

Special Research Topics in Spanish Literature

Course content will vary, depending upon the interests of instructors and students.

Lectures, 3 hours per week.

Prerequisites: two SPAN credits numbered 3(alpha)00 or above.

General Studies

Students wishing to pursue a pattern of studies which does not coincide with either a single major or a combined major program may choose either a Bachelor of Arts (pass only) or Bachelor of Science (honours or pass) with a General Studies major.

Bachelor of Arts

The BA in General Studies is available as a pass (15 credits) degree only. Course selection for this degree program is strictly limited and, as the requirements differ from other BA degrees, students should be aware of the specific requirements for this degree.

Program requirements

- A student may select a maximum of three and one-half credits from any one discipline (including courses cross-listed with that discipline) with the exception of courses from the faculties of Education, Business and Physical Education and Recreation.
- A maximum of three credits may be taken from any combination of designated Education, Business and Physical Education and Recreation courses (including courses cross-listed with that faculty).
- Students must satisfy all general University requirements, including one context credit from the list of eligible courses in the faculties of Humanities, Social Sciences and Mathematics and Science.
- Students must take eight credits at the 2(alpha)00 level or above (a maximum of seven credits at the 1(alpha)00 level or above are allowed), including a minimum of three credits at the 2(alpha)90 level or above.
- A Bachelor of Arts General degree will carry no major or area of concentration.
- Students must complete successfully, either one credit in MATH/COSC or one credit in a language other than English.

Students electing to pursue a General Studies program should consult with the appropriate dean, the Assistant Registrar, Academic Services or an undergraduate program adviser when choosing courses.

Brock University/Niagara College Degree Completion Pilot Project

This degree completion program is designed for graduates of Niagara College's General Arts and Science program to complete a BA with a General Studies major at Brock. Due to the structure of the program Niagara College graduates will lack prerequisites for upper year Brock courses. Course selection will be limited and students are advised to consult an Academic Adviser in planning their program. As this is a limited enrolment program applications will be reviewed by an Admissions Committee, chaired by the Chair of the Sociology and composed of representatives from Brock and Niagara College.

Program requirements

Graduation from the two-year General Arts and Science Diploma program with a Grade Point Average (GPA) of B (70%) or better (with a minimum grade of B in SOCL 100, 200 and 104), and

A minimum grade of 70 percent in CANA 1F91.

To complete the BA program with a General Studies Major, students will be required to complete seven Brock credits (in addition to CANA 1F91)

- 1) one credit in MATH or COSC or one credit in a language other than English;
- 2) one Science context credit;
- 3) two and one-half SOCI credits;
- 4) two and one-half elective credits, (excluding SOCI courses).

In this program five of the seven credits must be numbered 2(alpha)00 or above, and of these three must be numbered 2(alpha)90 or above.

Bachelor of Science

A BSc in General Studies is offered at both the honours and pass degree levels and must be approved by the Dean, or designate. Of the 20 credits required for an honours degree, at least seven credits must be chosen in one subject and five in another. In addition to the normal University requirements, a student must include at least five credits in one subject and three in another as part of the 15 credits required for a pass degree. It should be noted that a maximum of seven credits from any combination of courses from the faculties of Business, Education, Physical Education, Recreation and Leisure Studies can be included in an honours BSc;

General Studies

a maximum of five may be taken within a pass BSc. Education may only be used as the three credit component and only in a pass degree. An honours degree with Education as a component is not possible. One credit in mathematics or computer science is required. BSc students must include

three credits at the 2(*alpha*)90 level or above, with a minimum of two credits from the areas of concentration. In addition, General Studies (honours) students must offer three credits at the 3(*alpha*)90 level or above, with a minimum of two credits from the areas of concentration.

Students electing to pursue a General Studies program should consult with the appropriate dean, the Assistant Registrar, Academic Services or an undergraduate program adviser when choosing courses.

Geography

Chair

John Menzies
Hugh J. Gayler (as of July 1, 2000)

Undergraduate Program Advisers

David A. O. Butz (BA programs), Daniel McCarthy (BSc programs)

Professor Emeritus

John N. Jackson

Professors

John Menzies, Keith J. Tinkler

Associate Professors

David A. O. Butz, Hugh J. Gayler, Alun O. Hughes, Deborah Leslie, Daniel McCarthy, Michael Ripmeester, Anthony B. Shaw

Senior Demonstrator/Instructor

Daryl F. Dagesse

General Information

Administrative Assistant, extension 3484

Mackenzie Chown C322

<http://www.brocku.ca/geography/>

The Department of Geography offers programs leading to BA and BSc degrees at the honours and pass levels and participates in a number of combined major programs.

Geographers study the distribution of physical and human phenomena over the Earth's surface and the interrelationships of humans and the natural environment. Their work ranges from description and mapping, through scientific analysis and explanation, to forecasting and planning for the future.

The discipline of geography has a broad scope and combines elements of both the social and natural sciences. Two principal divisions of the subject exist—human geography and physical geography—linked by a common background, a mutual concern for humans and the environment and a body of related theory and methodology.

Geography majors at Brock may choose from the following degree programs: BA Human Geography, BSc Physical Geography, BA Geography and BSc Geography. The first two are relatively specialized, while the last two strike a balance between the physical and human sides of the discipline. Within each program students may be admitted to the honours degree program at any time. An honours degree program provides

students with an opportunity for a more intensive examination of issues in the discipline. These programs are described in detail in subsequent sections.

In addition, the department offers four-year honours programs leading to either a BA or BSc degree in Geography with a concentration in Geographic Information Science. This program combines Brock courses with those offered by Niagara College.

Course offerings

Courses offered by the department fall into two main groups, group A in human geography and group B in physical geography. A third group (C) emphasizes geographical techniques in cartography and related studies.

Group A:

1F90

2P02, 2P03, 2P06, 2P10, 2P91

3M90-3M99, 3P45, 3P52, 3P53, 3P57, 3P60, 3P74, 3P81, 3P83, 3P84, 3P86, 3P87, 3P88, 3V60-3V69, 3V90-3V99

4F50, 4F51, 4F90, 4F99, 4P95

Group B:

1F91

2P04, 2P05, 2P09, 2P11, 2P91

3M90-3M99, 3P10, 3P12, 3P22, 3P23, 3P24, 3P25, 3P26, 3P31, 3P32, 3P33, 3P56, 3P81, 3P83, 3P96, 3V60-3V69, 3V90-3V99

4F90, 4F99, 4P12, 4P13, 4P20, 4P26, 4P28, 4P29, 4P35, 4P95

Group C:

2P07

3P01, 3P04, 3P05, 3P07, 3P95

4P02, 4P03

In most courses there is emphasis on practical work. This involves structured labs and seminars in early years and progressively more independent work in later years, culminating in an optional honours thesis in year 4. Field work features prominently in many courses. Students should note that a nominal fee may be charged in courses having a field work or laboratory component.

Two field courses, GEOG 3P56 and 3P57, are held during registration week in early September, with follow-up seminars

Geography

during term. One of these courses is mandatory for students entering year 3; prospective students must register with the department by April of the preceding academic year.

GEOG 4F99 is an internship program in year 4, enabling students to obtain work experience while still at the University.

Laboratories and equipment are available for work in biogeography, geomorphology, climatology, cartography, surveying, remote sensing, geographic information systems and human geography. The University Map Library, containing an extensive collection of maps, atlases and airphotos, is housed within the Geography department.

Program Notes

1. Certain courses (GEOG 2P07, 2P91, 3P04, 3P05, 3P07, 3P81, 3P83, 3P95, 4F99, 4P02, 4P03) can be taken for either BA or BSc credit. GEOG 3P01 can be taken for BSc credit only.
2. In the case of GEOG 3M90-3M99, 3V60-3V69, 3V90-3V99, 4F90 and 4P95, the content in a given year determines whether the course yields BA credit or BSc credit.
3. Students may hold credit for only one of GEOG 3P56 or 3P57.
4. ERSC 3P25 may be taken for GEOG credit as GEOG 3P25.
5. For students with a specific interest in geomorphology and soils the following ERSC courses are recommended as elective credits: ERSC 2P31, 3P61, 4P41 and 4P61.
6. Two Social Science credits are required and must be other than GEOG.
7. Three Science credits are required and must be from: BIOL/BCHM, CHEM, COSC, ERSC, MATH and PHYS (excluding ASTR 1F00, BIOL 1F25, COSC 1P90, 1P98, 1P99, ERSC 1F90, SCIE 1F30). One of these credits must be numbered 2(alpha)00 or above.
8. In all 20 credit degree programs, at least 12 credits must be numbered 2(alpha)00 or above, six of which must be numbered 2(alpha)90 or above and of these, three must be numbered 3(alpha)90 or above. In all 15 credit degree programs, at least seven credits must be numbered 2(alpha)00 or above, three of which must be numbered 2(alpha)90 or above.

Bachelor of Arts in Human Geography

Honours

Year 1

GEOG 1F90 and GEOG 1F91 (may be taken in year 2); COSC 1P90 or 1P98; MATH 1P98; one Humanities and one Social Science context credit (see program note 6).

Year 2

GEOG 2P02, 2P03, 2P06, 2P07 and 2P10; one Social Science credit (see program note 6); one and one-half elective credits (to include GEOG 1F91 if not completed in year 1).

Year 3

GEOG 3P57; one and one-half GEOG credits numbered 2(alpha)90 to 3(alpha)99 from group A; one-half GEOG credit numbered 2(alpha)90 to 3(alpha)99 from group C; one-half GEOG credit numbered 2(alpha)90 to 3(alpha)99 from either group A or C; two elective credits.

Year 4

GEOG 4F99; three credits from GEOG 4F50 and 4F51, 4F90, 4P02, 4P03, 4P95 or two credits from this group and one GEOG credit numbered 2(alpha)90 to 3(alpha)99 from group A or C; one elective credit.

Pass

Satisfactory completion of the first three years of the honours program entitles a student to apply for a pass degree.

Bachelor of Science in Physical Geography

Honours

Year 1

GEOG 1F91 and 1F90 (may be taken in year 2); MATH 1P97 and 1P98; one Humanities and one Science context credit (see program note 7).

Year 2

GEOG 2P04, 2P05, 2P07, 2P09 and 2P11; one Science credit (see program note 7); one and one-half elective credits (to include GEOG 1F90 if not completed in year 1).

Year 3

GEOG 3P56; one and one-half GEOG credits numbered 2(alpha)90 to 3(alpha)99 from group B; one-half GEOG credit

numbered 2(*alpha*)90 to 3(*alpha*)99 from group C; one-half GEOG credit numbered 2(*alpha*)90 to 3(*alpha*)99 from group B or C; one Science credit (see program note 7); one elective credit.

Year 4

GEOG 4F99; three credits from GEOG 4F90, 4P02, 4P03, 4P12, 4P13, 4P20, 4P26, 4P28, 4P29, 4P35, 4P95 or two credits from this group and one GEOG credit numbered 2(*alpha*)90 to 3(*alpha*)99 from group B or C; one elective credit.

Pass program

Satisfactory completion of the first three years of the honours program entitles a student to apply for a pass degree.

Bachelor of Arts in Geography

Honours

Year 1

GEOG 1F90 and 1F91; COSC 1P90 or 1P98; MATH 1P98; one Humanities and one Social Science context credit (see program note 6).

Year 2

GEOG 2P10 and 2P07 or 2P11; one credit from GEOG 2P02, 2P03, 2P06; one credit from GEOG 2P04, 2P05, 2P09; one Social Science credit (see program note 6); one elective credit.

Year 3

GEOG 3P57; one GEOG credit numbered 2(*alpha*)90 to 3(*alpha*)99 from group A; one-half GEOG credit numbered 2(*alpha*)90 to 3(*alpha*)99 from group A or C; one-half GEOG credit numbered 2(*alpha*)90 to 3(*alpha*)99 from group B; one-half GEOG credit numbered 2(*alpha*)90 to 3(*alpha*)99 from group B or C; two elective credits.

Year 4

GEOG 4F99; two GEOG credits numbered 3(*alpha*)90 or above from groups A, B, C; one GEOG credit numbered 2(*alpha*)90 or above from groups A, B, C; one elective credit.

Pass

Satisfactory completion of the first three years of the honours program entitles a student to apply for a pass degree.

Bachelor of Science in Geography

Honours

Year 1

GEOG 1F90 and 1F91; MATH 1P97 and 1P98; one Humanities and one Science context credit (see program note 7).

Year 2

GEOG 2P07 or 2P10; GEOG 2P11; one credit from GEOG 2P02, 2P03, 2P06; one credit from GEOG 2P04, 2P05, 2P09; one Science credit (see program note 7); one elective credit.

Year 3

GEOG 3P56; one GEOG credit numbered 2(*alpha*)90 to 3(*alpha*)99 from group B; one-half GEOG credit numbered 2(*alpha*)90 to 3(*alpha*)99 from group B or C; one-half GEOG credit numbered 2(*alpha*)90 to 3(*alpha*)99 from group A; one-half GEOG credit numbered 2(*alpha*)90 to 3(*alpha*)99 from group A or C; one Science credit (see program note 7); one elective credit.

Year 4

GEOG 4F99; two GEOG credits numbered 3(*alpha*)90 or above from groups A, B, C; one GEOG credit numbered 2(*alpha*)90 or above from groups A, B, C; one elective credit.

Pass

Satisfactory completion of the first three years of the honours program entitles a student to apply for a pass degree.

Combined Major Programs

The Department of Geography participates in combined major programs with the following departments: Biological Sciences (BSc), Computer Science (BA and BSc), Earth Sciences (BSc), Economics (BA).

The requirements of the above programs are listed in the calendar sections of the co-major discipline.

Combined major programs with other disciplines are also possible; students interested in pursuing one of these should consult the Chair of Geography and of the other department involved.

As in the single major programs, students pursuing a combined major may be admitted to the honours program at any time. The honours program provides students with an opportunity for a more intensive examination of issues in the field.

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Concentration in Geographic Information Science

The Concentration in Geographic Information Science combines a training in the technical fields of cartography, geographic information systems (GIS), remote sensing and surveying with an education in a chosen academic discipline, which may be any subject that deals with spatial information relating to the Earth's surface. One combination -- Geography and Geographic Information Science -- has been developed to date and is described below.

This is a four-year honours program and involves courses offered through Brock/Niagara College's postgraduate certificate program in Geographic Information Systems. Students completing the program receive a Brock honours degree in Geography with a concentration in Geographic Information Science, as well as a postgraduate certificate in Geographic Information Systems from Niagara College. The degree may be a BA or BSc, depending on whether the human or physical side of geography is emphasized.

The program caters to the increasing demand in society for professionals who possess both a solid technical background in GIS and related fields and the substantive knowledge necessary to apply those technologies successfully in the real world. Normally, this involves attending college after gaining a university degree, but the Brock and Niagara program combines the two in a single integrated package.

Students should note the following about this program:

1. Students normally enter the program at the start of year 2 and should apply for admission at the end of year 1. Enrolment is limited, depending on the availability of lab space at Niagara College. Admission to the concentration will include concurrent admission to the Niagara College postgraduate certificate program in Geographic Information Systems.
2. Niagara College courses are taken in the Fall Term of year 3 and in the Winter Term of year 4. These courses are taught at the college's Glendale Campus and are of 15 weeks duration.
3. Upon completion of the requirements for the postgraduate certificate at Niagara College, with an overall average of at least 70 percent, students will have 4.5 transfer credits applied to their Brock degree. Students who successfully complete GEOG 2P07, 3P04, 3P05 and 3P95 and receive the 4.5 transfer credits will satisfy the concentration in Geographic Information Science.
4. Students in this program may not use GEOG 4F99 as a year 4 credit and may not take GEOG 3P01 and 3P07 for credit.
5. The courses in the Niagara College certificate program are listed below. The 100-level courses are taught in the fall term and the 200-level courses are taught in the winter term.

GEOG 112 Project Management
GEOG 114 Database Systems
GEOG 115 Introduction to Arc/Info
GEOG 116 Computers and Programming
GEOG 117 Spatial Analysis
GEOG 118 Foundations of Mapping
GEOG 230 Geomatics
GEOG 231 Remote Sensing
GEOG 232 GIS Applications
GEOG 233 Issues in GIS
GEOG 234 Applied GIS Project
GEOG 235 Advanced GIS Operations

Brock students are exempt from GEOG 118, 233, 232 or 235.

BA (Honours) Geography with Concentration in Geographic Information Science

Year 1

GEOG 1F90 and 1F91; COSC 1P98; MATH 1P98; one Social Science context credit; one Humanities context credit.

Year 2

GEOG 2P02, 2P03, 2P06, 2P07, 2P10, 3P05 and 3P95; one and one-half elective credits.

Year 3

One and one-half GEOG credits numbered 2(alpha)90 to 3(alpha)99 from group A; GEOG 3P04; one-half elective credit (see program note 2).

Year 4

GEOG 3P57; one GEOG credit numbered 3(alpha)90 or above from group A; one-half GEOG credit numbered 2(alpha)90 or above from group A; one elective credit (see program notes 2 and 8).

BSc (Honours) Geography with concentration in Geographic Information Science

Year 1

GEOG 1F90 and 1F91; COSC 1P98; MATH 1P98; one Science context credit; one Humanities context credit.

Year 2

GEOG 2P04, 2P05, 2P07, 2P09, 2P11, 3P05 and 3P95; MATH 1P97; one elective credit.

Year 3

One and one-half GEOG credits numbered 2(alpha)90 to 3(alpha)99 from group B; GEOG 3P04; one-half elective credit (see program note 2).

Year 4

GEOG 3P56; one GEOG credit numbered 3(alpha)90 or above from group B; one-half GEOG credit numbered 2(alpha)90 or above from group B; one elective credit (see program notes 2 and 8).

Environmental Economics

Brock offers an honours BA program in Environmental Economics. Starting in the second year, students choose a secondary component normally in Biological Sciences, Environment or Human Geography. Refer to the Environment entry for additional information.

Prerequisites and Restrictions

Students must check to ensure that prerequisites are met. Students may be deregistered, at the request of the instructor, from any course for which prerequisites and/or restrictions have not been met.

Description of Courses

Note that not all courses are offered in every session. Refer to the applicable term timetable for details.

GEOG 1F90

Introduction to Human Geography

A practical and problem-oriented examination of spatial patterns of human organization and their links with social, economic, political and ecological processes.

Lectures, lab/seminar, 3 hours per week.

GEOG 1F91

Principles of Physical Geography

The interactions of atmosphere, soils, vegetation and landforms occurring at the surface of the Earth. The development of natural environments and impacts upon people and their activities.

Lectures, lab/seminar, 4 hours per week.

GEOG 2P02

Economic Geography

Theory and concepts of economic geography and the work of economic geographers. The organization of goods and services producing activities and their locational patterns. An overview of the geography of economic change in Canada and the United States since 1930.

Lectures, seminar, 3 hours per week.

Prerequisite: GEOG 1F90 or permission of the instructor.

GEOG 2P03

Urban Geography

(also offered as ENVI 2P03)

Basic concepts and problems underlying the growth of cities, the urban system, land-use patterns in the city and urban policy making.

Lectures, seminar, 3 hours per week.

Prerequisite: GEOG 1F90 or permission of the instructor

GEOG 2P04

Introduction to Meteorology

(also offered as ENVI 2P04)

Principles, structure, composition and processes of the atmosphere; its energy budget, moisture balance and motion. Weather forecasting in middle and low latitudes, forecasting techniques and special problems in applied meteorology.

Lectures, lab, 3 hours per week.

Prerequisites: GEOG 1F91 or permission of instructor.

GEOG 2P05

Global Geomorphology

(also offered as ENVI 2P05)

Introductory geomorphology with an emphasis on basic principles and their application to global environments.

Lectures, lab, field work, 5 hours per week.

Prerequisites: GEOG 1F91 or permission of the instructor.

GEOG 2P06

Cultural and Historical Geography

Interactions among culture, society and landscape. The material and symbolic manifestations of culture in processes of landscape change.

Lectures, seminar, 3 hours per week.

Prerequisite: GEOG 1F90 or permission of the instructor.

GEOG 2P07

Foundations of Geomatics

Basic spatial, metric, graphic and other concepts common to cartography, surveying, remote sensing and geographic information systems (GIS). Properties of map and airphotos. Principles of map compilation and design. Practical experience in computer map-making, field surveying, image interpretation and GIS analysis.

Lectures, lab, field work, 4 hours per week.

Prerequisite: one of GEOG 1F90, 1F91, ERSC 1F95 or permission of the instructor.

GEOG 2P09

Principles of Biogeography

(also offered as ENVI 2P09)

Autoecological aspects of soils and plants including the human impact at all scales. Study of the patterns of soils and plants and their explanation. Spatial patterns of soils and vegetation communities and their explanation.

Lectures, lab, 5 hours per week.

Prerequisites: GEOG 1F91 and MATH 1P98 or CHEM 1P80 and 1P81 or CHEM 1P90 and 1P91 or permission of the instructor.

GEOG 2P10

Qualitative Research Design and Methodology

Aspects of qualitative research: project formulation, methodologies, writing-up; relation of theory and methodology.

Lectures, seminar, 4 hours per week.

Prerequisite: GEOG 1F90 or permission of the instructor.

Geography

GEOG 2P11

Research Methods in Physical Geography

An appraisal of scientific method. Problems of research design and the acquisition of information from the field by mapping, instrumental measurement, sampling and the use of published and unpublished data sources. Quantitative analysis of data, interpretation and the communication of results.

Lectures, lab, seminar, 5 hours per week.

Prerequisites: GEOG 1F91 and MATH 1P98 or permission of the instructor.

GEOG 2P91

Geography of Canada

The analysis of factors underlying the development of Canada's distinctive regions, with emphasis on its major metropolitan areas, resource regions and areas of decline.

Lectures, seminar, 4 hours per week.

GEOG 3M90-3M99

Selected Field Studies

The application of geographical principles and techniques to the analysis of field data and problems; background preparation on a selected area, a two-week visit to that area and the compilation of reports on the topics studied.

Restriction: permission of the department.

GEOG 3M90

2000-2001: London England

The growth and development of London as a world city, capital of Britain and major metropolitan area through an examination of its major functions, institutions, peoples and internal spatial structures; major planning issues involved in achieving a workable urban environment.

Note: students are expected to pay their own expenses.

GEOG 3P01

Topographic Surveying

Principles and techniques of topographic surveying, emphasizing applications in the earth sciences. Use of tape, compass, clinometer, level, plane table, transit, theodolite, tachymeter, electronic distance meter and GPS receiver.

Lectures, lab, field work, 5 hours per week.

Prerequisite: GEOG 2P07 or permission of the instructor.

GEOG 3P04

Map Design and Production

Advanced aspects of map design. Methods of statistical mapping. Evolution of cartographic technology. Traditional and computer methods of monochrome and colour map production. Issues and trends in cartography.

Lectures, lab, 4 hours per week.

Prerequisite: GEOG 2P07 or permission of the instructor.

GEOG 3P05

Geographic Information Systems

The principles and use of computer-based systems for capturing, managing, manipulating, analysing and displaying data relating to the Earth's surface, with emphasis on raster applications.

Lectures, lab, 5 hours per week.

Prerequisite: GEOG 2P07 or permission of the instructor.

GEOG 3P07

Remote Sensing and Photogrammetry

Theory of remote sensing. Photographic, thermal, multispectral and radar imaging from aircraft and satellites. Traditional methods of interpretation. Photogrammetric mapping. Applications in the earth sciences.

Lectures, lab, 4 hours per week.

Prerequisite: GEOG 2P07 or permission of the instructor.

GEOG 3P10

Applied Climatology

Studies in selected topics from the field of energy and moisture exchanges, air pollution, climatic change, climatic impact assessment and bioclimatology. Human impact on the climate along with applied microclimatological investigations and climatic data analysis.

Lectures, lab, 4 hours per week.

Prerequisite: GEOG 2P04 or permission of the instructor.

GEOG 3P12

Climate and Winegrape Production

(also offered as OEVI 3P12)

The climatological aspects of winegrape production. Emphasis on selected wine regions of the world. The effects of climate, weather-related diseases, topography, soil and viticulture practices on winegrape production.

Lectures, lab, field work, 4 hours per week.

Prerequisite: GEOG 2P04 or permission of the instructor.

Note: students enrolled in the OEVI program and OEVI certificate students are permitted to register without the prerequisite.

GEOG 3P22

Principles of Geomorphology

Field examples in the Niagara Peninsula establishing the late Quaternary chronology.

Lectures, lab, field work, 5 hours per week.

Prerequisite: GEOG 2P05 or 2P11 or permission of the instructor.

Note: field trips undertaken in laboratory periods.

GEOG 3P23

Advanced and Applied Geomorphology

Selected topics in geomorphology using maps, aerial photographs and the modern scientific literature. The application of geomorphological principles to environmental management is developed wherever possible.

Lectures, lab, field work, 5 hours per week.

Prerequisite: GEOG 2P05 or 2P11 or permission of the instructor.

GEOG 3P24

Glacial Geomorphology/Geology

(also offered as ERSC 3P24)

Introduction to glaciology; glacial processes, glacial deposits; their genesis and sedimentology. Relationship of glacial processes to landforms and surface topography. Glacial systems and

facies associations. Applied aspects of glacial geology such as drift exploration.

Lectures, lab, field work, 5 hours per week.

Prerequisite: GEOG 2P05 or ERSC 2P31 or permission of the instructor.

GEOG 3P25

Pleistocene Geology

(also offered as ERSC 3P25)

Glaciations in the geological record, causes of glaciations, biotic responses to climatic changes, eustatic and isostatic sea level changes in response to glaciation, Quaternary stratigraphy and correlation of glacial and non-glacial events, application of Quaternary geology to economic and environmental problems, methods of paleoclimatic reconstruction.

Lectures, lab, 5 hours per week.

Prerequisite: GEOG 3P24 or ERSC 2P31 or permission of the instructor.

GEOG 3P26

Glacial Soils and Sediments

Applied aspects of glacial deposits. Geotechnical and pedochemical properties and structural attributes of glacial soils and sediments. Micromorphology, glacial soil discontinuity analyses. Introductory aspects of soil mechanics. Drift exploration. Landfill problems and issues related to glacial soils and sediments.

Lectures, lab, 5 hours per week.

Prerequisite: GEOG 2P05 or permission of the instructor.

GEOG 3P31

Soil Science

Pedogenesis; processes of profile development. Weathering and soil evolution. Major world soil types, soil taxonomy. Soils of Canada.

Lectures, lab, 5 hours per week.

Prerequisite: GEOG 2P09 or permission of the instructor.

GEOG 3P32

Biogeography: Patterns and Processes

Contemporary controls on plant and animal distributions (ecological biogeography). Past controls/paleo-geographical factors which shaped the distributions of species (historical biogeography), including plate tectonics and Quaternary climate change.

Lectures, lab, field work, 5 hours per week.

Prerequisite: GEOG 2P09 or permission of the instructor.

GEOG 3P33

Biodiversity

Dispersal and migration; adaptation; speciation; extinction; ecological interaction; species invasion; plant and animal introductions; habitat fragmentation and application of biogeographical theory to conservation biology; human impacts on fire regimes.

Lectures, lab, field work, 5 hours per week.

Prerequisite: GEOG 2P09 or permission of the instructor.

GEOG 3P45

Urban Growth Processes and Planning

Economic, social and political forces underlying population growth, land-use change and spatial expansion in cities in advanced industrial societies. Technological innovations and urban morphology. Urban planning issues relating to suburbanisation, small-town development, urban countryside, new towns, urban sprawl versus containment and intensification, and the loss of valuable resource areas.

Lectures, seminar, 4 hours per week.

Prerequisite: one of GEOG 2P02, 2P03, 2P06 or permission of the instructor.

GEOG 3P52

Contemporary Issues in Social Geography

The spatial distribution of social well-being in Western society: work, housing, crime, gender, race, ethnicity in relation to the underlying structures of inequality, exploitation and alienation.

Lectures, seminar, 4 hours per week.

Prerequisites: GEOG 2P03 or 2P06; GEOG 2P10 or permission of the instructor.

GEOG 3P53

Community Development and Social Planning

A geographical approach to conceiving community and planning for community empowerment. Theories, policy perspectives and empirical studies from Canada and around the world.

Lectures, seminar, 4 hours per week.

Prerequisites: GEOG 2P03 or 2P06; GEOG 2P10 or permission of the instructor.

GEOG 3P56

Physical Geography Field Course

The application of geographical principles and field techniques to problems in physical geography.

Restriction: permission of the department.

Prerequisite: completion of year 2 GEOG requirements in the BSc GEOG (single or combined) programs.

Note: field work during registration week in early September. Students must register with the department by April of the preceding academic year. Students are expected to pay their own expenses.

Students completing this course will forfeit credit in GEOG 3P57.

GEOG 3P57

Human Geography Field Course

The application of geographical principles and field techniques to problems in human geography.

Restriction: permission of the department.

Prerequisite: completion of year 2 GEOG requirements in the BA GEOG (single or combined) programs.

Note: field work during registration week in early September. Students must register with the department by April of the preceding academic year. Students are expected to pay their own expenses.

Students completing this course will forfeit credit in GEOG 3P56.

Geography

GEOG 3P60

Geography of Transportation

Geographical aspects of transportation with particular emphasis on the bases for spatial interaction, networks and flows. The transportation planning process and transportation policy analysis.

Lectures, seminar, 4 hours per week.

Prerequisite: GEOG 2P02 or permission of the instructor.

GEOG 3P74

Geography and Gender

(also offered as COMM 3P74 and WISE 3P74)

The work of feminist geographers. Relationships between gender and space with respect to the organization of the city, architecture of the home, design of the shopping mall, the media, fear, homelessness, gentrification and employment.

Lectures, seminar, 4 hours per week.

Prerequisite: one of GEOG 2P02, 2P03, 2P06, WISE 2F90, 2P91, COMM 2P20 and 2P21 or permission of the instructor.

GEOG 3P81

Environmental and Developmental Problems in the Third World

Interrelationships between physical and human factors and development; poverty and environmental problems; natural resource exploitation and sustainable development; humans as agents of change in desertification, deforestation, soil erosion and environmental pollution and their impact on climate, hydrologic cycle and nutrient cycling processes. Selected studies of regions that are marginal in terms of carrying capacity and ecological fragility.

Lectures, lab, seminar, 4 hours per week.

Prerequisite: GEOG 1F90 or 1F91 or permission of the instructor.

GEOG 3P83

Geography of Water Resources

Physical and human factors affecting patterns of use and development of water resources. Emphasis will be on patterns of supply and demand, approaches to development and management of the resource, problems and alternative strategies.

Lectures, seminar, 4 hours per week.

Prerequisites: one GEOG credit numbered 2(alpha)00 to 2(alpha)99 or permission of the instructor.

GEOG 3P84

Themes in Political Geography

Introduction to political geography with primary emphasis on contemporary themes, including geopolitics, economic globalization, global sustainability theory, evolution and emergent issues of the nation-state, new regionalism and place-based politics, and the local-global role of the new social movements.

Lectures, seminar, 4 hours per week.

Prerequisite: GEOG 2P02 or 2P06 or permission of the instructor.

GEOG 3P86

Themes in Cultural Geography

The geographies of culture and cultural politics. Focus upon landscapes and the ways in which multiple meanings attached to them are implicated in relationships of power.

Lectures, seminar, 4 hours per week.

Prerequisites: GEOG 2P06 and 2P10 or permission of the instructor.

GEOG 3P87

Themes in Historical Geography

Literature, philosophies and methodologies of historical geography, including sections exploring the traditions of the field as well as current debates. Uses and limitations of primary source materials such as newspapers, oral traditions and government documents.

Lectures, seminar, 4 hours per week.

Prerequisites: GEOG 2P06 and 2P10 or permission of the instructor.

GEOG 3P88

Globalization and Sustainability

The phenomenon of globalization in relation to theories of sustainability. Changing spatial and power relations occurring through the globalization of economic, political, social, cultural and environmental spheres. Global sustainability principles in the contexts of local and regional "survival" under changing global conditions.

Lectures, seminar, 4 hours per week.

Prerequisite: GEOG 2P02 or 2P06 or permission of the instructor.

Note: GEOG 3P84 strongly recommended.

GEOG 3P95

Advanced Geographic Information Systems

Further study of geographic information systems, with emphasis on vector and database applications and advanced analytical operations. Discussion of legal, ethical, management and other issues relating to GIS.

Lectures, lab, 5 hours per week.

Prerequisite: GEOG 3P05.

Note: students with credit in GEOG 2P07 may take this course with permission of the instructor.

GEOG 3P96

Geoprocessing

Geoprocessing applied to research in physical geography focussing on case studies in biogeography and glacial geomorphology. This course will use image analyses techniques to investigate various paleoenvironmental processes and conditions.

Tutorials, labs and field work, 5 hours per week.

Prerequisites: GEOG 2P05 or 2P09; GEOG 3P05 or 3P07 or permission of the instructor.

GEOG 3V60-3V69

Special Topics in Geography

Topics selected from year to year on the basis of faculty expertise.

GEOG 3V60

2000-2001: Geography of Rural Development and Tourism
(also offered as TOUR 3V60)

Provides overview of tourism as it intersects with rural development theory, processes and planning. Examines various social, environmental, cultural and economic problems, consequences and opportunities of tourism in a rural development context. Incorporates examples of rural festivals, wineries and agri-tourism as means to understand appropriate rural tourism development.

Lectures, 4 hours per week.

Prerequisite: GEOG 1F90 or TOUR 2P08.

GEOG 3V90-3V99

Selected Field Studies and Directed Readings

The application of geographical methods and techniques to the analysis of field data and problems; two weeks of field work in a selected area.

Restriction: permission of the department.

Note: experience in hiking and wilderness travel recommended.

GEOG 4F50

Research Themes in Urban-Economic Geography

Selected topics and research themes relating to recent developments in global cities and service industries.

Seminar, 3 hours per week.

Prerequisites: one GEOG credit numbered 2(alpha)90 to 3(alpha)99 from group A.

Students completing this course will forfeit credit in 4F65 and 4F69.

GEOG 4F51

Research Themes in Cultural and Social Geography

Selected themes and debates in the spatiality of culture and social well-being.

Seminar, 3 hours per week.

Prerequisites: one of GEOG 3P52, 3P53, 3P86 or 3P87 or permission of the instructor.

Students completing this course will forfeit credit in GEOG 4F61 and 4F64.

GEOG 4F90

Honours Thesis

An individual research project carried out under the direction of a faculty adviser.

Restriction: permission of the department.

Note: students contemplating a thesis must consult with the department at the end of year 3. Regulations governing the thesis may be obtained from the Administrative Assistant. A detailed proposal must be submitted in writing before May 1st prior to entering year 4.

GEOG 4F99

Honours Internship

An internship on a specific geographic problem or task under either the direction of a faculty member, or in a government or private agency working under the supervision of that agency. *Internship, 8 hours per week for 15 weeks; seminar, 3 hours per week for 9 weeks.*

Restriction: permission of the department.

GEOG 4P02

Topographic Science

The independent study of an approved topic selected from the fields of surveying, remote sensing, geographical information systems and cartography.

Lab, 3 hours per week.

Prerequisite: one credit from GEOG 3P01, 3P04, 3P05, 3P07, 3P95 or permission of the instructor.

GEOG 4P03

Advanced Cartography

Research, discussion and synthesis of a selected issue in modern cartography or the compilation and design of a map illustrative of a contemporary theme.

Lab, 3 hours per week.

Prerequisite: GEOG 3P04 or permission of the instructor.

GEOG 4P12

Research Topics in Applied Climatology

Climatological investigations of selected problems in winegrape production, air pollution and climate change.

Seminar, lab and field work, 3 hours per week.

Prerequisite: GEOG 2P04 and 3P10 or permission of the instructor.

Students completing this course will forfeit credit in GEOG 4F11.

GEOG 4P13

Research Topics in Climatic Hazards

Special topics relating to climatic hazards, their impacts and societal adjustments.

Seminar, lab and field work, 3 hours per week.

Prerequisite: GEOG 2P04 and 3P10 or permission of the instructor.

Students completing this course will forfeit credit in GEOG 4F11.

GEOG 4P20

Snow and Ice Hydrology

Examination of hydrological processes involving snow, ice and frozen ground and their place in a geographical and environmental context. Topics include snowfall and drifting snow, the formation and evolution of the snow pack, snowmelt, avalanches, ice growth and decay on lakes and rivers, ice jams, glaciers and glacial hydrology; ground ice and permafrost hydrology.

Seminar, lab, field work, 3 hours per week

Prerequisite: one of GEOG 3P22, 3P23, 3P24, 3V68 or permission of the instructor.

Geography

GEOG 4P26

Research Themes in Fluvial Geomorphology

A survey of modern literature in fluvial geomorphology complemented by local field work and the analysis of published river records.

Seminar, lab, field work, 3 hours per week.

Prerequisites: one of GEOG 3P22, 3P23, 3P24 or permission of the instructor.

GEOG 4P28

Advanced Glacial Sedimentology I

(also offered as ERSC 4P28)

The sedimentology of present day glacial environments and of Quaternary sediments. Thermo-mechanical principles of glacier physics as applied to past and present glacier ice conditions. Glacial lithofacies associations. Glacio-tectonics and diagenesis. Principles of glacial erosion, entrainment and deposition.

Lectures, lab, field work, 3 hours per week.

Prerequisite: GEOG 3P24 or 3P26 or permission of the instructor.

GEOG 4P29

Advanced Glacial Sedimentology II

Selected topics and research themes in glacial sedimentology with emphasis on applied aspects viz. drift explorations; glacial sediments; groundwater and pollution; geotechnical aspects of glacial sediments; exploration techniques. The course involves extensive readings, field trips and research work involving laboratory analysis.

Lectures, lab, field work, 3 hours per week.

Prerequisite: GEOG 3P24 or 3P26 or permission of the instructor.

GEOG 4P35

Vegetation and Climate Change

Plant community history; organization of communities past and present, long-term changes in plant distribution and diversity. Topics include rainforest refugia hypotheses; migration in response to climatic change.

Lectures, seminar, 2 hours per week.

Prerequisite: GEOG 3P32 or 3P33 or permission of the instructor.

GEOG 4P95

Directed Readings

Guided readings on a topic which is not covered in the department's regular course offerings. Topics must be chosen in consultation with a faculty member willing to supervise the tutorial.

Seminar, 3 hours per week.

Restriction: permission of the department.

Germanic and Slavic Studies

Chair

Donald C. MacRae

Professor

Herbert Schutz

Associate Professors

Farry W. K. Joe, Donald C. MacRae, John A. Michielsen

General Information

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Students without any background in German may begin study towards a degree in German in year 1. Students may take German in combination with any other subject in combined major programs.

The Department of Germanic and Slavic Studies offers degree programs in German language and literature and in German area studies.

The department offers a degree program in German area studies. In this program the study of language, literature and culture is complemented by courses in German history, politics, philosophy, etc., given in English. Culture and civilization courses make use of the department's films, slides and tapes and deal with the major European cultural trends by examining such topics as art and architecture, mythology, cultural and intellectual history.

The department makes arrangements for students' summer travel/study/work in Germany (see GERM 3P98).

Brock/Trent Year Abroad in Freiburg

In co-operation with Trent University, the German section of the department offers to those of its students who have GERM 1F90 or its equivalent the opportunity to spend a year of study at the University of Freiburg in Germany.

In addition to an immersion program in the German language and courses in German literature, the student is encouraged to select courses in study areas of his or her choice. The program in Freiburg is supervised by a resident director from Brock or Trent familiar with the situation.

Program Notes

1. Courses offered in English: GERM 1F10, 1F90, 1P01, 1P02, 1P93, 1P94, 1P95, 1P96, 2P95, 2P98, 3P90; RUSS 1F00.

2. Students without OAC standing or equivalent in the language would normally take GERM 1P01, 1P02 in year 1 and GERM 1F90 in year 2.

3. Students registering for GERM 1F90 will normally have OAC standing in the language or equivalent (GERM 1P01, 1P02) or permission of the department.

4. The following are primarily language courses: GERM 1F10, 1F90, 1P01, 1P02, 2F20, 2F21, 3F99, 4F10; RUSS 1F00.

5. GERM 1P01, 1P02, 1F90, 2F20 and 2F21 constitute a sequence. Once credit has been obtained in one of these courses, students are not allowed to take for credit or upgrading a course with a lower number. Students admitted to any course numbered 2(alpha)00 or above in GERM may not subsequently take a course at the 1(alpha)00 level, except for GERM 1P93, 1P94, 1P95, 1P96.

6. GERM 1P01, 1P02 may be taken for university credit but only credits numbered 1(alpha)90 or above may normally be counted as GERM credits for a major in German.

7. Students who intend to pursue courses in German literature are strongly urged to consider one or more of CLAS 1P91, 1P92, 1P95, 1P97 as a supplement to their studies in German literature.

8. In all 20 credit degree programs, at least 12 credits must be numbered 2(alpha)00 or above, six of which must be numbered 2(alpha)90 or above and of these, three must be numbered 3(alpha)90 or above. In all 15 credit degree programs, at least seven credits must be numbered 2(alpha)00 or above, three of which must be numbered 2(alpha)90 or above.

Programs of Study in German

Honours

Year 1

GERM 1F90 (see program notes 2 and 3); one credit from GERM 1P93, 1P94, 1P95, 1P96; one Science context credit and one Social Science context credit; one elective credit (see program note 7).

Germanic and Slavic Studies

Year 2

GERM 2F20 and 2F21 (or GERM 1F90 and 2F20 or 2F21 if 1P01, 1P02 taken in year 1); three elective credits.

For students in Freiburg: a maximum of three GERM courses; two elective credits.

Year 3

Three GERM credits (including 2F20 or 2F21 if not taken in year 2); two elective credits (see program note 8).

Year 4

Three GERM credits; two elective credits (see program note 8).

Pass

Satisfactory completion of the first three years of the honours program entitles a student to apply for a pass degree.

Combined honours

Year 1

One GERM credit; one credit from co-major; one Science and one Social Science context credit; one elective credit (GERM 1P93, 1P94, 1P95, 1P96 recommended) (see program note 7).

Year 2

Two GERM credits; two credits from co-major; one elective credit (GERM 1P93, 1P94, 1P95, 1P96 recommended if not taken previously).

Year 3

Two GERM credits; two credits from co-major; one elective credits (see program note 8).

Year 4

Two GERM credits; two credits from co-major; one elective credit (See program note 8).

Combined pass

Satisfactory completion of the first three years of the combined honours program entitles a student to apply for a pass degree.

Programs of Study in German Area Studies

For students who wish to pursue German studies beyond the language and literature orientation as contained in the single and combined major description, a co-ordinated program consisting of course offerings pertinent to the study of German, Germany and Europe, leading to a BA in German area studies is available.

Participating departments: Classics, English Language and Literature, Fine Arts, Geography, History, Music, Philosophy, .

Political Science and Psychology.

Responsibility for the program rests with the Chair of the Department of Germanic and Slavic Studies, to whom all enquiries should be directed.

There are various approaches to this program:

(a) a Humanities orientation, consisting of courses in Classics, English Language and Literature, Fine Arts, Music and Philosophy chosen to complement the study of German language and literature;

(b) a Social Science orientation, consisting of a selection of courses in History, Political Science and Geography complemented by courses in German language and literature;

(c) a combination of (a) and (b).

Honours

Ten GERM credits numbered 1(*alpha*)90 or above in German language and literature; eight credits normally chosen from at least three of Classics, English Language and Literature, Fine Arts, Geography, History, Linguistics, Music, Philosophy, Political Science and Psychology (the Social Science context credit must be satisfied); one Science context credit; one elective credit (see program note 7).

Pass

Seven GERM credits numbered 1(*alpha*)90 or above in German language and literature; seven credits in relevant areas, normally chosen from at least three of Classics, English Language and Literature, History, Linguistics, Music, Philosophy, Political Science and Psychology (the Social Science context credit must be satisfied); one Science context credit (see program note 7).

Work opportunity: honours or pass

Three months in Germany, working and travelling. A half credit, GERM 3P98, will be awarded upon receipt of a satisfactory report of 8 weeks work from the employer involved. A second work opportunity abroad may be used for a further half credit, GERM 4P98.

Russian Language

The Russian section does not offer a degree program.

Students may enrol in RUSS 1F00 to fulfill the Humanities language requirement.

Prerequisites and Restrictions

Students must check to ensure that prerequisites are met. Students may be deregistered, at the request of the instructor, from any course for which prerequisites and/or restrictions have not been met.

Unless otherwise specified, there are no prerequisites for courses offered by the Department.

Description of Courses

Note that not all courses are offered in every session. Refer to the applicable term timetable for details.

GERMAN

GERM 1F10

German Reading Knowledge

A beginners' course open to students in all disciplines who need no more than the ability to read and understand German with the help of a dictionary. Students will work with translation passages from their chosen area of study.

Lectures, 3 hours per week.

Note: this course may not be used to fulfil the language requirement for the Humanities.

GERM 1F90

Language and Literature (Intermediate I)

Intermediate level. Conversational and written language skills. Introduction to 20th-century German literature. Language/computer laboratory, films, tapes, recordings.

Lectures, language/computer lab, 4 hours per week.

Prerequisites: GERM 1P01 and 1P02 or OAC German or permission of the department.

GERM 1P01

Language (Introductory I)

Learning of basic skills, conversational patterns, reading ability emphasizing the spoken language. Language/computer laboratory, films, records and tapes.

Lectures, language/computer lab, 4 hours per week.

GERM 1P02

Language (Introductory II)

Basic skills, conversational patterns, reading ability emphasizing the spoken language. Language/computer laboratory, films, records and tapes.

Lectures, language/computer lab, 4 hours per week.

Prerequisite: GERM 1P01.

GERM 1P93

Culture and Civilization of Central Europe: From the Prehistoric to the Carolingian Period

(also offered as CLAS 1P93)

The cultural development of central Europe from the earliest stone and pottery cultures, through the Bronze and Iron Ages, the Celts and Romans and the first Germanic kingdoms. Beliefs and practices, artistic style and architecture. Slides are used to illustrate the cultural evidence.

Lectures, 3 hours per week.

Note: given in English.

GERM 1P94

Culture and Civilization of Central Europe: The Holy Roman Empire

Forms of cultural expression in central Europe from the foundation of the Ottonian Empire to the Counter-Reformation. An illustrated survey of the arts, architecture and literature.

Lectures, 3 hours per week.

Note: given in English.

GERM 1P95

Culture and Civilization of Central Europe: Reformation to Revolution

Stages in early modern central European cultural development. Art and architecture of the 15th to 18th century in their social and political contexts.

Lectures, 3 hours per week.

Note: given in English.

Students completing this course will forfeit credit in GERM 1F96.

GERM 1P96

Culture and Civilization of Central Europe: Romanticism to Postmodernism

The evolution of modern central Europe. Art and architecture in the context of growing nationalism during the 19th and 20th centuries.

Lectures, 3 hours per week.

Note: given in English.

Students completing this course will forfeit credit in GERM 1F96.

GERM 2F20

Language and Literature (Intermediate II)

Intensive study of present-day German language and culture designed to improve communication skills. Selected readings from contemporary German literary texts.

Lectures, language lab, 3 hours per week.

Prerequisite: GERM 1F90 or permission of the department.

Students completing this course will forfeit credit in GERM 2F00.

GERM 2F21

Business German

The technical language of commerce and the socio-cultural implications of conducting business in Germany.

Lectures, language lab, 3 hours per week.

Prerequisite: GERM 1F90 or permission of the department.

Germanic and Slavic Studies

GERM 2P91

German Prose and Poetry of the 19th Century

Short works by such authors as Kleist, Hoffman, Eichendorff, Storm and Hauptmann as examples of Romanticism, Poetry Realism and Naturalism.

Lecture, 3 hours per week.

Prerequisite: GERM 1F90.

GERM 2P92

German Prose and Poetry of the 20th Century

Political and literary issues of the 20th century. Works by authors such as Kafka, Dürrenmatt, Kaschnitz and Lenz.

Lectures, 3 hours per week.

Prerequisite: GERM 1F90.

GERM 2P95

History of the Germanic Languages

(also offered as LING 2P95)

The development of the Germanic languages from their roots in Indo-European to the present day; morphology; phonology; syntax. The evolution of words throughout the ages.

Lectures, 3 hours per week.

Prerequisite: GERM 1F90 or LING 1F94 or permission of the instructor.

Note: given in English.

Students completing this course will forfeit credit in GERM 4P19 and 4P20.

GERM 2P98

Women in Germany from 1800 to the Present

(also offered as WISE 2P98)

Literature by women including the Romantics, Realists and 20th-century post-World War II writers. Men's views of women's issues (Bebel, Forel) and their support of equal rights for women at the end of the 19th century. Lily Braun's social activism.

Lectures, seminar, 3 hours per week.

Prerequisite: GERM 1F90 or WISE 1F90 or permission of the instructor.

Note: given in English.

GERM 3F99

Advanced Language Study I

Fluency at an advanced level in speaking, writing and comprehension through tapes, films, written and oral projects, discussions and advanced interpreting and translating.

Lectures, language lab, 3 hours per week.

Prerequisite: GERM 2F20 (2F00 or 2P91 and 2P92) or permission of the department.

GERM 3P20

German Literature from 1900 to 1945

Poetry, drama and prose of the first half of the 20th century. Experiments in form and content: Thomas Mann, Hermann Hesse, Franz Kafka. The literature of totalitarianism.

Lectures, 3 hours per week.

Prerequisite: GERM 2F20 (2F00 or 2P91 and 2P92) or permission of the department.

Students completing this course will forfeit credit in GERM 4P05 and 4P06.

GERM 3P21

German Literature from 1945 to Present

Poetry, drama and prose of the postwar period in Germany, Austria and Switzerland. New experiments in Frisch, Handke, Süskind.

Lectures, 3 hours per week.

Prerequisite: GERM 2F20 (2F00 or 2P91 and 2P92) or permission of the department.

Students completing this course will forfeit credit in GERM 4P07 and 4P08.

GERM 3P90

The Germans in Canada

Contributions of the Germans to the cultural mosaic of Canada from their earliest years to the present.

Lectures, seminar, 3 hours per week.

Note: given in English.

GERM 3P98

Practicum in Germany

An opportunity to work for three months in a German firm to acquire practical skills as well as language proficiency. The practicum may be repeated as GERM 4P98 only by students in the honours program.

Prerequisite: working knowledge of German.

GERM 4F10

Advanced Language Study II

The development of greater proficiency in German through simultaneous translation, written translations, discussions and essays on contemporary issues.

Language/computer lab, 3 hours per week.

Prerequisite: GERM 2F20 (2F00 or 2P91 and 2P92) or permission of the department.

GERM 4P17

Tutorial

Advanced study in an area of language or literature of mutual interest to the student and the instructor. A written proposal must be approved by the Chair.

Tutorial, 3 hours per week.

Prerequisite: permission of the department.

GERM 4P21

Romanticism

Critical theory and literature of the first half of the 19th century. Works by writers such as Novalis, Eichendorff, Kleist, Heine and Büchner.

Lectures, seminar, 3 hours per week.

Prerequisite: GERM 2F20 (2F00) or permission of the department.

Students completing this course will forfeit credit in GERM 3Q91.

GERM 4P22

Realism to Naturalism

Critical theory and literature from the second half of the 19th century. Works by writers such as Hebbel, Fontane, Keller, Storm, Hauptmann and Wedekind.

Lectures, seminar, 3 hours per week.

Prerequisite: GERM 2F20 (2F00) or permission of the department.

Students completing this course will forfeit credit in GERM 3Q92.

GERM 4P23

Enlightenment to Storm and Stress

Literature and literary theory from the Enlightenment to Storm and Stress. The dramatic literature and criticism of the 18th century from Gottsched to Goethe.

Lectures, seminar, 3 hours per week.

Prerequisite: GERM 2F20 (2F00) or permission of the department.

Students completing this course will forfeit credit in GERM 3Q93.

GERM 4P24

Classicism

Classic drama, prose and essays by Goethe and Schiller. Goethe's *Faust*.

Lectures, seminar, 3 hours per week.

Prerequisite: GERM 2F20 (2F00) or permission of the department.

GERM 4P25

Medieval German literature

An introduction to the poetry of the Minnesänger from 1050 to 1250. The Tristan of Gottfried von Strassburg.

Lectures, seminar, 3 hours per week.

Prerequisite: GERM 2F20 (2F00) or permission of department.

Note: GERM 2P95 recommended.

Students completing this course will forfeit credit in GERM 4P19 and 4P20.

GERM 4P98

Practicum in Germany

See GERM 3P98.

RUSSIAN

RUSS 1F00

Russian (Introductory)

Development of the four basic skills in language proficiency (reading, writing, speaking and comprehension).

Lectures, language lab, 4 hours per week.

Great Books/Liberal Studies

Director

William Mathie, Political Science
Allan Arthur, History (as of July 1, 2000)

Participating Faculty

Alan G. Arthur (History), David W. Atkinson (English Language and Literature), Howard E. Bell (Mathematics), John G. Benjafield (Psychology), Brian Crick (English Language and Literature), Corrado J.A. Federici (French, Italian and Spanish), Peter Landey (Music), Ingrid Makus (Political Science), William Mathie (Political Science), Francine McCarthy (Earth Sciences), Thomas M. Mulligan (Management, Marketing and Human Resources), Mary Frances Richardson (Chemistry), Carl M. Wolff (History)

General Information

Administrative Assistant, extension 4752
Mackenzie Chown C330
<http://www.brocku.ca/greatbooks>

Great Books/Liberal Studies provides an opportunity for the exploration and discussion of those questions which arise when education is directed towards the freedom of the fully examined life.

Questions of human nature and purpose and of our relationship to the natural order, for example, are examined primarily through reading and discussion of the great works of human reason and imagination that constitute our cultural tradition.

The program seeks to develop the skills and habits of inquiry, analysis, argument and expression needed for a rigorous treatment of these questions.

The program is made up of a set of closely related core courses which are intended to provide an integrated liberal education, to be cumulative and to furnish the basis for an intellectual community of students and faculty. The Great Books/Liberal Studies Program is commonly combined with a major in another discipline. Students combining Great Books/Liberal Studies with a major concentration in Mathematics or Science will usually be exempted from the Science context requirement and may petition for exemption from the second language requirement.

The focus of the program is the Great Books Seminar which meets, under the guidance of two faculty leaders, twice weekly, throughout the entire program. Leaders for this seminar are drawn from a variety of disciplines and faculties of the University.

The other courses in the Great Books/Liberal Studies Program are intended both to provide for a kind of learning not possible in the seminar itself and also to enhance the quality and rigour of the inquiry and discussion which the seminar is intended to engender.

Students in year 4 are required to prepare a major essay on some aspect of Great Books/Liberal Studies under the guidance of a faculty member. Students who have combined Great Books/Liberal Studies with a particular discipline are encouraged to prepare an essay integrating these two aspects of their work at Brock.

A non-credit series of lectures supplements the Great Books/Liberal Studies Program. The lectures will illuminate the works and issues addressed in the program from a variety of perspectives. Students also attend concerts, art exhibitions and dramatic productions. Students are expected to attend the lectures and cultural events, since these constitute an integral part of the Great Books/Liberal Studies Program. Each student in the program is assigned a faculty adviser for regular and incidental consultation.

Great Books seminars

The Great Books Seminars (GBLS 1F90, 2F90, 3P90, 3P91, 4P10, 4P11) can be taken by students who are not majors in the program where enrolments permit. Students who complete GBLS 1F90, 2F90, 3P90, 3P91, 4P10, and 4P11 are deemed to have satisfied the Social Science context requirement.

Language Requirement for Humanities Majors

Great Books/Liberal Studies BA majors are required to complete one credit in a language other than English. Where one-half credit courses are used to satisfy this requirement, both half credits must be in the same language. Greek or Latin recommended.

Program Notes

1. One elective credit should be used to complete the language requirement and one to complete the science context requirement. Students who complete GBLS 2P96 and one-half credit from GBLS 3V95-99 are deemed to have completed the science context requirement.
2. HIST 4F99 or POLI 4F99 may be substituted for GBLS 4P99 if the topic selected for the History or Political Science honours thesis is approved by the Director of Great Books/Liberal Studies. Students who substitute HIST 4F99 must take

an additional one-half credit in GBLS.

3. In planning their programs students should note that not all GBLS courses are available every year. One of GBLS 2P96 and a selection from GBLS 3V95-3V99 is offered each year in a three-year cycle. GBLS 3P90 and 4P10 are offered together in alternate years with GBLS 3P91 and 4P11.

4. By petition to the Director a student majoring in the program may substitute up to one credit of GBLS 3P90, 3P91, 4P10, 4P11 with other GBLS offerings at the same level.

5. These two credits must include one credit numbered 3(*alpha*)90 or above from ACTG, ENTR, FNCE, MKTG, OBHR; MGMT 3P98, 4P12 or 4P82.

6. MATH 1P12 strongly recommended.

7. PHYS 3P20 is offered in alternate years. A student in year 3 when PHYS 3P20 is not offered should take an additional one-half credit from GBLS courses listed in year 3, and one-half credit less from the GBLS courses listed under year 4.

8. In all 20 credit degree programs, at least 12 credits must be numbered 2(*alpha*)00 or above, six of which must be numbered 2(*alpha*)90 or above and of these, three must be numbered 3(*alpha*)90 or above. In all 15 credit degree programs, at least seven credits must be numbered 2(*alpha*)00 or above, three of which must be numbered 2(*alpha*)90 or above.

Bachelor of Arts in Great Books/Liberal Studies

Programs of Study

Honours

GBLS 1F90, 1P91, 2F90, 3P90, 3P91, 4P10, 4P11 and 4P99; one credit from GBLS 1P92, 2P90, 2P91, 2P96, 3P92, 3V90-3V99; SCIE 1F30 or another Science context credit (see program note 1); five credits from GBLS 1P92, 2F97, 2P90, 2P91, 2P96, 2P99, 3P00, 3P92, 3V90-3V99, 4P01, 4P02, 4P04, 4P06, 4V00-4V09, 4V70-4V71.

Combined honours

GBLS 1F90, 1P91, 2F90, 3P90, 3P91, 4P10, 4P11 and 4P99; one credit from GBLS 1P92, 2P90, 2P91, 2P96, 3P92, 3V90-3V99; SCIE 1F30 or another Science context credit (see program note 1); one credit from GBLS 1P92, 2F97, 2P90, 2P91, 2P96, 2P99, 3P00, 3P92, 3P95, 3V95-3V99, 4P01, 4P02, 4P04, 4P06, 4V00-4V09, 4V70, 4V71.

Combined pass

GBLS 1F90, 1P91 and 2F90; SCIE 1F30 or another Science context credit (see program note 1); one and one-half credits

from GBLS 1P92, 2P90, 2P91, 2P96, 3P92, 3V90-3V99; one credit from GBLS 3P90, 3P91, 4P10, 4P11.

Great Books/Liberal Studies and Business (honours only)

In co-operation with the Faculty of Business, the Great Books/Liberal Studies Program offers a combined major leading to a BA (honours) in Great Books/Liberal Studies and Business. This program is designed to provide students with the skills and knowledge demanded for successful leadership in business and a critical understanding of the intellectual forces that have shaped and still shape the world within which that leadership must be exercised. The program is intended for students with career interests involving business leadership and policy making, lifelong learning, social issue management or the management of creative organizations.

Year 1

GBLS 1F90 and 1P91; ACTG 1P91; ECON 1P91 and 1P92; MGMT 1P93; MATH 1P98; one elective credit (see program note 1).

Year 2

GBLS 2F90; GBLS 2P91 or 2P96; ACTG 1P92; ECON 2P91; FNCE 2P91; MKTG 2P91; OBHR 2P91; one elective credit (see program note 1).

Year 3

GBLS 3P90 and 4P10 or GBLS 3P91 and 4P11; FNCE 3P93; MKTG 3P24; OBHR 3P42; OPER 2P91; one-half GBLS credit numbered 2(*alpha*)90 level or above; one-half credit from GBLS 3P92 or 3V95-3V99; one elective credit (see program note 1).

Year 4

GBLS 3P90 and 4P10 or GBLS 3P91 and 4P11; GBLS 4P99; MGMT 4F87; one-half GBLS credit numbered 3(*alpha*)90 level or above; two credits from ACTG, ENTR, FNCE, MGMT, MKTG or OBHR (see program note 5).

Great Books/Liberal Studies and History (honours only)

In co-operation with the Department of History, the Great Books/Liberal Studies Program offers a combined major program in Great Books/Liberal Studies and History, especially for students wishing to combine a study of change over time with a focus on the literary and cultural achievements of the past. A variety of combinations is possible; the following program is suggested for students interested in cultural history.

GBLS 1F90, 1P91, 2F90, 3P90, 3P91, 4P10, 4P11 and 4P99 (see program note 3); one credit from GBLS 1P92, 2P90, 2P91, 2P96, 3P92, 3V90-3V99; one credit from GBLS 1P92, 2F97, 2P90, 2P91, 2P96, 2P99, 3P00, 3P92, 3P95, 3V90-3V99, 4P01, 4P02, 4P04, 4P06, 4V00-4V09, 4V70, 4V71.

HIST 1F95 or 1F96 or 1P92 and 1P93; HIST 2P30, 2P99, 3P00, 4F99, 4V10 and 4V40; two and one-half additional HIST credits.

Great Books/Liberal Studies

SCIE 1F30 (see program note 1).

FREN 1F90 (or one credit in another language other than English).

Four elective credits.

Great Books/Liberal Studies and Music (honours only)

In co-operation with the Department of Music, the Great Books/Liberal Studies Program offers a combined major program in Great Books/Liberal Studies and Music. This program is designed especially for students interested in the interdisciplinary study of music; students will have the opportunity to consider music within the context of the great philosophical, literary and scientific works of our cultural tradition.

GBLS 1F90, 1P91, 2F90, 3P90, 3P91, 4P10, 4P11 and 4P99; one credit from GBLS 1P92, 2P90, 2P91, 2P96, 3P92, 3V90-3V99; one credit from GBLS 1P92, 2F97, 2P90, 2P91, 2P96, 2P99, 3P00, 3P92, 3P95, 3V90-3V99, 4P01, 4P02, 4P04, 4P06, 4V00-4V09, 4V70, 4V71.

MUSI 1F50, 1F90, 1P83, 2F90, 2P83, 2Y05, 2Y06, 3Y05 and 3Y06; one credit from MUSI 2P51, 2P52, 3P96, 3P97, 4P51; two additional MUSI credits.

SCIE 1F30 (see program note 1).

One language credit (see language requirement).

Three elective credits.

Great Books/Liberal Studies and Political Science (honours only)

In co-operation with the Department of Political Science, the Great Books/Liberal Studies Program offers a combined major program in Great Books/Liberal Studies and Political Science. The honours program is designed to furnish a liberal education especially for students with an interest in political philosophy, Canadian politics and law.

Year 1

GBLS 1F90 and 1P91; one POLI credit numbered 1(*alpha*)90 to 1(*alpha*)99 (POLI 1P91 recommended); FREN 1F90 (or one credit in another language other than English); one-half elective credit (GBLS 1P92 recommended); SCIE 1F30 (see program note 1).

Year 2

GBLS 2F90; POLI 2F12 and 2P80; one-half credit from GBLS 2P90, 2P91, 2P96; one-half credit from GBLS 2P90, 2P91, 2P96, 2P99, 3P00, 3P95 and 3V95-3V99; one POLI credit; one-half elective credit.

Year 3

GBLS 3P90 and 4P10 or 3P91 and 4P11; POLI 3P18; POLI 3P91 or 3P92; one-half credit from GBLS 3P92, 3P95 or 3V90-

3V99; one-half credit from GBLS 2P99, 3P00, 3P92, 3P95, 3V90-3V99, 4P01, 4P02, 4P04, 4P06, 4V00-4V09, 4V70, 4V71; one-half credit from POLI 3P01, 3P04, 3P07, 3P71; one-half POLI credit numbered 2(*alpha*)90 or above; one elective credit.

Year 4

GBLS 3P91 and 4P11 or 3P90 and 4P10; GBLS 4P99 (see program note 2); POLI 4P14 or 4P19; one credit from POLI 4P01 (recommended), 4P02, 4P04, 4P05, 4P06, 4V00-4V09; two elective credits.

Bachelor of Science in Great Books/Liberal Studies

Great Books/Liberal Studies can be combined with a concentration in Mathematics or Science. Students interested in this combination should consult the Program Director concerning their program and course selection.

Students who complete the combined honours program in Great Books/Liberal Studies and Physics may earn the BA or BSc degree depending upon whether the majority of their credits are in the Faculty of Mathematics and Science or the Faculty of Humanities. Students completing the program for the BA degree are deemed Humanities majors and are required to complete the language requirement as described above. Students completing the program to earn the BSc degree are not required to do so but it is strongly recommended.

Context requirements for Great Books/Liberal Studies majors are deemed satisfied by successful completion of the program.

Great Books/Liberal Studies and Physics (honours only)

In co-operation with the Department of Physics, the Great Books/Liberal Studies Program offers a combined major program in Great Books/Liberal Studies and Physics. The Program will be of interest to students wanting to understand the most important ideas in the physical sciences within the context furnished through the reading and discussion of the major works of reason and imagination that have animated our cultural tradition. The program is flexible enough to accommodate students with varying interests.

Year 1

GBLS 1F90 and 1P91; MATH 1P93 and 1P94; one of PHYS 1F20, 1F25, 1F90; one and one-half elective credits (see program notes 1 and 6).

Year 2

GBLS 2F90; MATH 2F95; one-half credit from GBLS 2P90, 2P91, 2P96; one credit from PHYS 2P20, 2P31, 2P50 (recommended), one and one-half elective credits.

Year 3

PHYS 3P20(see program note 7); one of GBLS 2P99, 3P00, 3P92, 3P95, 3V95-3V99, 4P01, 4P02, 4P04, 4P06, 4V00-4V09, 4V70, 4V71; two credits from PHYS 3P35, 3P36, 3P42, 3P70, 3P91; GBLS 3P90 and 4P10 or GBLS 3P91 and 4P11; one elective credit (see program note 1).

Year 4

GBLS 3P91 and 4P11 or GBLS 3P90 and 4P10; GBLS 4P99; one credit from GBLS 2P99, 3P00, 3P92, 3P95, 3V90-3V99, 4P01, 4P02, 4P03, 4P04, 4P05, 4P06, 4P07, 4V00-4V09, 4V70, 4V71; one credit from PHYS 4F50, 4P30, 4P41, 4P70, 4F90; one and one-half elective credits (see program notes 1 and 7).

Certificate Program

The Centre for Great Books/Liberal Studies also offers a Certificate in Great Books/Liberal Studies. It provides an overview for persons who may be interested in taking an integrated set of courses exploring several major scientific, philosophic and literary works but already have a degree in a different field or who do not wish to proceed to a degree. The admission requirements are the same as for the degree program. Prospective students should consult with the Director before beginning the certificate program.

The Certificate is awarded upon completion of at least five credits in Great Books/Liberal Studies with a minimum overall average of 60 percent.

Required courses:

Three credit from GBLS 1F90, 2F90, 3P90, 3P91, 4P10, 4P11.

Additional courses:

Two credits from the required courses not previously taken or GBLS 1P91, 1P92, 1P93, 2F97, 2P90, 2P91, 2P96, 2P99, 3P00, 3P92, 3P95, 3V95-3V99, 4P01, 4P02, 4P03, 4P04, 4P05, 4P06, 4P07, 4V70, 4V71.

See "Certificate Requirements" under Academic Regulations.

Concentration in Great Book/Liberal Studies

Students may earn a concentration in Great Books/Liberal Studies by successfully completing the courses listed below as part of their academic work leading to an honours major other than Great Books/Liberal Studies (see program note 1).

Required courses:

Three credits from GBLS 1F90, 2F90, 3P90, 3P91, 4P10, 4P11; one credit from GBLS 2F97, 2P99, 3P00, 3P95, 4P01, 4P02, 4P03, 4P04, 4P05, 4P06, 4P07, 4V70, 4V71.

Additional courses:

Two credits from the required courses not previously taken, GBLS 1P91, 1P92, 2P90, 2P91, 2P96, 3V90-3V99.

The words "Concentration in Great Books/Liberal Studies" will be added to a student's official transcript when the student graduates with an honours degree and completes the above listed requirements.

Prerequisites and Restrictions

Students must check to ensure that prerequisites are met. Students may be deregistered, at the request of the instructor, from any course for which prerequisites and/or restrictions have not been met.

Description of Courses

Note that not all courses are offered in every session. Refer to applicable term timetable for details.

GBLS 1F90

Great Books Seminar I

Important works of Western literature, philosophy, science and theology from the Greco-Roman world to the 20th century, including Homer, Sophocles, Plato, the Bible, Galileo, Shakespeare, Austen, Darwin, Twain and Freud.

Seminars, 4 hours per week.

Students completing this course will forfeit credit in LBST 1F90.

GBLS 1P91

Introduction to Logic and Critical Thinking

Kinds of argument and their employment in everyday affairs as well as in science and the humanities. Topics include the syllogism, analogical arguments, arguments from authority, and inductive arguments. Instruction in the construction and analysis of arguments.

Lectures, seminar, 3 hours per week.

Students completing this course will forfeit credit in LBST 1F92.

Great Books/Liberal Studies

GBLS 1P92

Introduction to Argumentation and Rhetoric

The fundamentals of rational persuasion. Classical dialectics and refutation, arguments that make special appeals such as ad hominem arguments, the different functions of linguistic communication, fallacies and the rules governing interpersonal dispute resolution.

Lectures, seminar, 3 hours per week.

Students completing this course will forfeit credit in LBST 1F92.

GBLS 1P93

Great Books World Tour

Selected texts of European, Near Eastern, African, Carribean, Asian, East Indian and South American literature and thought.

Lectures, seminar, 3 hours per week.

GBLS 2F90

Great Books Seminar II

Important works of Western literature, philosophy, science and theology from Homer to Shakespeare, including Aeschylus, Aristotle, the Bible, Vergil, Aquinas, Dante, Machiavelli, Calvin and Copernicus.

Seminar, 4 hours per week.

Prerequisite: GBLS (LBST) 1F90 or 1P91 and 1P92 (LBST 1F92) or permission of the Program Director.

Students completing this course will forfeit credit in LBST 2F90.

GBLS 2F97

Shakespeare

(also offered as ENGL 2F97)

Poetry and Sonnets; representative plays from all genres: histories, comedies, tragedies and romance; a selection of Sonnets.

Lectures, seminar, 3 hours per week.

Prerequisite: GBLS (LBST) 1F90 or one ENGL credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

Students completing this course will forfeit credit in DRAM 3F97 (3F10).

GBLS 2P90

Reason and Persuasion

Important issues in the theory of argumentation through a consideration of the practice of and the theoretical relationships between logic, rhetoric and dialectics. Classical sources (Plato and Aristotle) as well as 19th- and 20th-century developments.

Lectures, seminar, 3 hours per week.

Prerequisite: GBLS 1P91 or 1P92 (LBST 1F92) or PHIL 2P25 or permission of the Director.

Students completing this course will forfeit credit in LBST 2P90.

GBLS 2P91

Poetics and Poieisis

The poet, the critic and the craft: techniques, forms and effects of poetry from antiquity to the present.

Lectures, seminar, 3 hours per week.

Students completing this course will forfeit credit in LBST 2P91.

GBLS 2P96

Euclidean and Non-Euclidean Geometry

Geometry from Euclid to the 19th century. Results and techniques from Euclidean and Lobachevskian geometry, with discussion of relevant logical and philosophical issues.

Seminars, 3 hours per week.

Restriction: open to GBLS (LBST) (single or combined) majors or permission of the Program Director.

Students completing this course will forfeit credit in LBST 2P96.

GBLS 2P99

Ideas and Culture, 1700-1850

(also offered as HIST 2P99)

Intellectual and cultural developments in Europe and North America during the 18th and early 19th centuries, with particular attention to the exchange of ideas across the Atlantic. Developments in literature and the arts as well as the relationships between high and low culture.

Lectures, seminar, 3 hours per week.

GBLS 3P00

Ideas and Culture Since 1850

(also offered as HIST 3P00)

Intellectual and cultural developments in Europe and North America during the late 19th and 20th centuries.

Lectures, seminar, 3 hours per week.

GBLS 3P90

Great Books Seminar III: Part I

Important works of modern Western literature, philosophy, science and theology including Descartes, Milton, Rousseau, Mozart and Goethe.

Seminars, 4 hours per week.

Students completing this course will forfeit credit in LBST 4F01.

GBLS 3P91

Great Books Seminar IV: Part I

Important works of modern Western literature, philosophy, science and theology including Cervantes, Hobbes, Vico, Lessing and Kant.

Seminar, 4 hours per week.

Students completing this course will forfeit credit in LBST 4F02.

GBLS 3P92

Language and Thought

Connections between spoken and written languages and the nature and structures of things thought and transmitted. Theories of language and some of the basic issues of contemporary linguistic analysis.

Lectures, seminar, 3 hours per week.

Students completing this course will forfeit credit in LBST 3P92.

GBLS 3P95

Aesthetics of Music

(also offered as MUSI 3P95)

Issues of meaning, beauty, value, and greatness in music through analysis of selected readings from Aristoxenus to the present.

Lectures, seminar, 3 hours per week.

Prerequisite: MUSI 1F50 and 2F90 or GBLS (LBST) 2F90 or permission of the instructor.

Students completing this course will forfeit credit in LBST 3P95.

GBLS 3V90-3V94

Special Topics in Great Books/Liberal Studies

Selected topics in Western or non-Western works of literature, philosophy, history, science and/or theology.

Seminar, 3 hours per week.

GBLS 3V95-3V99

Senior Science Seminar

Exploration of a topic or theoretical concept in the physical or life sciences.

Seminar, 3 hours per week.

Restriction: open to GBLS (LBST) (single or combined) majors or permission of the Director.

Students completing this course will forfeit credit in LBST 3V95-3V99.

GBLS 4P01

The Philosophy of Law

(also offered as POLI 4P01)

Traditional and contemporary accounts of law and their implications for issues of contemporary concern.

Seminar, 3 hours per week.

Restriction: open to GBLS (LBST) (single or combined) and POLS (POLI) (single or combined) majors with either a minimum of 14.0 overall credits and a minimum 70 percent major average or approval to year 4 (honours).

GBLS 4P02

Principles of Classical Political Philosophy

(also offered as POLI 4P02)

Premodern political philosophy examined in the works of Plato and Aristotle, emphasizing those features distinguishing ancient political science and philosophy from that of modernity.

Seminar, 3 hours per week.

Restriction: open to GBLS (LBST) (single or combined) and POLS (POLI) (single or combined) majors with either a minimum of 14.0 overall credits and a minimum 70 percent major average or approval to year 4 (honours).

GBLS 4P03

Modern Political Theory

(also offered as POLI 4P03)

Modern political theory examined in selected texts. Topics may include historicism, consent, progress, equality or a selected author such as Rousseau, Kant, Hegel.

Seminar, 3 hours per week.

Restriction: open to GBLS (LBST) (single or combined) and POLS (POLI) (single or combined) majors with either a minimum of 14.0 overall credits and a minimum 70 percent major average or approval to year 4 (honours).

GBLS 4P04

Politics and Tyranny

(also offered as POLI 4P04)

Comparative accounts of ancient and modern tyranny examined in light of the question: has political domination varied significantly in the Western tradition?

Seminar, 3 hours per week.

Restriction: open to GBLS (LBST) (single or combined) and POLS (POLI) (single or combined) majors with either a minimum of 14.0 overall credits and a minimum 70 percent major average or approval to year 4 (honours).

GBLS 4P05

Shakespeare's Politics

(also offered as POLI 4P05)

Issues of justice; politics, law and morality; republican, monarchical and tyrannical government as explored in selected Shakespearean comedies, tragedies and histories.

Seminar, 3 hours per week.

Restriction: open to GBLS (LBST) (single or combined) and POLS (POLI) (single or combined) majors until date specified in the BIRT guide. After that date open to English Plus, ENGL (single or combined) and HIST (single or combined) majors. Students must have either a minimum of 14.0 overall credits and a minimum 70 percent major average or approval to year 4 (honours).

GBLS 4P06

Philosophy, Politics and the Family

(also offered as POLI 4P06)

Family relations and their significance for the political community as both have been treated by ancient and modern political philosophers and by contemporary feminists and their critics.

Seminar, 3 hours per week.

Prerequisite: POLI 2P91 and 2P92 (2F90) or 2P93 (2P01 and 3P01) or permission of the instructor.

GBLS 4P07

Postmodern Political Theory

(also offered as POLI 4P07)

Perspectives on the postmodern condition in the works of selected 20th century thinkers. Topics may include notions on the self; aesthetics and politics; reason and power; the construction of meaning.

Seminar, 3 hours per week.

Restriction: open to GBLS (LBST) (single or combined) and POLS (POLI) (single or combined) majors with either a minimum of 14.0 overall credits and a minimum 70 percent major average or approval to year 4 (honours).

Great Books/Liberal Studies

GBLS 4P10

Great Books Seminar III: Part II

Important works of modern Western literature, philosophy, science and theology including Flaubert, Eliot, Tolstoy and Nietzsche.

Seminar, 4 hours per week.

Students completing this course will forfeit credit in LBST 4F01.

GBLS 4P11

Great Books Seminar IV: Part II

Important works of modern Western literature, philosophy, science and theology including Tocqueville, Dostoevsky, Freud and Foucault.

Seminar, 4 hours per week.

Students completing this course will forfeit credit in LBST 4F02.

GBLS 4P99

Senior Essay and Workshop

Discussion of ideas and issues related to the preparation of a senior Great Books/Liberal Studies essay.

Seminars, tutorial, two terms.

Students completing this course will forfeit credit in LBST 4P99.

GBLS 4V00-4V09

Selected Problems in Political Theory

(also offered as POLI 4V00-4V09)

A particular writer, work or theoretical problem in political philosophy.

Seminar, 3 hours per week.

Restriction: open to GBLS (LBST) (single or combined) and POLS (POLI) (single or combined) majors with either a minimum of 14.0 overall credits and a minimum 70 percent major average or approval to year 4 (honours).

GBLS 4V70-4V79

Text and Context

Topics in Literature and Intellectual History

GBLS 4V70

2000-2001: Early 19th-Century Thought

(also offered as ENGL 4V70)

Writings in social criticism, aesthetics, education, science, and philosophy, from Burke and Coleridge to Carlyle and Mill.

Seminar, 3 hours per week.

Restriction: open to GBLS (LBST) (single or combined), English Plus and ENGL (single or combined) majors with either a minimum of 14.0 overall credits and a minimum major average of 70 percent and a minimum non-major average of 60 percent or approval to year 4 (honours) or permission of the instructor.

Students completing this course will forfeit credit in ENGL 4P30.

GBLS 4V71

Later 19th-Century Thought

(also offered as ENGL 4V71)

Writings in social criticism, aesthetics, education, science, and philosophy, from Arnold and Darwin to Pater and Wilde.

Seminar, 3 hours per week.

Restriction: open to GBLS (LBST) (single or combined), English Plus and ENGL (single or combined) majors with either a minimum of 14.0 overall credits and a minimum major average of 70 percent and a minimum non-major average of 60 percent or approval to year 4 (honours) or permission of the instructor.

Students completing this course will forfeit credit in ENGL 4P31.

History

Chair

John A. Sainsbury
Jane A. McLeod (as of July 1, 2000)

Undergraduate Officer

Carmela K. Patrias

Professor Emeritus

Craig R. Hanyan

Professors

Frederick C. Drake, John A. Sainsbury, Robert R. Taylor

Associate Professors

Alan G. Arthur, Patricia G. Dirks, Jane A. McLeod, Carmela K. Patrias, Carl M. Wolff

Assistant Professors

Mark C. Anderson, David H. Schimmelpenninck

General Information

Administrative Assistant, extension 3500
Mackenzie Chown C420
<http://www.brocku.ca/history/>

Historians explore changes in past societies, cultures and peoples. They examine cultural, artistic, political, economic, intellectual, as well as military and national history. Their interests range from the history of individuals and local communities to studies of nations and international relations. They analyse the causes and consequences of significant change over time. They seek to illuminate the past.

The study of history involves surveying and gathering evidence and evaluating, interpreting and refining it by constructing clear and logical arguments on the basis of that evidence.

Within the requirements indicated under the honours program and pass program the department allows students considerable flexibility in the selection of HIST courses. There are no mandatory courses and only a few upper-level courses have prerequisites. However, students are encouraged to plan honours and pass programs by taking a selection of courses with a coherent geographic and/or thematic focus. The range of departmental offerings, supplemented by approved courses offered in other departments, enables students to take clusters of courses in the following fields of history:

1. The Americas
2. Europe (including Britain)
3. Russia and East Asia

4. Political and diplomatic
5. Social
6. Intellectual, religious and cultural

Other possible fields may be defined by students in consultation with the department's Undergraduate Officer. (It should be noted that many courses cross thematic and geographic boundaries). The department encourages History majors in a pass program to select a minimum of three and a maximum of five of the six HIST courses they will take over years 2 and 3 from within their chosen field. Their other HIST courses may be selected from outside their chosen field. In year 4, honours students take four HIST credits including those offered within or related to their chosen field. Students should always consult with the Undergraduate Officer in arranging acceptable programs.

The department normally offers about six to eight one credit and 30-35 half credit courses, both lecture and seminar courses, in any one year. Courses not offered in one year are normally offered the following year, so that a two-year rotation pattern is in operation.

To assist students in refining their analytical and critical skills, weekly seminars are a crucial part of every history course. In many courses individual students are given the responsibility of organizing and leading discussions on particular topics.

The Department of History recommends combining History with other disciplines in Humanities and Social Sciences, such as Classics, Economics, English Language and Literature, Geography, Philosophy, Political Science, Psychology, Sociology and languages.

Language Requirement for Humanities Majors

HIST majors are required to complete one credit in one language other than English to fulfill the Humanities language requirement. Where half credit courses are used to satisfy the requirement, both half credits must be in the same language. The History department recommends a 1(*alpha*)00 level credit in French, German, Italian, Latin, Russian or Spanish.

Program Notes

1. History majors must take one credit outside of History to satisfy their Social Science context requirement.
2. Year 2 students may take courses numbered 2(*alpha*)90 to 3(*alpha*)99 with permission of the instructor. Courses numbered 3(*alpha*)90 or above are restricted to students with a minimum of three credits numbered 2(*alpha*)00 to 2(*alpha*)99 or permission of the instructor.

History

3. Students who have obtained honours standing in year 2 may be permitted to take a course numbered 3(alpha)90 or above in year 3, especially if it is not expected that the course will be offered the following year. A tentative list of courses numbered 3(alpha)90 or above to be offered in 2000-2001 is available in the department.

4. Students in the honours and pass programs in History have the option of fulfilling one of their required History credits by taking two half or one full course(s) from those listed under the heading "Departmental Offerings which are Approved History Credits". Students choosing this option must meet all prerequisites for the course(s) selected.

5. Students in the combined HIST/GBLS honours program who complete GBLS 2P96 and 3V95-3V99 are deemed to have completed the Science context requirement.

6. The courses chosen must be approved by the department Chair or designate, as comprising an acceptable program.

7. In all 20 credit degree programs, at least 12 credits must be numbered 2(alpha)00 or above, six of which must be numbered 2(alpha)90 or above and of these, three must be numbered 3(alpha)90 or above. In all 15 credit degree programs, at least seven credits must be numbered 2(alpha)00 or above, three of which must be numbered 2(alpha)90 or above.

Honours Program

Eleven HIST credits are required for an honours degree.

Year 1

HIST 1P92 and 1P93 or 1F95 or 1F96 (see program note 1); one Social Science and one Science context credit (see program note 1); two elective credits.

Years 2 and 3

Six HIST credits from those numbered 1(alpha)90 to 3(alpha)99; four elective credits (see program note 2).

Year 4

One HIST credit; one HIST credit numbered 3(alpha)90 or above; two HIST credits numbered 4(alpha)00 to 4(alpha)99; one elective credit.

Pass Program

Seven HIST credits are required for a pass degree.

Satisfactory completion of the first three years of the honours program entitles a student to apply for a pass degree.

Combined Major Programs

The Department of History participates in combined major programs. Students take seven HIST credits for an honours degree and five HIST credits for a pass degree.

History and Great Books/Liberal Studies (honours only)

Consult the Great Books/Liberal Studies entry for a listing of the course requirements.

Prerequisites and Restrictions

Students must check to ensure that prerequisites are met. Students may be deregistered, at the request of the instructor, from any course for which prerequisites and/or restrictions have not been met.

Description of Courses

Note that not all courses are offered in every session. Refer to the applicable term timetable for details.

HIST 1F95

World History since 1914

Major political, social, economic and cultural trends of the 20th century, with prime focus on developments in Europe and the way they have affected the rest of the world; the decline of Europe in global political and economic terms. Topics include the world wars, the Russian Revolution, fascism, the Holocaust, the Cold War, decolonization and conflict and its resolution in the international, political and social spheres.

Lectures, seminar, 3 hours per week.

HIST 1F96

The Americas

Comparative themes in the history of the Americas from pre-Columbian times to the present, with an emphasis on class, colonialism, economics, gender, labour, political systems, race, religion, revolution and war.

Lectures, seminar, 3 hours per week.

HIST 1P92

Early Medieval Europe

The societies and culture of Western Europe from the late Roman Empire until the Crusades and the 12th-century Renaissance. The agricultural base of society, its cultural context, the nature and roles of early Christianity and the ultimate survival and expansion of Christendom in the face of both pagan and Muslim challenges.

Lectures, seminar, 3 hours per week.

HIST 1P93

The High Middle Ages

The economy, society, culture and politics of Western Europe, 1050-1350. Ecclesiastical problems, religious beliefs, scholasticism, material culture and family structures in the context of urban and mercantile expansion.

Lectures, seminar, 3 hours per week.

HIST 2F20

The Origins of Modern Britain, 1485-1832

The political, religious, and economic forces that shaped British society and led to the country's emergence as an industrial and global power.

Lectures, seminar, 3 hours per week.

HIST 2F90

European Religious Reform and Reformation, 1300-1650

Forces promoting religious change and reform and institutional impediments; the fragmentation of Western Christendom. The effects of new theological positions and diverging denominational frameworks on the lives of ordinary people. Ancillary issues include marriage and family, poor relief, and education. Examination of primary texts.

Lectures, seminar, 3 hours per week.

HIST 2F92

Modern East Asia

A survey of East Asian history from the 17th century to the present focussing on China and Japan.

Lectures, seminar, 3 hours per week.

HIST 2P07

Origins: Canadian History to 1800

Social, economic, political and cultural developments in Canada from earliest French contacts to the end of the 18th century.

Lectures, seminar, 3 hours per week.

HIST 2P11

Canada in the 19th Century

Political, economic, social and cultural developments in British North America and the Dominion of Canada, 1800 to 1900.

Lectures, seminar, 3 hours per week.

Students completing this course will forfeit credit in HIST 2P08 and 2P09.

HIST 2P12

Canada in the 20th Century

Political, economic, social and cultural developments in 20th-century Canada.

Lectures, seminar, 3 hours per week.

Students completing this course will forfeit credit in HIST 2P09 and 2P10.

HIST 2P30

Renaissance Europe, 1300-1500

Some of the more problematic shifts and continuities in Western European society in an age of demographic crisis and economic dislocation. Family structures, technological innovation, elite and popular culture will be emphasized.

Lectures, seminar, 3 hours per week.

HIST 2P31

Europe during the Reformation, 1480-1600

The economic, demographic and political environment within which Luther, Calvin and other innovators attempted to reform Europe's religious life. Political and mercantile change and overseas expansion.

Lectures, seminar, 3 hours per week.

HIST 2P34

Seventeenth-Century Europe, 1566-1715

A survey of the history of continental Europe between the Netherlands Revolt and the death of Louis XIV. Topics include absolutism and its limits, religious controversy, developments in science, the witch craze and the effects of colonial expansion.

Lectures, seminar, 3 hours per week.

HIST 2P41

Eighteenth-Century Europe, 1715-1789

Demographic, economic and structural changes as they affected the nobility, bourgeoisie and popular classes; changes in patterns of criminality, riot and popular mentality; war as a stimulus of social reform; the Enlightenment in its social and cultural context and the origins of the French Revolution.

Lectures, seminar, 3 hours per week.

HIST 2P42

Revolutionary Europe, 1789-1815

The French Revolution and its European impact, emphasizing its origins, its role in the development of European political culture and its impact on the experience of women. Topics include the failure of the constitutional monarchy and the counter-revolution.

Lectures, seminar, 3 hours per week.

HIST 2P51

Europe 1815-1914

Political, social and cultural changes in the subcontinent when liberal, imperialist and industrializing Europe was still a dominant global power.

Lectures, seminar, 3 hours per week.

History

HIST 2P52

Twentieth-Century Europe

Themes in 20th-century European history.
Lectures, seminar, 3 hours per week.

HIST 2P79

The Thirteen Colonies, 1585-1776

The English colonies of North America from settlement to revolution.

Lectures, seminar, 3 hours per week.

Students completing this course will forfeit credit in HIST 2P80 and 2P81.

HIST 2P82

Glory and Despair: The United States, 1775-1875

The United States from its War of Independence through post-Civil War Reconstruction. Topics include the emergence of the two-party system, slavery and race, gender and power relations, Manifest Destiny and expansionism, Civil War, evangelical reform and industrialization.

Lectures, seminar, 3 hours per week.

Students completing this course will forfeit credit in HIST 2F97.

HIST 2P83

Ambiguities of Greatness: The United States, 1875 To Present

The United States since Reconstruction. Emphasis on industrialization and post-industrialism, empire building, race, gender relations, world wars, Cold War, consumerism, youth rebellion and popular culture.

Lectures, seminar, 3 hours per week.

Students completing this course will forfeit credit in HIST 2F98.

HIST 2P96

Early Russia

Russian history from its beginnings in the Kievan period (ninth century) to the end of Catherine the Great's reign (1796).

Lectures, seminar, 3 hours per week.

Students completing this course will forfeit credit in HIST 3F70.

HIST 2P97

Canada: Social Control or Social Reform

Forces underlying social movements in Canada since the 1850s emphasizing the roles played by religious and educational institutions. Developments in secular and religious education, the origins and evolution of training programs for Canadian youth and the changing place of organized sport in Canadian life.

Lectures, seminar, 3 hours per week.

HIST 2P98

Modern Russia

Politics, society and culture from 19th-century Imperial Russia to the Soviet Union.

Lectures, seminar, 3 hours per week.

Students completing this course will forfeit credit in HIST 3F90 and 3F92.

HIST 2P99

Ideas and Culture, 1700-1850

(also offered as GBLS 2P99)

Intellectual and cultural developments in Europe and North America during the 18th and early 19th centuries.

Lectures, seminar, 3 hours per week.

HIST 2Q95

Women in North America

(also offered as WISE 2Q95)

Major themes in the history of women in Canada and the United States: native and European women in New France and British North America; women in the American Revolution; the lives of enslaved women; women and industrialization; women in the west; suffrage and social reform; women and the two world wars; and feminism in the 1960s and 1970s.

Lectures, seminar, 3 hours per week.

Students completing this course will forfeit credit in HIST 2P95.

HIST 2V90-2V99

History in its Environment

Study of the history of a country or region in its own cultural and geographical context. Background preparation and research preceding an intensive study period on location.

Restriction: permission of the Department.

Lectures, seminar, 3 hours per week.

HIST 2V90

2000-2001: Selected Issues in Mexican History

(also offered as SPAN 2V90)

Focuses on one or more of the following topics: colonial architecture, urban growth, muralist art of the early 20th century, Mexican-United States relations, bullfighting, the failure of modernization, and the Mexican Revolution.

Note: students are responsible for travel accommodations and other expenses.

HIST 3F20

Modern Britain

Politics, economy, society and culture in the British Isles from the early 19th century to the present.

Lectures, seminar, 3 hours per week.

Students completing this course will forfeit credit in HIST 3P23 and 3F24.

HIST 3F50

Modern Germany

Politics, economy, society and culture in the German-speaking lands from the early 19th century to the present.

Lectures, seminar, 3 hours per week.

HIST 3F80

From Revolution to Revolution: The Promise of Modern Mexico, 1810-Present

Mexican history since independence. Class, ideology, foreign relations, and gender relations in the context of strong-man rule, civil war, French and American interventions, Corporatism, the Mexican Revolution, the failure of modernization, and the stability of one-party democracy.

Lectures, seminar, 3 hours per week.

HIST 3F91

The Experience of Empire

Imperialism, anti-imperialism and nationalism in the British Empire and Commonwealth in the 19th and 20th centuries.

Lectures, seminar, 3 hours per week.

HIST 3P00

Ideas and Culture since 1850

(also offered as GBL5 3P00)

Intellectual and cultural developments in Europe and North America during the late 19th and 20th centuries.

Lectures, seminar, 3 hours per week.

HIST 3P50

Directed Research

In exceptional circumstances, a student with honours standing may be permitted to pursue directed research using primary sources. Topics to be defined in consultation with a faculty member who is willing to supervise the student.

Restriction: permission of the department.

HIST 3P60

The World of Genghis Khan: Inner Asia since 500 BCE

The history of Mongolia, Tibet and Xinjiang. Political, economic, social and cultural topics. Emphasis on the nomadic encounter with the settled world (China, Russia, etc.), including the medieval nomadic invasions, the Great Game and nationalistic policies in the 20th century.

Lectures, seminar, 3 hours per week.

Note: seminars will include films and primary sources (in translation).

HIST 3P74

Canada: A Land of Immigrants

Immigrants, immigration movements, problems of adjustment and government policies.

Lectures, seminar, 3 hours per week.

HIST 3P90

The Rise and Fall of the Russian Empire

The Russian empire and its components over the past 500 years. Topics include expansion, nationalities, diplomacy and the politics of dissolution in the post-Soviet era.

Lectures, seminar, 3 hours per week.

HIST 3P91

North America's First Nations

Topics in the history of North American aboriginal peoples.

Lectures, seminar, 3 hours per week.

HIST 3P92

Aspects of Ontario History, 1791-1914

Specific themes in the social, cultural, political and economic history of the province.

Lectures, seminar, 3 hours per week.

HIST 3P93

Literacy, Culture and Typography in Europe, 1300-1600

The shift from script to print, the gap between high and low cultures and the cosmology of the Early Modern period. The consequences of typography for scholars, writers, governments and ordinary people.

Lectures, seminar, 3 hours per week.

HIST 3P94

Twentieth-Century Latin American Revolutions

(also offered as SPAN 3Q94)

The social, economic, and intellectual roots of revolutions in Mexico, Bolivia, Guatemala, Cuba and Nicaragua. The seminal role of the Mexican Revolution.

Lectures, seminar, 3 hours per week.

HIST 3P98

French Canada

The cultural, economic and political institutions of French Canada; analysing the sources of French-English conflict with emphasis on questions such as education, cultural values, imperial defence and conscription.

Lectures, seminar, 3 hours per week.

HIST 3P99

The Challenge to Social Order in 18th-Century England

The basis of Hanoverian stability and the threat to it from political factionalism, popular dissent and economic upheaval.

Lectures, seminar, 3 hours per week.

Students completing this course will forfeit credit in HIST 3P21.

HIST 3Q95

Canadian Labour History

(also offered as LABR 3Q95)

Canadian workers and the labour movement from the mid-19th century to the present, combining studies of trade unions with the broader context of the social, community and political life of workers. How gender and race/ethnicity have shaped the working class experience.

Lectures, seminar, 3 hours per week.

Students completing this course will forfeit credit in HIST (CANA/LABR) 3P75.

HIST 3V90-3V94

Topics in Canadian Cultural History

Lectures, seminar, 3 hours per week.

Prerequisite: CANA 2F91 or two HIST credits numbered 2(alpha)00 to 2(alpha)99 or permission of the instructor.

History

HIST 3V91

2000-2001: TBA

(also offered as CANA 3V91)

HIST 3V95-3V99

Problems in United States Foreign Policy

Studies in selected problems and themes in U.S. foreign policy.

HIST 4F99

Honours Tutorial

Directed reading and discussion in the student's selected field in preparation for a comprehensive examination. Honours students who are interested in this course may begin their reading for HIST 4F99 in year 3.

Restriction: open to HIST (single or combined) majors with approval to year 4 (honours) until the date specified in the BIRT guide and then open to other students with permission of the department.

Note: students must make arrangements before the end of April for tutorials to begin the following school term.

HIST 4V00-4V09

Themes in Literature and History

Seminar, 3 hours per week.

Restriction: open to HIST (single or combined) majors with approval to year 4 (honours) until the date specified in BIRT guide and then open to other students with permission of the department.

HIST 4V00

2000-2001: Literature of the English Revolution

(also offered as ENGL 4V00)

Literary, critical, historical and theoretical perspectives of texts from the 1640s to the Restoration, including *Areopagitica*, *Eikon Basilike*, female prophecy and *Agreement of the People*. *Seminar, 3 hours per week.*

Restriction: open to English Plus, ENGL (single or combined) and HIST (single or combined) majors with either a minimum of 14.0 overall credits and a minimum 70 percent major average and a minimum non-major average of 60 percent or approval to year 4 (honours) or permission of the instructor.

HIST 4V10-4V19

Problems in Canadian History

Studies of selected problems in different eras of Canadian history. Topics studied in any given year will focus on a particular theme.

Seminar, 3 hours per week.

Restriction: open to HIST (single or combined) majors with approval to year 4 (honours) until the date specified in the BIRT guide and then open to other students with permission of the department.

HIST 4V10

2000-2001: Emergence of Modern Canada, 1930-1980

Political, economic and social developments in Canada from 1930 through the 1970s.

HIST 4V13

2000-2001: Canadian Women's History

The social, economic and political activities of women in Canadian history, concentrating on the late 19th and the 20th centuries. Ethnic/racial and class variations in women's experience.

HIST 4V21-4V29

Problems in United States History

Studies of selected problems and topics in United States history. *Seminar, 3 hours per week.*

Restriction: open to HIST (single or combined) majors with approval to year 4 (honours) until the date specified in the BIRT guide and then open to other students with permission of the department.

HIST 4V25

2000-2001: TBA

HIST 4V30-4V39

Problems in European Social and Political History

Selected problems, topics and periods in European social and political history from the 15th to the 20th centuries, with particular attention to developments pertaining to France, Germany, Great Britain and Russia. Countries covered will vary from year to year.

Seminar, 3 hours per week.

Restriction: open to HIST (single or combined) majors with approval to year 4 (honours) until the date specified in the BIRT guide and then open to other students with permission of the department.

HIST 4V38

2000-2001: The Russian Revolution

Causes of the Romanov dynasty's collapse and its replacement by Bolshevism.

HIST 4V40-4V49

Problems in European Intellectual and Cultural History

Studies in selected problems, topics and periods in European cultural and intellectual history.

Seminar, 3 hours per week.

Restriction: open to HIST (single or combined) majors with approval to year 4 (honours) until the date specified in the BIRT guide and then open to other students with permission of the department.

HIST 4V43

2000-2001: Censorship: A Comparative Approach

A comparison of the attitudes and approaches to censorship in a number of different contexts (e.g., the Inquisition, the English Civil War, absolute monarchy, the French Revolution and the totalitarian state) between the Middle Ages and the 20th century.

History

HIST 4V50-4V59

Problems in Asian History

Studies of selected problems and topics in Asian history.

Seminar, 3 hours per week.

Restriction: open to HIST (single or combined) majors with approval to year 4 (honours) until the date specified in the BIRT guide and then open to other students with permission of the department.

FREN 3E82

FREN 4P00

The Civilization of France

History of the Language

GBLS 1F90

GBLS 2F90

GBLS 3P90

Great Books Seminar I

Great Books Seminar II

Great Books Seminar III
(Part I)

Great Books Seminar IV
(Part I)

Great Books Seminar III
(Part II)

Great Books Seminar IV
(Part II)

GBLS 3P91

GBLS 4P10

GBLS 4P11

Departmental Offerings which are Approved History Credits:

Students in the pass and honours programs in History have the option of fulfilling one of their required History credits by taking two half or one full course(s) from those listed below. Students choosing this option must meet all prerequisites for the course(s) selected.

GEOG 2P03

GEOG 2P06

Urban Geography

Cultural and Historical

Geography

Geography of Canada

Themes in Cultural

Geography

Themes in Historical

Geography

GEOG 2P91

GEOG 3P86

GEOG 3P87

CANA 2F91

Culture and Power in Canada

CLAS 2P91

The History of Early Greece

CLAS 2P92

The History of Classical Greece

CLAS 2P98

History of the Roman Republic

CLAS 2P99

History of the Early Roman
Empire

ITAL 2P10

ITAL 2P11

Renaissance Art and Thought

Modern and Contemporary

Italian Culture and Civilization

ECON 2P09

Canadian Economic History

MUSI 1F50

History of Music from

ECON 2P10

United States Economic History

MUSI 2P51

Medieval to Modern Times

ECON 2P11

European Economic History

MUSI 2P51

History of Music in the

ECON 3P01

History of Economic Thought I

MUSI 2P52

Classical Era

ECON 3P02

History of Economic Thought II

MUSI 2P52

History of Music in the

ENGL 2P51

Literature of the British Empire

MUSI 3P96

Romantic Era

ENGL 3F91

History of the Language

MUSI 3P97

History of Music in the

ENGL 3V70

Contemporary Writing and
History

MUSI 3P97

Baroque Era

FILM 2F54

Documentary Film (also offered
as COMM/SOCI 2F54)

MUSI 4P51

History of Music in the
20th
Century

FILM 2F90

Film History

MUSI 4P52

History of Music in the

FILM 2F97

Canadian Cinema (also offered
as COMM 2F97)

MUSI 4P53

Renaissance

FILM 2P20

Introduction to Popular
Culture (also offered as COMM/
PCUL 2P20)

MUSI 4P54

18th-Century Italian

FILM 2P21

Canadian Popular Culture
(also offered as COMM/PCUL
2P21)

POLI 2F12

Opera

FILM 3F97

Screened Women (also offered
as COMM/WISE 3F97)

POLI 2P91

Methodology and Research
in Musicology

FILM 3P95

National Cinema

POLI 2P92

POLI 2P93

POLI 2P95

Singspiel and German

Romantic Opera

History of Music in the
Renaissance

The Government and Politics of
Canada

Political Theory I

Political Theory II

Liberal Democracy

Politics, Culture and Society in

Contemporary Britain

History

POLI 2P97	The Government and Politics of the United States
POLI 3P11	Local Government
POLI 3P16	Politics in Québec (also offered as CANA 3P16)
POLI 3P28	Canadian Foreign Policy
POLI 3P43	Politics in the Developing World
POLI 3P44	Canada's Asian-Pacific Neighbours
POLI 3P45	Politics in Advanced Democratic Systems
POLI 4P01	The Philosophy of Law (also offered as GBL5 4P01)
POLI 4P02	Ancient Political Theory (also offered as GBL5 4P02)
POLI 4P04	Politics and Tyranny (also offered as GBL5 4P04)
POLI 4P14	Federalism in Canada
POLI 4P15	Canadian Political Economy (also offered as LABR 4P15)
POLI 4P22	Foreign Policy Analysis
POLI 4P36	Revolution or Reform? Political Change in the Modern World
POLI 4P47	Arab Politics
PSYC 4P92	History of Psychology
SPAN 4P00	History of the Spanish Language
VISA 2P40	Early to High Renaissance Art and Architecture
VISA 2P41	Baroque Art and Architecture
VISA 2P50	Canadian Identities: From Nouvelle France to the Group of Seven
VISA 2P51	Themes in 20th-Century Canadian Art
VISA 2P90	Art in Revolution: 1750-1851
VISA 2P91	Modernism, Modernity and Contemporaneity: 1851-1907
VISA 3P05	The European Avant-Garde: 1905-1960
VISA 3P06	The American Avant-Garde: 1912-1970
WISE 2P91	The Status of Women: Historical Perspectives

Integrated Studies

Students wishing to pursue a pattern of studies which does not coincide with either a single major or a combined major program may choose an Integrated Studies Program.

An Integrated Studies Program is offered at both honours and pass levels for students whose special interests cannot be accommodated by a major, combined major or General Studies program. (An Integrated Studies program in Education is not available). A student choosing an Integrated Studies program must receive prior approval for such a program or any subsequent changes to an approved program from the appropriate Dean.

Program Requirements

A student electing to pursue an Integrated Studies Program must maintain second-class honours standing in order to continue in the program and to graduate. Additionally, an Integrated Studies Program must include an appropriate credit in MATH or COSC if the pattern of studies includes an emphasis in Science or Social Science or a credit in a language (in accordance with the language requirement of the Faculty of Humanities) if the pattern of studies includes an emphasis in the Humanities. Both may be required where circumstances warrant. When choosing a program, students should take care that prerequisites for advanced courses are met and that the schedule for cycled courses be considered.

Program Notes

1. Students enrolled in the program are invited to participate in the study year in Germany at the University of Freiburg and are eligible for the practicum in Germany (GERM 3P98, 4P98). Both opportunities are offered by the Department of Germanic and Slavic Studies. Students may also avail themselves of the many summer programs offered by universities in Québec and France.
2. In all honours degree programs, at least 12 credits must be numbered 2(alpha)00 or above, six of which must be numbered 2(alpha)90 or above and of these, three must be numbered 3(alpha)90 or above. In all pass degree programs, at least seven credits must be numbered 2(alpha)00 or above, three of which must be numbered 2(alpha)90 or above.

A typical example of an Integrated Studies Program is the BA (honours) program in Canadian and European Union Studies.

BA Integrated Studies in Canadian and European Union Studies

The program is offered only as a four-year honours program leading to the degree of Bachelor of Arts (BA) in Integrated Studies in Canadian and European Union Studies. Only students who have obtained a 70 percent overall average in year 2 may proceed to years 3 and 4.

Students will be required to pass an oral proficiency test in either French or German prior to graduation. Competence in both languages is strongly recommended.

One credit in FREN and GERM at the 1(alpha)00 level or above must be taken in years 1 and 2. At least two credits in either FREN or GERM, numbered 2(alpha)90 or above, must be taken during years 3 and 4.

Students must fulfil the University's context requirements.

Of the remaining credits, at least five must have European content and at least five must have Canadian content. A minimum of six credits must be taken in either HIST or POLI, including a year 4 honours research credit. Students should consult the Dean of Humanities regarding course selection.

Prerequisites:

Either OAC French (or FREN 1P01, 1P02) or German (or GERM 1P01, 1P02). FREN 1P01, 1P02 or GERM 1P01, 1P02, or both, may be taken in year 1.

International Political Economy

This program is co-ordinated by the Department of Economics and Political Science.

Co-ordinators

Robert Dimand, Department of Economics
Pierre Lizée, Department of Political Science

General Information

*Administrative Assistant, extension 3476
Iaro Hall 468*

The Honours BA in International Political Economy offers students an opportunity to combine studies in Economics and Political Science to develop an understanding of the forces of globalization and their consequences.

The study of political economy explores, from diverse perspectives, the interplay of economic forces with political processes and institutions - in particular, the relationship between states and markets. Many of the most significant questions of political economy are becoming international in scope because of three inter-related phenomena: productions, finance and trade increasingly transcend the traditional jurisdictions of nation-states; the effects of economic globalization have been intensified by developments in communications technologies and cultural process; in these contexts, fundamental political questions of (re-)distribution and power are becoming internationalized, and international forces increasingly rival domestic ones as influences on state policy.

Program Notes

1. ECON 4P13 and 4P14 are recommended for those intending to proceed to graduate studies in Economics or International Affairs.
2. One of POLI 4P22, 4P26, 4P27, 4P95 strongly recommended.
3. In all 20 credit degree programs, at least 12 credits must be numbered 2(alpha)00 or above, six of which must be numbered 2(alpha)90 or above and of these, three must be numbered 3(alpha)90 or above.

Honours Program

Year 1

ECON 1P91 and 1P92; MATH 1P93 or 1P97; MATH 1P98; POLI 1F90; one Humanities context credit (HIST 1F95 recommended); one Science context credit.

Year 2

ECON 2P21, 2P22, 2P31 and 2P32; POLI 2F20 and 2P91; POLI 2P92 or 2P93; one elective credit.

Year 3

ECON 2P90, 3P13, 3P93 and 3P94; POLI 3P21 and 3P26; one credit from POLI 2P94, 2P95, 2P97, 3P28, 3P33 (recommended), 3P43, 3P44, 3P45; one elective credit.

Year 4

ECON 3P90 and 3P91; POLI 4P20 and 4P21; one ECON credit numbered 2(alpha)99 or above (see program note 1); one POLI credit numbered 3(alpha)99 or above (see program note 2); one elective credit.

Prerequisites and Restrictions

Students must check to ensure that prerequisites are met. Students may be deregistered, at the request of the instructor, from any course for which prerequisites and/or restrictions have not been met.

Description of Courses

See relevant calendar entries for course descriptions.

International Studies

Director

Dennis F. Essar

Participating Faculty

Irene Blayer (French, Italian and Spanish), David T. Brown (Environment), Mohammed Dore (Economics), John Middleton (Environment), Roberta Robb (Economics), John Sivell (Applied Language Studies), Sybil Wilson (Education).

General Information

Administrative Assistant, extension 4224
Mackenzie Chown F242

The Centre for International Studies offers an interdisciplinary program; it is not a major, but rather is designed to contribute to the development of international perspectives across disciplines. Students take required International Studies courses along with approved internationally-oriented courses offered by other programs or departments.

Two programs of study are offered: a Concentration in International Studies, in concert with an honours major or co-major degree; and a Certificate in International Studies.

Three fundamentals are stressed in International Studies: 1) cultivation of another language; 2) comparative analysis of cultures and state-level systems; and 3) study of practical problems on a global scale. International Studies allows students to enrich their work in other programs and departments, contextualizes area studies focussed on particular parts of the world, and supports exchange programs in which Brock participates.

Students in International Studies must demonstrate written and oral proficiency in English and one other modern language at a level adequate for practical communication. Relevant languages currently taught at Brock include French, German, Italian, Japanese, Mandarin and Spanish. Usually two language credits are necessary. Language study should be started as early as possible. Students with demonstrable prior proficiency in any modern language other than English may apply to substitute other courses qualifying for International Studies credit. Students wishing to study Mohawk or Cayuga as part of International Studies should consult the Director.

Experience in another nation is strongly recommended, normally in year 3; it is possible to complete INTL 3P80 while abroad. The Office of International Services facilitates formal exchange programs with numerous countries including Australia, France, Germany, Japan, Korea, Mexico, the United Kingdom and the United States. See the Calendar entry on

International Study and Exchange Programs; students may also propose individual study plans abroad outside those established structures, but must obtain approval in advance from the Director of the Centre for International Studies.

Certificate in International Studies

The certificate is available to persons who already have a degree or do not wish to pursue a degree. Prospective candidates for the certificate should consult the Director before beginning the certificate sequence. This sequence normally requires part-time study over a minimum of two academic years, but in some circumstances the Director may advise on a selection of courses that may in some cases make it possible to complete the certificate in a single academic year. The certificate is awarded after completion of a minimum of five appropriate credits with an overall average of at least 60 percent. In keeping with the rules and conditions for certificates, students who go on to be admitted to a degree program may be permitted to count certificate credits towards that degree.

Required course:

INTL 1P95

Additional courses:

Two credits from the list of approved International Studies modern language courses (both in the same language); one credit from ECON 1P90 and 1P91, ERSC 1F90 or 1F95, GEOG 1F90, 1F91, HIST 1F95, LING 1F94, POLI 1F90; one-half credit from the list of approved INTL courses; one-half credit numbered 1(*alpha*)90 or above from remaining INTL courses or from the list of approved International Studies non-language courses; one-half credit numbered 3(*alpha*)90 or above from the remaining INTL courses or from the list of approved International Studies non-language courses.

It is strongly recommended that credits counted towards the certificate should be taken from at least three different departments or programs.

Students with demonstrable prior written and oral proficiency in a modern language other than English may apply to substitute other courses qualified for International Studies credit. All requirements for a major or a co-major honours degree program must also be fulfilled.

Concentration in International Studies

Students can earn a Concentration in International Studies by including International Studies courses, and other approved courses, as part of their academic work leading to an honours

International Studies

major in an academic department or program. Students should consult the Director when planning their programs to ensure that specific courses will qualify. Some departments or programs may also advise on appropriate and compatible sequences of courses for a Concentration in International Studies with a particular disciplinary major or co-major. The words "Concentration in International Studies" will be added to the student's transcript and diploma if the program is certified by the Director.

Required courses:

INTL 1P95 and 4P21.

Additional courses:

The five remaining credits must be taken from at least three different Departments/Centres/Programs, only one of which may be a language department:

Two credits from the list of approved International Studies modern language courses (both in the same language); one credit from ECON 1P90 and 1P91, ERSC 1F90 or 1F95, GEOG 1F90, 1F91, HIST 1F95, LING 1F94, POLI 1F90; one credit numbered 1(*alpha*)90 or above from remaining INTL courses or from the list of approved International Studies non-language courses; one credit numbered 3(*alpha*)90 or above from the remaining INTL courses or from the list of approved International Studies non-language courses.

Students with demonstrable prior written and oral proficiency in a modern language other than English may apply to substitute other courses qualified for International Studies credit. All requirements for a major or a co-major honours degree program must also be fulfilled.

Prerequisites and Restrictions

Students must check to ensure that prerequisites are met. Students may be deregistered, at the request of the instructor, from any course for which prerequisites and/or restrictions have not been met.

Description of Courses

Note that not all courses are offered in every session. Refer to the applicable term timetable for details.

INTL 1P95

Introduction to International Studies

Today's world as understood by differing cultures and approached by various disciplines. Complementary efficacy of three avenues of analysis: immersion in another language and

culture; comparative study of state-level and other intermediate systems; comprehension of trans-state phenomena from a global perspective. Focus on cultural similarities and differences and preparation for international experience.

Lectures, seminar, 3 hours per week.

INTL 2P94

Global Conventions on Environment and Development

(also offered as ENVP 2P94 and TOUR 2P94)

Attempts of the global community to set policy through processes such as the World Conservation Strategy, the Brundtland Commission, Agenda 21 and the Commission on Sustainable Development.

Lectures, workshop, seminar, 3 hours per week.

Prerequisites: ENVP 1P90, 1P91 or INTL 1P95; MATH 1P98 or permission of the instructor.

Students completing this course will forfeit credit in ENVP 3P44.

INTL 3P80

International Academic Experience

Completion of observational and/or data-collection research assignment under supervision, while participating in one of the international exchange programs or an approved equivalent international academic experience.

Restriction: permission of the Director.

Note: other criteria apply for each exchange program.

INTL 3P90

Tutorial in International Studies

Directed intensive and individual study under supervision of a co-operating faculty member in an area of international studies not represented by other courses.

Restriction: permission of the Director.

Note: students should consult the Director for assistance in arranging a tutorial.

INTL 4P21

Issues in the Global System

(also offered as ENVP 4P21 and TOUR 4P21)

Emphasis on power relationships, economic factors, business transactions, technological transnationalism and extra-state phenomena such as pollution and disease.

The role and possibilities for leadership, with a view to leadership development.

Seminar, 3 hours per week.

Restriction: minimum of 14.0 overall credits or permission of the Director.

Departmental Offerings which are Approved International Studies Modern Language Courses:

FREN 1F90

Intermediate French

FREN 1P01

Introductory French I

FREN 1P02

Introductory French II

FREN 1P03

Introductory French III

International Studies

FREN 2F00	Grammar and Composition	ECON 1P91	Principles of Microeconomics
FREN 2F03	Introduction to Literary Studies in French	ECON 1P92	Principles of Macroeconomics
FREN 3P62	African and Caribbean Literature in French	ECON 2P17	Economic Development
		ECON 3F07	Comparative Economic Systems
		ECON 3P13	Economics of the Multinational Enterprise
GERM 1F90	Language and Literature (Intermediate I)	ECON 3P93	International Trade
GERM 1P01	Language (Introductory I)	ECON 3P94	International Payments
GERM 1P02	Language (Introductory II)	ECON 3V61	Economics of ASEAN Countries
GERM 2F20	Language and Literature (Intermediate II)	ENGL 2P51	Literature of the British Empire
		ENGL 2P52	Post-Colonial Literature
		ERSC 1F90	Geology and the Environment
ITAL 1F00	Introductory Italian	ERSC 1F95	Introduction to Earth and Environmental Science
ITAL 1F01	Introductory Italian		Palaeontology
ITAL 1F90	Intermediate Italian	ERSC 2P32	Environmental Geology
ITAL 2F00	Language, Literature and Culture	ERSC 2P61	
ITAL 2F50	Italian Language and Culture	ENVP 2P92	Conservation Planning
ITAL 2P11	Modern and Contemporary Italian Culture and Civilization	ENVI 3V25-3V29	Interdisciplinary Perspectives on International Issues
ITAL 2P90	Translation	ENVI 3V64	Third World Cities
JAPA 1P00	Introduction to Modern Standard Japanese I	FILM 3P95	National Cinema
JAPA 1P01	Introduction to Modern Standard Japanese II	FNCE 4P05	International Finance
JAPA 1P80	Practical Japanese I	FREN/WISE 3P85	Women Writers of la Francophonie
JAPA 1P81	Practical Japanese II		
MAND 1P00	Introduction to Mandarin Chinese I	GEOG 1F90	Introduction to Human Geography
MAND 1P01	Introduction to Mandarin Chinese II	GEOG 1F91	Principles of Physical Geography
MAND 1P80	Practical Mandarin Chinese I	GEOG 2P02	Economic Geography
MAND 1P81	Practical Mandarin Chinese II	GEOG 2P10	Qualitative Research Design and Methodology
		GEOG 3P53	Community Development and Social Planning
RUSS 1F00	Introductory Russian	GEOG 3P81	Environmental and Developmental Problems in the Third World
SPAN 1F00	Introductory Spanish		
SPAN 1F90	Intermediate Spanish	HIST 1F95	World History since 1914
SPAN 2F00	Language and Literature	HIST 2F92	Modern East Asia
SPAN 2P10	Spanish-American Civilization	HIST/WISE 2Q95	Women in North America
SPAN 2P11	Culture and Civilization of Spain	HIST/SPAN 2V90-2V99	History in its Environment
SPAN 2P90	Spanish Linguistics	HIST 3P91	North America's First Nations
		HIST 3F91	The Experience of Empire
		HIST 3P94/SPAN 3Q94	Twentieth Century Latin American Revolutions
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Departmental Offerings which are Approved International Studies Non-Language Courses:			
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BIOL 4P70	Coral Reef Biology	LING 1F94	Introduction to General Linguistics
COMM 4P50	Ethnography of Communication	LING 3P92	Sociolinguistics
COMM 4P51	Language and Power	MGMT 3P98	International Business
COSC 1P99	The Internet and Intranets	MKTG 4P33	International Marketing

International Studies

OBHR 4V90	International Organizational Behaviour
PHIL 2P12	Indian Philosophy: An Introduction to Hindu Thought
PHIL 2P13	Indian Philosophy: An Introduction to Buddhist Thought
PHIL 2P17	Introduction to Chinese Philosophy
POLI 1F90	Introduction to Politics
POLI 2F20	Introduction to International Politics
POLI 2F30	Comparative Politics: Regimes and Political Life
POLI 3P26	International Law
POLI 3P27	International Organizations
POLI 3P41	Russia, Ukraine and the Other Successor States of the USSR
POLI 3P43	Politics and the Third World
POLI 3P44	Canada's Asia Pacific Neighbours
POLI 3P45	Politics in Advanced Democratic Systems
POLI 4P20	International Political, Legal and Organizational Processes
POLI 4P26	International Politics and National Security
POLI 4P27	Theories of International Relations
POLI 4P36	Political Systems Transformation
POLI 4P38	Ethnicity and Politics
POLI 4P46	Government and Politics of the European Union
POLI 4P47	Arab Politics
POLI 4P90	Honours Seminar
PSYC 3P54	Psychology of Western Consciousness
PSYC 3P55	Psychology of Eastern Consciousness
RECL 2P08	Introduction to Tourism
RECL 3P18	Tourism Planning and Development
RECL 3P28	Travel Product Distribution Channels
SOCI 3P47	Race and Ethnicity
SPAN/WISE 4P01	Contemporary Hispanic Women Writers
WISE 2P92	Women in the World Literature
*WISE 2P96	Global Issues in Under-Resourced Nations [See additions to the Course Bank]

Courses not on the above list may be approved by the Director on a case-by-case basis where substantial international content consistent with the General Information on this program can be demonstrated.

Labour Studies

Director

Daniel G. Glenday, Department of Sociology

Participating Faculty

Robert Andersen (Sociology), Ann D. Duffy (Sociology), Daniel G. Glenday (Sociology), Felice Martinello (Economics), Carmela Patrias (History), Roberta E. Robb (Economics), Garth Stevenson (Political Science)

General Information

Administrative Assistant, extension 4753
Mackenzie Chown C330
<http://www.brocku.ca/labourstudies/>

Our work determines how we spend many of our waking hours and it largely defines our position in society, our economic well-being and our self-image. It also defines the nature of our society and economy, since these are determined by the work efforts of individuals. Restructuring of the labour force, technological change, de-skilling, re-skilling, changing labour legislation, labour market segmentation, women's work and equality in the workplace are some of the issues that stimulate teaching and research in Labour Studies.

Given the complex and multifaceted nature of work, Labour Studies adopts a multidisciplinary approach to its study. Labour Studies is a combined major program leading to a pass BA degree. The program provides a social science perspective on the study of work with the participation of the departments of Economics, History, Political Science and Sociology. Students may earn a Concentration in Labour Studies by including Labour Studies and other approved courses, as part of their academic work leading to an honours BA in Economics, Political Science or Sociology.

Program Note

1. In all 15 credit degree programs, at least seven credits must be numbered 2(alpha)00 or above, three of which must be numbered 2(alpha)90 or above.

Pass Programs only

Students wishing to major in Labour Studies must declare a combined major with either Economics, Political Science or

Sociology. At least one-half LABR credit must be from outside the student's disciplinary co-major.

Labour Studies and Economics

Consult the Economics entry for a listing of course requirements.

Labour Studies and Political Science

Year 1

LABR 1P91 and 1P92; one POLI credit numbered 1(alpha)90 to 1(alpha)99; ECON 1P91 and 1P92 or SOCI 1F90; one Humanities context credit and one Science context credit.

Year 2

LABR 2F00; POLI 2F12, 2P80; one of POLI 2P91, 2P92, 2P93; one LABR credit; one elective credit.

Year 3

LABR 3F00 and 3P13; two POLI credits numbered 2(alpha)90 to 3(alpha)99; one-half LABR credit; one elective credit.

Labour Studies and Sociology

Year 1

LABR 1P91 and 1P92; SOCI 1F90; ECON 1P91 and 1P92, or one POLI credit numbered 1(alpha)90 to 1(alpha)99; one Humanities context credit and one Science context credit.

Year 2

LABR 2F00, 2P32 or 2P34; one SOCI credit; SOCI 2F10; one-half LABR credit; one elective credit.

Year 3

LABR 3F00; one LABR credit; SOCI 2P00 and SOCI 3P01; one SOCI credit numbered 2(alpha)90 or above; one elective credit.

Certificate Program

The Labour Studies Program offers a Certificate in Labour Studies designed for persons who already have a degree or do not wish to pursue a degree. The program consists of required courses with core concepts in Labour Studies and electives, where students cover Labour Studies topics in more detail. The admission requirements are the same as for the degree program.

The certificate is awarded upon completion of at least five credits as set out below with an overall minimum average of 60 percent.

Labour Studies

Required courses:

LABR 1P91, 1P92 and 2F00.

Additional courses:

One credit from ECON 1P91 and 1P92, one POLI credit numbered 1(alpha)90 to 1(alpha)99 level or SOCI 1F90; two credits from LABR 2P15, 2P32, 2P34, 3F51, 3P13, 3P24, 3P25, 3P30, 3P33, 3P34, 3P66, 3Q95.

See "Certificate Requirements" under Academic Regulations.

Concentration in Labour Studies

Students may earn a Concentration in Labour Studies by successfully completing the courses listed below as part of their academic work leading to an BA (honours) in Economics, Political Science or Sociology.

Required courses:

LABR 1P91, 1P92, 2F00 and 3F00.

Additional courses:

One credit from ECON 1P91 and 1P92, one POLI credit numbered 1(alpha)90 to 1(alpha)99 or SOCI 1F90; two credits from LABR 2P15, 2P32, 2P34, 3F51, 3P13, 3P24, 3P25, 3P30, 3P33, 3P34, 3P65, 3P66, 3Q95, 3V95-3V99, 4P15, 4P32, 4P54.

The words "Concentration in Labour Studies" will be added to a student's official transcript when the student graduates with a BA (honours) and completes the above listed requirements.

Prerequisites and Restrictions

Students must check to ensure that prerequisites are met. Students may be deregistered, at the request of the instructor, from any course for which prerequisites and/or restrictions have not been met.

Description of Courses

Note that not all courses are offered in every session. Refer to the applicable term timetable for details.

LABR 1P91

Introduction to Labour Studies

History of Canadian workers and unions. The evolution of work and the labour movement within the context of the social, economic and political lives of workers. The historical relationship between employers and employees and the basis for their conflict and co-operation.

Lectures, seminar, 3 hours per week.

LABR 1P92

Introduction to Issues in Labour Studies

Core concepts and key issues in work and labour in contemporary Canadian society. Topics may include the organization of work, technological change, occupational health and safety, pay and employment equity, women in the paid labour force, economic restructuring and its effect on work and labour and the changing face of the labour movement.

Lectures, seminar, 3 hours per week.

Prerequisite: LABR 1P91 or permission of the instructor.

LABR 2F00

Labour Law and Labour Unions

Labour law and public policy relating to work and organized labour in provincial and federal jurisdictions; institutions in the labour market such as the Labour Relations Board; the structure and functioning of organized labour in Canada; labour law and union organization in other countries.

Lectures, 3 hours per week.

Prerequisites: LABR 1P91 and 1P92 or permission of the instructor.

LABR 2F98

Public Administration

(also offered as COMM 2F98 and POLI 2F98)

Political, legal and managerial dimensions of public administration. Topics include the structure and management of public organizations; government reform; political-bureaucratic relations; pressure groups; personnel and budgetary processes; the policy process; ethics and accountability.

Lectures, seminar, 3 hours per week.

Prerequisite: one of LABR 1P91 and 1P92, COMM 1F90, one POLI credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

Students completing this course will forfeit credit in LABR (COMM/POLI) 3F51 and POLI 3P50.

LABR 2P15

The Economics of Unions

(also offered as ECON 2P15)

Labour unions in the marketplace. How unions affect, and are affected by, the labour and product markets. Topics include the effects of unions on wages, fringe benefits, turnover, inequality, productivity and the profitability of firms; union behaviour; who belongs to unions and why; collective bargaining; strikes; interest arbitration; public-sector unionism.

Lectures, 3 hours per week.

Prerequisites: ECON 1P91 and 1P92.

LABR 2P32

The Sociology of Work

(also offered as SOCI 2P32)

Changes in the organization of work and the composition of the work force with emphasis on the Niagara Peninsula. Topics include unionization, management strategies, pay equity and employment equity, the international division of labour and other current issues in the Canadian labour movement.

Lectures, seminar, 3 hours per week.

Prerequisite: LABR 1P91 and 1P92 or SOCI 1F90 or permission of the instructor.

LABR 2P34

Sociology of Trade Unions

(also offered as SOCI 2P34)

Labour process theories which focus on the relationship among technology, the division of labour, social relations of production and the manner in which the state, business and trade unions in Canada have responded to changes in the labour process.

Lectures, seminar, 3 hours per week.

Prerequisite: LABR 1P91 and 1P92 or SOCI 1F90 or permission of the instructor.

LABR 2P86

Women in the Economy

(also offered as ECON 2P86, SOCI 2P86 and WISE 2P86)

Women in the Canadian labour market. Topics include the allocation of time between the household and the labour market; gender segregation in the work place; how earnings are determined; causes of occupational and earnings difference by gender, the role of investment in education and discrimination; recent developments in the labour market and their impact on women and men; selected policy issues.

Lectures, 3 hours per week.

Restriction: open to WISE majors until date specified in the BIRT guide. Students must have a minimum of 4.0 overall credits.

LABR 2P94

Canadian Economic Issues

(also offered as ECON 2P94)

Canadian economic and business problems and policies. Topics may include stabilization, competition, taxation, foreign trade and exchange rate policies.

Lectures, 3 hours per week.

Prerequisites: ECON 1P91 and 1P92.

LABR 2P98

Work in an Information Age

The growth of information and communications technologies in paid and unpaid work in advanced industrial societies. Topics may include changing employment patterns; high-tech enclaves such as Silicon Valley, Kanata and Mondragon; skill training and changes to the gendered nature of work in high technology industries and organizations.

Lectures, seminar, 3 hours per week.

Prerequisite: one of LABR 1P91 and 1P92, ECON 1P91 and 1P92, one POLI credit numbered 1(alpha)90 to 1(alpha)99, SOCI 1F90.

LABR 3F00

Labour Studies Seminar

Advanced study of contemporary issues in Labour Studies with an emphasis on students' research and analysis.

Seminars, 3 hours per week.

Restriction: students must have a minimum of 8.0 overall credits.

Prerequisites: LABR 1P91, 1P92 and one other LABR credit or permission of the instructor.

LABR 3F98

Tutorial in Labour Studies

Guided readings on a topic not covered in the program's regular course offerings. Topics must be chosen in consultation with a faculty member willing to supervise the tutorial.

Seminar, 3 hours per week.

Restriction: permission of the Director.

LABR 3P13

The Politics of Labour

(also offered as POLI 3P13)

Relations between the labour movement and the state, with particular reference to Canada, including tripartism, corporatism, incomes policy, organized labour and political parties, industrial democracy and worker participation.

Lectures, seminar, 3 hours per week.

Prerequisite: one POLI credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

LABR 3P24

Labour Economics

(also offered as ECON 3P24)

Economics of the labour market. Topics include the demand for labour, the supply of labour and investment in human capital. Emphasis on policy applications.

Lectures, 3 hours per week.

Prerequisite: ECON 2P21 or 2P23.

LABR 3P25

Topics in Labour Economics

(also offered as ECON 3P25)

Topics vary from year to year and may include unemployment and the impact of unemployment insurance in the labour market, discrimination in the labour market, labour migration and the economic impact of immigration, economics of the family, the distribution of income and wealth in Canada, the

Labour Studies

economic impact of unions on wages and non-wage outcomes, issues in retirement and pensions.

Lectures, 3 hours per week.

Prerequisite: ECON 2P21 or 2P23.

LABR 3P30

Sociology of Women and Work

(also offered as SOCI 3P30 and WISE 3P30)

Quantitative and qualitative research exploring the societal significance and implications of the change in women's participation in paid employment and domestic labour in this century. Topics include the ghettoization of the female labour force, women in professional and non-traditional occupations, microtechnology, part-time work and unionization.

Lectures, seminar, 3 hours per week.

Prerequisite: one of LABR 1P91 and 1P92, SOCI 1F90 or WISE 1F90 or permission of the instructor.

LABR 3P31

Complex Organizations

(also offered as SOCI 3P31)

Research on the nature of complex organizations using theories such as those of the French Regulation School. The formal and informal aspects of the organizational roles, how morale, motivation, work discipline and conflict are regulated; feminist critiques of the traditional literature.

Lectures, seminar, 3 hours per week.

Prerequisite: LABR 1P91 and 1P92 or SOCI 1F90 or permission of the instructor.

LABR 3P33

The State and Economic Life

(also offered as POLI 3P33)

Political economy and the role of the state. Relationships between politics and markets and between democracy, capitalism and socialism. Topics may include regulation, public ownership, taxation, fiscal and monetary policy, income support programs, regional development and the screening of foreign direct investment.

Lectures, seminar, 3 hours per week.

Prerequisite: one POLI credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

LABR 3P34

Information Technology and Work

(also offered as SOCI 3P34)

Application of information technology to the labour process. Topics include the relationship of this technology to the number and types of jobs available, to the total hours worked over a lifetime and to the increased importance given to education and work.

Lectures, seminar, 3 hours per week.

Prerequisite: LABR 1P91 and 1P92 or SOCI 1F90 or permission of the instructor.

LABR 3P65

Introduction to Public Policy

(also offered as POLI 3P65)

Major theories, approaches and concepts including the nature

of public policy studies, contending theories of the state and public policy making, the growth of the state and the expansion of the scope of public policy activities and alternative modes of state intervention.

Lectures, seminar, 3 hours per week.

Prerequisite: one POLI credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

LABR 3P66

Social Movements

(also offered as SOCI 3P66)

A survey of the impact of ideology on behaviour and the subsequent development of social movements or examinations of particular movements such as separatism, nationalism, fascism, Marxism or feminism.

Lectures, seminar, 3 hours per week.

Prerequisite: LABR 1P91 and 1P92 or SOCI 1F90 or permission of the instructor.

LABR 3Q95

Canadian Labour History

(also offered as HIST 3Q95)

Canadian workers and the labour movement from the mid-19th century to the present, combining studies of trade unions with the broader context of the social, community and political life of workers. How gender and race/ethnicity have shaped the working class experience.

Lectures, seminar, 3 hours per week.

Students completing this course will forfeit credit in LABR (CANA/HIST) 3P75.

LABR 3V90-3V94

Special Topics in Labour Studies

Special topics courses not offered on a regular basis.

Lectures, seminar, 3 hours per week.

Prerequisites: LABR 1P91 and 1P92 or permission of the instructor.

LABR 3V95-3V99

Directed Studies

Guided readings on a topic not covered in the program's regular course offerings. Topics must be chosen in consultation with a faculty member willing to supervise.

Seminar, 3 hours per week.

Restriction: permission of the instructor.

Prerequisites: LABR 1P91 and 1P92.

LABR 4P15

Canadian Political Economy

(also offered as POLI 4P15)

From the writings of Innis, Mackintosh and Creighton to contemporary neo-Marxist and dependency theorists. Topics may include foreign investment, regional development, the labour movement, resources and Canada's place in the new international economy.

Seminar, 3 hours per week.

Restriction: open to POLS (POLI) (single or combined) majors with either a minimum of 14.0 overall credits and a minimum 70 percent major average or approval to year 4 (honours).

LABR 4P32

Advanced Seminar in the Sociology of Work

(also offered as SOCI 4P32 and WISE 4P32)

Theoretical and research developments in the sociology of work. Topics may include the impact of technological innovation on the labour process, reconceptualizations of work and leisure, changes in the gendered nature of work, the role of the contemporary labour movement and international perspectives on labour and the labour force.

Lectures, seminar, 3 hours per week.

Restriction: approval to year 4 (honours).

Prerequisites: two SOCI or LABR credits or permission of the instructor.

Note: SOCI 2P32 recommended.

LABR 4P54

Business-Government Relations

(also offered as POLI 4P54)

The politics and management of relations between business organizations and governments in Canada, emphasizing current research issues. Topics include theories of business-government relations, the legislative and regulatory environment of business, public enterprise and privatization, lobbying and interaction among government, business, the media and labour.

Seminar, 3 hours per week.

Restriction: open to POLS (POLI) (single or combined) majors with either a minimum of 14.0 overall credits and a minimum 70 percent major average or approval to year 4 (honours).

Prerequisite: LABR 2F98 (3F51) or POLI 3P50 or permission of the instructor.

Note: also open to non-POLI majors with a relevant background in other disciplines and permission of the department.

Mathematics

Chair

Hichem Ben-el-Mechaiekh

Professors Emeriti

Shao-Chien Chang, John P. Mayberry

Professors

Howard E. Bell, Hichem Ben-el-Mechaiekh, Velmer B. Headley, Ronald A. Kerman, Charles F. Laywine, Eric R. Muller, Jan Vrbik

Associate Professors

John W. Auer, Mei Ling Huang, Thomas A. Jenkyns, William J. Ralph

Assistant Professor

Stephen Anco

Instructor

Brian Calvert

Senior Demonstrator

Dorothy Levay

General Information

Administrative Assistant, extension 3300

Mackenzie Chown J415

<http://www.brocku.ca/mathematics/>

The Department of Mathematics welcomes inquiries from any student who may be interested in pursuing his or her degree in either pure mathematics (mathematics for its own sake) or applied mathematics (mathematics used for attacking problems in other fields). The interests and experience of the faculty in both areas are varied and extensive.

Certain courses are required for any degree in Mathematics (see below). Because a MATH major needs both facility in dealing with mathematical theories and experience in the application of mathematics to real-world problems, each student should discuss his or her particular interests with faculty before selecting elective courses. At least one-third of a student's upper-year MATH courses should be chosen from each of the following groups:

Courses emphasizing theory: MATH 2F00, 2F10, 2P01, 2P50, 2P51, 3F00, 3F10, 3F94, 3P50, 3P51, 3P97, 3P98, 4F02, 4F10, 4F16, 4F52, 4P19, 4P20.

Courses emphasizing applications: MATH 2F96, 2P20, 2P60, 3P20, 3P58, 3P59, 3P95, 3P96, 4F21, 4P22, 4P23, 4P58, 4P59.

Program Notes

1. COSC 1P03 or 1P93 should be selected in consultation with the Mathematics department.
2. PHYS 1F90 is recommended as the Science context credit for students interested in physical applications of mathematics.
3. Students intending graduate studies in Mathematics will find it essential to have either MATH 4F02 or 4F10 and desirable to have both.
4. In all 20 credit degree programs, at least 12 credits must be numbered 2(alpha)00 or above, six of which must be numbered 2(alpha)90 or above and of these, three must be numbered 3(alpha)90 or above. In all 15 credit degree programs, at least seven credits must be numbered 2(alpha)00 or above, three of which must be numbered 2(alpha)90 or above.

Honours Program

Year 1

MATH 1P12, 1P93, 1P94; COSC 1P03 or 1P93 (see program note 1); three elective credits, at least two of which should be chosen to fulfil context requirements (see program note 2).

Year 2

MATH 2F00, 2F10 and 2P01; one credit from MATH 2P50, 2P51, 2F96, 2P20, 2P60, 3P20, 3P50, 3P51; one and one-half elective credits.

Year 3

MATH 3F00 and 3F10; one credit from those not taken above or MATH 3F94, 3P58, 3P59, 3P95, 3P96, 3P97, 3P98, 4F21, 4P19, 4P20, 4P22, 4P23, 4P58, 4P59; two elective credits.

Year 4

Four MATH credits; one elective credit (see program note 3).

Pass Program

Year 1

MATH 1P12, 1P93, 1P94; COSC 1P03 or 1P93 (see program note 1) three elective credits, at least two of which should be chosen to fulfil context requirements (see program note 2).

Year 2

MATH 2F00 and 2P01; two credits from MATH 2F10, 2F96, 2P20, 2P50, 2P51, 2P60, 3F10, 3P20, 3P50, 3P51; one context credit if all three are not taken in year 1; one-half elective credit.

Year 3

Three MATH credits from those not taken in year 2 MATH 3F00, 3F94, 3P58, 3P59, 3P95, 3P96, 3P97, 3P98, 4F21, 4P19, 4P20, 4P22, 4P23, 4P58, 4P59; two elective credits.

Combined Major Programs

Combined major programs have been developed by the Department of Mathematics in co-operation with each of these departments: Biological Sciences, Chemistry, Computer Science, Economics and Physics. Program requirements are listed in the calendar sections of the co-major discipline. If any student wishes a major program which combines Mathematics or Mathematics with a Concentration in Statistics with any other discipline, he or she may request approval of an individual program from the two departments involved.

Programs and Courses for Future Teachers

The Department of Mathematics has developed a set of courses that are most appropriate for students preparing to become teachers at either the elementary or secondary levels.

Elementary

To assist students meet Primary/Junior Pre-service Education admission requirements at Brock University - MATH 2P02.

Three credits for a specialization - MATH 1F92, 1P66, 2P50, 2P51 and 3P91.

Concurrent BSc/BE d

The Faculty of Mathematics and Science and the Faculty of Education co-operate in offering a concurrent pass BSc/BE d Integrated Studies program with a concentration in mathematics for students interested in teaching grades 4 to 8. After graduation from the BSc/BE d program, students may proceed to an honours Bachelor of Science degree in Integrated Studies. Refer to the Education - Concurrent BSc/BE d Program listing for additional information.

Secondary

For Mathematics as the major area of concentration (a minimum of five credits), an honours degree in Mathematics is recommended. Students should consult the Chair in the selection of courses.

For Mathematics as the minor area of concentration (a minimum of three credits) - MATH 1P12, 1P93, 1P94, 2P50, 2P51 and one-half MATH credit.

Certificate in Statistics

The certificate program will be available to people (ideally those with a degree in another discipline) who have completed at least one full-year university level course in Calculus.

Required courses:

MATH 2F96, 3P95, 3P96, 4P22, 4P23.

Additional courses:

Two other credits approved by the Mathematics department and normally selected from mathematics and statistics courses offered by the Mathematics department.

Concentration in Statistics

Students may earn a Concentration in Statistics by successfully completing the courses listed below as part of their academic work leading to a BSc (honours) in Mathematics.

Required courses:

MATH 1P93, 1P94, 2F96, 3P95, 3P96, 4F21, 4P22, 4P23; MATH 2F00 or 2F95.

Other courses as specified in the Mathematics honours program.

The words "Concentration in Statistics" will be added to a student's official transcript when the student graduates with a BSc (honours) in Mathematics having completed the above listed requirements.

Prerequisites and Restrictions

Students must check to ensure that prerequisites are met. Students may be deregistered, at the request of the instructor, from any course for which prerequisites and/or restrictions have not been met.

Mathematics

Description of Courses

Note that not all courses are offered in every session. Refer to the applicable term timetable for details.

Note that courses marked in the following descriptions with an asterisk(*) are "service courses", developed specifically to serve the needs of students majoring in some other area; those courses will not be counted among the Mathematics courses required for a Mathematics degree.

*MATH 1F92

Introductory Statistics

Types of scales; frequency distribution, mean, mode, median and measures of dispersion; elements of probability theory, probability distributions, non-parametric tests; normal, chi-squared, t- and F-distributions; means and variance tests; analysis of variance, correlation and regression, applications and use of a computer package.

Lectures, tutorial, 4 hours per week.

Prerequisite: grade 11 mathematics credit.

Note: designed for non-science majors. Not open to students with credit in any university mathematics or statistics course.

MATH 1P12

Introductory Linear Algebra

Vector algebra; systems of linear equations; basic matrix operations; matrix inversion; determinants, characteristic equations, eigenvalues and eigenvectors; diagonalization; the use of computer algebra systems.

Lectures, tutorial, 5 hours per week.

Prerequisite: two OAC mathematics credits.

Note: a third OAC mathematics credit is strongly recommended.

MATH 1P66

Mathematics for Computer Science I

Development, analysis and applications of algorithms in computation; elementary logic, proofs; graphs and trees.

Lectures, tutorial, 4 hours per week.

Prerequisite: one OAC mathematics credit.

Note: designed for students in Computer Science.

MATH 1P67

Mathematics for Computer Science II

Development, analysis and applications of algorithms in combinatorial analysis; discrete probability models; recursion; limiting procedures and summation; difference equations; introduction to automata theory.

Lectures, tutorial, 4 hours per week.

Prerequisite: MATH 1P66.

Note: designed for students in Computer Science.

MATH 1P93

Calculus I

Review of real variables and real functions; limits and continuity of functions, the intermediate value theorem and the extreme value theorem with applications, differentiation, the mean value theorem, optimization problems, graphing, Newton's method, antiderivatives, the fundamental theorem of calculus and definite integrals, elementary integration techniques, numerical integration.

Lectures, tutorial, 5 hours per week.

Prerequisites: two OAC mathematics credits including OAC calculus or permission of instructor.

Note: this course has compulsory computer algebra system activities.

Students completing this course will forfeit credit in MATH 1F00.

MATH 1P94

Calculus II

Further techniques of integration; ordinary differential equations; applications of the definite integral; improper integrals; infinite series, Taylor's theorem, Taylor series; functions of several variables: partial differentiation, limits and continuity, gradients, extrema with or without constraints, double integrals.

Lectures, tutorial, 5 hours per week.

Prerequisite: MATH 1P93.

Note: this course has compulsory computer algebra system activities.

Students completing this course will forfeit credit in MATH 1F00.

*MATH 1P97

Differential and Integral Methods

Elementary functions, particularly the power function, the logarithm and the exponential; the derivative and its application; integration; approximation to the area under a curve; the definite integral; partial differentiation; simple differential equations; numerical methods; and the use of computer algebra systems.

Lectures, lab, 5 hours per week.

Prerequisite: grade 12 mathematics or permission of the department.

Note: designed for students of Biological Sciences, Business, Earth Sciences, Economics and Geography. Not open to students with credit in any university calculus course.

Students completing this course will forfeit credit in MATH 1P93.

*MATH 1P98

Basic Statistical Methods

Descriptive statistics; probability distributions, estimation; hypothesis testing; non-parametric tests; normal, chi-squared, t- and F-distributions; mean and variance tests; regression and correlation; and the use of statistical computer software.

Lectures, lab, 4 hours per week.

Prerequisite: grade 12 mathematics.

Note: designed for students of Biological Sciences, Business, Earth Sciences, Economics and Geography. Not open to students with credit in any university statistics course.

MATH 2F00

Advanced Calculus

Continuous functions on \mathbb{R}^n ; proofs of the intermediate value theorem and the extreme value theorem; Heine's theorem; partial differentiation; differentiability; Taylor's theorem; the implicit function theorem; integration theory: multiple integrals, arc length, surface area, line and surface integrals, Green's theorem, Gauss' theorem, Stokes' theorem; curves and surfaces in \mathbb{R}^n .

Lectures, 4 hours per week.

Prerequisite: MATH 1P93 and 1P94 (1F00).

Students completing this course will forfeit credit in MATH 2F95.

MATH 2F10

Linear Algebra

Theory of finite-dimensional vector spaces; algebra of linear transformations; matrices and determinants; canonical forms, eigenvalues, change of basis; applications.

Lectures, tutorial, 5 hours per week.

Prerequisite: MATH 1P12.

MATH 2F95

Advanced Calculus for Science Students

Infinite series, partial differentiation; elementary complex functions; ordinary differential equations; multiple, line and surface integrals; vector calculus; elementary partial differential equations; separation of variables; Fourier series; introduction to special functions of Legendre, Laguerre, and Hermite.

Lectures, 4 hours per week.

Prerequisites: MATH 1P93 and 1P94 (1F00).

Students completing this course will forfeit credit in MATH 2F00.

MATH 2F96

Mathematical Probability and Statistics

Basic probability theory, probability distributions, mathematical expectation, moments, generating functions, functions of random variables, central limit theorems, special probability distributions, sampling distributions, theory of estimation and its applications, theory of hypothesis testing and its applications, regression and correlations, analysis of variance, non-parametric methods.

Lectures, 4 hours per week.

Prerequisites: MATH 1P93 and 1P94 (1F00).

MATH 2P01

Introduction to Combinatorics

The pigeonhole principle; combinations, permutations and binomial coefficients; the inclusion-exclusion principle; recurrence relations; generating functions; introduction to graph theory.

Lectures, 4 hours per week.

Prerequisites: two OAC mathematics credits.

Students completing this course will forfeit credit in MATH 1P90.

MATH 2P02

Principles of Mathematics for Primary and Junior Teachers

Mathematical concepts and ideas in number systems, geometry and probability arising in the Primary and Junior school curriculum.

Lectures, seminar, 4 hours per week.

Restriction: students must have a minimum of 5.0 overall credits.

Note: designed to meet the mathematics admission requirement for the Primary/Junior Pre-service program of the Faculty of Education at Brock University. Not open to students holding credit in any grade 12/OAC or university mathematics course.

MATH 2P20

Numerical Analysis I

Elementary techniques for solving algebraic equations, systems of linear equations, eigenvalues and eigenvectors of matrices; numerical differentiation, integration and interpolation. Some theory of efficiency and precision of algorithms; some computer applications.

Lectures, 4 hours per week.

Prerequisites: MATH 1P12 (may be taken concurrently), MATH 1P93 and 1P94 (1F00).

MATH 2P50

Euclidean and Non-Euclidean Geometry I

The development of Euclidean and non-Euclidean geometry from Euclid to the 19th century. The deductive nature of plane Euclidean geometry as an axiomatic system, the central role of the parallel postulate and the general consideration of axiomatic systems for geometry in general and non-Euclidean geometry in particular. Introduction to transformation geometry.

Lectures, tutorial, 4 hours per week.

Prerequisite: one MATH credit.

Students completing this course will forfeit credit in MATH 2F94.

MATH 2P51

Great Moments in Mathematics I

Triumphs in mathematical thinking with emphasis on many cultures up to 1000 AD. Special attention is given to analytical understanding of mathematical problems from the past, with reference to the stories and times behind the people who solved them. Students will be encouraged to match wits with great mathematicians by solving problems and developing activities related to their discoveries.

Lectures, 4 hours per week.

Prerequisite: one MATH credit.

Note: MATH 2P51 and 3F92 are offered in alternate years. Students completing this course will forfeit credit in MATH 2F92.

Mathematics

MATH 2P60

Introductory Operations Research

Project management: CPM, PERT. Linear programming: formulation, graphical solution, simplex method, duality, examples. Special LP problems: transportation, assignment. The two-player zero-sum game and the minimax theorem. Elements of decision theory: utility, Bayesian models. Multiple regression. Inventory models: EOQ and generalizations. Queuing theory.

Lectures, lab, 5 hours per week.

Prerequisites: MATH 1P97 and 1P98.

Note: designed for students in Business.

MATH 3F00

Real and Complex Analysis I

Real numbers, uniform convergence, the space of continuous functions $C[a,b]$, Riemann-Stieltjes integration, Weierstrass approximation theorem. Fourier series, the Cauchy-Riemann and Laplace equations, complex integration, complex analytic functions, Cauchy's integral theorem and formulas, Taylor series, residue calculus, geometric properties of analytic functions (conformal maps).

Lectures, 4 hours per week.

Prerequisite: MATH 2F00 or permission of the department.

MATH 3F10

Basic Structures of Algebra

Introduction to fundamental algebraic structures; groups, rings and fields. Topics include fundamental theorems on subgroups and subrings, homomorphisms and quotient structures, as well as detailed discussion of important examples.

Lectures, 4 hours per week.

Prerequisite: MATH 1P12 or permission of the department.

MATH 3F65

Mathematical Methods for Computer Science

Applied probability, Markov chains, Poisson and exponential processes, renewal theory, queuing theory, applied differential equations. Networks, graph theory, reliability theory, NP-completeness.

Lectures, 4 hours per week.

Prerequisites: MATH 1P12, 1P66, 1P67 and 1P97.

MATH 3F92

Algebra with Applications

Introduction to algebraic structures with emphasis on application of abstract ideas to concrete mathematical problems. Group theory will be applied to the study of symmetries and counting problems using the Polya-Burnside theorem. Field theory will be applied to answer classical questions about trisecting angles and squaring the circle. Students will make presentations of selected topics.

Lectures, 4 hours per week.

Restriction: open to BSc/BEEd majors.

Prerequisite: MATH 1P12.

Note: MATH 2P51 and 3P51 are cycled in alternate years with MATH 3F92.

MATH 3F94

Differential Equations

Linear equations, series solutions, Laplace transforms and operator methods, systems of equations, basic existence theorem, Sturm-Liouville theory, Bessel and Legendre functions, orthogonal polynomials, eigenvalue problems. Fourier series, simple partial differential equations and boundary-value problems.

Lectures, 4 hours per week.

Prerequisite: MATH 2F00 or 2F95 or permission of the department.

MATH 3P20

Numerical Analysis II

Topics in matrix analysis, approximation theory (including least-squares and minimax); Legendre, Chebyshev and trigonometric functions; Gaussian quadrature; differential and partial differential equations.

Lectures, 4 hours per week.

Prerequisites: MATH 2F00 or 2F95 (may be taken concurrently); MATH 2P20.

MATH 3P50

Euclidean and Non-Euclidean Geometry II

Topics in Euclidean and non-Euclidean geometry chosen from the classification of isometries in selected geometries, projective geometry, finite geometries and axiomatic systems for plane Euclidean geometry.

Lectures, 4 hours per week.

Prerequisites: MATH 1P12 and 2P50.

Students completing this course will forfeit credit in MATH 2F94.

MATH 3P51

Great Moments in Mathematics II

The development of modern mathematics from Medieval times to the present. The course includes Fibonacci's calculation revolution, the disputes over cubic equations, Pascal and probability, Fermat's last theorem, Newton and Calculus, Euler and infinite series, set theory and the possibilities of inconsistencies in mathematics.

Lectures, 4 hours per week.

Prerequisites: MATH 1P12, 1P93 and 1P94.

Note: MATH 3P51 and 3F92 are offered in alternate years.

Students completing this course will forfeit credit in MATH 2F92.

MATH 3P58

Operations Research Methods A

(also offered as ECON 3P58)

Principles of operations research; Lagrange multipliers, with applications to LP; network models, elements of dynamic programming; scheduling (criteria and algorithms); integer programming (theory and practice); elements of quadratic programming; optimization and quasi-Newton methods; discussion and analysis of selected cases.

Lectures, 4 hours per week.

Prerequisite: MATH 2P60.

MATH 3P59

Operations Research Methods B

(also offered as ECON 3P59)

Principles of modelling; decision theory, subjective probability and Bayesian statistics; simulation; discussion and analysis of selected cases.

Lectures, 4 hours per week.

Prerequisite: MATH 2P60.

MATH 3P91

Mathematics at the Junior/Intermediate Level

A treatment of mathematics and its teaching and learning issues at the junior and intermediate levels. A major portion of the course will involve directed projects.

Lectures, seminar, 4 hours per week.

Restriction: open to BSc/BEd majors with a minimum of 9.0 overall credits.

Note: designed for students in the concurrent Mathematics and Education program.

MATH 3P95

Experimental Design

Analysis of variance; randomized block designs, Latin squares, factorial designs; nested and confounded designs; factorial replication; linear models; regression models; related topics.

Lectures, 3 hours per week; lab, 1 hour per week.

Prerequisite: MATH 2F96.

MATH 3P96

Sampling Theory

Theory of finite population sampling; simple random and stratified sampling; ratio and regression methods; systematic and cluster sampling; multi-stage sampling; errors in surveys; related topics.

Lectures, lab, 4 hours per week.

Prerequisite: MATH 2F96.

MATH 3P97

Introductory Topology

Introduction to metric and topological spaces; connectedness, completeness, countability axioms, separation properties, covering properties, metrization of topological spaces.

Lectures, 4 hours per week.

Prerequisites: MATH 2F00 and MATH 2F10 or 3F10.

MATH 3P98

Functional Analysis

Introduction to the theory of normed linear spaces, fixed point theorems, Stone-Weierstrass approximation on metric spaces and preliminary applications on sequence spaces.

Lectures, 4 hours per week.

Prerequisite: MATH 3P97.

MATH 4F02

Real and Complex Analysis II

Lebesgue integration on \mathbb{R}^n , differentiation and absolute continuity, Fubini's theorem, LP spaces, elementary Banach space theory, Fourier series, proof of Cauchy's integral theorem. The

maximum-modulus principle, the Phragmén-Lindelöf method, the Hausdorff-Young theorem, conformal mapping (linear fractional transformations, Riemann's mapping theorem, Bieberbach's conjecture); topics selected from: zeros of holomorphic functions, analytic continuation, asymptotic expansions.

Lectures, 4 hours per week.

Prerequisite: MATH 3F00.

MATH 4F10

Topics in Algebra

A treatment of several advanced topics drawn from group theory, theory of rings and modules, Galois theory, lattice theory, homological algebra and applications of algebra in geometry.

Lectures, 4 hours per week.

Prerequisite: MATH 3F10.

MATH 4F16

Advanced Topics

Topics vary from year to year. Topics include number theory, problems in real or complex analysis, summability theory, differential geometry, differentiable manifolds, algebraic topology, approximation theory, dynamical systems, foundations of mathematics.

Seminars, 4 hours per week.

Restriction: permission of the department.

MATH 4F21

Topics in Advanced Statistics

Topics chosen from stochastic processes, game theory, decision theory, multivariate analysis, time series analysis, Bayesian statistics and statistical inference.

Lectures, 4 hours per week.

Restriction: permission of the department.

Prerequisite: MATH 2F96.

MATH 4F52

Partial Differential Equations

Existence theory: Cauchy-Kowalewski theorem, distributions (generalized functions); separation of variables, equations of parabolic type, the heat equation, elliptic equations (Laplace's equation, the biharmonic equation) and applications, general theory of eigenvalues and eigenfunction expansions, Green's functions, hyperbolic equations (the wave equation, etc.), boundary-value problems.

Lectures, 4 hours per week.

Prerequisite: MATH 3F94.

MATH 4P19

Theory of Computation

Turing machines, universal machines, halting problems and related unsolvable problems; recursive functions and their relations to Turing machines; some non-computable functions. Formal languages and their relation to automata; regular, context-free and context-sensitive grammars.

Lectures, 4 hours per week.

Restriction: permission of the department.

Mathematics

MATH 4P20

Combinatorics

Enumeration problems involving generating functions, the principle of inclusion-exclusion, and Polya's counting theorem. Sets of orthogonal Latin squares, their existence and construction, and applications to affine and projective planes, coding theory and cryptography.

Lectures, 4 hours per week.

Restriction: permission of the department.

Note: while no specific course is an essential prerequisite, students should have competence in abstraction equivalent to that obtained by successful completion of MATH 2F10.

MATH 4P22

Regression Analysis

Simple and multiple linear regression and correlation, measures of model adequacy, residual analysis, weighted least squares, polynomial regression, indicator variables, variable selection and model building, multicollinearity, time series, selected topics.

Lectures, 4 hours per week.

Prerequisite: MATH 2F96.

MATH 4P23

Nonparametric Statistics

Order statistics, rank statistics, methods based on the binomial distribution, contingency tables, Kolmogorov-Smirnov statistics, nonparametric analysis of variance, nonparametric regression, comparisons with parametric methods.

Lectures, 4 hours per week.

Prerequisite: MATH 2F96.

MATH 4P58

Operations Research Applications

(also offered as ECON 4P58)

Practice of operations research; investment and applications of LP to project selection, capital growth, further dynamic programming, location problems, inventory problems, actuarial problems; discussions and analysis of selected cases.

Lectures, 4 hours per week.

Prerequisite: MATH 3P58 or permission of the instructor.

MATH 4P59

Game Theory

(also offered as ECON 4P59)

Applications of modelling, review of elementary decision theory and subjective probability theory, game theory (Nash equilibrium, two player NZS games, Nash co-operative solution), Shapley value, voting power, selected cases from economics and other applications.

Lectures, 4 hours per week.

Prerequisite: MATH 2P60 or ECON 3P91 or permission of the instructor.

Music

Chair

Patricia Debly

Associate Professors

Patricia Debly, Peter Landey, Harris Loewen

Assistant Professor

Brian Power

Part-time Instructors

Brent Adams* (tuba), Lesley Atreo (organ, piano), Terry Ball* (viola), John Butler (keyboard harmony, piano), Terrance Cox (popular culture), Cécile Desrosiers (harpsichord), Sandra Donatelle (horn), Jonathan Earp (guitar), Margaret Gay (cello), Zoltan Kalman* (clarinet), Deborah Linton (voice), Roger Macchiaroli (double bass), Jennifer Snow (piano), Douglas Miller* (flute, saxophone), Shannon Peet (bassoon), Greg Robinson* (trumpet), Sandra Sakofsky (oboe), Laura Thomas* (percussion), Suzanne Thomas (harp), Tim White* (wind ensemble, trumpet)

*Members of the Niagara Symphony Orchestra

Co-ordinator, Applied Music

Deborah Linton

General Information

Administrative Assistant, extension 3817

Thistle 139

<http://www.brocku.ca/music/>

The goal of the Music program is to prepare each student for their chosen musical career and to produce critically aware musicians with a broadly based musical education. The Department of Music offers four-year programs of study leading to a BMus honours, a BA honours in Music, a BA with a Major in Music and a three-year BA pass degree program.

Students take core courses in music history, theory, general musicianship and choral ensemble. Students in the BMus program must choose one principle study in applied music. If applied music is not taken in successive years, students must reaudition before proceeding to the next year of applied music. In their third and fourth years, students may pursue specialized interests in theory, musicology, composition and applied music. Students may elect to write an honours thesis.

To proceed to year 4, students must attain a minimum of 60 percent in all MUSI courses. Students with less than 60 percent in a MUSI course must upgrade the course in order to reapply

to the honours program. Students who do not attain honours standing and a minimum of 60 percent in all MUSI courses may continue to year 4 in the BA with a Major in Music.

Facilities

Facilities in the Music department include sound-equipped classrooms, a choral studio and library, a Boesendorfer concert grand piano, Yamaha and Heintzman grand and upright pianos, a two-manual Dowd harpsichord, a Casavant chamber organ and a variety of percussion instruments. Individual sound-proofed practice rooms and a computer music lab with midi controllers are available for students studying applied music and keyboard skills.

Concerts, recitals and performance classes are regularly held in the 543-seat Sean O'Sullivan Theatre and in the Martin Luther Chapel, Concordia Lutheran Theological Seminary. A Kingham and Pole seven-rank pipe organ is located in the Chapel.

The sound and video collection, located on the fifth floor of the Library, contains 24 individual study carrels. The listening room is equipped with tape and video cassette recorders, as well as record, compact disc, and laser disc players. The Library has an extensive collection of records, compact discs, video tapes, laser discs and CD-ROMs. There is a substantial collection of music literature, collected editions, scores and specialized music journals.

Public events

The Music program offers a regular series of events open to students and the general public. These include an evening concert series, regular noon-hour concerts and presentations and a guest lecture series featuring distinguished theorists, musicologists and composers. Students frequently attend masterclasses by distinguished visiting artists. Exposure to a variety of concerts and first-class artists and scholars provides a stimulating environment for students.

Large ensembles

The department sponsors several choral ensembles and a wind ensemble. Participation in choral ensemble is required of all majors and combined majors as well as all students enrolled in full credit applied music courses. The choral and instrumental ensembles are open to any member of the University or the general public who may wish to participate on a credit or audit basis and who successfully completes an audition.

Orchestra-in-residence

The Niagara Symphony Orchestra is the University's Orchestra-in-Residence with many of its members teaching in the Music Department.

Music

Entrance requirements for music majors

Prospective majors must possess a level of musical literacy equivalent to Royal Conservatory Grade II rudiments as well as the necessary aural skills to complete the course requirements in Music. It is recommended that prospective majors possess a level of keyboard proficiency equivalent to Royal Conservatory Grade IV. Students who do not meet these entrance requirements may upgrade their skills through preparatory music courses offered by the department.

Admission as a major will depend on the successful completion of tests in basic rudiments, keyboard and aural skills. Prospective majors must arrange an interview with a Music department faculty member upon application to the University. Details concerning interviews, tests and auditions may be obtained from the Administrative Assistant. Admission to the BMus program with transfer credits from other universities requires an overall average of 70 percent in music courses.

An audition on a solo instrument or voice is required of all applicants to the BMus program and of all students wishing to take electives in applied music. Auditions are normally held in March, April and May of each year, in conjunction with interviews and placement tests. Applicants who are unable to audition at this time may request an alternate date.

The recommended audition level for admission into MUSI 1F92 and the BMus program is at least Royal Conservatory Grade VIII or its equivalent. Students who are not at this level may enrol in MUSI 1P81. Applied music students who study with an approved non-resident instructor should be prepared to cover additional travel and instruction fees. There is a lesson fee for students who are not in the BMus program.

Language Requirement for Humanities Majors

Students in the Music program, including single and combined majors in Music, are required to complete one credit in a language other than English. Where half credit courses are used to satisfy the requirement, both half credits must be in the same language.

Program Notes

1. It is strongly recommended that students develop a secondary area of interest. Students are encouraged to take a second language credit (in addition to the Humanities language requirement) in French, Italian, German or Latin.

2. Music majors may take five and one-half credits in any year of the program without approval from the Dean of Humanities.

3. In all 20 credit degree programs, at least 12 credits must be numbered 2(alpha)00 or above, six of which must be numbered 2(alpha)90 or above and of these, three must be numbered 3(alpha)90 or above. In all 15 credit degree programs, at least seven credits must be numbered 2(alpha)00 or above, three of which must be numbered 2(alpha)90 or above.

BMUS Program

Year 1

MUSI 1F50, 1F90, 1F92, 1P83, 2Y05 and 2Y06; one Science context credit or Social Science context credit.

Year 2

MUSI 2F90, 2F92, 2P83, 3Y05 and 3Y06; one credit from MUSI 2P51, 2P52, 3P96, 3P97, 4P50, 4P51; the Science context credit or Social Science context credit not taken in year 1.

Year 3

MUSI 3F92 and MUSI 3P83 (credit or audit); two additional MUSI credits; one Humanities language credit; one-half elective credit. (Students who audit MUSI 3P83 must complete an additional one-half credit.)

Year 4

Three MUSI credits at least two of which must be numbered 3(alpha)90 or above; MUSI 4P83 (credit or audit); one and one-half elective credits. (Students who audit MUSI 4P83, must complete an additional one-half elective credit.)

BA Honours Program

Year 1

MUSI 1F50, 1F90, 1P83, 2Y05 and 2Y06; one Science context credit and one Social Science context credit.

Year 2

MUSI 2F90, 2P83, 3Y05 and 3Y06; one credit from MUSI 2P51, 2P52, 3P96, 3P97, 4P50, 4P51; one Humanities language credit; one elective credit.

Year 3

Three MUSI credits; MUSI 3P83 (credit or audit); one and one-half elective credits. (Students who audit MUSI 3P83 must complete an additional one-half elective credit.)

Year 4

Three MUSI credits, at least two of which must be numbered 3(*alpha*)90 or above; MUSI 4P83 (credit or audit); one and one-half elective credits. (Students who audit MUSI 4P83 must complete an additional one-half elective credit.)

BA with a Major Program

This program is identical to the honours program listed above in years 1 to 4. It differs from the honours program in that honours standing is not required for entry into year 4.

Pass Program

Year 1

MUSI 1F50, 1F90, 1P83, 2Y05 and 2Y06; one Science context credit and one Social Science context credit.

Year 2

MUSI 2F90, 2P83, 3Y05 and 3Y06; one credit from MUSI 2P51, 2P52, 3P96, 3P97, 4P50, 4P51; one Humanities language credit; one elective credit.

Year 3

Two MUSI credits; MUSI 3P83 (credit or audit); two and one-half elective credits. (Students who audit MUSI 3P83 must complete an additional half elective credit.)

Combined Major Programs

Honours

Students may take a combined major in MUSI and in a second discipline. For requirements in the other discipline, the student should consult the relevant department. Note that not all departments provide a combined major option.

MUSI 1F50, 1F90, 1P83, 2F90, 2P83, 2Y05, 2Y06, 3Y05, 3Y06; MUSI 3P83 and 4P83 (credit or audit); one credit from MUSI 2P51, 2P52, 3P96, 3P97, 4P50, 4P51; two additional MUSI credits.

Pass

Satisfactory completion of the first three years of an honours program entitles a student to apply for a pass degree.

Music and Great Books/Liberal Studies (honours only)

Consult the Great Books/Liberal Studies entry for a listing of course requirements.

Prerequisites and Restrictions

Students must check to ensure that prerequisites are met. Students may be deregistered, at the request of the instructor, from any course for which prerequisites and/or restrictions have not been met.

Description of Courses

Note that not all courses are offered in every session. Refer to the applicable term timetable for details.

MUSI 1F00

Music in Popular Culture

(also offered as PCUL 1F00)

Survey of developments in blues, jazz, rock and related genres of popular music.

Lectures, seminar, 3 hours per week; listening assignments.

Note: major credit will not be granted to MUSI majors.

MUSI 1F50

History of Music from Medieval to Modern Times

Historical survey of styles in Western art music; analysis of representative musical compositions with assigned readings from secondary literature.

Lectures, 3 hours per week.

Restriction: permission of the instructor.

Note: a level of musical literacy equivalent to Royal Conservatory Grade II rudiments is required.

MUSI 1F90

Materials of Music I

Sixteenth-century counterpoint in 5th species; principles of text-setting; writing of short compositions without cantus firmus; common practice harmony; analysis of selected forms and works up to 1800; use of music notation software.

Lectures, seminar, 3 hours per week.

Restriction: open to MUSI (single or combined) majors or permission of the instructor.

Prerequisites: MUSI 1P20, 1Y01 and 1Y02.

Co-requisites: MUSI 2Y05 and 2Y06.

Note: successful completion of placement tests in theory (equivalent to Royal Conservatory Grade II rudiments), keyboard and aural skills will satisfy the course prerequisite.

Music

MUSI 1F92

Applied Music I

Individual and group instruction in one of the following: piano, harpsichord, organ, voice, classical guitar or any approved concert band and orchestral instrument.

Private instruction, 1 hour per week; performance seminar, 2 hours per week; required participation in chamber ensembles and student recitals.

Restriction: permission of the instructor.

Co-requisite: MUSI 1P83, 2P83, 3P83 or 4P83.

Note: a solo audition is required. Lesson fee; consult the department. Further details under entrance requirements for Music majors. Attendance at Music department concert series.

MUSI 1P11

Listening to Music I

A music appreciation course for students with little or no formal instruction in music. Discussion of basic musical materials, instrumentation, forms and techniques for listening critically. Development of a listening repertoire of representative compositions from the Middle Ages to the 18th century.

Lectures, 3 hours per week.

Note: major credit will not be granted to Music majors. Attendance at Music department concert series.

MUSI 1P12

Listening to Music II

A music appreciation course for students with little or no formal instruction in music. Discussion of basic musical materials, instrumentation, forms and techniques for listening critically. Development of a listening repertoire of representative compositions from the 18th to the 20th century.

Lectures, 3 hours per week.

Note: major credit will not be granted to Music majors. Attendance at Music department concert series.

MUSI 1P20

Rudiments of Music

An introduction to musicianship and the basic vocabulary of music for students with little or no previous experience in music. Topics include notation and aural perception of scales, intervals, chords, meter and rhythm; elementary harmony.

Lectures, labs, 1.5 hours per week for two terms.

Note: not open to MUSI majors for major credit or to students who have Royal Conservatory grade II rudiments or equivalent.

Credit will not be granted to students with credit in MUSI 1F90.

MUSI 1P81

Instrumental or Vocal Study I

Individual instruction in one of the following: piano, harpsichord, organ, voice, classical guitar or any approved concert band and orchestral instrument.

Private instruction, 1 hour per week for two terms; auditing performance seminar, 1 hour per week for two terms.

Restriction: permission of the instructor.

Note: basic performance skills and solo audition required. Lesson fee; consult the department. Attendance at Music department concert series.

MUSI 1P83

Choral Ensemble I

Selected choral literature in rehearsal and performance; development of sight-singing and interpretive skills. Participation in one of the following two ensembles: 1) mixed chorale; 2) women's chorus.

Rehearsals, 3 hours per week for two terms; participation in dress rehearsals and concert performances as required.

Restriction: permission of the instructor (audition) required; consult the department.

Note: pitch matching skills required; sight-singing skills strongly recommended. Concert uniform required. Competent vocalists from the University and community are encouraged to audition.

MUSI 1P84

Wind Ensemble I

Selected wind literature in rehearsal and performance; development of sight-reading, technical and interpretive skills.

Rehearsals, 3 hours per week for two terms; participation in dress rehearsals and concert performances as required.

Restriction: permission of the instructor (audition) required; consult the department.

Note: previous ensemble experience required. Competent instrumentalists from the University and community are encouraged to audition.

MUSI 1Y01

Aural Proficiency

Introduction to aural perception of melody, intervals, chords, tonality, meter and rhythm through sight-singing, dictation and recognition exercises.

Labs, 2 hours per week for two terms.

Note: completion of theory and aural placement tests required. Major credit will not be granted to music majors.

MUSI 1Y02

Keyboard Proficiency

Introduction to the piano for those with no previous background or training. Individual instruction in basic playing techniques.

Individual instruction, 0.5 hour per week for two terms; auditing piano performance seminar, minimum 3 hours per term.

Note: completion of a keyboard placement test required. Major credit will not be granted to music majors. Lesson fee; consult the department.

MUSI 2F90

Materials of Music II

Eighteenth-century counterpoint; writing of short binary and ternary compositions; three-part fugal expositions; chromatic harmony up to enharmonic modulation; analysis of selected forms and works from 1800 to 1900; use of music notation software.

Lectures, 3 hours per week.

Restriction: open to MUSI (single or combined) majors or permission of the instructor.

Prerequisite: MUSI 1F90 or permission of the instructor.

Co-requisites: MUSI 3Y05 and 3Y06.

MUSI 2F92

Applied Music II

A continuation of instrumental or vocal study. *Private instruction, 1 hour per week; performance seminar, 2 hours per week; required participation in chamber ensembles and student recitals.*

Prerequisite: MUSI 1F92.

Co-requisite: MUSI 1P83, 2P83, 3P83 or 4P83.

Note: the prerequisite may be satisfied with its equivalent by audition. Lesson fee; consult the department. Attendance at Music department concert series.

MUSI 2M90-2M99

Special Topics

A selected topic in music literature involving historical, musicological, analytical or performance issues.

MUSI 2P00

Music of the World's Peoples

Exploration of music as a part of culture through the study of diverse musical traditions (e.g., music of the Middle East, Far East, India, aboriginal North America) including analysis of representative vocal and instrumental forms. Topics may include music's role in religion, ritual, economics and politics. *Lectures, 3 hours per week.*

MUSI 2P11

History of Music in Canada

Canadian music and its place in our culture from the earliest European influences in the works of modern Canadian composers, through analysis of selected compositions and an exploration of Canadian music-related industries.

Lectures, 3 hours per week.

Prerequisites: MUSI 1P11 and 1P12 or 1F50 or permission of the instructor.

MUSI 2P21

Accompanying I

Supervised experience in keyboard accompaniment, including lieder, chamber music and/or large ensembles.

Seminars, 1 hour alternating weeks for two terms; supervised rehearsals and performances, minimum 1 hour per week.

Prerequisites: MUSI 1F92 and 1P83.

MUSI 2P40

Vocal Techniques

Practical and theoretical instruction in vocal technique.

Lectures, lab, 3 hours per week.

Restriction: consult the instructor for permission to register.

Prerequisite: MUSI 1P20.

Co-requisite: MUSI 1P83, 2P83, 3P83 or 4P83.

Note: Royal Conservatory Grade II rudiments or equivalent by audition may be used to satisfy the course prerequisite.

Students completing this course will forfeit credit in MUSI 1F92, 1P81, 2F92 or 2P81 if in voice.

MUSI 2P41

Woodwind Techniques

Practical and theoretical instruction in woodwind instruments.

Lectures, lab, 3 hours per week.

Prerequisite: MUSI 1P20 or permission of the instructor.

Note: Royal Conservatory Grade II rudiments or equivalent may be used to satisfy the course prerequisite.

MUSI 2P42

Brass Techniques

Practical and theoretical instruction in brass instruments.

Lectures, lab, 3 hours per week.

Prerequisite: MUSI 1P20 or permission of the instructor.

Note: Royal Conservatory Grade II rudiments or equivalent may be used to satisfy the course prerequisite.

MUSI 2P43

Percussion Techniques

Practical and theoretical instruction in percussion instruments.

Lectures, lab, 3 hours per week.

Prerequisite: MUSI 1P20 or permission of the instructor.

Note: Royal Conservatory Grade II rudiments or equivalent may be used to satisfy the course prerequisite.

MUSI 2P51

History of Music in the Classical Era

Styles, forms and genres from the pre-Classical era (c. 1740) to Beethoven's late works through the analysis of selected compositions and readings.

Lectures, 3 hours per week.

Prerequisites: MUSI 1F50 and 1F90 or permission of the instructor.

MUSI 2P52

History of Music in the Romantic Era

Styles, forms and genres from Schubert (c. 1820) to Wolf (c. 1900) through the analysis of selected compositions and readings.

Lectures, 3 hours per week.

Prerequisites: MUSI 1F90 and 2P51 or permission of the instructor.

MUSI 2P60

Composition and Orchestration I

Guided composition in one and two parts with analysis of selected works; notational systems; instrumentation and arranging for small combinations of instruments and voices; use of music notation software.

Lectures, 1.5 hours per week for two terms.

Prerequisite: MUSI 1P20 or permission of the instructor.

Note: Royal Conservatory Grade II rudiments or equivalent may be used to satisfy the course prerequisite.

MUSI 2P70

Politics and Popular Music

(also offered as COMM 2P70, PCUL 2P70 and POLI 2P70)

The political context and content of popular music. Topics may include theoretical perspectives on popular culture/popular

Music

music; the relationship of popular music to public policy, race and gender, popular movements and political identity; political economy of the music business.

Lectures, seminar, 3 hours per week.

Note: major credit will not be granted to MUSI majors.

Students completing this course will forfeit credit in COMM (POLI) 2V70.

MUSI 2P81

Instrumental or Vocal Study II

A continuation of individual instrumental or vocal study.

Private instruction, 1 hour per week for two terms; auditing performance seminar, 1 hour per week for two terms.

Prerequisite: MUSI 1P81 or 1F92.

Note: lesson fee; consult the department. Attendance at Music department concert series.

MUSI 2P83

Choral Ensemble II

Selected choral literature in rehearsal and performance; continued development of sight-singing and interpretive skills. Participation in one of the following two ensembles: 1) mixed chorale; 2) women's chorus.

Rehearsals, 3 hours per week for two terms; participation in dress rehearsals and concert performances as required.

Restriction: permission of the instructor (audition) required; consult the department.

Prerequisite: MUSI 1P83.

Note: basic sight-singing skills and concert uniform required.

MUSI 2P84

Wind Ensemble II

Selected wind literature in rehearsal and performance; continued development of sight-reading, technical and interpretive skills.

Rehearsals, 3 hours per week for two terms; participation in dress rehearsals and performances as required.

Restriction: permission of the instructor (audition) required; consult the department.

Prerequisite: MUSI 1P84.

MUSI 2P93

Conducting and Score-reading I

Introduction to historical, theoretical and practical aspects of choral and instrumental conducting. Reading of simple instrumental and choral scores at the keyboard. Topics include basic patterns, baton techniques, notational terminology and instrumental transpositions.

Lectures, seminar, 3 hours per week; field assignments as required.

Prerequisites: MUSI 1P20, 1Y01 and 1Y02 (1P05), or permission of the instructor.

Co-requisites: MUSI 1F90 and 1P83 or 1P84.

MUSI 2P94

Choral Methods I

Introduction to historical, theoretical and practical aspects of directing children's, youth and adult choirs. Topics include:

vocal development, physiology and training; basic audition and rehearsal procedures, score selection and evaluation.

Lectures, seminar, 3 hours per week; field assignments as required.

Prerequisites: MUSI 1P83 and 2P93 or permission of the instructor.

Co-requisite: MUSI 2P83, 3P83 or 4P83.

MUSI 2P95

Conducting and Score-reading II

Intermediate conducting techniques for choral and instrumental ensembles. Reading of choral and instrumental ensemble scores at the keyboard. Topics include asymmetrical patterns, left-hand techniques, meter and tempo changes.

Lectures, seminar, 3 hours per week; field assignments as required.

Prerequisites: MUSI 1F90 and 2P93 or permission of the instructor.

Corequisite: MUSI 2P83 or 2P84.

MUSI 2P98

Computers in Music I

History of computer music; introduction to computer music applications, including software for score-writing and sequencing.

Lectures, seminar, 3 hours per week.

Prerequisites: MUSI 1F50 and 1F90 or permission of the instructor.

MUSI 2P99

Computers in Music II

Use of computer software for transcription, composition, and analysis.

Lectures, seminar, 3 hours per week.

Prerequisite: MUSI 2P98.

MUSI 2Y05

Aural Skills I

Aural perception of diatonic musical materials, simple and compound meters, rhythm and elementary chromaticism through sight-singing, dictation and recognition exercises.

Labs, 2 hours per week for two terms.

Prerequisite: MUSI 1Y01 or permission of the instructor.

Co-requisites: MUSI 1F90 and 2Y06.

Note: successful completion of an aural placement test may be used to satisfy the course prerequisite.

Students completing this course will forfeit credit in MUSI 1P05.

MUSI 2Y06

Keyboard Harmony I

Introduction to figured bass, melodic harmonization, harmonic progressions and score-reading.

Seminar, tutorial, 1 hour per week for two terms.

Restriction: open to MUSI (single or combined) majors.

Prerequisite: MUSI 1Y02.

Co-requisites: MUSI 1F90 and 2Y05.

Note: successful completion of a keyboard placement test may

be used to satisfy the course prerequisite. Students completing this course will forfeit credit in MUSI 1P05.

MUSI 3F92

Applied Music III

A continuation of instrumental or vocal study. *Private instruction, 1 hour per week; performance seminars, 2 hours per week; required participation in chamber ensembles and student recitals; one solo recital (approx. 30 minutes).*

Restriction: permission of the department.

Prerequisite: MUSI 2F92.

Co-requisite: MUSI 1P83, 2P83, 3P83 or 4P83.

Note: a minimum grade of 75 percent in MUSI 2F92 is required. Lesson fee required; consult the department. Attendance at Music department concert series.

MUSI 3P20

Piano Pedagogy

Methodologies for teaching all ages and all levels. Historical treatises and educational materials, current research and practical teaching experiences. Topics include sequencing and reinforcement of technical and musical concepts, critical evaluation of methods, curriculum design, problem solving techniques and communication skills.

Lectures, 3 hours per week.

Restriction: permission of the instructor.

Note: Royal Conservatory of Music Grade VIII (practical) or its equivalent is required.

Students completing this course will forfeit credit in MUSI 3F20.

MUSI 3P21

Accompanying II

Supervised experience in keyboard accompaniment, including lieder, chamber music and/or large ensembles.

Seminar, 1 hour alternating weeks for two terms; supervised rehearsals, performances, minimum 1 hour per week.

Prerequisite: MUSI 2P21.

MUSI 3P30

Vocal Pedagogy

Methodologies for teaching all levels, ages, and vocal classifications including technique, physiology and pathology of the voice. Topics include style, language, presentation skills and performance practice.

Lectures, 3 hours per week.

Restriction: permission of the instructor.

Note: Royal Conservatory of Music Grade VIII or its equivalent is required.

MUSI 3P60

Composition and Orchestration II

Guided composition in two or more parts with analysis of selected works; orchestration and arranging for woodwinds, brass, strings, percussion and voices; use of music notation software.

Lectures, 1.5 hours per week for two terms.

Prerequisites: MUSI 1F90 and 2P60 or permission of the instructor.

MUSI 3P81

Instrumental or Vocal Study III

A continuation of individual instrumental or vocal study. *Private instruction, 1 hour per week; auditing performance seminar, 1 hour per week.*

Prerequisite: MUSI 2P81 or 2F92.

Note: lesson fee; consult the department. Attendance at Music department concert series.

MUSI 3P83

Choral Ensemble III

Selected choral literature in rehearsal and performance; continued development of sight-singing and interpretive skills. Participation in one of the following two ensembles: 1) mixed chorale; 2) women's chorus.

Rehearsals, 3 hours per week for two terms; participation in dress rehearsals and concert performances as required.

Restriction: audition required.

Prerequisite: MUSI 2P83.

Note: intermediate sight-singing skills and concert uniform required.

MUSI 3P84

Wind Ensemble III

Selected wind literature in rehearsal and performance; continued development of sight-reading, technical and interpretative skills.

Rehearsals, 3 hours per week for two terms; participation in dress rehearsals and performances as required.

Restriction: permission of the instructor (audition) required; consult the department.

Prerequisite: MUSI 2P84.

MUSI 3P90

Twentieth-Century Approaches to Music Theory

Introduction to Schoenberg's theories of thematic development, Schenkerian voice-leading analysis, twelve-tone and elementary set theory, theories of rhythm and form.

Lectures, 3 hours per week.

Prerequisites: MUSI 1F50 and 2F90 or permission of the instructor.

MUSI 3P94

Choral Methods II

Theory and practice of directing youth and adult choirs. Topics include advanced rehearsal procedures, performance practices, score preparation and analysis.

Lectures, 3 hours per week; field assignments as required.

Prerequisites: MUSI 2P83, 2P94 and 2P95.

Co-requisite: MUSI 3P83 or 4P83.

Students completing this course will forfeit credit in MUSI 3P93.

Music

MUSI 3P95

Aesthetics of Music

(also offered as GBLS 3P95)

Issues of meaning, beauty, value, and greatness in music through analysis of selected readings from Plato to the present.

Lectures, seminar, 3 hours per week.

Prerequisites: MUSI 1F50 and either MUSI 2F90 or GBLS(LBST) 2F90 or permission of the instructor.

MUSI 3P96

History of Music in the Baroque Era

Styles, forms and genres from Monteverdi (c. 1600) to Bach (c. 1750), through analysis of selected compositions and readings.

Lectures, 3 hours per week.

Prerequisites: MUSI 1F50 and 1F90 or permission of the instructor.

MUSI 3P97

History of Music in the 20th Century

Styles, forms and genres from Mahler (c. 1890) to the present day, through the analysis of selected compositions and readings.

Lectures, 3 hours per week.

Prerequisites: MUSI 1F50 and 1F90 or permission of the instructor.

MUSI 3Y05

Aural Skills II

Aural perception of diatonic and chromatic musical materials, meter and rhythm through sight-singing, dictation and recognition exercises.

Labs, 2 hours per week for two terms.

Prerequisite: MUSI 2Y05 or permission of the instructor.

Co-requisites: MUSI 2F90 and 3Y06.

Students completing this course will forfeit credit in MUSI 2P05.

MUSI 3Y06

Keyboard Harmony II

Figured bass, melodic harmonization, harmonic progressions and score-reading.

Seminars, individual tutorial, 1 hour per week for two terms.

Restriction: open to MUSI (single or combined) majors.

Prerequisite: MUSI 2Y06.

Co-requisite: MUSI 2F90 and 3Y05.

Students completing this course will forfeit credit in MUSI 2P05.

MUSI 4F00

Work-Study Practicum

Supervised research-based activities and assignments in a music-related field (e.g., administration, liturgical music, arranging or composition, music criticism, solo or ensemble performance, private or class teaching).

Restriction: year 3 honours standing and permission of the department.

Note: students must complete a departmental application form by the end of April (see departmental guidelines).

MUSI 4F92

Applied Music IV

A continuation of instrumental or vocal study.

Private instruction, 1 hour per week; performance seminar, 2 hours per week; required participation in chamber ensembles and student recitals; one solo recital (approx. 45 minutes).

Restriction: permission of the department.

Prerequisite: MUSI 3F92.

Co-requisite: MUSI 1P83, 2P83, 3P83 or 4P83.

Note: a minimum grade of 80 percent in MUSI 3F92 is required. Lesson fee; consult the department. Attendance at Music department concert series.

MUSI 4F99

Honours Thesis

Independent study in an historical, theoretical, creative or applied area in which the student has developed a particular interest; to be chosen in consultation with a faculty member willing to supervise that study.

Restriction: permission of the department.

Note: a written proposal must be approved by the department by the end of April.

MUSI 4P50

History of Music in the Middle Ages

Styles, forms and genres from the earliest notated plainchant (c. 850) to the beginning of the Renaissance (c. 1425) through investigation of original sources in facsimile and analysis of selected compositions and readings.

Lectures, 3 hours per week.

Prerequisites: MUSI 1F50 and 1F90 or permission of the instructor.

MUSI 4P51

History of Music in the Renaissance

Styles, forms and genres from the time of Machaut (c. 1350) to the early works of Monteverdi (c. 1600), through analysis of selected compositions and readings.

Lectures, 3 hours per week.

Prerequisite: MUSI 1F50 or permission of the instructor.

MUSI 4P52

Eighteenth-Century Italian Opera

Detailed study of *opera seria*, *opera buffa* and the *dramma giocoso* from the works of Handel to Mozart.

Lectures, 3 hours per week.

Prerequisites: MUSI 1F50, 2P51 and 3P96 or permission of the instructor.

MUSI 4P53

Methodology and Research in Musicology

Examination of sources for music research and a historical survey of musicological methodologies.

Lectures, seminar, 3 hours per week.

Prerequisites: MUSI 1F50 and one credit from MUSI 2P51, 2P52, 3P96, 3P97, 4P50, 4P51, 4P52 or 4P54.

MUSI 4P54

Singspiel and German Romantic Opera

Development of German opera from its origins in the Singspiel tradition of the 18th century to the operas of Carl Maria von Weber.

Lectures, seminar, 3 hours per week.

Prerequisites: MUSI 1F50, 2P51 and 2P52 or permission of the instructor.

MUSI 4P60

Composition and Orchestration III

Guided composition in larger forms with analysis of selected works; orchestration/arranging for full orchestra or chorus; use of music notation software.

Lectures, 1.5 hours per week for two terms.

Prerequisites: MUSI 2F90 and 3P60 or permission of the instructor.

MUSI 4P81

Instrumental or Vocal Study IV

A continuation of individual instrumental or vocal study.

Private instruction, 1 hour per week; auditing performance seminar, 1 hour per week.

Prerequisite: MUSI 3P81 or 3F92.

Note: lesson fee; consult the department. Attendance at Music department concert series.

MUSI 4P83

Choral Ensemble IV

Selected choral literature in rehearsal and performance; continued development of sight-singing and interpretive skills. Participation in one of the following two ensembles; 1) mixed chorale; 2) women's chorus.

Rehearsals, 3 hours per week for two terms; participation in dress rehearsals and concert performances as required.

Restriction: permission of the instructor (audition) required; consult the department.

Prerequisite: MUSI 3P83.

Note: advanced sight-singing skills and concert uniform required.

MUSI 4P84

Wind Ensemble IV

Selected wind literature in rehearsal and performance; continued development of sight-reading, technical and interpretive skills.

Rehearsals, 3 hours per week for two terms; participation in dress rehearsals and concert performances as required.

Restriction: permission of the instructor (audition) required; consult the department.

Prerequisite: MUSI 3P84.

MUSI 4P94

Directed Reading in Music Theory

Independent study of advanced contemporary or historical theoretical monographs chosen in consultation with the instructor. A major piece of written work will be required.

Restriction: approval to year 4 (honours) and permission of the instructor.

MUSI 4P95

Topics in the History of Theory

Selected theorists including Mattheson, Rameau, Kirnberger, Rousseau, Koch, Reicha, Fetis, Momigny, Czerny, A.B. Marx, Riemann, Prout and Macpherson. Topics include theories of harmony, melodic phraseology, organicism, the development of theories of sonata form and motivic development.

Lectures, 3 hours per week.

Prerequisite: MUSI 2F90.

Neuroscience

This program is co-ordinated by the Department of Biological Sciences and Psychology.

Co-ordinators

Dawn E. Good, Department of Psychology
A. Joffe Mercier, Department of Biological Sciences

Participating Faculty

Stefan Brudzynski (Psychology), David DiBattista (Psychology), Robert L. Carlone (Biological Sciences), Jane Dywan (Psychology), Dawn E. Good (Psychology), J. Cameron Lewis (Biological Sciences), A. Joffe Mercier (Biological Sciences), Robert D. Ogilvie (Psychology), R. Peter Rand (Biological Sciences), Sidney J. Segalowitz (Psychology), Paul D. Tyson (Psychology)

General Information

<http://www.brocku.ca/neuroscience/>

Neuroscience, the study of behaviour and its underlying neural mechanisms, is studied in psychology, biology and other departments at many universities, but there is an increased tendency in North America and Europe to offer neuroscience as a specialized major program. Neuroscience combines selected courses from the disciplines of psychology and biology that illustrate behavioural, cellular and physiological approaches to examining the nervous system. The program is specifically designed to permit integration of information derived experimentally from both disciplines to gain a better understanding of the relationships between neural function and behaviour. Neuroscience provides information and skills necessary for careers in the health and behavioural sciences. It also provides a firm basis for graduate studies in the neurosciences and depending on choice of courses, prepares the student for entry into medicine, dentistry, chiropractic and physical or occupational therapy.

The BSc honours program is divided into two streams, allowing students to specialize in either Neurobiology or Neuropsychology. Honours students must choose one concentration or the other. The first two years are identical for all programmes in Neuroscience.

The BSc with a major program is designed to allow students to select courses that suit individual interests and may result in a programme that is more general. However, it also offers freedom to specialize within sub-disciplines of neuroscience by following courses in either stream of the honours program.

Program Notes

1. In all 20 credit degree programs, at least 12 credits must be numbered 2(*alpha*)00 or above, six of which must be numbered 2(*alpha*)90 or above and of these, three must be numbered 3(*alpha*)90 or above.

Honours Program

Year 1

BIOL 1F90; CHEM 1P80 and 1P81, or CHEM 1P90 or 1P91; PHYS 1F25; PSYC 1F90; one Humanities context credit.

Year 2

NEUR 2F36; BIOL 2F01; CHEM 2P20; MATH 1P12 or 1P97; PSYC 2F23; one elective credit.

Neurobiology stream

Year 3

NEUR 3F91, 3P34, 3P84 and 3P98; BCHM 3P01; one credit from BCHM 3P02, BIOL 2P92, 2P97, 3P28, 3P51, 3P60; one elective credit.

Year 4

Thesis option

NEUR 3P97, 4F90 and 4F91; one-half credit from BCHM 3P02, BIOL 2P92, 2P97, 3P28, 3P50, 3P51, 3P60, 4P28, 4P34, 4P52, 4P53, 4P56, 4P84; one credit from BIOL 4P28, 4P34, 4P84; one elective credit.

Library Research option

NEUR 3P97 and 4F92; one and one-half credits from BCHM 3P02, BIOL 2P92, 2P97, 3P28, 3P50, 3P51, 4P28, 4P34, 4P52, 4P53, 4P56, 4P84; one credit from BIOL 4P28, 4P34, 4P84; one elective credit.

Neuropsychology stream

Year 3

NEUR 3F91, 3P34, 3P84 and 3P98; BCHM 3P01; PSYC 3P30; one-half credit from LING 2P97, 3P98, 3P99, PSYC 2F12, 2F20, 2F91, 3F46, 3P56, 3P68, 3P92, 3P94, 3P99, 3Q97, 3Q98; one elective credit.

Year 4

Thesis option

NEUR 3P97, 4F90 and 4F91; PSYC 3P39; one credit from LING 2P97, 3P98, 3P99, 4P20, 4P21, PSYC 2F12, 2F20, 2F91, 3F46, 3P56, 3P68, 3P92, 3P94, 3P99, 3Q97, 3Q98, 4P21, 4P22, 4P70; one elective credit.

Library Research Option

NEUR 3P97 and 4F92; two and one-half credits from LING 3P98, 3P99, 4P20, 4P21, PSYC 2F12, 2F20, 2F91, 3F46, 3P56, 3P68, 3P92, 3P94, 3P99, 3Q97, 3Q98, 4P21, 4P22; one elective credit.

BSc with a Major

Years 1 and 2 as in the honours program.

Year 3

NEUR 3F91, 3P34, 3P84 and 3P98; BCHM 3P01; one credit from BCHM 3P02, BIOL 2P92, 2P97, 3P28, 3P50, 3P51, 3P60, LING 2P97, 3P98, 3P99, PSYC 2F12, 2F20, 2F91, 3F46, 3P56, 3P68, 3P92, 3P94, 3P99, 3Q97, 3Q98; one elective credit.

Year 4

NEUR 3P97; one-half credit from BCHM 3P02, BIOL 2P92, 2P97 or 3P37, 3P28, 3P50, 3P51, 4P28, 4P34, 4P52, 4P53, 4P56, 4P84; three credits from BCHM 3P02, BIOL 2P92, 2P97, 3P28, 3P50, 3P51, 3P60, 4P28, 4P34, 4P52, 4P53, 4P56, 4P84, LING 2P97, 3P98, 3P99, 4P20, 4P21, PSYC 2F12, 2F20, 2F91, 3F46, 3P56, 3P68, 3P92, 3P94, 3P99, 3Q97, 3Q98, 4P21, 4P22 (see program note 1); one elective credit.

Pass Program

Year 1 of the pass program is closed to new students.

Year 2

BIOL 2F01 and 2P92; one of BIOL 2P05, 2Q04, CHEM 3P20; PSYC 2F23 and 2F36; one elective credit.

Year 3

BIOL 3P34 and 3P84; one credit from BCHM 3P01 or 3P02, BIOL 3P24 or 3P25, 3P26, 3P28, 3P37, 3P50 or 3P51, 3P60, 3P64, 3P80, 3P93; two credits from PSYC 2F20, 2F91, 3F40 or 3P30, 3F45, 3F91, 3P48, 3P49, 3P56, 3P68, 3P92, 3P94, 3P97, 3P98, 3P99, 3Q97, 3Q98; one elective credit.

Prerequisites and Restrictions

Students must check to ensure that prerequisites are met. Students may be deregistered, at the request of the instructor, from any course for which prerequisites and/or restrictions have not been met.

Description of Courses

Note that not all courses are offered in every session. Students should plan their program accordingly and are advised to refer to the applicable term timetable for details.

NEUR 2F36**Physiological Psychology**

(also offered as PSYC 2F36)

Biological aspects of behaviours; the functional activities of the neuron and the interrelationships among neural systems (brain organization). Topics include the psychobiology of sensory and motivational systems, emotion and affect, learning, memory, language and consciousness.

Lectures, 2 hours per week, lab, 3 hours alternating weeks.

Restriction: open to NEUR, CHSC (HLST) (single or combined), HLSC and PSYC (single or combined) majors with a minimum 67 percent major average until date specified in BIRTguide.

Prerequisite: PSYC 1F90.

NEUR 3P34**Neurobiology**

(also offered as BIOL 3P34)

Nervous systems from the single neuron level to integrated function in the brain. Topics include sensory systems, synaptic function and transmitters substances, developmental aspects and neural plasticity, cellular basis of behaviour.

Lectures, 3 hours per week, lab, 3 hours per week.

Restriction: open to NEUR, BIOL (single or combined), BCHM, BTEC, BSc/BEEd, CHEM (single or combined), ENVI (ENVS) and OEVI majors with a minimum of 8.0 overall credits.

Prerequisites: two credits from BIOL 2F01, 2P05, 2P92, 2P93, 2Q04.

NEUR 3P84**Investigative Neurobiology**

(also offered as BIOL 3P84)

Methods used in neurobiology and neurophysiology. Emphasis on electrophysiological techniques, including intracellular recording from nerve cells and muscle, and on theory and techniques for electrophysiological data acquisition. Other topics include intracellular staining, immunocytochemistry and assay procedures.

Lectures, 2 hours per week, lab, 3 hours per week.

Restriction: open to NEUR, BIOL (single or combined), BCHM, BTEC, BSc/BEEd, CHEM (single or combined), ENVI (ENVS) and OEVI majors with a minimum of 8.0 overall credits.

Prerequisite: BIOL 2F01 or PSYC 2F35.

Note: BIOL 3P34 is strongly recommended for students who have not taken PSYC 2F36.

Neuroscience

NEUR 3F91

Neuroscience

(also offered as PSYC 3F91)

Integrative approach to neuroscience from basic elements of molecular neuroscience, physiology of excitable cells, neurophysiology of major brain systems to behavioural neuroscience and selected topics in affective and cognitive neuroscience. Emphasis on the interdisciplinary nature of the subject and the integrative aspects of brain function. A general insight into a number of classical disciplines including neuroanatomy, neurophysiology, neuropharmacology, electrophysiology, neurochemistry.

Lectures, 2 hours per week, lab, 3 hours alternating weeks.

Restriction: open to NEUR, CHSC (HLST), HLSC and PSYC (single or combined) major until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits or 3.0 PSYC credits above PSYC 1F90.

Prerequisite: NEUR 2F36 or permission of the instructor.

NEUR 3P97

Bases of Neuropsychopharmacology

(also offered as PSYC 3P97)

Mechanisms of drug action and classification of psychoactive agents. Elements of pharmacokinetics (drug absorption, distribution, metabolism and elimination) and a review of the major groups of psychoactive agents including hypnotics, analgesics, anxiolytics, antidepressants, psychostimulants and neuroleptics. Emphasis on mechanisms and consequences of drug action on selected neurotransmitter systems (dopaminergic, cholinergic, serotonergic).

Lectures, seminar, 3 hours per week.

Restriction: open to NEUR, CHSC (HLST), HLSC and PSYC (single or combined) majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits and 1.0 PSYC credit above PSYC 1F90.

NEUR 3P98

Introduction to Human Neuropsychology

(also offered as PSYC 3P98)

Focus on clinical syndromes that result from brain damage. Topics include disorders of memory, language, attention and problem solving.

Lectures, seminar, 3 hours per week.

Restriction: open to NEUR (single or combined), CHSC (HLST) (single or combined), HLSC, PSYC and WKHL majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits and 1.0 PSYC credit above PSYC 1F90.

NEUR 4F90

Honours Thesis

Each student will undertake a limited research project under faculty supervision.

Restriction: open to NEUR majors with approval to year 4 (honours).

Note: to be taken in conjunction with NEUR 4F91. Submission and oral defence of thesis is required.

NEUR 4F91

Literature Research and Seminar

Each student will undertake a detailed study of the scientific literature relevant to the topic of the honours thesis.

Restriction: open to NEUR majors with approval to year 4 (honours).

Note: to be taken in conjunction with NEUR 4F90. The review will be included in the thesis and will be presented as a seminar.

NEUR 4F92

Library Research Essays

Each student will be required to carry out two detailed studies of the scientific literature under faculty supervision.

Restriction: open to NEUR majors with approval to year 4 (honours).

Note: for students not registered for NEUR 4F90 and 4F91. The results of the studies will be presented in major essays and presented as formal seminars. One research topic is to be completed each term.

Oenology and Viticulture

This program is co-ordinated by the Department of Biological Sciences.

Co-ordinator, Experiential Learning

E. Brian Grant

NSERC Industrial Research Chair, (Cool Climate Oenology and Viticulture Institute)

Andrew G. Reynolds

Adjunct Professors

Ronald S. Jackson, Ronald R. Subden

Instructors

Linda Bramble, Kevin W. Ker

Participating Faculty

Biological Sciences, Chemistry, Computer Science, Earth Sciences, Geography, Management, Marketing and Human Resources, Mathematics, Physics and Recreation and Leisure Studies

General Information

Administrative Co-ordinator, extension 4652

Inniskillin Hall 206

<http://aqueous.labs.brocku.ca/>

A four-year honours program leading to a Bachelor of Science in Oenology and Viticulture is designed to meet the growing needs of the grape, grape juice and wine industries of cool climate regions. The aim of the program is to provide a comprehensive scientific education as well as practical skills in Oenology and Viticulture together with exposure to marketing and tourism. Since "wine begins in the field and ends in the glass", our graduates will be trained to work in the vineyard and the winery or may become owners and operators of wineries. The unique feature of this program is its strong base in biotechnology which has been used for centuries in fermentation and the making of bread, wine and cheese. It encompasses the scientific disciplines pertaining to the grape and wine industry such as biochemistry, chemistry, microbiology, genetics, cell and molecular biology, plant physiology and environmental biology. The program can enable our graduates to pursue higher education in any of these disciplines.

Practical experience is an essential part of the students' preparation. To provide exposure to the various aspects of the grape and wine industry, two types of work experiences are available. The Employment Experience consists of a sixteen week placement with an approved employer participating in the various aspects of the operation. The Intern Experience, consisting of a minimum of forty-five hours of industry service, provides an

opportunity for the student to participate in a variety of industry activities not available during the longer term placements. This placement is not a program requirement but students are encouraged to take advantage of these opportunities to gain a wider range of industry experience.

All placements must be approved by the Co-ordinator of Experiential Learning. Student performance will be evaluated using a combination of employer questionnaires, interviews and work term reports, as appropriate. Previous experience may be used to satisfy the program requirements if it can be satisfactorily evaluated. Students are assessed an annual administration fee (see Schedule of Fees).

Oenology courses:

OEVI 3P21, 3P25, 3P98, 4P20

Viticulture courses:

OEVI 2P99, 3P12, 3P45, 4P30

Program Notes

1. Students are required to complete two employment experience work terms, OEVI 0N20-0N23. Students must contact the Co-ordinator of Experiential Learning regarding these courses.
2. MATH 1P98 is highly recommended as preparation for OEVI 4P20.
3. ECON 1P91 and 1P92 are strongly recommended as the Social Science context credit.
4. MKTG 2P51 or RECL 2P08 recommended.
5. Because of the fall term crush placement, all academic credits in year 4 should be taken in the Winter and Spring terms.
6. In all 20 credit degree programs. At least 12 credits must be numbered 2(alpha)00 or above, six of which must be numbered 2(alpha)90 or above and of these, three must be numbered 3(alpha)90 or above.

Honours Program

Year 1

OEVI 1P20; BIOL 1F90; CHEM 1P80 and 1P81, or CHEM 1P90 and 1P91; MATH 1P93 and 1P94, or MATH 1P97 and 1P98 (see program note 2); PHYS 1P10; one Humanities context credit or one Social Science context credit (see program notes 1 and 3).

Oenology and Viticulture

Year 2

OEVI 2P45 and 2P99; BIOL 2F01, 2P96 and 2P98; BTEC 2P09 or 2P63; CHEM 2P20, 2P21 and 2P42 (see program note 1).

Year 3

OEVI 0N01, 3P21, 3P25 and 3P98; BCHM 3P01; one credit from BIOL 3P91, BTEC 3P09, 3P50, 3P62, 3P63, GEOG 3P31; the Humanities context or Social Science context credit not taken in year 1; one elective credit (see program notes 1 and 4).

Year 4

OEVI 0N01 (if not taken in year 3), 4P20 and 4P30; OEVI 4F90 and 4F91, or OEVI 4F92 and one elective credit: CHEM 3P41; one-half credit from OEVI 3P12, 3P50, BIOL 3P42, 3P51, 3P91, 4P02, 4P57, 4P58, BTEC 3P09, 3P50, 3P62, 3P63, GEOG 3P31; one elective credit (see program notes 1, 5 and 6).

Certificate in Grape and Wine Technology

Eligibility requirements:

1. For those individuals having completed an undergraduate degree in biological sciences or chemistry or some related area (e.g., biotechnology, biochemistry etc.); or
2. For those individuals admissible to the University with a number of years of work experience in the grape and wine industry.

See "Certificate Requirements" under Academic Regulations.

Students must maintain a minimum 70 percent average of the required and additional courses listed below to continue in the certificate program.

The certificate is awarded upon completion of five credits with a minimum 70 percent overall average.

Certificate students will enrol in courses as scheduled for the degree program students.

Required courses:

OEVI 1P20, 2P45, 2P99, 3P25, 3P98, 4P20 and 4P30.

Additional courses:

One and one-half credits from OEVI 3P12, 3P21, 3P50, BIOL, BCHM, BTEC or CHEM courses numbered 2(alpha)00 or above.

Prerequisites and Restrictions

Student must check to ensure that prerequisites are met. Students may be deregistered, at the request of the instructor, from any course for which prerequisites and/or restrictions have not been met.

Description of Courses

Note that not all courses are offered in every session. Students should plan their program accordingly and are advised to refer to the applicable term timetable for details.

OEVI 1P20

Introduction to Wines

A survey of the wine producing regions of the world: wine production, classification, evaluation, regulations and marketing of wine.

Lectures, seminar, 3 hours per week.

Note: materials fee required. Students must be of legal drinking age. Other students should consult the Co-ordinator of Experiential Learning.

OEVI 2P45

Cultural Practices

Site selection, pruning, training, canopy management, crop control, mechanization, soil management and vineyard establishment.

Lectures, 3 hours per week; lab, 3 hours per week; field trips.

Restriction: open to OEVI majors and OEVI certificate students or permission of the instructor.

Prerequisite: OEVI 2P99.

Students completing this course will forfeit credit in OEVI 3P45.

OEVI 2P99

Grapevine Biology

Varieties, rootstocks, clones, physiology and biochemistry of grapevine growth and fruit maturation; soil science, winter hardiness; grapevine propagation.

Lectures, 3 hours per week; lab, 3 hours per week.

Restriction: open to OEVI majors and OEVI certificate students or permission of the instructor.

Prerequisite: CHEM 1P80 and 1P81 or CHEM 1P90 and 1P91 and BIOL 1F90.

OEVI 3P12

Climate and Winegrape Production

(also offered as GEOG 3P12)

The climatological aspects of winegrape production. Emphasis on wine regions of Ontario and British Columbia. The ef-

fects of climate, weather-related diseases, topography, soil and viticultural practices on winegrape quality.

Lectures, lab, field work, 4 hours per week.

Prerequisite: GEOG 2P04 or permission of the instructor.

Note: students enrolled in the OEVI program and OEVI certificate students are permitted to register without the prerequisite.

OEVI 3P21

Winery Equipment

Theory and operation of grape and wine processing equipment in commercial wineries, including crushers, presses, filters, pumps, tanks; winery layout; sanitation and waste water management.

Lectures, 3 hours per week; lab, 3 hours per week.

Restriction: open to OEVI majors and OEVI certificate students or permission of the instructor.

Prerequisites: CHEM 1P80 and 1P81 or CHEM 1P90 and 1P91; PHYS 1P10.

Note: the laboratory section will include fermentations to demonstrate the equipment being used. Students must be of legal drinking age.

Students completing this course will forfeit credit in OEVI 2P21.

OEVI 3P25

Wine Chemistry

Chemical reactions in fermentation, sulfiting, fining, casse formation and removal, ageing and wine supplementation. The laboratory section will include sampling grapes, fermentation chemical analysis and evaluation of wine.

Lectures, 3 hours per week; lab, 3 hours per week.

Restriction: open to OEVI majors and OEVI certificate students or permission of the instructor.

Prerequisite: CHEM 2P20 and 2P42.

Note: students must be of legal drinking age.

Students completing this course will forfeit credit in OEVI 2P25.

OEVI 3P50

Geology of Viticultural Regions

(also offered as ERSC 3P50)

The influence of bedrock, unconsolidated sediments and groundwater in glaciated, temperate and semi-desert terroirs. Field examination of Niagara appellation vineyards and the geological environs of the sub-appellations.

Lectures, 2 hours per week; lab, field work, 3 hours per week.

Prerequisite: ERSC 1F90 or 1F95 or permission of the instructor.

Note: students enrolled in the OEVI program and OEVI certificate students are permitted to register without the prerequisite. Not open to ERSC majors for major credit.

OEVI 3P98

Wine Microbiology

Alcoholic fermentation; metabolism of nitrogen compounds and organic acids; production of sulphur compounds; killer yeasts; malolactic fermentation; wine spoilage micro-organ-

isms; genetic improvement of wine yeasts.

Lectures, 3 hours per week; lab, 3 hours per week.

Restriction: open to OEVI majors and OEVI certificate students or permission of the instructor.

Prerequisite: BIOL 2P98 and BTEC 2P09 or 2P63.

OEVI 4F90

Research Project

Experimental research carried out under faculty supervision.

Restriction: open to OEVI majors with approval to year 4 (honours).

Co-requisite: OEVI 4F91.

OEVI 4F91

Thesis

The thesis will incorporate the results of the research project and will form the basis of a seminar presented by the student.

Restriction: open to OEVI majors with approval to year 4 (honours).

Co-requisite: OEVI 4F90.

OEVI 4F92

Library Research Essays

Students will carry out two detailed studies of the scientific literature under faculty supervision.

Restriction: open to OEVI majors with approval to year 4 (honours).

Note: For students not registered in OEVI 4F90 and 4F91. The results of the studies will be presented in major essays and presented as formal seminars. One research topic is to be completed each term.

OEVI 4P20

Sensory Evaluation of Wines and Food

Physiology of taste, chemistry of aroma and flavour, origin of off-odours in wines, measurement techniques.

Lectures, lab, 3 hours per week.

Restriction: open to OEVI majors and OEVI certificate students or permission of the instructor.

Prerequisite: MATH 1P98.

OEVI 4P30

Plant Protection: Diseases of Grapes and Pest Control

Management aspects of vineyards including methods of identifying vineyard diseases, nematodes and insect pests, their biology and control practices. Integrated pest management strategies as an adjunct approach to chemical control.

Lectures, 3 hours per week; lab, 3 hours per week.

Restriction: open to OEVI majors and OEVI certificate students or permission of the instructor.

Prerequisite: OEVI 2P99.

OEVI 4V90-4V99

Special Topics in Oenology and Viticulture

Selected issues in Oenology and Viticulture on the basis of faculty expertise.

Restriction: open to OEVI majors.

Note: under certain circumstances a student may carry out,

Oenology and Viticulture

under faculty supervision a detailed study of the scientific literature pertinent to a specific topic. The results of this study will be presented as a major essay and as a formal seminar.

NON-CREDIT

OEVI 0N01

Wine Appreciation

A special interest course focussed on the tasting of wines from Canada and around the world.

Restriction: permission of the Co-ordinator of Experiential Learning.

Note: materials fee required. Students must be of legal drinking age. Other students should consult the Co-ordinator of Experiential Learning. This course must be taken by OEVI majors in year 3 or year 4. Available to the general public.

OEVI 0N10

Intern Experience - Viticulture

Experiential placement largely in a vineyard setting.

Restriction: open to OEVI majors. Consult the Co-ordinator of Experiential Learning regarding permission to register.

OEVI 0N11

Intern Experience - Oenology

Experiential placement concentrating on some aspect of the wine making process.

Restriction: open to OEVI majors. Consult the Co-ordinator of Experiential Learning regarding permission to register.

OEVI 0N12

Intern Experience - Tourism and Marketing

Experiential placement involving the sales and/or promotion of local grape products and/or events.

Restriction: open to OEVI majors. Consult the Co-ordinator of Experiential Learning regarding permission to register.

OEVI 0N13

Intern Experience - Industry Preparation

Experiential placement requiring the successful completion of an approved program of industry workshops and short courses.

Restriction: open to OEVI majors. Consult the Co-ordinator of Experiential Learning regarding permission to register.

Note: any fees charged for these activities are the responsibility of the student.

OEVI 0N20

Employment Experience - Viticulture

Experiential placement which includes participation in an appropriate range of vineyard operations.

Restriction: open to OEVI majors. Consult the Co-ordinator of Experiential Learning regarding permission to register.

OEVI 0N21

Employment Experience - The Crush and Fermentation

Experiential placement which includes participation in an appropriate range of winery operations during the crush and early phases of the wine making process.

Restriction: restricted to OEVI majors. Consult the Co-ordinator of Experiential Learning regarding permission to register.

OEVI 0N22

Employment Experience - Cellar Operations

Experiential placement which includes an appropriate range of winery operations during a period of time other than the crush and early phases of the wine making process.

Restriction: open to OEVI majors. Consult the Co-ordinator of Experiential Learning regarding permission to register.

OEVI 0N23

Employment Experience - Tourism and Marketing

Experiential placement which includes a range of experiences in sales and/or promotion of local grape products and/or events.

Restriction: open to OEVI majors. Consult the Co-ordinator of Experiential Learning regarding permission to register.

Philosophy

Chair

Ravindra Raj Singh

Professors Emeriti

J. R. A. Mayer, Debabrata Sinha

Professor

David L. Goicoechea

Associate Professors

Richard S. G. Brown, Wing-Cheuk Chan, Martha Husain,
Robert W. Malone, Murray L. Miles, George J. Nathan,
Ravindra Raj Singh

General Information

Administrative Assistant, extension 3315

Schmon Tower 1128

<http://www.brocku.ca/philosophy/>

Philosophy, defined as the pursuit of wisdom, encompasses the exploration of the nature of reality, consciousness, values, knowledge, reason, argument and evidence. At Brock the undergraduate student studies not only the primary texts of the Western philosophical tradition, but also major texts of Indian and Chinese thought. Students are encouraged to investigate critically and dialectically their own views and values.

Language Requirement for Humanities Majors

PHIL majors must complete a credit in one language other than English (classical or modern), within the first 10 credits. Where half credit courses are used to satisfy the requirements, both half credits must be in the same language.

Program Notes

1. All courses numbered 1F90 through 1F94 are introductory PHIL courses. Though different in content and emphasis, PHIL 1F91, 1F93 and 1F94 are no more advanced than 1F90. Normally a student will not be permitted to take more than one introductory course.

2. One-half credit from PHIL 2P12, 2P13, 2P17 is required for the honours degree.

3. Year 3 courses are restricted to students with a minimum of three credits at the 2(alpha)00 level or above or permission of the instructor.

4. Some year 4 courses will be offered conjointly with a correspondingly numbered year 5 (graduate level) course.

5. Although all year 4 level courses are intended for fourth-year PHIL honours majors, students at the year 3 level may take the equivalent of one year 4 credit if they have obtained second-class honours standing or with the permission of the department. No undergraduate student may take more than one credit in the form of honours tutorials.

6. In all 20 credit degree programs, at least 12 credits must be numbered 2(alpha)00 or above, six of which must be numbered 2(alpha)90 or above and of these, three must be numbered 3(alpha)90 or above. In all 15 credit degree programs, at least seven credits must be numbered 2(alpha)00 or above, three of which must be numbered 2(alpha)90 or above.

Honours Program

Year 1

One credit from PHIL 1F90, 1F91, 1F93, 1F94; (see program note 1); one Social Science and one Science context credit; two elective credits (see language requirement).

Year 2

PHIL 2F01, 2P02 and 2P03; one additional PHIL credit; two elective credits, one of which must be approved by the department (see program notes 2 and 3).

Year 3

Three PHIL credits; two elective credits, one of which must be approved by the department.

Year 4

PHIL 4P20; two and one-half PHIL credits numbered 3(alpha)90 or above; two elective credits, of which one must be approved by the department.

Pass Program

Satisfactory completion of the first three years of the honours program entitles a student to apply for a pass degree.

Philosophy

Combined Major Program

Students wishing to major in PHIL and in one other discipline are required to complete at least seven PHIL credits (including the required courses) for an honours degree and five PHIL credits including PHIL 2F01, 2P02, 2P03 and one-half credit from PHIL 2P12, 2P13, 2P17 for a pass degree.

Master of Arts (MA) Program

A master's program is offered, focusing on two areas: recent and contemporary European thought and Asian (especially Indian) thought. Candidates should have an honours BA in philosophy; those with a pass BA in philosophy or a degree in another discipline will be required to take additional courses. Students may choose either to complete two credits and write a thesis or to complete four credits and write a major essay.

Graduate credits are to be obtained by completing courses designated at the 5(*alpha*)00 level. A course previously taken for 4(*alpha*)00 level credit may not be retaken for graduate credit.

For details, see the Graduate Calendar or contact the Director of Graduate Studies Office or the Chair of the Department.

Prerequisites and Restrictions

Students must check to ensure that prerequisites are met. Students may be deregistered, at the request of the instructor, from any course for which prerequisites and/or restrictions have not been met.

Description of Courses

Note that not all courses are offered in every session. Refer to the applicable term timetable for details.

PHIL 1F90

Introduction to Philosophy: Philosophical Classics and Contemporary Life

Contemporary problems viewed through a variety of philosophical writings. Students are encouraged to formulate and examine their own beliefs about freedom, knowledge, religion, love and questions of right and wrong.

Lectures, seminar, 3 hours per week.

Students completing this course will forfeit credit in PHIL 1F91, 1F93, 1F94 except with permission of the department.

PHIL 1F91

Introduction to Philosophy: Philosophies of Human Nature
How do we see ourselves? Who are we? What are we? A critical analysis and evaluation of classical and contemporary views of human nature from a variety of philosophical and religious traditions.

Lectures, seminar, 3 hours per week.

Students completing this course will forfeit credit in PHIL 1F90, 1F93, 1F94 except with permission of the department.

PHIL 1F93

Introduction to Philosophy: The Foundations of the Present

An attempt to place the philosophical issues which confront the reflective individual today in their historical context by examining the teachings and arguments which shape our views of such matters as body and soul, life after death, truth and knowledge, faith and moral responsibility.

Lectures, seminar, 3 hours per week.

Students completing this course will forfeit credit in PHIL 1F90, 1F91, 1F94 except with permission of the department.

PHIL 1F94

Introduction to Philosophy: Philosophical Problems

The central problems of philosophy as living questions for reflection, dialogue and debate, including: Is the external world really there? Does God exist? Can I really know anything? What is a person? Is everything permissible? Can my life have meaning?

Lectures, seminar, 3 hours per week.

Students completing this course will forfeit credit in PHIL 1F90, 1F91, 1F93 except with permission of the department.

PHIL 2F01

Ancient Greek Philosophy

The beginnings of Western civilization in the thought of the great sages of ancient Greece. These early philosophers set Western civilization on a new and distinctive course, which has resulted in our contemporary scientific-technological way of life.

Lectures, seminar, 3 hours per week.

PHIL 2F09

Ethics: Foundations and Cases

An investigation into the ultimate basis of our beliefs about what is right or wrong, good or bad. Begins with case studies about particular moral issues, such as abortion, euthanasia and animal rights, issues that provoke profound moral disagreement. Continues into explaining the ultimate basis of such disagreements and concludes with an attempt to explain why consensus has not so far been reached and how consensus might be reached on such issues. Considers both traditional and contemporary approaches to explaining and resolving moral disputes.

Lectures, 3 hours per week.

PHIL 2F93

Philosophical Psychology

The philosophical and historical foundations of Freudian and post-Freudian theories concerning the nature of the human psyche. Theories and theorists include exorcism (Gassner), animal magnetism (Mesmer), the school of Nancy (Bernheim), Charcot, Freud, Jung and Adler.

Lectures, seminar, 3 hours per week.

Prerequisite: one credit from PHIL 1F90, 1F91, 1F93, 1F94, PSYC 1F90 or permission of the instructor.

PHIL 2F95

Bioethics

(also offered as BIOL 2F95)

Value conflicts and moral dilemmas in biology and medicine. Emphasis on specific case studies in reproductive interventions, medical experimentation, concepts of "health" and "disease", modification of behaviour, lifestyle choices, allocation of scarce or expensive medical resources and death and dying.

Lectures, seminar, 3 hours per week.

Prerequisite: one credit in BIOL or PHIL or permission of the instructor.

Note: may count as an elective, but not as a major credit in honours BIOL (single or combined) major.

PHIL 2F96

Philosophy of Human Nature

Major philosophical orientations regarding the concept of humanity across the Western and some Eastern traditions. Examination of basic issues involved in reaching a philosophical understanding of human nature and its place in the scheme of things.

Seminar, 3 hours per week.

Prerequisite: one credit in PHIL or permission of the instructor.

PHIL 2M90-2M92

Selected Topics in Philosophy

Topics chosen to reflect areas of occasional interest which are not represented in the regular program of studies. Proposals from students are welcome.

Lectures, seminar, 3 hours per week.

Prerequisite: one credit in PHIL or permission of the instructor.

PHIL 2P02

Early Modern Philosophy: The Rationalists

The classical philosophies of Europe in the 17th and 18th centuries as found in the writings of the Continental Rationalists (Descartes, Spinoza and Leibniz).

Lectures, 3 hours per week.

PHIL 2P03

Early Modern Philosophy: The Empiricists

The classical philosophies of England, Ireland and Scotland in the 17th and 18th centuries as found in the writings of the British Empiricists (Locke, Berkeley and Hume).

Lectures, 3 hours per week.

PHIL 2P12

Indian Philosophy: An Introduction to Hindu Thought

Hindu thought beginning with the Vedic myths, through the Upanishads and the Bhagavad Gita to the systems of the Vedanta. Topics include Karma, reincarnation, altered states of consciousness, Maya, the problem of knowledge, the role and nature of God, the theory and practice of yoga.

Lectures, seminar, 3 hours per week.

PHIL 2P13

Indian Philosophy: An Introduction to Buddhist Thought

Buddhist thought from Prince Siddhartha's enlightenment and subsequent Deer Park Sermon (the basis of Hinayana) through the Perfection of Wisdom to Madhyamika Buddhism (the Mahayana representative) to Zen (the silence of the Buddha). Topics include Nirvana, non-self, one-hand clapping.

Lectures, seminar, 3 hours per week.

PHIL 2P14

The Beginnings of Existential Thinking

The sources of both theistic and atheistic lived philosophy in such figures as Kierkegaard, Nietzsche and Dostoyevski.

Lectures, seminar, 3 hours per week.

PHIL 2P15

The Growth of Existential Thinking

A study of the work of such philosophers as Scheler, Heidegger, Marcel and Sartre.

Lectures, seminar, 3 hours per week.

Prerequisite: PHIL 2P14 or permission of the instructor.

PHIL 2P17

Introduction to Chinese Philosophy

Confucian, Taoist and Chinese Buddhist philosophical traditions examined in conjunction with appropriate texts.

Lectures, 3 hours per week.

PHIL 2P18

Introduction to Postmodernism

The origin and development of postmodern thinking with particular reference to the issues of ethics and the role of women. Selected writers may include Nietzsche, Derrida, Levinas, Irigaray, Kristeva, Cixous and Wyschogrod.

Seminar, 3 hours per week.

PHIL 2P25

Introduction to Logic

Modern deductive logic; the objective is to develop the ability to analyze arguments in order to determine their worth. Arguments will be symbolized in order to clarify their form and to determine their validity or invalidity.

Lectures, 3 hours per week.

PHIL 2P82

Business Ethics

(also offered as MGMT 2P82)

An evaluation of the contribution of business practices, institutions and actions to the general human good. Topics may

Philosophy

include false or misleading advertising, product safety, monopolistic price schemes, effects of pollution, discriminatory hiring policies, the role of shareholders, management, government and the public in determining corporate policy and economic justice.

Lectures, seminar, 3 hours per week.

Restriction: not open to BAcc and BBA majors.

Students completing this course will forfeit credit in MGMT 3P82.

PHIL 2P91

Philosophy of Art

An historical and systematic approach to the theory of art, analysing the current proliferation of theories as variations on a few basic concepts such as work-analysis vs. content-analysis; constitutive vs. genetic or affective definition; intrinsic vs. extrinsic meaning.

Seminar, 3 hours per week.

PHIL 2P92

Philosophy of Love

A consideration of the question "What is love?" in such philosophical texts as those of Plato, Aquinas, Kierkegaard and Scheler and in literary figures of the student's choice, e.g., Dante, Shakespeare, Goethe and Byron.

Lectures, seminar, 3 hours per week.

PHIL 2P97

Philosophy of Religion

Traditional issues such as the proofs for the existence of God, the problem of evil, the relationship of faith to reason and the nature of religious knowledge.

Seminars, 3 hours per week.

Prerequisite: one credit in PHIL or permission of the instructor.

PHIL 2P98

Philosophy in Literature

Philosophical issues in literature, such as creation stories in ancient and contemporary mythology, the nature of human freedom versus externally determining forces, conflicts of values, the encounter of opposing world views.

Lectures, seminar, 3 hours per week.

Prerequisite: one credit in PHIL or permission of the instructor.

PHIL 2P99

Philosophy of Sex

The application of ethics to questions of human sexuality. Topics may include sexual values, the semantics of sex, the concepts of the romantic and eternal-feminine, respect for the personhood of women, censorship, pornography, legal enforcement of morality, sex in advertising, prostitution and AIDS.

Lectures, seminar, 3 hours per week.

Prerequisite: one credit in PHIL or CHSC (HLST) 2P50 (2F50) or permission of the instructor.

Students completing this course will forfeit credit in WISE 2P99.

PHIL 2V85-2V89

Contemporary Social Issues

Problems arising in the areas of social ethics and public policy. Topics include the morality of deceit, overpopulation, obligations to future generations and the environment, nuclear deterrence, animal liberation, moral enforcement and world hunger. Whenever possible, topics are selected in accordance with student interests.

Lectures, seminar, 3 hours per week.

Prerequisite: one credit in PHIL or permission of the instructor.

PHIL 2V87

2000-2001: Lies and Secrets

PHIL 2V96-2V99

Philosophy of Science

An historical introduction to the metaphysical foundations of modern physical science. The concepts of space, time and matter as they evolved from the theories of the pre-Socratics to those of Bohr, Heisenberg and contemporary exponents of quantum mechanics.

Seminar, 3 hours per week.

Prerequisite: one credit in PHIL or permission of the instructor.

PHIL 3M50-3M59

Selected Topics in Philosophy

Selected issues on the basis of faculty expertise.

Seminar, 3 hours per week.

Prerequisite: one credit in PHIL or permission of the instructor.

PHIL 3M50

2000-2001: Philosophical Concepts in the New Testament.

PHIL 3M95-3M99

Comparative Studies in Ancient and Modern Philosophy

An historical and systematic study of one or more important themes as developed in the transition from ancient Greek to modern and contemporary philosophy.

Seminar, 3 hours per week.

Prerequisites: PHIL 2F01, 2P02 and 2P03.

PHIL 3P01

Theory of Knowledge

Fundamental distinctions in the theory of knowledge, such as knowledge and belief, the empirical and the a priori, analytic/synthetic, scientific versus metaphysical knowledge.

Seminar, 3 hours per week.

Prerequisites: PHIL 2P02 and 2P03.

Students completing this course will forfeit credit in PHIL 2P94.

PHIL 3P02

Metaphysics

Major problems of metaphysics, considering the question of what there is. Topics may include the nature of space and time, the mind-body relation, substance and property, universals and particulars, causation, identity and personal identity.

Lectures, seminar, 3 hours per week.

Prerequisites: PHIL 2P02 and 2P03.

Students completing this course will forfeit credit in PHIL 2P95.

PHIL 3P19

The Rise of Christian Philosophy

Philosophy from the patristic period through Erigena and Anselm up to and including the 12th-century Renaissance.

Lectures, 3 hours per week.

Prerequisite: PHIL 2F01 or permission of the instructor.

PHIL 3P20

Scholastic Philosophy

The great Islamic, Jewish and Christian philosophers of the 13th century.

Lectures, 3 hours per week.

Prerequisite: PHIL 2F01 or permission of the instructor.

PHIL 3P60

Phenomenology

The work of philosophers such as Husserl, Heidegger, Sartre, Merleau-Ponty, Scheler and others.

Lectures, 3 hours per week.

Prerequisite: PHIL 2P15 or permission of the instructor.

PHIL 3P90

Critical Study of a Classical Philosophy: Plato I

Plato's middle period ontology, centring on *The Republic*.

Seminar, 3 hours per week.

Prerequisite: PHIL 2F01 or permission of the instructor.

Students completing this course will forfeit credit in PHIL 3M91.

PHIL 3P91

Critical Study of a Classical Philosophy: Aristotle I

Aristotle's *Metaphysics*.

Seminar, 3 hours per week.

Prerequisite: PHIL 2F01 or permission of the instructor.

Students completing this course will forfeit credit in PHIL 3M90.

PHIL 3P92

Hermeneutics

The philosophical theory of interpretation and understanding, with special reference to the methods employed in the humanities (history, literary criticism etc.); the problems of hermeneutics in the works of such thinkers as Gadamer, Ricoeur, Heidegger and Habermas.

Seminars, 3 hours per week.

PHIL 3P93

Critical Study of a Classical Philosophy: Plato II

Plato's late dialectic, centring on the Sophist.

Seminar, 3 hours per week.

Prerequisites: PHIL 2F01 and 3P90 or permission of the instructor.

PHIL 3P94

Critical Study of a Classical Philosophy: Aristotle II

Application of Aristotelian metaphysics.

Seminar, 3 hours per week.

Prerequisites: PHIL 2F01 and 3P91 or permission of the instructor.

PHIL 3P98

Hegel and the 19th Century

The great comprehensive metaphysical systems of the 19th century and reactions to them. In addition to Hegel, philosophers include Fichte, Schelling, Schleiermacher, Schopenhauer, Feuerbach, Marx, Comte, Mill, Kierkegaard, Nietzsche.

Lectures, seminar, 3 hours per week.

Prerequisites: PHIL 2P02 and 2P03 and 3P56 or permission of the instructor.

Students completing this course will forfeit credit in PHIL 3P58.

PHIL 3Q90

Consciousness and Society

(also offered as PSYC 3Q90)

Psychoanalytic approaches to modern clinical pathologies of narcissism, transpersonal psychologies of meditation and consciousness, and socio-cultural approaches to radical salvation movements are combined to examine both the nature and history of religious-mystical experience and the repeated appearance of mystical movements and gnostic cults throughout the 20th century. Emphasis on the personal, social, and political conflicts associated with these phenomena.

Lectures, seminar, 3 hours per week.

Restriction: open to PHIL (single or combined) and PSYC (single or combined) majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits or 3.0 PSYC credits above PSYC 1F90.

Prerequisite: PSYC 1F90.

PHIL 3Q95

Theories of Personality: Freud and Jung

(also offered as PSYC 3Q95)

Major clinically derived theories of personality with special attention to their bases in case study/life history methodology; focus on Freud and Jung and their continuing relevance for current personality, developmental and transpersonal psychology. The possibly unique relation of "depth psychology" to numinous experience (mysticism, creativity, psychosis).

Lectures, seminar, 3 hours per week.

Restriction: open to PHIL (single or combined) and PSYC (single or combined) majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits or 3.0 PSYC credits above PSYC 1F90.

Prerequisite: PSYC 1F90.

Philosophy

PHIL 3Q96

Theories of Personality: Developments in Psychodynamic and Transpersonal Psychology (also offered as PSYC 3Q96)

Major developments in the psychoanalytic tradition (Kohut, Winnicott, Klein) as they relate to analogous developments within transpersonal and Jungian approaches to "higher" states of consciousness. The conflicts and congruences between these perspectives illustrated by selected life histories (Melanie Klein, Wilhelm Reich, G. Gurdjieff).

Lectures, seminar, 3 hours per week.

Restriction: open to PHIL (single or combined) and PSYC (single or combined) majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits or 3.0 PSYC credits above PSYC 1F90.

Prerequisite: PSYC 1F90.

PHIL 3V95-3V99

Issues in 17th- and 18th-Century Philosophy

A special issue or a particular thinker of central importance in the classical period of modern philosophy. Where it does not focus upon one individual (e.g., Descartes, Spinoza, Leibniz, Locke, Berkeley, Hume, Kant), the course will trace the development of an issue (e.g., causality, mind-body union, the doctrine of substance, personal identity etc.) through its classical origins.

Seminar, 3 hours per week.

Prerequisites: PHIL 2P02 and 2P03 or permission of the instructor.

PHIL 4P07

Husserl and Transcendental Phenomenology

Basic issues and the characteristic method of phenomenology using some of the major works of Husserl.

Seminar, 3 hours per week.

Restriction: students must have a minimum 70 percent major average and a minimum of 10.0 overall credits.

PHIL 4P20

Kant and the 18th Century

An historical study of the thought of Immanuel Kant in the context of the 18th-century enlightenment, focussing primarily on Kant's *Critique of Pure Reason*.

Lectures, seminar, 3 hours per week.

Prerequisites: PHIL 2P02 and 2P03 or permission of the instructor.

Students completing this course will forfeit credit in PHIL 3P56 and PHIL 3P96.

PHIL 4P47

Contemporary Approaches to Consciousness (also offered as PSYC 4P47)

Cognitive, philosophical, neuropsychological, physical and phenomenological perspectives on consciousness will be explored, including the work of James, Sperry, Gibson, Penrose, Wittgenstein, Husserl and Heidegger and research on metaphor and self-organizing natural systems.

Lectures, seminar, 3 hours per week.

Restriction: open to PSYC (single or combined) and PHIL (single or combined) majors with approval to year 4 (honours).

PHIL 4P70

Cognitive Science

(also offered as COSC 4P70 and PSYC 4P70)

Interdisciplinary study of the mind. Computer models of the human mind examined in three ways: as a branch of computer science related to artificial intelligence, as a form of psychological theory and as a source of philosophical puzzles about the mind.

Lectures, 3 hours per week; lab, 1 hour per week.

Restriction: permission of the instructor.

PHIL 4P97

Honours Tutorial I

Directed intensive and individual study in an area in which a student has developed and displayed a particular interest. To be chosen in consultation with a faculty member able to supervise the study. Proposals for a tutorial course must be approved by the Chair of the department by the last day for late registration. Restriction: students must have a minimum 70 percent major average and a minimum of 10.0 overall credits.

PHIL 4P98

Honours Tutorial II

Directed intensive and individual study in an area in which a student has developed and displayed a particular interest. To be chosen in consultation with a faculty member able to supervise that study. Proposals for a tutorial course must be approved by the Chair of the department by the last day for late registration. Restriction: students must have a minimum 70 percent major average and a minimum of 10.0 overall credits.

PHIL 4V00-4V04

Advanced Studies in Political Philosophy

Examination of either a particular thinker or a problem in political philosophy. Political philosophers may include Plato, Aristotle, Hobbes, Locke, Rousseau, Kant, J. S. Mill, Rawls and Nozick. Problems may include liberty and political obligation, justice and equality, human nature and the political order, civil disobedience, participation and consent, liberalism, anarchism, socialism and conservatism.

Seminar, 3 hours per week.

Restriction: students must have a minimum 70 percent major average and a minimum of 10.0 overall credits.

PHIL 4V06-4V14

Studies in Contemporary European Philosophy

A study of the work of one or more thinkers prominent in recent Continental thought.

Seminars, 3 hours per week.

Restriction: students must have a minimum 70 percent major average and a minimum of 10.0 overall credits.

PHIL 4V08
2000-2001: Nietzsche

PHIL 4V13
2000-2001: Derrida-Levinas

PHIL 4V15-4V29

Modern Philosophical Studies

An advanced course devoted to one or more of the major thinkers of the tradition from Descartes to the present day.

Seminar, 3 hours per week.

Restriction: students must have a minimum 70 percent major average and a minimum of 10.0 overall credits.

PHIL 4V20
2000-2001: Kant

PHIL 4V23
2000-2001: Kierkegaard

PHIL 4V26
2000-2001: Rationalists

PHIL 4V27
2000-2001: Husserl

PHIL 4V30-4V45

Advanced Studies in Eastern Philosophy

Concentrated critical and interpretative study of selected texts in the areas of Advaita, Vedanta, Yoga etc. or Madhyamika and Yogacara schools of Buddhism.

Seminars, 3 hours per week.

Restriction: students must have a minimum 70 percent major average and a minimum of 10.0 overall credits.

PHIL 4V42
2000-2001: Vedanta

PHIL 4V43
2000-2001: Yogacara Buddhism - Sartre

Physical Education

Chair

Nancy R. Murray
Anna H. Lathrop (as of July 1, 2000)

Professor

Robert Kerr

Associate Professors

Lorne J. Adams, Maureen Connolly, Paulette Côté-Laurence,
Robert M. Davis, John Hay, Anna H. Lathrop, Nancy R.
Murray, Danny Rosenberg

Assistant Professors

Panagiota Klentrou, Susan Forbes, David Gabriel, Diane
Stevens

Movement Specialist

Janet Westbury

Adjunct Professor

Joseph P. Kenny

ers grant an Ontario Certificate of Qualification certifying them to teach grades K - 6.

The BPhEd General major provides students with a broadly based understanding of the discipline. This stream allows maximum opportunity for students to pursue various combinations of courses within their particular areas of interest.

The BPhEd major in Disability Studies focuses on the therapeutic and holistic benefits of physical activity. This stream allows students to gain an understanding of the application of movement analyses and programming to persons living with disabilities and chronic conditions.

The BPhEd Movement Studies major offers a combination of theoretical and practical courses in physical education. This stream allows students to apply movement knowledge in educational contexts such as teaching, coaching, programming and administration.

The BPhEd major in Kinesiology focuses on the biophysical and social sciences in physical education. This stream aims to equip the student with a knowledge in kinesiology and the related fields of exercise prescription, motor performance, sport psychology and coaching.

General Information

Administrative Assistant, extension 4358
Physical Education 286
<http://arnie.pec.brocku.ca/~phed/>

Physical Education majors may choose a 20 credit BPhEd degree or a 25.5 credit BPhEd (honours)/BEd degree. Within the BPhEd degree students may choose one of four streams. These four streams share a core of physical education courses which comply with the National accreditation standards established by the Canadian Council of University Physical Education and Kinesiology Administrators.

The requirement for graduation with a BPhEd (honours) is a minimum major average of 70 percent and a minimum non-major average of 60 percent in the remaining credits. The minimum major average for graduation with a BPhEd with a Major is 60 percent and a minimum overall average of 60 percent.

Successful graduates of the concurrent BPhEd (honours)/BEd degree will receive an honours Bachelor of Physical Education degree (20 credits) and a Bachelor of Education degree (5.5 credits). As well, the concurrent BPhEd (Honours)/BEd degree complies with the National accreditation standards established by the Canadian Council of University Physical Education and Kinesiology Administrators. The Dean of the Faculty of Education may recommend that the Ontario College of Teach-

Program Notes

1. The requirement for admission to all majors is a minimum average of 60 percent in year 1 PHED courses.
2. Changing majors may require additional courses; students should consult the Department of Physical Education.
3. Students should consult with the Physical Education department regarding their program requirements.
4. Physical Education majors must take one and one-half elective credits outside the Department of Physical Education.
5. OAC Biology and OAC Mathematics are recommended for students who wish to pursue the kinesiology major.
6. Students intending to pursue teacher certification upon completion of their degree should consult the Calendar entry for the Faculty of Education for the program admission requirements.
7. Physical Education majors are strongly recommended to take an emergency First Aid/CPR course.
8. In all BPhEd degree programs, at least 12 credits must be numbered 2(alpha)00 or above, six of which must be numbered 2(alpha)90 or above and of these, three must be numbered 3(alpha)90 or above.

Programs of Study

General

Year 1

PHED 1P90 and 1P93; COSC 1P90 or 1P98; one Science context credit; one Humanities context credit; one Social Science context credit; one-half elective credit.

Year 2

PHED 2P00, 2P04, 2P05, 2P08, 2P09 and 2P84; one additional PHED credit; one elective credit.

Year 3

PHED 2P95, 2P97, 3P00, 3P10, 3P08 or 3P18 and 3P70; one additional PHED credit; one elective credit.

Year 4

One-half credit from PHED 3P41, 3P93, 4P11; one credit from PHED 4F90, 4F91, 4M90-4M99; two PHED elective credits; one and one-half elective credits (see program notes 4 and 8).

Disability Studies

Year 1

PHED 1P90 and 1P93; COSC 1P90 or 1P98; one Science context credit; one Humanities context credit; one Social Science context credit; one-half elective credit.

Year 2

PHED 2P00, 2P03 or 2P06, 2P04, 2P05, 2P08, 2P09, 2P84 and 2P92; one elective credit.

Year 3

PHED 2P95, 2P97, 3P08 or 3P18, 3P23, 3P41, 3P70, 3P91 and 3P92; one elective credit.

Year 4

PHED 3P10, 3P93, 4F02 and 4P12; one credit from PHED 4F91, 4F93, 4M90-4M99; one-half PHED elective credit; one elective credit (see program notes 4 and 8).

Kinesiology

Year 1

PHED 1P90 and 1P93; COSC 1P90 or 1P98; one Science context credit; one Humanities context credit; one Social Science context credit; one-half elective credit.

Year 2

PHED 2P04, 2P05, 2P08, 2P09, 2P19, 2P84 and 2P97; one and one-half elective credits.

Year 3

PHED 2P95, 3P00, 3P08 or 3P18, 3P10, 3P70, 3P75 and 3P90; one and one-half elective credits.

Year 4

PHED 3P94, 3P95, 4P10 and 4P11; one credit from PHED 4F90, 4F91, 4M90-4M99; two elective credits (see program note 4).

Movement Studies

Year 1

PHED 1P90 and 1P93; COSC 1P90 or 1P98; one Science context credit; one Humanities context credit; one Social Science context credit; one-half elective credit.

Year 2

PHED 2P00, 2P03, 2P04, 2P05, 2P06, 2P08, 2P09 and 2P84; one elective credit.

Year 3

PHED 2P95, 2P97, 3P00, 3P03, 3P06, 3P08 or 3P18, 3P10 and 3P70; one elective credit.

Year 4

PHED 3P41, 3P93, 3P97 and 4F93; one credit from PHED 4F90, 4F91, 4M90-4M99; one and one-half elective credits (see program note 4).

Concurrent BPhEd (Honours)/BEd

The Department of Physical Education and the Faculty of Education co-operate in offering a concurrent BPhEd (honours)/BEd program for students interested in teaching at the Primary/Junior level; grades K-6. Refer to the Education-Concurrent BPhEd(honours)/BEd program listing for additional information.

Prerequisites and Restrictions

Students must check to ensure that prerequisites are met. Students may be deregistered, at the request of the instructor, from any course for which prerequisites and/or restrictions have not been met.

Physical Education

Descriptions of Courses

Note that not all courses are offered in every session. Refer to the applicable term timetable for details.

PHED 1P90

Foundations of Human Movement Science

Basic concepts in functional anatomy, exercise physiology, biomechanics, motor control and sport psychology. Key issues concern changes in movement function and behaviour throughout the life span and in response to training.

Lectures, 3 hours per week.

Restriction: open to students admitted to PHED until date specified in BIRT guide.

Students completing this course will forfeit credit in PHED 1P92 and 1P94.

PHED 1P93

Foundations of Movement Studies

Historical and sociological examination of systems of body culture and movement education in Europe and North America. Applications of movement concepts and theories to contemporary physical education.

Lectures, seminar, lab, 4 hours per week.

Restriction: open to students admitted to PHED until date specified in BIRT guide.

PHED 2P00

Movement Orientation through Developmental Games

The educational and developmental value of games. The fundamental principles of movement as developed by Rudolf Laban applied through games and fundamental skills for children.

Lectures, lab, 3 hours per week.

Restriction: open to PHED majors with a minimum of 4.0 overall credits.

Prerequisite: PHED 1P93.

PHED 2P01

Organization and Administration of Physical Education and Sport

Theory and practice of administration and management related to various delivery systems in both private and public sectors. Organizational structures at the federal, provincial and local levels.

Lectures, seminar, 3 hours per week.

Restriction: open to PHED majors until date specified in BIRT guide. Students must have a minimum of 4.0 overall credits. Students completing this course will forfeit credit in SPMA 2P01.

PHED 2P03

Movement Orientation through Educational Gymnastics

Application of Laban's principles in the educational gymnastics environment. The content of educational gymnastics is

used to analyse movement and to develop motor performance. Practical application of theory pursued in lab situations.

Lectures, lab, 3 hours per week.

Restriction: open to PHED majors with a minimum of 4.0 overall credits.

Prerequisite: PHED 1P93.

PHED 2P04

Musculo-skeletal Anatomy

The anatomical bases of skeletal and muscular movement, joint actions and the interrelationship of aggregate muscle groups.

Lectures, lab, 3 hours per week.

Restriction: open to PHED majors until date specified in BIRT guide. Students must have a minimum of 4.0 overall credits.

Prerequisite: PHED 1P90.

Students completing this course will forfeit credit in SPMA (CHSC (HLST)) 2P93.

PHED 2P05

Motor Learning and Motor Behaviour

A theoretical examination of the acquisition of motor skills, including the neurophysiological structures involved in learning, learning theories and their application; information processing.

Lectures, lab, 3 hours per week.

Restriction: open to PHED majors with a minimum of 4.0 overall credits.

Prerequisite: PHED 1P90.

PHED 2P06

Movement Orientation through Creative Dance

Introduction to dance as art through Laban's principles of movement. Emphasis on composing, performing and appreciating dance sequences.

Lectures, lab, 3 hours per week.

Restriction: open to PHED majors with a minimum of 4.0 overall credits.

Prerequisite: PHED 1P93.

Note: students will be expected to pay the cost of a ticket to a dance performance on campus.

Students completing this course will forfeit credit in PHED 2P07.

PHED 2P09

Introduction to Human Physiology

(also offered as CHSC 2P09)

Molecular, cellular, tissue and organ physiology. Topics include nerve and muscle tissues, nervous system, endocrine regulation, metabolism and reproductive physiology.

Lectures, 3 hours per week.

Restriction: open to PHED, CHSC (HLST), (single or combined), HLSC, NUSC, RECL and SPMA majors until date specified in BIRT guide. Students must have a minimum of 4.0 overall credits.

Note: this course provides foundation for students seeking Cardiac Rehabilitation Certification.

PHED 2P19

The Philosophy and Principles of Coaching

The physiological and psychological development of the athlete. The role of the coach and the organization of sport in contemporary society.

Lectures, seminar, 3 hours per week.

Restriction: open to PHED and SPMA majors until date specified in BIRT guide. Students must have a minimum of 4.0 overall credits.

PHED 2P41

Health Behaviour

Problems associated with the ability to function effectively and efficiently in present-day society. The decision-making process related to the delivery of health education information.

Lectures, seminar, 3 hours per week.

Restriction: open to PHED majors until date specified in BIRT guide. Students must have a minimum of 4.0 overall credits.

PHED 2P44

Physical Activity and Aging

The contribution of human movement to the well-being and quality of life of the senior adult. A review of principles, practice, and programs for seniors related to the concept of wellness. The myths, needs and movement potential of senior adults.

Lectures, lab, 3 hours per week.

Restriction: open to PHED majors until date specified in BIRT guide. Students must have a minimum of 4.0 overall credits.

PHED 2P70

Care and Prevention of Injuries

The basic treatment, recognition and prevention of musculoskeletal injuries; the interrelationship of anatomy, physiology and kinesiology and the practical application of these fields including emergency care and preventative taping.

Lectures, lab, 3 hours per week.

Restriction: open to PHED majors until date specified in BIRT guide. Students must have a minimum of 4.0 overall credits. Prerequisite: PHED 2P04.

PHED 2P84

Introduction to Motor Development

Developmental patterns in motor abilities and skills across the life span. Age-related changes in motor behaviour.

Lectures, seminar, 3 hour per week.

Restriction: open to PHED majors until date specified in BIRT guide. Students must have a minimum of 4.0 overall credits. Prerequisite: PHED 1P90.

Students completing this course will forfeit credit in PHED 1P94.

PHED 2P91

History and Physical Education and Sport

Origins and historical significance of physical activity from ancient times to the present. Emphasis on Europe and North America.

Lectures, seminar, 3 hour per week.

Restriction: open to PHED majors until date specified in BIRT guide. Students must have a minimum of 4.0 overall credits.

Prerequisite: PHED 1P90 or PHED 1P93.

Students completing this course will forfeit credit in PHED 1P91.

PHED 2P92

Physical Education for Persons with Disabilities and Chronic Conditions

The life conditions and needs of persons who require adapted physical education programs or adapted activities.

Lectures, lab, fieldwork, 3 hours per week.

Restriction: open to PHED majors with a minimum of 4.0 overall credits.

Note: visits to schools and institutions with practical work.

Students completing this course will forfeit credit in PHED 3P04.

PHED 2P93

Rhythmic Activities for Children

(also offered as CHYS 2P93)

Basic elements of rhythm and rhythmic abilities; role of rhythm in motor skill acquisition /performance; practical experiences with small apparatus; methods of music education and curriculum planning.

Lectures, lab, 3 hours per week.

Restriction: open to PHED, BA/BEed and CHYS (CHST) (single or combined) majors until date specified in BIRT guide. Students must have a minimum of 4.0 overall credits.

Prerequisite: PHED 1P90 or CHYS (CHST) 1F90 and PSYC 1F90.

PHED 2P94

Movement for the Young Child

(also offered as CHYS 2P94)

Movement experiences for pre-schoolers in dance, developmental games and educational gymnastics. Topics include the impact of physical activity on the developing child, pre-schoolers' characteristics and needs, motor development principles and planning age-appropriate movement activities.

Lectures, lab, 3 hours per week.

Restriction: open to PHED, BA/BEed and CHYS (CHST) (single or combined) majors until date specified in BIRT guide. Students must have a minimum of 4.0 overall credits.

Prerequisite: PHED 1P93 or CHYS (CHST) 1F90 and PSYC 1F90.

Students completing this course will forfeit credit in CHST 2P94.

PHED 2P95

Psychological Foundations of Human Movement

Psychological bases and implications of physical activity in sport and physical education. Topics include personality, motivation, achievement needs, group interaction, conflict and cohesion.

Lectures, seminar, 3 hours per week.

Restriction: open to PHED and SPMA majors with a minimum of 4.0 overall credits.

Physical Education

Students completing this course will forfeit credit in PHED 2P02.

PHED 2P97

Introduction to Exercise Physiology

Examination of cardio-vascular, respiratory, muscular and nervous systems in relation to exercise, training and health.

Lectures, lab, 3 hours per week.

Restriction: open to PHED and SPMA majors until date specified in BIRT guide. Students must have a minimum of 4.0 overall credits.

Prerequisite: PHED 1P90.

PHED 2Q07

Introduction to Research Design and Evaluation

Principles and techniques for research. Issues concerning the construction, administration and evaluation of data collection as well as the processing and analysis of data.

Lectures, lab, 3 hours per week.

Restriction: open to PHED majors.

Prerequisite: COSC 1P90 or 1P98 or permission of the instructor.

Students completing this course will forfeit credit in CHSC 2Q07, HLST 2P07, PHED 2P08, RECL 2P07, SPMA 2P07 and TOUR 2P07.

PHED 3P00

Movement Orientation through Advanced Games

Application of Laban's principles of movement to formal games; emphasis on analysis, motor skill development and strategies.

Lectures, lab, 3 hours per week.

Restriction: open to PHED majors with a minimum of 4.0 overall credits.

Prerequisite: PHED 1P93.

PHED 3P03

Movement Orientation through Advanced Educational Gymnastics

Designed to facilitate skill development and understanding in the area of educational gymnastics through advanced practical experience and theoretical application of Laban's movement principles.

Lectures, lab, 3 hours per week.

Restriction: open to PHED majors with a minimum of 8.0 overall credits.

Prerequisite: PHED 2P03.

PHED 3P06

Movement Orientation through Advanced Creative Dance

Dance as art through composition, performance and appreciation. Topics include aesthetics, the choreographic process, form and meaning.

Lectures, lab, 3 hours per week.

Restriction: open to PHED majors with a minimum of 8.0 overall credits.

Prerequisite: PHED 2P06 (2P07).

Note: students will be expected to pay the cost of a ticket to a dance performance on campus.

Students completing this course will forfeit credit in PHED 3P17.

PHED 3P10

Introduction to Biomechanics

(also offered as SPMA 3P10)

Basic mechanical principles and concepts as applied to human movement. Focus on the characteristics of movement from both a qualitative and quantitative perspective.

Lectures, lab, 3 hour per week.

Restriction: open to PHED and SPMA majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits.

Prerequisite: PHED 2P04.

Students completing this course will forfeit credit in PHED 3V90 (SPMA 4P10).

PHED 3P16

Movement Orientation through Folk Dance

An understanding of Laban's principles of movement as they relate to folk dance. Emphasis on performance, teaching, evaluation and analysis of a wide variety of folk dance forms.

Lectures, lab, 3 hours per week.

Restriction: open to PHED majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits. Students completing this course will forfeit credit in PHED 3P07.

PHED 3P23

Functional and Expressive Movement for Diverse Populations

Thematically organized activities utilizing a variety of contexts to create inclusive and relevant movement-based programs for diverse and under-resourced groups. Contexts include aquatics, dance, games, outdoor pursuits and therapeutic movement.

Lab, 3 hours per week.

Restriction: open to PHED majors with a minimum of 8.0 overall credits.

Prerequisites: PHED 2P92 and one credit from PHED 2P00, 2P03, 2P06.

PHED 3P32

Movement Orientation to School Physical Education

Sequential skill and knowledge development for children and adolescents through various movement forms appropriate in educational settings. Movement education principles applied to the observation, analysis and selection of activities.

Lab, 3 hours per week.

Restriction: open to PHED majors with a minimum of 8.0 overall credits.

Prerequisite: one credit from PHED 2P00, 2P03, 2P06.

PHED 3P41

Health Issues

Contemporary issues in health education focusing on choices that concern individuals in our society.

Lectures, lab, 3 hours per week.

Restriction: open to PHED majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits.

PHED 3P70

Sociology of Physical Education and Sport

Social significance of physical education and sport. Topics include social organizations, stratification, deviance, race, gender and the media.

Lectures, seminar, 3 hours per week.

Restriction: open to PHED majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits.

PHED 3P75

Mental Training for Human Movement and Personal Growth

An integration of reading, research, and applied work in mental training and applied sport psychology. Analysis, discussion and practical application of mental skills such as arousal management, attention control, decision making, goal setting, positive self-talk and time management.

Lectures, seminar, 3 hours per week.

Restriction: open to PHED and SPMA majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits.

Prerequisite: PHED 2P95 (2P02).

PHED 3P76

Dance: Contemporary Issues and Trends

Nature and meaning of dance as a performing art. Emergence of knowledge base in dance from the social sciences, humanities and movement sciences; dance and other performing arts; dance in higher education, international trends and dance research.

Lectures, seminar, 3 hours per week.

PHED 3P80

Clinical and Field Practices in Athletic Therapy

Emphasis on musculo-skeletal assessment of the upper appendage, patient management skills, advanced emergency care, therapeutic modalities, rehabilitation techniques and taping.

Lectures, internship, 5 hours per week.

Restriction: open to PHED majors with a minimum of 8.0 overall credits and permission of the instructor.

Prerequisite: PHED 2P70.

Note: a minimum grade of 75 percent in PHED 2P70 is required. In addition, a letter submitted by May 1, stating explicit experience which may include work in a therapy clinic, with a varsity/community team as trainer/therapist, certification in CPR and First Aid, completion of the sports injury and prevention and care course and the taping course offered by the Ministry of Tourism and Recreation. References and an interview may be used to determine eligibility to enter the course. Students should note that this is a limited enrolment course and admission is not guaranteed by attainment of the minimum requirements. A clinical internship in the Athletic Injury Clinic is required. Enrolment limited to 22 students per section.

PHED 3P81

Clinical Assessments in Athletic Therapy

Functional and surface anatomy of the major joints; the clinical skills used in the assessment of musculo-skeletal injuries related to the lower appendage and lower back. Qualitative

posture and gait assessment.

Lectures, internship, 5 hours per week.

Restriction: open to PHED majors with a minimum of 8.0 overall credits and permission of the instructor.

Prerequisite: PHED 3P80.

Note: clinical internship required. Enrolment limited to 22 students per section.

PHED 3P90

Advanced Exercise Physiology

Bio-energetics, metabolic and endocrine responses/adaptations to training. Environmental physiology from rest to exercise. Exercise prescription and recent advances.

Lectures, lab, 3 hours per week.

Restriction: open to PHED and SPMA majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits.

Prerequisite: PHED 2P97.

PHED 3P91

Training Principles from a Movement Education Orientation

Current theories and practices in a variety of training contexts, formats and modalities. Training as applied to a broad age and ability spectrum; movement education principles applied to the observation, analysis and selection of activities.

Lectures, lab, 3 hours per week.

Restriction: open to PHED majors with a minimum of 8.0 overall credits.

Prerequisites: PHED 2P04 and 2P05.

PHED 3P92

Assessment and Programming for Persons with Disabilities and Chronic Conditions

Assessment protocols and appropriate activity programming for persons with disabilities and chronic conditions.

Lectures, lab, 3 hours per week.

Restriction: open to PHED majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits.

Prerequisite: PHED 2P92 (3P04).

Note: applied work, placement/practica required.

PHED 3P93

The Lived Body: Philosophical Issues in Physical Education, Sport and Dance

A philosophic inquiry on the nature of human movement as experienced through physical education, sport and dance.

Lectures, seminar, 3 hours per week.

Restriction: open to PHED majors with a minimum of 8.0 overall credits.

PHED 3P94

Motor Control and Learning

Motor behaviour. Emphasis on factors producing changes in skill. Aspects of information processing, attention and memory underlying skilled performance. Practical application to teaching and coaching situations.

Lectures, lab/seminar, 3 hours per week.

Restriction: open to PHED majors until date specified in BIRT

Physical Education

guide. Students must have a minimum of 8.0 overall credits.
Prerequisite: PHED 2P05.

PHED 3P95

Psychological Aspects of Sport

An integration of reading, research, and applied work in the area of sport psychology. Analysis and discussion of research and readings on the effects of psychological variables on performance.

Lectures, lab, 3 hours per week.

Restriction: open to PHED and SPMA majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits.

Prerequisite: PHED 2P95 (2P02).

PHED 3P96

Women, Men and the Body

(also offered as WISE 3P96)

A critical and reflective examination of historical, philosophical, socio-cultural and religious influences on the body from a variety of feminist perspectives.

Lectures, tutorial, lab, 3 hours per week.

Restriction: open to students with a minimum of 8.0 overall credits.

Prerequisite: PHED 1P93 or WISE 1F90 or permission of the instructor.

Note: experiential work (somatic, movement, expressive) is part of the course experience.

PHED 3P97

Observational Techniques and Laban Movement Analysis

Movement observation techniques, analysis of movement patterns, factors influencing movement behaviour and the recording of movement patterns.

Lectures, lab, 3 hours per week.

Restriction: open to PHED majors with a minimum of 8.0 overall credits.

Prerequisite: one credit from PHED 2P00, 2P03, 2P06.

PHED 3P99

Special Studies in Physical Education

Directed study in specialized areas of physical education.

Restriction: open to PHED majors with 8.0 overall credits and permission of a specified faculty member.

Note: approval of a faculty member and the Chair required.

PHED 3Q07

Quantitative Methods of Inquiry

(also offered as CHSC 3Q07, RECL 3Q07, SPMA 3Q07 and TOUR 3Q07)

Quantitative means of understanding, evaluating and interpreting statistical information.

Lectures, lab, 3 hours per week.

Prerequisite: PHED 2Q07 (2P08).

Students completing this course will forfeit credit in HLST 3P07, PHED 3P08, RECL 3P07, SPMA 3P07 and TOUR 3P07.

PHED 3Q17

Qualitative Approaches to Inquiry

(also offered as CHSC 3Q17, RECL 3Q17, SPMA 3Q17 and TOUR 3Q17)

Theories, approaches, designs, methods and procedures for conducting evaluative analyses.

Lectures, seminar, 3 hours per week.

Prerequisite: PHED 2Q07 (2P08).

Students completing this course will forfeit credit in HLST 317, PHED 3P18, RECL 3P17, SPMA 3P17 and TOUR 3P17.

PHED 3V91-3V99

Selected Topics in Physical Education

Lectures, seminars and practical experiences offered in specialized areas of physical education.

Restriction: open to PHED majors with a minimum of 8.0 overall credits and permission of the chair.

Note: approval of a faculty member and the Chair required.

PHED 4F02

Disability Studies Practicum

Planning and implementing bodily based experiences with persons with disabilities and chronic conditions. Prolonged engagement, direct contact placement; administration; working with parents, government and consultation services; instruction/facilitation of learning experiences.

Tutorial, seminar, fieldwork, 3 hours per week.

Restriction: open to PHED majors with a minimum of 12.0 overall credits.

PHED 4F90

Research Seminar in Physical Education

Research in movement sciences and physical education. Qualitative and quantitative approaches.

Tutorials, seminar, 3 hours per week.

Restriction: open to PHED majors with a minimum of 12.0 overall credits.

Prerequisite: PHED 3Q07 (3P08) or 3Q17 (3P18).

PHED 4F91

Thesis/Project

Directed study in an approved area of specialization.

Restriction: open to PHED majors with a minimum of 12.0 overall credits and a minimum 70 percent major average and a minimum 60 percent non-major average and permission of the chair.

Note: prior to registration students must submit a written proposal for approval by a faculty adviser and the chair.

PHED 4F93

Advanced Movement Seminar

Designed to aid students in increasing their personal expertise and knowledge in movement education. Emphasis on improvement, refinement and perfection of personal, observational and analytical skills in a wide variety of movement experiences.

Movement seminar, 4 hours per week.

Restriction: open to PHED majors with a minimum of 12.0 overall credits.

Prerequisites: PHED 3P00, 3P03 and 3P06.

PHED 4M90-4M99

Tutorial in Special Topics in Physical Education

Directed reading and discussion in the student's selected field. Restriction: open to PHED majors with a minimum of 12.0 overall credits and a minimum 70 percent major average and a minimum 60 percent non-major average and permission of the chair.

Note: students must obtain permission from the chair by June 1.

PHED 4P10

Advanced Biomechanics

Mechanics of human movement with applications to ergonomics, rehabilitation, sport and performing arts. Focus on two-dimensional kinetics and kinematics, with an introduction to three-dimensional analysis of movement.

Lectures, lab, 3 hours per week.

Restriction: open to PHED majors with a minimum of 12.0 overall credits.

Prerequisite: PHED 3P10 (PHED 3V90).

PHED 4P11

Sport Ethics

(also offered as SPMA 4P11)

A speculative philosophical approach to specific ethical issues in sport. Ethics of competition, sportsmanship, cheating and violence in sport, the use of performance-enhancing drugs, equality and excellence, gender equity in sport and the role of intercollegiate sport.

Lectures, 3 hours per week.

Restriction: open to PHED and SPMA majors with a minimum of 12.0 overall credits.

PHED 4P12

Fitness and Conditioning for Persons with Disabilities and Chronic Conditions

Design, application and modification of movement education concepts applied to the analysis and development of exercise and activity, user-friendly spaces and individualized programs.

Lectures, lab, 3 hours per week.

Restriction: open to PHED majors with a minimum of 12.0 overall credits.

Prerequisites: PHED 2P92 (3P04) and 3P91.

PHED 4P13

Aesthetics of the Body and Movement

Aesthetic judgment and analysis as shaped by content, context and culture as perceived by the performer, creator and spectator in functional and expressive movement forms. Historical and contemporary issues.

Lectures, seminar, 3 hours per week.

Restriction: open to PHED majors with a minimum of 12.0 overall credits.

PHED 4P22

Therapeutic Applications of Movement Education

Movement education concepts applied to movement profiles and the design of individualized programs. Contexts include activities of daily living and workplace.

Lectures, seminar, 3 hours per week.

Restriction: open to PHED majors with a minimum of 12.0 overall credits.

Prerequisites: PHED 2P92 (3P04) and 3P23.

PHED 4P31

Reflective Practicum in Physical Education

The processes involved in becoming reflective practitioners. Emphasis on the development of reflective awareness as a significant aspect of practitioner conduct.

Lectures, lab, field work, 3 hours per week.

Restriction: open to PHED majors with a minimum of 8.0 overall credits.

Students completing this course will forfeit credit in PHED 3P31.

PHED 4P32

Movement Orientation in Teaching Physical Education

The development and implementation of movement programs for children and adolescents. Curricular application of Laban's principles and other conceptual analysis in a teaching setting.

Lectures, lab, fieldwork, 3 hours per week.

Restriction: open to PHED majors with a minimum of 8.0 overall credits.

Prerequisite: one credit from PHED 2P00, 2P03, 2P06.

Note: teaching practicum in a school is required.

Students completing this course will forfeit credit in PHED 3P22.

PHED 4P50

Sport and Leisure in Canadian Society: Historical Perspectives

Changes in leisure and sport in Canadian society. The emergence and role of sport and leisure from a historical, methodological and theoretical perspective. Relationships between leisure and sport and social, cultural, religious and political history.

Lectures, seminar, 3 hours per week.

Restriction: open to PHED majors with a minimum of 12 overall credits.

Prerequisite: PHED 2P91.

PHED 4P70

Advanced Sociology of Sport

Sport as a microcosm of society, socio-political theories, religion, culture, socially structured inequalities and excesses in sport.

Lectures, seminar, 3 hours per week.

Restriction: open to PHED majors with a minimum of 12.0 overall credits.

Prerequisite: PHED 3P70

Physical Education

PHED 4P95

Women and Sport

(also offered as SPMA 4P95 and WISE 4P95)

Historical and current issues relating to women's participation in sport. The influence of physiological, psychological and sociological factors on performance.

Lectures, seminar, 3 hours per week.

Restriction: open to PHED, SPMA and WISE majors with a minimum of 12.0 overall credits.

NON-CREDIT

PHED 0N08

Elementary School Culture

A 12-hour course on issues associated with elementary education.

Lectures, 2 hours per week for six weeks.

Restriction: consult the department for permission to register.

Prerequisite: 70 percent in PHED 1P90.

Note: this course is required for acceptance into the concurrent BPhEd (honours)/BEd degree program and is offered the last six weeks of the Winter Term. Students will register at the first class.

Physics

Chair
Božidar Mitrović

Professor Emeritus
Colin A. Plint

Professors
John E. Black, Shyamal K. Bose, Božidar Mitrović, Fereidoon S. Razavi, Stuart M. Rothstein, Ramesh C. Shukla, Jan Vrbik

Associate Professors
Maureen Reedyk, Edward Stermin

Senior Laboratory Instructor
Frank A. Benko

Laboratory Demonstrator
Ronald Snelgrove

General Information

Administrative Assistant, extension 3412
Mackenzie Chown B210
<http://www.physics.brocku.ca/>

The department offers four-year programs of study leading to a BSc honours in Physics, a BSc with a major in Physics and a three-year BSc pass degree program. Students may take a single major in Physics or a combined major with Biological Sciences, Chemistry, Computer Science, Earth Sciences or Mathematics. The core of the program is designed to provide an understanding of the principles and fundamental interactions of classical and quantum physics as well as many applications of these principles in technology and everyday life. It is possible for non Physics degree students to take advanced courses, provided they have the physics and mathematics required in the year 1 Physics program. An experimental physics path of PHYS 2P31 and 3P92 or a modern physics path of PHYS 2P50 and 3P91 are possible.

Program Notes

1. Students should consult a faculty adviser when planning years 3 and 4 of the BSc programs or year 3 of the BSc (pass) program.
2. PHYS 3P20 is offered in odd years and PHYS 3P92 is offered in even years.

3. In all 20 credit degree programs, at least 12 credits must be numbered 2(alpha)00 or above, six of which must be numbered 2(alpha)90 or above and of these three must be numbered 3(alpha)90 or above. In all fifteen credit degree programs, at

least seven credits must be numbered 2(alpha)00 or above, three of which must be numbered 2(alpha)90 or above.

Honours Program

Year 1
PHYS 1F25 or 1F90 (preferred); CHEM 1P80 and 1P81 or CHEM 1P90 and 1P91 (preferred); COSC 1P93; MATH 1P12, 1P93 and 1P94; one Humanities or Social Science context credit.

Year 2
PHYS 2P20, 2P31, 2P50 and 2P51; MATH 2F95; the Humanities or Social Science context credit not taken in year 1; one elective credit.

Year 3
PHYS 3P35, 3P36, 3P41, 3P70 and 3P91; MATH 3F94; one and one-half elective credits.

Year 4
PHYS 4F50, 4F90, 4P30, 4P41 and 4P70; one of PHYS 2P92, 3P20, 3P92, 3P93, 4P61, 4P71 (see program note 2); one elective credit.

BSc with a Major

This program is identical to the honours program listed above in years 1 to 3.

Year 4
PHYS 4P30, 4P41 and 4P70; two PHYS credits numbered 2(alpha)00 or above; one of PHYS 2P92, 3P20, 3P92, 3P93, 4P61, 4P71 (see program note 2); one elective credit.

Pass Program

Years 1 and 2 as in the honours program.

Year 3
PHYS 3P35, 3P36, 3P41, 3P70 and 3P91; MATH 3F94; one and one-half elective credits.

Physics

Concurrent BSc/BEd

The Faculty of Mathematics and Science and the Faculty of Education co-operate in offering a concurrent pass BSc/BEd program for students interested in teaching mathematics or science at the elementary level to grade 8. Refer to the Education-Concurrent BSc/BEd Program listing for additional information.

Combined Major Programs

Physics and Biological Sciences

Honours

Year 1

PHYS 1F20, 1F25 or 1F90 (preferred); BIOL 1F90; MATH 1P93 and 1P94; one Humanities and one Social Science context credit.

Year 2

PHYS 2P20 and 2P50; BIOL 2F01; one credit from BIOL 2P05, 2P92, 2P93, 2P96, 2P98, 2Q04; CHEM 1P80 and 1P81 or CHEM 1P90 and 1P91 (preferred); MATH 2F95.

Year 3

PHYS 2P31 and 2P51; one-half credit from PHYS 3P20, 3P35, 3P70; one BIOL credit; one BIOL credit numbered 2(alpha)00 to 3(alpha)99 or one year 3 PHYS credit; one and one-half elective credits.

Year 4

PHYS 4F90 and 4F91 or BIOL 4F90 and 4F91 or PHYS 4F90 and one elective credit or BIOL 4F92 and one elective credit; one PHYS credit numbered 2(alpha)99 or above; one year 3 or year 4 BIOL credit; one PHYS or BIOL credit numbered 2(alpha)90 or above.

Pass

Satisfactory completion of the first three years of the honours program entitles a student to apply for a pass degree.

Physics and Computer Science

Honours

Year 1

PHYS 1F20 or 1F25 or 1F90 (preferred); COSC 1P03 and 1P12; MATH 1P66, 1P67, 1P93 and 1P94; one Social Science context credit.

Year 2

PHYS 2P20, 2P31, 2P50 and 2P51; COSC 2P03 and 2P32; MATH 2F95; one Humanities context credit.

Year 3

Two credits from MATH 3F94, PHYS 3P20, 3P35, 3P36, 3P41, 3P70; COSC 2P13, 2P50, 2P91 and 3P01; MATH 1P12; one-half elective credit.

Year 4

Two credits from PHYS 4F50, 4F90, 4P41, 4P70; COSC 3F00; two COSC credits numbered 3(alpha)90 or above.

Physics and Mathematics

Honours

Year 1

PHYS 1F20 or 1F25 or 1F90 (preferred); MATH 1P12, 1P93 and 1P94; one Humanities and one Social Science context credit; one-half elective credit.

Year 2

PHYS 2P20, 2P31, 2P50 and 2P51; MATH 2F00 or 2F95 (see program note 2); MATH 2F10 and 2P01; one-half elective credit.

Year 3

Two credits from PHYS 3P20, 3P35, 3P36, 3P41, 3P70; MATH 3F00 and 3F94; one elective credit.

Year 4

PHYS 4F50; one credit from PHYS 4P30, 4P41, 4P70; PHYS 4F90 and 4F91 or two MATH credits numbered 3(alpha)90 or above; one elective credit.

Pass

Satisfactory completion of the first three years of the honours program entitles a student to apply for a pass degree.

Physics and Chemistry

Consult the Chemistry entry for a listing of course requirements.

Physics and Earth Sciences

Consult the Earth Sciences entry for a listing of course requirements.

Master of Science (MSc) Program

The department offers an MSc program in condensed matter physics. Experimental and theoretical studies are provided. Current research interests and activities involve experimental, theoretical and computational studies in materials science and condensed matter.

For details, see the Graduate Calendar or contact the Chair of the Department.

Prerequisites and Restrictions

Students must check to ensure that prerequisites are met. Students may be deregistered, at the request of the instructor, from any course for which prerequisites and/or restrictions have not been met.

Description of Courses

Note that not all courses are offered in every session. Refer to the applicable term timetable for details.

ASTR 1F00
Introduction to Astronomy

Topics include a description of the appearance of the night sky, the properties of the sun and stars and a discussion of the planets of the solar system, galaxies, history of astronomy and the properties of some unusual astronomical objects such as pulsars and black holes.

Lectures, 3 hours per week.

Note: a night of observing the stars and some seminars may be offered. Designed for both non-science and science students.

PHYS 1F20
Physics for Life Sciences

Fundamental classical physics phenomena and concepts: mechanics, optics, electromagnetism and thermal physics.

Lectures, 3 hours per week; problem sessions, 2 hours per week.

Note: a background in elementary algebra and trigonometry is useful. This material should be of interest and use to students who plan to major in the physical or life sciences.

Students completing this course will forfeit credit in PHYS 1F25.

PHYS 1F25
Physics, with Laboratory, for Life Sciences

Combines the lectures in PHYS 1F20 with a laboratory session.

Lectures, 3 hours per week; problem sessions, 2 hours per week; lab, alternating weeks, 3 hours per week.

Note: for science students who require an introductory physics course with laboratory but who do not have OAC physics.

Students completing this course will forfeit credit in PHYS 1F20.

PHYS 1F90
Principles of Physics

Mechanics, electromagnetism and light.

Lectures, 3 hours per week; problem sessions, 1 hour per week; lab, alternating weeks, 2 hours per week.

Note: OAC physics is strongly recommended. Designed for students intending to major in physics (either as a single major or as part of a combined major), chemistry, mathematics or computer science. Credit in PHYS 1F90 is preferred for entry into all year 2 PHYS courses.

PHYS 1P10
Fluids, Heat and Light

(also offered as ENVI 1P10)

Newton's laws and their consequences: work-energy relationship, energy conservation, momentum-impulse relationship and momentum conservation. Application of Newton's laws to fluids: fluids in equilibrium (pressure and Pascal's principle, surface tension and capillary action); fluids in motion (Bernoulli's equation, viscosity, turbulent flow); principles of centrifuge. Heat and heat flow, phase-changes, heat pumps/refrigeration. Wave nature of light.

Lectures, 3 hours per week; tutorial, 1 hour per week.

Restriction: open to OEVI and ENVI (ENVP) (single or combined) majors or permission of the instructor.

PHYS 2P01
Environmental Physics

Energy and the environment and the application of physics to topics of environmental significance; the mechanics of energy, the laws of thermodynamics and their implications for energy efficiency and energy sources, the environmental impact of energy production.

Lectures, lab, 6 hours per week.

Note: major credit will not be granted to PHYS (single or combined) majors.

Students completing this course will forfeit credit in ENVP 2P01.

PHYS 2P20
Introductory Mechanics

Mechanics of particles and systems of particles by the Newtonian method; conservation of linear momentum, angular momentum and energy; elementary dynamics of rigid bodies; oscillators; motion under central forces; selected applications.

Lectures, problem sessions, 3 hours per week; lab and tutorial, 3 hours per week.

Prerequisites: one of PHYS 1F20, 1F25, 1F90 (preferred); MATH 1P93 and 1P94 (1F00).

Physics

PHYS 2P31

Electronics

Conduction in metals and semiconductors; circuit analysis; semiconductor junction, diode and transistor; rectification, switching and amplification; digital and linear integrated circuits; electrical measurement instruments.

Lectures, lab, 6 hours per week.

Prerequisites: one of PHYS 1F20, 1F25, 1F90; one MATH credit or permission of the instructor.

Note: laboratory will include student exercises and instructor demonstration. No previous course in electricity/magnetism/electronics is required. Secondary school algebra and some basic calculus will be used in the quantitative sections.

PHYS 2P50

Modern Physics

Special relativity, photons, the wave-particle aspects of electromagnetic radiation and matter; introduction to wave mechanics; the hydrogen atom and atomic line spectra; orbital and spin angular momenta; lasers.

Lectures, tutorial, 4 hours per week.

Prerequisites: one of PHYS 1F20, 1F25, 1F90 (preferred); MATH 1P93 and 1P94 (1F00).

PHYS 2P51

Introduction to Classical and Modern Optics

Geometrical and wave optics, reflection, refraction, lenses, matrix methods, aberrations, gradient index phenomena including fibre optics; interference, coherence, holography, Fraunhofer and Fresnel diffraction, polarization.

Lectures, 3 hours per week; lab, 3 hours per week.

Prerequisites: one of PHYS 1F20, 1F25, 1F90 (preferred); MATH 1P93 and 1P94 (1F00).

PHYS 2P92

Introductory Electronics and Solid-state Devices

Laboratory

Laboratory instruments, noise and cross-talk; passive filters; Thevenin equivalents; time and frequency response; Bode plots; junction diodes and rectification; operational amplifiers; active filters; lock-in amplifiers; combinatorial logic gates; sequential logic counters.

Labs, 3 hours per week.

Prerequisites: one of PHYS 1F20, 1F25, 1F90; one MATH credit or permission of the instructor.

Note: normally taken concurrently with PHYS 2P31.

PHYS 3P20

Classical Mechanics

An advanced treatment of the mechanics of particles and of rigid bodies; Lagrangian and Hamiltonian methods; Poisson brackets, applications to the theory of small oscillators and central force motions, elements of chaotic motions.

Lectures, 3 hours per week; tutorial, alternating weeks, 2 hours per week.

Prerequisites: PHYS 2P20 and MATH 2F95.

PHYS 3P35

Electromagnetism I

Electric field, divergence and curl of electrostatic field; relation between electric work and energy; conductors; application of Laplace's and Poisson's equation in electrostatics; electrostatic field in matter; field in polarized object and linear dielectric.

Lectures, 3 hours per week.

Prerequisite: MATH 2F00 or 2F95.

Students completing this course will forfeit credit in PHYS 2P30.

PHYS 3P36

Electromagnetism II

Magnetostatics, divergence and curl of magnetic field; magnetic vector potential; magnetic field in matter; magnetization; field of magnetic object; magnetic field inside of linear and non-linear media; electrodynamics; Ohm's law; Faraday's law and Maxwell equations; energy and momentum in electrodynamics; electromagnetic waves.

Lectures, 3 hours per week.

Prerequisite: PHYS 3P35.

Students completing this course will forfeit credit in PHYS 3P30.

PHYS 3P41

Statistical Physics I

Introduction to probability distribution functions, accessible states, entropy, temperature, partition functions and relations to thermodynamic functions.

Lectures, 3 hours per week, tutorial, 1 hour per week.

Prerequisite: PHYS 2P50.

PHYS 3P70

Introduction to Wave Mechanics

Wave particle dualism, Schrodinger equation, solution of simple one-dimensional barrier problems and the harmonic oscillator, hydrogen atom, angular momentum theory, introduction to perturbation theory and variational methods.

Lectures, lab/problem sessions, 4 hours per week.

Prerequisites: PHYS 2P50 and MATH 2F95.

PHYS 3P91

Experimental Physics I

Laboratory experiments to be selected from atomic physics, nuclear physics, solid state physics.

Lab, 1 day per week.

Prerequisites: PHYS 2P20 and 2P30 or permission of the instructor.

PHYS 3P92

Experimental Physics (Electronics) II

Operational amplifiers, converters, switches, microcomputers and their application to physical measurements.

Labs, 1 day per week.

Prerequisite: PHYS 2P31 or permission of the instructor.

PHYS 3P93

Solid-state Devices

Principles of operation of solid-state devices, from the point of view of the quantum theory; electronic bands and conduction in semiconductors; operation and manufacture of silicon and germanium diodes, junction and field effect transistors; thin-film deposition technology; special topics.

Lectures, lab, 6 hours per week.

Prerequisites: PHYS 3P70.

PHYS 4F50

Quantum Mechanics

Operator formalism, Hilbert space, Dirac's transformation theory, matrix mechanics, creation and annihilation operators, second quantization, variational method, perturbation theory, scattering theory.

Lectures, 4 hours per week.

Prerequisites: PHYS 3P70 and MATH 3F94 (3P95).

PHYS 4F90

Research Project I

A small experimental, theoretical or applied physics research project to be carried out under the supervision of a member of the department.

Restriction: open to PHYS (single or combined) majors with either a minimum of 14.0 overall credits and a 70 percent major average and a non-major average of 60 percent or approval to year 4 (honours).

Note: the project may, under special circumstances, be started in the summer months. Students must consult with the Department Chair regarding their proposed program during the first week of lectures.

PHYS 4F91

Research Project II

A small experimental, theoretical or applied physics research project to be carried out under the supervision of a member of the department.

Restriction: open to PHYS (single or combined) majors with either a minimum of 14.0 overall credits and a 70 percent major average and a non-major average of 60 percent or approval to year 4 (honours) and permission of the department.

Prerequisite: PHYS 4F90.

Note: the project may, under special circumstances, be started in the summer months. Students must consult with the Department Chair regarding their proposed program during the first week of lectures. PHYS 4F90 and 4F91 may be taken concurrently.

PHYS 4P30

Electromagnetic Waves

Electromagnetic wave propagation in vacuum, dielectrics, conductors and ionized gases; reflection, refraction, polarization at the plane boundary between two media; wave guide and transmission line propagation; dipole and quadrupole radiation fields; antenna systems; electromagnetic radiation pressure; transformation of the electromagnetic fields.

Lectures, problem sessions, 3 hours per week.

Prerequisites: PHYS 3P35, 3P36 and MATH 3F94 (3P95).

PHYS 4P41

Statistical Physics II

Fundamental postulates, equilibrium statistical mechanics and its relation to thermodynamics. Maxwell-Boltzmann, Bose-Einstein and Fermi-Dirac statistics are derived and applied in appropriate physical situations of non-interacting and interacting particles; fluctuations; elementary treatment of transport theory.

Lectures, 3 hours per week, tutorial, 1 hour per week.

Prerequisites: PHYS 3P41, 3P70 and MATH 3F94 (3P95).

PHYS 4P61

Nuclear Physics

Intrinsic properties of nuclei, nuclear binding energy; qualitative treatment of shell model; alpha, beta and gamma radioactivities, nuclear fission, characteristics of nuclear reactions.

Lectures, problem sessions, 3 hours per week.

Prerequisites: PHYS 2P50 and 3P70.

PHYS 4P70

Condensed Matter Physics I

Crystal structures and crystal binding; the vibration of atoms in solids and the thermodynamics of solids; introduction to transport properties of solids.

Lectures, 3 hours per week, tutorial, 1 hour per week.

Prerequisite: PHYS 3P70.

PHYS 4P71

Condensed Matter Physics II

Energy bands in metals and semiconductors, lattice vibrations, transport properties of solids, magnetism, defects in solids.

Lectures, 3 hours per week, tutorial, 1 hour per week.

Prerequisite: PHYS 4P70.

PHYS 4P92

Advanced Electronics Laboratory

Families of logic devices, selection and implementation techniques; synchronous and asynchronous sequential circuits; safety and physical constraints; programmable array logic designs; digital signal processing, optoelectronics; CAD; circuit layout.

Prerequisite: PHYS 3P92.

Note: completion of a project from design to a working device is required.

PHYS 4V80-4V89

Special Topics

Examples of topics are relativity and cosmology; surface physics and electronic states in ordered and disordered systems.

Lectures, problem sessions, 4 hours per week.

Students completing this course will forfeit credit in PHYS 4P80.

Political Science

Chair

Nicolas Baxter-Moore
Leah Bradshaw (as of July 1, 2000)

Undergraduate Program Adviser

Daniel Madar

Professors Emeriti

Victor M. Fic, William H. N. Hull, William A. Matheson, J. Patrick Sewell

Professors

Carl Baar (on leave), Gerald E. Dirks, W. D. Kenneth Kernaghan, David T. Siegel, Garth Stevenson

Associate Professors

Nicolas Baxter-Moore, Leah Bradshaw, Charles Burton, Terrance G. Carroll, Juris Dreifelds, Daniel Madar, Ingrid Makus, William Mathie

Assistant Professor

Pierre Lizée

Seminar Co-ordinator

Jacqueline Dix

General Information

Administrative Assistant, extension 3476

Taro Hall 468

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Politics affects everyone. It is through politics that the future of the world we inhabit is shaped. Aristotle called politics the master science because he recognized how wide and pervasive politics is. The interests of political scientists are diverse. They may include conflict at city hall or in the courtroom; the arguments and processes through which our national existence might be preserved; the collapse of Communism and the struggle to establish new political arrangements in its place; the role of pressure groups in shaping public policy; electoral reform; the control of civil servants; the rule of law among nations; the place of moral principle and national interest in the conduct of foreign policy; or how far any citizen might have the right or duty to disobey an unjust law. Political Science offers us the opportunity to become freer human beings and citizens because, whatever the subject of our immediate inquiry, the focus is always upon the ideas, institutions and processes that shape our lives.

The courses numbered 2(alpha)00 or above fall into a number of fields and the department advises Political Science majors to select courses from at least three of these fields.

Canadian Politics

POLI 2F12*

3P05, 3P15, 3P16, 3P17, 3P18, 3P28
4P07, 4P14, 4P15, 4P19, 4V10 - 4V19, 4V60-4V69

Comparative Politics

POLI 2F30*, 2P21, 2P42, 2P47, 2P94, 2P95, 2P97 2V40-2V49

3P43, 3P44, 3P45, 3P72
4P32, 4P34, 4P38, 4P39, 4P47, 4V30-4V39

International Politics

POLI 2F20*, 2P21, 2P47

3P21, 3P26, 3P28
4P20, 4P21, 4P22, 4P26, 4P27, 4V20-4V29

Political Theory

POLI 2P91*, 2P92*, 2P93

3P04, 3P05, 3P07, 3V00-3V09
4P01, 4P02, 4P03, 4P04, 4P05, 4P06, 4P07, 4V00-4V09

Public Administration

POLI 2F98*, 2P62

3P11, 3P50, 3P52, 3P65
4P50, 4P52, 4P54, 4V50-4V59

*recommended for students intending to take other courses in this field in years 3 and 4.

The BA honours program provides students with the opportunity for a more intensive examination of issues in the field.

Political Science may be combined at the honours or pass level with other disciplines, the choice depending upon the student's interests and capabilities. As well, it is possible, within the departmental offerings, to arrange a thematic program of study around a selection of courses built to suit the student's particular interests.

All students in Political Science especially those proceeding to graduate studies or to a career in the public service, are encouraged to become proficient in a language other than English, normally French. Students who develop interests in a particular geographical area are urged to select related courses in history, language and literature. MATH 1F92 provides a sound background in those skills often employed in modern social science research. Questions about the Political Science program should be directed to the Undergraduate Program Adviser.

Program Notes

1. Students are encouraged to take courses from at least three of the designated subfields in Political Science.
2. With the permission of the Undergraduate Program Adviser, methods courses which are required in other departments may be considered equivalents for POLI 2P80, 3P91 or 3P92.
3. Students in the honours program with concentration in Public Law are strongly recommended to complete SOCI 1F90.
4. In all 20 credit degree programs, at least 12 credits must be numbered 2(alpha)00 or above, six of which must be numbered 2(alpha)90 or above and of these, three must be numbered 3(alpha)90 or above. In all 15 credit degree programs, at least seven credits must be numbered 2(alpha)00 or above, three of which must be numbered 2(alpha)90 or above.

Honours Programs

Year 1

One POLI credit numbered 1(alpha)90 to 1(alpha)99; one Humanities context credit and one Science context credit; two elective credits.

Year 2

POLI 2P80; one of POLI 2P91, 2P92, 2P93; two POLI credits numbered 2(alpha)00 to 2(alpha)99 (see program note 1); two elective credits.

Year 3

POLI 3P91 or 3P92; one-half credit from political theory list; two POLI credits numbered 2(alpha)90 to 3(alpha)99 (see program note 1); two elective credits.

Year 4

POLI 4P90; one POLI credit numbered 2(alpha)90 or above; one and one-half POLI credits numbered 4(alpha)00 to 4(alpha)99; two elective credits (see program note 2).

International Political Economy

Consult International Political Economy entry for a listing of course requirements.

Pass Program

One POLI credit numbered 1(alpha)90 to 1(alpha)99, one of POLI 2P91, 2P92, 2P93; five POLI credits numbered 2(alpha)00 or above (see program notes 1 and 4).

Combined Major Programs

Students are likely to find that both parts of their program benefit if they combine studies in Political Science with studies in another Social Science, such as Communication Studies, Popular Culture and Film, Economics, Geography or Sociology; or with studies in a related field in a different faculty, such as Business or History. Political Science also provides a sound disciplinary core when combined with a program of study in Canadian Studies, Environment, Labour Studies, Great Books/Liberal Studies or Women's Studies.

Honours

One POLI credit numbered 1(alpha)90 to 1(alpha)99; POLI 2P80; POLI 3P91 or 3P92; one of POLI 2P91, 2P92, 2P93; one-half POLI credit; four POLI credits numbered 2(alpha)90 or above (see program notes 1, 2 and 4).

Pass

One POLI credit numbered 1(alpha)90 to 1(alpha)99; POLI 2P80; one of POLI 2P91, 2P92, 2P93; one POLI credit; two POLI credits numbered 2(alpha)90 or above (see program notes 2 and 4).

Political Science and Business (honours only)

Year 1

One POLI credit numbered 1(alpha)90 to 1(alpha)99; ECON 1P91 and 1P92; MGMT 1P93 and 1P96; one Science context credit and one Humanities context credit (FREN 1F90 recommended).

Year 2

POLI 2F12 and 2P80; ACTG 1P91, 1P92 and 2P40; MATH 1P98; OPER 2P91; one of POLI 2P91, 2P92, 2P93; one-half additional credit from political theory list.

Year 3

POLI 2F98; FNCE 2P91; MKTG 2P91; OBHR 2P91; one and one-half credits from POLI 3P11, 3P15, 3P16, 3P18, 3P21, 3P26, 3P33, 3P52, 3P65, 3P66; one elective credit (ECON 3P14, 3P15 recommended).

Year 4

POLI 3P91 or 3P92; POLI 4P54; FNCE 3P93; MGMT 3P82; OBHR 3P42; one and one-half credits from POLI 4P01, 4P14, 4P15, 4P21, 4P50, 4P52, 4V10-4V19; one-half OBHR credit numbered 4(alpha)90 to 4(alpha)99; one-half elective credit.

Political Science and Labour Studies (pass only)

Consult the Labour Studies entry for a listing of course requirements.

Political Science

Political Science and Great Books/Liberal Studies

Consult the Great Books/Liberal Studies entry for a listing of course requirements.

Certificate Programs

The Political Science department also offers programs leading to a Certificate in Public Administration and a Certificate in Public Law. These programs provide an overview for interested people who do not wish to proceed to a degree or those who have already obtained a degree with a major other than Political Science. Only under exceptional circumstances and with special permission from the department will applicants who already have a degree with a major (or combined major) in Political Science be admitted.

The requirements for admission to the certificate programs are the same as for admission to the degree program. For those without a degree, the equivalent of five approved credits selected from the lists below are required.

A certificate is awarded upon completion of the five credits with a minimum overall average of 70 percent.

See "Certificate Requirements" under *Academic Regulations*.

Certificate in Public Administration

The program is of interest to people already employed in the public sector environment and wanting to embark on a program of part-time studies.

Required courses:

One POLI credit numbered 1(*alpha*)90 to 1(*alpha*)99; POLI 2F12, 2F98 (or 3P50 and 3P65) and 4P52.

Additional courses:

POLI 4P50 or 4P54; one elective credit approved by the Undergraduate Program Adviser.

Under exceptional circumstances, the Department may require the substitution of other relevant courses for those usually required.

Certificate in Public Law

The program is of interest to people already employed in the legal and justice fields who wish to embark on a program of part-time studies and to those with Community College qualifications in law and justice who would like to add university-level certification.

Required courses:

One POLI credit numbered 1(*alpha*)90 to 1(*alpha*)99; POLI 2F12, 3P18 and 3P26.

Additional courses:

One credit from POLI 3P11, 3P15, 3P66, 4P01, 4P14, 4P19, 4P34; one credit from POLI 3P04, 3P07, 3P11, 3P15, 3P50, 3P52, 3P66, 4P01, 4P14, 4P19, 4P34, 4P50.

Concentrations

Concentration in Public Law

Public Law consists of those areas of the law that deal with the relationship between the individual and the state or relationships between jurisdictions. These include administrative, constitutional, criminal, international and municipal law.

Students may earn a Concentration in Public Law by successfully completing the courses listed below together with the requirements for a BA (honours) in Political Science.

Required courses:

POLI 2F12, 3P18, 3P26, 4P01, 4P14; POLI 4P19 or 4P34.

Additional courses:

One credit from POLI 1P91, 2F98, 3P11, 3P15, 3P66; one and one-half credits from POLI 1P91, 2F98, 3P04, 3P07, 3P11, 3P15, 3P50, 3P52, 3P65, 3P66, 4P19, 4P20, 4P34, 4P50, 4P95; one credit from ACTG 2P40, ENVI 3P02, LABR 2F00, SOCI 2P61, 2P62, 3P33, 4P33 (see program note 3).

The words "Concentration in Public Law" will be added to a student's official transcript when the student graduates with a BA (honours) in Political Science having completed the above listed requirements.

Master of Arts (MA) Program

The MA program allows for study and directed research with a concentration in several fields including Canadian politics, comparative politics, international relations, political philosophy and public administration. For details about graduate courses and programs, see the Graduate Calendar.

Prerequisites and Restrictions

Students must check to ensure that prerequisites are met. Students may be deregistered, at the request of the instructor, from any course for which prerequisites and/or restrictions have not been met.

Description of Courses

Note that not all courses are offered in every session. Refer to the applicable term timetable for details.

POLI 1F90

Introduction to Political Science

Basic concepts, issues and approaches in the study of politics. Topics include the nature of politics and political power; states and nations; major ideologies including liberalism, conservatism, nationalism, socialism and feminism; elections, parties and movements; law and politics; political institutions, bureaucracy and public administration; conflict resolution and governance at the international level; the changing relationship between domestic and international politics.

Lectures, seminar, 3 hours per week.

POLI 1P91

Courts and Politics: Famous Trials

Courtroom trials - past and current, Canadian and non-Canadian - as an introduction to fundamental issues in the study of politics, and to the analysis of political and social phenomena.

Lectures, seminar, 3 hours per week.

POLI 1P92

Freedom and Power in the New Millennium

Topics include the legacy of ideological and imperial divisions of the 20th century; variations on notions of freedom and rights; considerations on obligations of citizenship in the age of technology.

Lectures, seminar, 3 hours per week.

POLI 1P93

Canada and the Global Community

The impact of politics, economics, culture, society and globalization on Canada's role in the community of nations. The Canadian political system in comparative perspective and trends in Canada's political development.

Lectures, seminar, 3 hours per week.

POLI 1P95

Identity and Statehood

Issues include the sovereign integrity of states, justice and independence and international recognition. Examples range from successful accommodation to civil war.

Lectures, seminar, 3 hours per week.

POLI 2F12

The Government and Politics of Canada

Political institutions and processes of Canada including the constitution and federalism, regions and regionalism, the political attitudes and behaviour of Canadians, parties and elections, and the policy process.

Lectures, seminar, 3 hours per week.

Prerequisite: one POLI credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

POLI 2F20

International Relations

The characteristics of the international system, the process of foreign policy formulation in individual states and the means of acting internationally.

Lectures, seminar, 3 hours per week.

Prerequisite: one POLI credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

POLI 2F30

Dictatorship to Democracy: Politics in the Contemporary World

Politics in industrialized, capitalist, state socialist and developing countries. Compares types of institutions, parties and political cultures and recent developments in a variety of countries. Topics include the challenges of European integration, democratization and the relationship between capitalism and democracy.

Lectures, seminar, 3 hours per week.

Prerequisite: one POLI credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

POLI 2F98

Public Administration

(also offered as COMM 2F98 and LABR 2F98)

Political, legal and managerial dimensions of public administration. Topics include the structure and management of public organizations; government reform; political-bureaucratic relations; pressure groups; personal and budgetary processes; the policy process; ethics and accountability.

Lectures, seminar, 3 hours per week.

Prerequisites: one of one POLI credit numbered 1(alpha)90 to 1(alpha)99, COMM 1F90, LABR 1P91 and 1P92 or permission of the instructor.

Students completing this course will forfeit credit in POLI (COMM/LABR) 3F51 and POLI 3P50.

POLI 2P21

The Politics of International Migration

Causes and consequences, both domestic and international, associated with intensifying regulated and unregulated population movements. Topics include chain migration, political refugees, economic migrants and the impact of these upon less developed countries, including Canada.

Lectures, seminar, 3 hours per week.

Political Science

POLI 2P42

The Rise of China

China's emergence as an economic and political power: political, cultural and economic implications. The impact of China on Canada as a Pacific nation from government and business perspectives. Implications for Canadian identity of greater China as Canada's main source of immigrants.

Lectures, seminar, 3 hours per week.

Note: this multidisciplinary course is designed for all students interested in Canada's increasing integration into the Asia-Pacific region.

Students completing this course will forfeit credit in POLI 3P42.

POLI 2P47

Rights Across Borders

Current issues in application, verification and enforcement of UN Covenants on Torture and Human Rights. The new concept of "human security" as a means to revitalize international relations in the post-Cold War era.

Lectures, seminar, 3 hours per week.

POLI 2P62

Government and Politics

An introduction to government and politics intended for students in the second year of the BAcc and SPMA programs.

Lectures, seminar, 3 hours per week.

Restriction: open to BAcc and SPMA majors with a minimum of 3.0 overall credits.

Students completing this course will forfeit credit in POLI 1F90.

POLI 2P70

Politics and Popular Music

(also offered as COMM 2P70, MUSI 2P70 and PCUL 2P70)

The political context and content of popular music. Topics may include theoretical perspectives on popular culture/popular music; the relationship of popular music to public policy, race and gender, popular movements and political identity; political economy of the music business.

Lectures, seminar, 3 hours per week.

Students completing this course will forfeit credit in POLI (COMM) 2V70.

POLI 2P71

Politics and Sport

Politics and sport in Canadian, comparative and international contexts. Topics include the political economy of sport as business and as popular culture; sport and the politics of class, race and gender; sport and political ideology; sport and national identity; sport and government policy; sport as an instrument of diplomacy and international relations.

Lectures, seminar, 3 hours per week.

POLI 2P72

Politics and Health

Political, legal and governmental aspects of health and wellness in Canada and elsewhere. The evolution of Canadian health

policies in comparative perspective. Current issues, including federal-provincial relations, funding and delivery systems; regulation of medical professions; management of the blood supply; the politics and ethics of new reproductive technologies, euthanasia, genetically-altered foods; the challenges of an aging population.

Lectures, seminar, 3 hours per week.

POLI 2P80

Political Analysis

Research methodologies and skills commonly used by political scientists. Topics include the evolution of political science, the ways in which empirical political research is carried out, advantages and limitations of the scientific approach in political analysis.

Lectures, seminar, 3 hours per week.

Prerequisite: one POLI credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

POLI 2P91

Political Theory I

Socratic origins of political philosophy as understood by Plato and Aristotle and their Christian, Jewish and Islamic successors. Machiavelli's critique.

Lectures, seminar, 3 hours per week.

Prerequisite: one POLI credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

Students completing this course will forfeit credit in POLI 2F90.

POLI 2P92

Political Theory II

Modern political philosophy in the writings of Hobbes, Locke, Rousseau, Tocqueville, Marx and Nietzsche.

Lectures, seminar, 3 hours per week.

Prerequisite: one POLI credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

Students completing this course will forfeit credit in POLI 2F90.

POLI 2P93

Liberal Democracy

Classical and contemporary variants on liberty and democracy and critical alternatives to liberal democracy.

Lectures, seminar, 3 hours per week.

Prerequisite: one POLI credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

Students completing this course will forfeit credit in POLI 2P01 and POLI 3P01.

POLI 2P94

Russia, Ukraine and other Successor States of the USSR

Historical, geographical and demographic factors that have shaped post-Soviet societies. Nationalism, ethnic tensions, economic debates, societal values and behaviour, leadership and forces affecting stability and division.

Lectures, seminar, 3 hours per week.

Prerequisite: one POLI credit numbered 1(alpha)90 to 2(alpha)

pha)99 or permission of the instructor.

Students completing this course will forfeit credit in POLI 3P41.

POLI 2P95

Politics, Culture and Society in Contemporary Britain

Continuity and change in British politics. Topics include race, class and nation, popular culture and politics in Britain, parties, elections, interest groups and new social movements, central political institutions, central and local administration, the "unwritten" constitution and the role of the monarchy, the (dis)United Kingdom, Britain in Europe and the world, theoretical perspectives on British politics.

Lectures, seminar, 3 hours per week.

Prerequisite: one POLI credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

POLI 2P97

The Government and Politics of the United States

The American political system and the institutions of the federal government in the context of the constitutional separation of powers and the political party structure. Related topics include federalism, elections and voting behaviour, civil rights and selected public policy issues.

Lectures, seminar, 3 hours per week.

Prerequisite: one POLI credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

POLI 2V40-2V49

Government and Politics of a Selected Nation State

The political processes and institutions of a nation state not included among regular departmental offerings.

Lectures, seminar, 3 hours per week.

POLI 2V46

2000-2001: Politics in South Asia

Politics and government in India, Pakistan and Sri Lanka. Emphasis on ethnicity and religion.

POLI 2V70-2V79

Politics and Culture

The relationship between politics and aspects of culture such as film, literature or music.

Lectures, seminar, 3 hours per week.

POLI 3P04

Politics, Law and Justice

Contrasting accounts of the role of justice and other moral principles in political life and in the conduct of political leaders and states.

Lectures, seminar, 3 hours per week.

Prerequisite: one POLI credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

POLI 3P05

Canadian Political Thought

Selected works of 20th century Canadian thinkers such as Harold Innes, Marshall McLuhan, Northrop Frye, George Grant, Charles Taylor and John Ralston Saul. Topics include

the relationships among art and technology, politics and myth, culture and identity.

Lectures, seminar, 3 hours per week.

Prerequisite: one POLI credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

POLI 3P07

Democracy in the United States

Examines the attempt to devise, establish and preserve a new political order in the United States based on the principles of liberalism, through discussion of the Declaration of Independence, the Constitution, the *Federalist Papers*, and selected judicial decisions. The crisis for that order posed by the Civil War. Analysis of that order by Tocqueville, George Grant and others.

Lectures, seminar, 3 hours per week.

Prerequisite: one POLI credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

POLI 3P11

Local Government

Local government and politics in Canada with particular reference to Ontario. Topics include municipal organization, metropolitan and regional government, provincial-municipal relations, elections, councils and councillors, citizen participation, property taxation and municipal finance, selected policy areas and theories of local government.

Lectures, seminar, 3 hours per week.

Prerequisite: one POLI credit numbered 1(alpha)90 to 1(alpha)99 or POLI 2P62 or permission of the instructor.

POLI 3P13

The Politics of Labour

(also offered as LABR 3P13)

Relations between the labour movement and the state, with particular reference to Canada, including tripartism, corporatism, incomes policy, organized labour and political parties, industrial democracy and worker participation.

Lectures, seminar, 3 hours per week.

Prerequisite: one POLI credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

POLI 3P15

Politics in Ontario

Major aspects of political life in Ontario, including province-building, voting behaviour, party systems, policy making and administrative apparatus.

Seminar, 3 hours per week.

Prerequisite: one POLI credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

POLI 3P16

Politics in Québec

(also offered as CANA 3P16)

Québec's political, social and economic evolution since 1945. Topics include old and new varieties of nationalism, the Quiet Revolution, the changing roles of church and state, the decline of the anglophone minority and Québec's impact on Canadian federalism.

Political Science

Lectures, seminar, 3 hours per week.

Prerequisite: one POLI credit numbered 1(alpha)90 to 1(alpha)99 or CANA 2F91 or permission of the instructor.

POLI 3P17

Politics and the Mass Media in Canada

(also offered as COMM 3P17 and PCUL 3P17)

The Canadian mass media and their relationship to the political process.

Lectures, seminar, 3 hours per week.

Prerequisite: one POLI credit numbered 1(alpha)90 to 1(alpha)99 or COMM 2F50 or permission of the instructor.

POLI 3P18

Law and Politics

Canadian constitutional law with emphasis on the protection of civil liberties both before and after the adoption of the Charter of Rights. Courts in both legal and political perspectives.

Lectures, seminar, 3 hours per week.

Prerequisite: one POLI credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

POLI 3P21

Introduction to International Political Economy

Survey of theoretical perspectives and policy-related frameworks necessary to the study of the international political economy. Topics may include relations among production, finance and trade; role of transnational corporations and international economic institutions; politics of underdevelopment; emerging issues such as gender and work, the environment, new technologies.

Lectures, seminar, 3 hours per week.

Prerequisite: one POLI credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

POLI 3P26

International Law and International Organization

International law and organization in the changing context of international politics. Activities and mechanisms of the United States, the International Court of Justice and the International Criminal Court. Tensions between law and power at the international level.

Lectures, seminar, 3 hours per week.

Prerequisite: one POLI credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

POLI 3P28

Canadian Foreign Policy

The foreign policy formulation process in Canada; significant factors, both domestic and external, which contribute to the shaping of specific policy objectives.

Seminar, 3 hours per week.

Prerequisite: one POLI credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

POLI 3P33

The State and Economic Life

(also offered as LABR 3P33)

Political economy and the role of the state. Relationships between politics and markets and between democracy, capitalism and socialism.

Lectures, seminar, 3 hours per week.

Prerequisite: one POLI credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

POLI 3P43

Politics in the Developing World

Political institutions, processes and social movements in the developing world, including the role of international organizations and transnational corporations. Countries examined may be drawn from the Indian subcontinent, Southeast Asia, Africa and Latin America.

Lectures, seminar, 3 hours per week.

Prerequisite: one POLI credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

POLI 3P44

Canada's Asia-Pacific Neighbours

The rise of Japan, Singapore, South Korea and Taiwan as the economic dragons of East Asia. The politics, economics and culture of the region and the implications for theories of development. The impact of the changing global and regional economy on Canadian business and economics.

Lectures, seminar, 3 hours per week.

Prerequisite: one POLI credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

Note: this multidisciplinary course is designed for all students interested in Canada's increasing integration into the Asia-Pacific region.

POLI 3P45

Politics in Advanced Democratic Systems

A comparative study of political institutions and processes of advanced democratic systems in Europe and elsewhere.

Lectures, seminar, 3 hours per week.

Prerequisite: one POLI credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

POLI 3P50

Introduction to Public Administration

The role of the public sector in the marketplace and the internal operation of government organizations emphasizing the comparison of public and business administration and government-business relations.

Lectures, seminar, 3 hours per week.

Prerequisite: one POLI credit numbered 1(alpha)90 to 1(alpha)99 or POLI 2P62 or MGMT 1P93 and 1P96 or permission of the instructor.

Students completing this course will forfeit credit in POLI (COMM/LABR) 2F98 and POLI (COMM/LABR) 3F51.

POLI 3P52

Ethics in Government

Issues of responsible and ethical behaviour by elected and appointed government officials emphasizing the behaviour of public servants. Topics include conflicts of interest, political rights of public servants, political neutrality, administrative responsibility, confidentiality/freedom of information, privacy, accountability and the public interest.

Lectures, seminar, 3 hours per week.

Prerequisite: one POLI credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

POLI 3P65

Introduction to Public Policy

(also offered as LABR 3P65)

Major theories, approaches and concepts including the nature of public policy studies, contending theories of the state and public policy making, the growth of the state and the expansion of the scope of public policy activities, and alternative modes of state intervention.

Lectures, seminar, 3 hours per week.

Prerequisite: one POLI credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

POLI 3P66

Environmental Policy, Law and Administration

(also offered as ENVI 3P66)

The development of the issue of pollution, including perceptions of the problem of different actors, public participation, governmental reactions and legislation, the implementation of potential solutions and international cooperation. Seminar topics may include toxic wastes, acid rain, energy, the Great Lakes, risk assessment and ideologies.

Lectures, seminar, 3 hours per week.

Prerequisite: one POLI credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

POLI 3P71

Gender and Politics

(also offered as WISE 3P71)

Theoretical and practical issues in the relationships among gender, sex and politics, such as sexual equality and its nature and implications for public and private life.

Lectures, seminar, 3 hours per week.

Prerequisite: one POLI credit numbered 1(alpha)90 to 1(alpha)99 or WISE 1F90 or permission of the instructor.

POLI 3P72

Women in Politics

(also offered as WISE 3P72)

Women's participation and influence in the political institutions, processes and policies of modern states, with an emphasis on contemporary Canada.

Lectures, seminar, 3 hours per week.

Prerequisite: one POLI credit numbered 1(alpha)90 to 1(alpha)99 or WISE 1F90 or permission of the instructor.

POLI 3P91

Quantitative Political Analysis

The statistical analysis of quantitative political data and the use of computers in political research. Topics include central tendency and dispersion, association and correlation, regression and analysis of variance, statistical significance and the SPSSx computer analysis program.

Lectures, seminar, 3 hours per week.

Prerequisite: POLI 2P80.

POLI 3P92

Qualitative Political Analysis

Qualitative techniques in research design and political analysis: qualitative versus quantitative research, ethical problems, interviewing, participant and non-participant observation, content analysis, use of microcomputers in qualitative research.

Lectures, seminar, 3 hours per week.

Prerequisite: POLI 2P80.

POLI 3V00-3V09

Politics and Theory

Philosophic issues raised by various questions in contemporary moral and political life.

Lectures, seminar, 3 hours per week.

Prerequisite: one of POLI 2P91 and 2P92 (2F90), 2P93, (2P01 and 3P01) or permission of the instructor.

POLI 3V70-3V79

Special Topics in Politics

Topics selected on the basis of instructional expertise and student interest.

Lectures, seminar, 3 hours per week.

Prerequisite: one POLI credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

POLI 4F99

Honours Thesis

Individual study and research under faculty supervision.

Restriction: open to POLS (POLI) (single or combined) majors with either minimum of 14.0 overall credits and a minimum 70 percent major average or approval to year 4 (honours).

Note: topics may come from any field in the discipline and may involve library research, field work and empirical analysis. Students must consult the Undergraduate Program Adviser about topics, regulations and a faculty adviser before registration.

POLI 4P01

The Philosophy of Law

(also offered as GBLS 4P01)

Traditional and contemporary accounts of law and their implications for issues of contemporary concern.

Seminar, 3 hours per week.

Restriction: open to POLS (POLI) (single or combined) and GBLS (LBST) (single or combined) majors with either a minimum of 14.0 overall credits and a minimum 70 percent major average or approval to year 4 (honours).

Political Science

POLI 4P02

Ancient Political Theory

(also offered as GBLS 4P02)

Premodern political philosophy examined in the works of Plato and Aristotle, emphasizing those features distinguishing ancient political science and philosophy from that of modernity.

Seminar, 3 hours per week.

Restriction: open to POLS (POLI) (single or combined) and GBLS (LBST) (single and combined) majors with either a minimum of 14.0 overall credits and a minimum 70 percent major average or approval to year 4 (honours).

POLI 4P03

Modern Political Theory

(also offered as GBLS 4P03)

Modern political theory examined in selected texts. Topics may include historicism, consent, progress, equality or a selected author such as Rousseau, Kant, Hegel.

Seminar, 3 hours per week.

Restriction: open to POLS (POLI) (single or combined) and GBLS (LBST) (single or combined) majors with either a minimum of 14.0 overall credits and a minimum 70 percent major average or approval to year 4 (honours).

POLI 4P04

Politics and Tyranny

(also offered as GBLS 4P04)

Comparative accounts of ancient and modern tyranny examined in light of the question: has political domination varied significantly in the Western tradition?

Seminar, 3 hours per week.

Restriction: open to POLS (POLI) (single or combined) and GBLS (LBST) (single and combined) majors with either a minimum of 14.0 overall credits and a minimum 70 percent major average or approval to year 4 (honours).

POLI 4P05

Shakespeare's Politics

(also offered as GBLS 4P05)

Issues of justice; politics, law and morality; republican, monarchical and tyrannical government as explored in selected Shakespearean comedies, tragedies and histories.

Seminar, 3 hours per week.

Restriction: open to POLS (POLI) (single or combined) and GBLS (LBST) (single or combined) majors until date specified in the BIRT guide. After that date open to English Plus, ENGL (single or combined) and HIST (single or combined) majors. Students must have either a minimum of 14.0 overall credits and a minimum 70 percent major average or approval to year 4 (honours).

POLI 4P06

Philosophy, Politics and the Family

(also offered as GBLS 4P06)

Family relations and their significance for the political community as both have been treated by ancient and modern political philosophers and by contemporary feminists and their critics.

Seminar, 3 hours per week.

Prerequisite: POLI 2P91 and 2P92 (2F90) or 2P93 (2P01 and 3P01) or permission of the instructor.

POLI 4P07

Postmodern Political Theory

(also offered as GBLS 4P07)

Perspectives on the postmodern condition in the works of selected 20th century thinkers. Topics may include notions on the self; aesthetics and politics; reason and power; the construction of meaning.

Seminar, 3 hours per week.

Restriction: open to POLS (POLI) (single or combined) and GBLS (LBST) (single or combined) majors with either a minimum of 14.0 overall credits and a minimum 70 percent major average or approval to year 4 (honours).

POLI 4P14

Federalism in Canada

Topics may include social diversity and federal institutions, federalism and the party system, the role of the courts, federal-provincial financial relations, federalism and the policy process, the evolving role of provincial authorities and intergovernmental relations.

Seminar, 3 hours per week.

Restriction: open to POLS (POLI) (single or combined) majors with either a minimum of 14.0 overall credits and a minimum 70 percent major average or approval to year 4 (honours).

POLI 4P15

Canadian Political Economy

(also offered as LABR 4P15)

The political economy tradition in Canada, from the writings of Innis, Mackintosh and Creighton to contemporary neo-Marxist and dependency theorists. Topics may include foreign investment, regional development, the labour movement, resources and Canada's place in the new international economy.

Seminar, 3 hours per week.

Restriction: open to POLS (POLI) (single or combined) majors with either a minimum of 14.0 overall credits and a minimum 70 percent major average or approval to year 4 (honours).

POLI 4P19

The Canadian Judicial Process

Procedures and processes of courts in civil and criminal cases and the impact of these procedures and practices on the administration of justice.

Seminar, 3 hours per week.

Restriction: open to POLS (POLI) (single or combined) majors with either a minimum of 14.0 overall credits and a minimum 70 percent major average or approval to year 4 (honours).

POLI 4P20

Globalization and Global Governance

Globalization of national politics and the reconstruction of politics at a global level. Topics may include policy problems linked to the effectiveness of international and national institutions; theoretical considerations on new concepts of politics and democracy in the globalized world.

Seminar, 3 hours per week.

Restriction: open to POLS (POLI)(single or combined) majors with either a minimum of 14.0 overall credits and a minimum 70 percent major average or approval to year 4 (honours).

POLI 4P21

The Global Political Economy

Mechanisms and practices which shape the emerging global political economy. Topics may include theories of political economy; the role of international economic institutions (World Bank, IMF, WTO, G-8); policy making and global economics; Canadian involvement in the global economy.

Seminar, 3 hours per week.

Restriction: open to POLS (POLI)(single or combined) majors with either a minimum of 14.0 overall credits and a minimum 70 percent major average or approval to year 4 (honours).

POLI 4P22

Foreign Policy Analysis

Major domestic and external factors determining the content of the foreign policies of selected states.

Seminar, 3 hours per week.

Restriction: open to POLS (POLI) (single or combined) majors with either a minimum of 14.0 overall credits and a minimum 70 percent major average or approval to year 4 (honours).

POLI 4P26

International Politics and National Security

Conditions affecting the use of force in the post-Cold War international system. The basis of state security, the nature of threats and regional conflicts.

Seminar, 3 hours per week.

Restriction: open to POLS (POLI) (single or combined) majors with either a minimum of 14.0 overall credits and a minimum 70 percent major average or approval to year 4 (honours).

POLI 4P27

Theories of International Relations

International relations theory emphasizing the nature of the international system and its relationship to the choices and actions of individual states.

Seminar, 3 hours per week.

Restriction: open to POLS (POLI) (single or combined) majors with either a minimum of 14.0 overall credits and a minimum 70 percent major average or approval to year 4 (honours).

POLI 4P32

Comparative Mass Media

(also offered as COMM 4P32)

Selected problems concerning the mass media and the political process in Canada and other countries.

Seminar, 3 hours per week.

Restriction: open to POLS (POLI) (single or combined) and COMM (single or combined) majors with a minimum of 14.0 overall credits and either a minimum 70 percent major average or approval to year 4 (honours).

Prerequisite: POLI 3P17 or permission of the instructor.

POLI 4P34

Comparative Judicial Systems

Judicial power and legal processes throughout the world. Topics may include common law systems in such countries as Australia, England, India and Singapore; civil law systems in selected countries in Europe and Latin America; communist and post-Communist judicial systems in countries such as Cuba and Russia; evolution and change in legal systems.

Seminar, 3 hours per week.

Restriction: open to POLS (POLI) (single or combined) majors with either a minimum of 14.0 overall credits and a minimum 70 percent major average or approval to year 4 (honours).

POLI 4P36

Revolution or Reform? Political Change in the Modern World

Comparative study of patterns of transformation and transition of totalitarian, authoritarian and paternalistic systems towards political pluralism and democracy. Democratization in selected regimes - Communist, nationalist and religious - in different parts of the world and the dynamics of political and social change.

Seminar, 3 hours per week.

Restriction: open to POLS (POLI)(single or combined) majors with either a minimum of 14.0 overall credits and a minimum 70 percent major average or approval to year 4 (honours).

POLI 4P38

Nationalism and Ethnic Politics

Theory and case studies of the origins and resolution of national conflict, the mobilization of ethnic groups and the role of international forces in what have been viewed traditionally as domestic conflicts. Case studies situate Canada's ethnic tensions within a broader comparative perspective.

Seminar, 3 hours per week.

Restriction: open to POLS (POLI) (single or combined) majors with minimum of 14.0 overall credits and a minimum 70 percent major average or approval to year 4 (honours).

POLI 4P39

Elites and Power

The bases of power and of the degree of power concentration in government, industry, bureaucracy and the media in Canada, the United States and other selected countries. The characteristics, lifestyles, interrelationships and actions of the individuals in senior positions of power.

Seminar, 3 hours per week.

Restriction: open to POLS (POLI) (single or combined) majors with either a minimum of 14.0 overall credits and a minimum 70 percent major average or approval to year 4 (honours).

Prerequisite: POLI 2F30 or permission of the instructor.

POLI 4P47

Arab Politics

Topics include religion, pan-Arab nationalism and political culture; problems of economic development; the Palestinian factor in Arab politics; the Gulf War and its aftermath; and a comparative analysis of ways in which political processes and

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institutions have influenced and responded to these forces.

Seminar, 3 hours per week.

Restriction: open to POLS (POLI) (single or combined) majors with either a minimum of 14.0 overall credits and a minimum 70 percent major average or approval to year 4 (honours).

Prerequisite: POLI 2F30 or permission of the instructor.

POLI 4P50

Machinery of Government

The structures and processes of federal and provincial government in Canada. Emphasis on the operation of government departments, central agencies, regulatory agencies and crown corporations.

Seminar, 3 hours per week.

Restriction: open to POLS (POLI) (single or combined) majors with either a minimum of 14.0 overall credits and a minimum 70 percent major average or approval to year 4 (honours).

Prerequisite: POLI 2F98 (3F51) or 3P50 or permission of the instructor.

POLI 4P52

Managing the New Public Organization

The political and managerial dimensions of new developments in government organizations. Topics include administrative reform, innovation, collective bargaining, human resource issues, budgeting and comparisons with business organizations.

Seminar, 3 hours per week.

Restriction: open to POLS (POLI) (single or combined) majors with either a minimum of 14.0 overall credits and a minimum 70 percent major average or approval to year 4 (honours).

Prerequisite: POLI 2F98 (3F51) or 3P50 or permission of the instructor.

Note: open to non-POLI majors with relevant background in other disciplines and permission of the instructor.

POLI 4P54

Business-Government Relations

(also offered as LABR 4P54)

The politics and management of relations between business organizations and governments in Canada, emphasizing current research and issues. Topics include theories of business-government relations, the legislative and regulatory environment of business, public enterprise and privatization, lobbying, and interaction among government, business, media and labour.

Seminar, 3 hours per week.

Restriction: open to POLS (POLI) (single or combined) majors with either a minimum of 14.0 overall credits and a minimum 70 percent major average or approval to year 4 (honours).

Prerequisite: POLI 2F98 (3F51) or 3P50 or permission of the instructor.

Note: open to non-POLI majors with relevant background in other disciplines and permission of the instructor.

POLI 4P90

Honours Seminar

Analysis of selected contemporary issues in Canadian, comparative or international politics.

Seminar, 3 hours per week.

Restriction: open to POLS (POLI) (single or combined) majors with either a minimum of 14.0 overall credits and a minimum 70 percent major or approval to year 4 (honours).

Note: this course is required for POLS (POLI) (single) honours. Students completing this course will forfeit credit in POLI 4P30.

POLI 4P95

Political Science Internship

Part-time internship in a government agency, political party, research institute, relevant non-governmental organization (NGO) or other approved placement.

Tutorial, 1 hours per week, plus internship placement time.

Restriction: open to POLS (POLI) (single) majors with a minimum of 14.0 overall credits and a minimum 75 percent major average. Permission of the department is required.

Note: enrolment limited to number of placements available up to a maximum of 15 students. Students will be required to complete a major paper setting the internship experience within a theoretical context.

POLI 4V00-4V09

Selected Problems in Political Theory

(also offered as GBLS 4V00-4V09)

A particular writer, work or theoretical problem in political philosophy examined.

Seminar, 3 hours per week.

Restriction: open to POLS (POLI) (single or combined) and GBLS (LBST) (single or combined) majors with either a minimum of 14.0 overall credits and a minimum 70 percent major average or approval to year 4 (honours).

POLI 4V10-4V19

Issues in Canadian Politics

A selected aspect of Canadian government and politics or an issue of contemporary concern.

Seminar, 3 hours per week.

Restriction: open to POLS (POLI) (single or combined) majors with either a minimum of 14.0 overall credits and a minimum 70 percent major average or approval to year 4 (honours).

POLI 4V20-4V29

Selected Problems in International Relations

Selected problems and issues drawn from both the system and nation-state levels of international politics.

Seminar, 3 hours per week.

Restriction: open to POLS (POLI) (single or combined) majors with either a minimum of 14.0 overall credits and a minimum 70 percent major average or approval to year 4 (honours).

POLI 4V30-4V39

Selected Problems in Comparative Politics

A comparative study of selected political institutions, processes or policies in various states.

Seminar, 3 hours per week.

Restriction: open to POLS (POLI) (single or combined) majors with either a minimum of 14.0 overall credits and a minimum 70 percent major average or approval to year 4 (honours).

POLI 4V50-4V59

Selected Topics in Public Administration

Selected problems and issues in public administration drawn from the federal, provincial and/or municipal levels.

Seminar, 3 hours per week.

Restriction: open to POLS (POLI) (single or combined) majors with either a minimum of 14.0 overall credits and a minimum 70 percent major average or approval to year 4 (honours).

Note: open to non-POLI majors with relevant background in other disciplines and permission of the instructor.

POLI 4V60-4V69

Selected Topics in Canadian Public Policy

A field or topic in Canadian public policy, including the analysis of policy making and policy outcomes.

Seminar, 3 hours per week.

Restriction: open to POLS (POLI) (single or combined) majors with either a minimum of 14.0 overall credits and a minimum 70 percent major average or approval to year 4 (honours).

POLI 4V70-4V79

Political Science Tutorial

Guided readings on a particular topic which is not covered in the department's regular course offerings.

Restriction: open to POLS (POLI) (single or combined) majors with either a minimum of 14.0 overall credits and a minimum 70 percent major average or approval to year 4 (honours).

Note: topics must be chosen in consultation with a faculty member willing to supervise the tutorial. Further information is available from the Undergraduate Program Adviser.

Popular Culture

This program is co-ordinated by the Department of Communications, Popular Culture and Film.

Undergraduate Program Adviser
Bohdan Szuchewycz

General Information

Administrative Assistant, extension 4290
Mackenzie Chown A225
<http://www.brocku.ca/cpcf/>

The Popular Culture program is a series of critical and historical courses which examines popular culture and its relation to folk, mass and high culture. Popular Culture is studied in its wide variety of forms (including film, television, literature, music and advertising) and its economic, political and historical contexts.

Program Notes

1. PCUL 4F99 is strongly recommended for honours students intending to continue their studies at the graduate level. Students may not register for this course without permission of the Undergraduate Program Adviser, who should be consulted before June 30 of the previous year.
2. In all 20 credit degree programs, at least 12 credits must be numbered 2(alpha)00 or above, six of which must be numbered 2(alpha)90 or above and of these, three must be numbered 3(alpha)90 or above. In all 15 credit degree programs, at least seven credits must be numbered 2(alpha)00 or above, three of which must be numbered 2(alpha)90 or above.

Honours Program

Year 1
COMM 1F90; FILM 1F94; one Social Science context credit; one Science context credit; one elective credit.

Year 2
PCUL 2P20, 2P21 and 2P94; COMM 2P15; one credit from PCUL 1F00, 2F92, 2P70, COMM 2F50, DRAM 2P91, ENGL 2P10, 2P11, FILM 2F97, GEOG 2P06, WISE 2P97; two elective credits.

Year 3

PCUL 3P20, 3P21 and 3P96; PCUL 3P16 or 3P17; one credit from PCUL 1F00, 2F92, 2P70, 3P16, 3P17, 3P92, DRAM 2F91, ENGL 2P10, 2P11, FILM 2F97, 3F97, 3P93, 3P95, GEOG 2P06, WISE 2P97; two elective credits.

Year 4

PCUL 4P17, 4P30 and 4P31; two credits from PCUL 3P92, 4F80, 4F99, 4P23, FILM 3F97, 3P93, 3P95, HIST 4V24; one and one-half elective credits.

Pass Program

Satisfactory completion of the first three years of the honours program entitles students to apply for a pass degree.

Combined Major Program

Honours

PCUL 2P20, 2P21, 2P94, 3P20, 3P21, 3P96, 4P30 and 4P31; COMM 1F90; FILM 1F94; two credits from PCUL 1F00, 2F92, 2P70, 3P16, 3P17, 3P92, 4P23, 4F80, 4F99, COMM 2F50, DRAM 2P91, ENGL 2P10, 2P11, FILM 2F97, 3F97, 3P93, 3P95, GEOG 2P06, HIST 4V24, WISE 2P97.

Pass

PCUL 2P20, 2P21, 2P94, 3P20, 3P21 and 3P96; COMM 1F90; FILM 1F94.

Certificate and Concentration in Writing

It is possible for Popular Culture majors to earn either a certificate or a concentration in Writing. For details see the calendar entry for the Department of English Language and Literature.

Prerequisites and Restrictions

Students must check to ensure that prerequisites are met. Students may be deregistered, at the request of the instructor, from any course for which prerequisites and/or restrictions have not been met.

Description of Courses

Note that not all courses are offered in every session. Refer to applicable term timetable for details.

PCUL 1F00

Music in Popular Culture

(also offered as MUSI 1F00)

Survey of developments in blues, jazz, rock and related genres of popular music.

Lectures, 3 hours per week; listening assignments.

PCUL 2F92

Popular Narrative

(also offered as COMM 2F92 and ENGL 2F92)

Archetypal and mythic dimensions of popular literary genres such as the detective novel, Gothic fiction, science fiction, the romance novel; comparison and contrast with other media.

Lectures, seminar, 3 hours per week.

Prerequisite: one of COMM 1F90, one year 1 ENGL credit, FILM 1F94 or permission of the instructor.

PCUL 2P20

Introduction to Popular Culture

(also offered as COMM 2P20 and FILM 2P20)

Historical, theoretical and critical approaches to various forms of popular culture (e.g., film, music, television, literature, periodicals and advertising).

Lectures, seminar, lab, 4 hours per week.

Prerequisite: one of CANA 1F91, COMM 1F90, FILM 1F94 or permission of the instructor.

PCUL 2P21

Canadian Popular Culture

(also offered as COMM 2P21 and FILM 2P21)

A survey of the media in Canada. Studies in the popular arts, with special reference to the ways in which institutions (e.g., CBC, NFB) and selected artists identify and express a Canadian cultural imagination.

Lectures, seminar, lab, 4 hours per week.

Prerequisite: PCUL 2P20 or permission of the instructor.

PCUL 2P22

Media and Sport

(also offered as COMM 2P22 and SPMA 2P22)

The representation of sport in film, television and advertising. Topics may include issues of race, gender, business, politics and ideology in both professional and non-professional sport.

Lectures, seminar, 3 hours per week.

Restriction: open to COMM (single or combined), PCUL (single or combined) and SPMA majors with a minimum of 5.0 overall credits or permission of the instructor.

PCUL 2P70

Politics and Popular Music

(also offered as COMM 2P70, MUSI 2P70 and POLI 2P70)

The political context and content of popular music. Topics may include theoretical perspectives on popular culture/popular music; the relationship of popular music to public policy, race and gender, popular movements and political identity; political economy of the music business.

Lectures, seminar, 3 hours per week.

Students completing this course will forfeit credit in POLI (COMM) 2V70.

PCUL 2P94

Popular Cinema

(also offered as COMM 2P94 and FILM 2P94)

Popular cinema as art and institution with emphasis on film genres and cultural contexts.

Lectures, seminar, 3 hours per week; plus weekly film lab.

Prerequisite: FILM 1F94.

Students completing this course will forfeit credit in FILM 3P94.

PCUL 3P16

Mass Media

(also offered as COMM 3P16 and SOCI 3P16)

Introduction to methods of media analysis. Comparison of theoretical and methodological approaches to mass media content, structures, institutions and audiences. Analysis of relations among media, culture and society with reference to Canadian examples.

Lectures, seminar, 3 hours per week.

Prerequisite: one of PCUL 2P21, COMM 2F50, SOCI 2F10 or permission of the instructor.

Students completing this course will forfeit credit in SOCI (COMM) 2P23.

PCUL 3P17

Politics and the Mass Media in Canada

(also offered as COMM 3P17 and POLI 3P17)

The Canadian mass media and their relationship to the political process.

Lectures, seminar, 3 hours per week.

Prerequisite: one POLI credit numbered 1(alpha)90 to 1(alpha)99 or COMM 2F50 or permission of the instructor.

PCUL 3P20

Television Studies

(also offered as COMM 3P20 and FILM 3P20)

Historical, theoretical and critical approaches to television.

Lectures, seminar, lab, 4 hours per week.

Prerequisite: one of PCUL 2P20 and 2P21, FILM 2F90 or permission of the instructor.

Students completing this course will forfeit credit in PCUL 3F50.

Popular Culture

PCUL 3P21

Canadian Television

(also offered as COMM 3P21 and FILM 3P21)

Historical, theoretical and critical approaches to Canadian television.

Lectures, seminar, lab, 4 hours per week.

Prerequisite: PCUL 3P20 or permission of the instructor.

Students completing this course will forfeit credit in PCUL 3F50.

PCUL 3P92

Technology and Culture

(also offered as COMM 3P92 and FILM 3P92)

Studies in the effects of technological change on cultural forms and the representations of technology in different media.

Lectures, lab, seminar, 4 hours per week

Prerequisite: COMM 2P20 or 2P21 or permission of the instructor.

PCUL 3P93

Media and Minorities

(also offered as COMM 3P93 and SOCI 3P93)

Relations between mass media and minority groups in society including dominant representations and stereotypes of cultural, racial and sexual minorities and minority group access to alternative forms of media production.

Lectures, seminar, 3 hours per week, plus weekly lab.

Prerequisite: COMM 2F50 or SOCI 2F10 or permission of the instructor.

PCUL 3P96

Advanced Studies in Popular Culture

(also offered as COMM 3P96 and FILM 3P96)

Specialized studies in different media; or the role of different media in specific social, historical or theoretical contexts.

Lectures, seminar, lab, 3 hours per week plus weekly lab.

Prerequisite: PCUL 2P20 and 2P21 or FILM 2F90 or permission of the instructor.

PCUL 4F80

Directed Reading

Directed individual or group readings in an area of popular culture.

Restriction: permission of the Undergraduate Program Adviser.

Note: students are responsible for arranging their course with a faculty member, in consultation with the Undergraduate Program Adviser and must submit a written proposal before registration. The reading may not be on the topic of the student's PCUL 4F99 honours thesis.

PCUL 4F99

Honours Thesis

A thesis on a topic of mutual interest to the student and the instructor, with a critical, historical or contemporary focus.

Restriction: open to PCUL (single or combined) majors with a minimum of 14.0 overall credits, a minimum 70 percent major average, a minimum 60 percent non-major average, approval to year 4 (honours) and permission of the Undergraduate

Program Adviser.

Prerequisite: PCUL 4P30 and 4P31 (4F30) (may be taken concurrently).

Note: to register in the honours thesis, the student must consult the Undergraduate Program Adviser about topics, department regulations and the selection of an adviser.

PCUL 4P17

Canadian Cultural and Communications Policy

(also offered as COMM 4P17)

Historical perspectives on the development of government policies affecting the arts, cultural industries, public and private broadcasting in Canada.

Lectures, seminar, 3 hours per week.

Restriction: open to PCUL (single or combined) and COMM (single or combined) majors with approval to year 4 (honours) or permission of the instructor.

Students completing this course will forfeit credit in CANA 4P17.

PCUL 4P23

Research on Popular Culture

(also offered as COMM 4P23 and SOCI 4P23)

Advanced research seminar on the relations between mass media and popular culture. Topics vary with the interests of instructor and students.

Seminar, 3 hours per week.

Restriction: open to PCUL (single or combined), COMM and SOCI (single or combined) majors with approval to year 4 (honours) or permission of the instructor.

Prerequisite: PCUL 2P20 or 3P16 (SOCI/COMM 2P23) or permission of the instructor.

PCUL 4P30

Theories of Mass Culture

(also offered as COMM 4P30 and FILM 4P30)

Studies in cultural theory and its application to mass media texts, with special reference to the work of the Frankfurt School, French Structuralism and British Cultural Studies.

Lectures, lab, seminar, 4 hours per week.

Restriction: open to PCUL (single or combined), COMM (single or combined) or FILM (single or combined) majors with approval to year 4 (honours) or permission of the instructor.

Students completing this course will forfeit credit in PCUL (COMM/FILM) 4F30.

PCUL 4P31

Theories of the Visible

(also offered as COMM 4P31 and FILM 4P31)

Central 20th-century developments in the theories of visibility and their relevance to the field of media studies.

Lectures, lab, seminar, 4 hours per week.

Restriction: open PCUL (single or combined), COMM (single or combined) and FILM (single or combined) with approval to year 4 (honours) or permission of the instructor.

Students completing this course will forfeit credit in PCUL (COMM/FILM) 4F30.

Psychology

Chair

Nancy DeCourville
TBA (as of July 1, 2000)

Undergraduate Program Officer

Kathryn Belicki
TBA (as of July 1, 2000)

Professor Emeritus

John J. Lavery

Professors

Jack R. Adams-Webber, John G. Benjafield, David DiBattista, Harry T. Hunt, Robert D. Ogilvie, Edward W. G. Pomeroy, Joan M. Preston, Linda Rose-Krasnor, Stanley W. Sadava, Sidney J. Segalowitz, Paul D. Tyson, William G. Webster

Associate Professors

Kathryn Belicki, Stefan M. Brudzynski, Nancy DeCourville, Jane Dywan, Dawn E. Good, Carolyn Hafer, Darla MacLean, John Mitterer, Robert Nadon (on leave), Peter Ramm (on leave), Teena Willoughby

Assistant Professors

Michael Ashton, Anthony F. Bogaert, H. Willard Bradley, Alicia Dunlop

Adjunct Professors

Michael Alexander, Sherrie Bieman-Copland, Nancy Johnston, Tomoka Takeuchi

Co-ordinator

Roslyn Ralph

General Information

Administrative Assistants, extensions 3542, 3543
Mackenzie Chown B326
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The Department of Psychology offers four-year programs of study leading to a BA (honours) in Psychology, a BA with a Major in Psychology and a three year BA pass degree program. All of the programs are designed to provide students with a broad introduction to the field of psychology including research methodology, psychological theory and application. In addition, the 20 credit degree programs give students the opportunity to prepare for admission to professional and advanced degree training in a variety of fields. Students interested in pursuing graduate study specifically in psychology should complete the Honours program.

Students who wish to pursue an Honours degree in Psychology, whether as a single or combined major, must apply in writing to the Department, after the completion of 10 credits. Ordinarily, applications are due by mid-June prior to the year the student desires entrance to the Honours program. Applications are available from the Department and specify the precise deadline date for applications in any given year. Entrance into the honours program is restricted to students who have a minimum 70 percent average in all Psychology credits and a minimum 70 percent non-major average.

The requirements for graduation with a BA (Honours) are a minimum 70 percent major average and a minimum 60 percent non-major average. The requirements for a BA with a Major are a minimum 60 percent major average and a minimum 60 percent overall average.

Students wishing to major in Psychology are encouraged to apply to declare their major after they have completed PSYC 1F90. The department believes that a broadly based liberal arts background is appropriate in conjunction with a major in Psychology. It is recommended that honours students acquire some background in other disciplines as part of their undergraduate program. Students must be admitted to year 4 (honours). Applications are available in the Office of the Registrar. See the Psychology Major's Manual for more information.

Content Areas

Applied, Clinical and Health Psychology

PSYC 2P91
3F20, 3P34, 3P36, 3P95
4F50, 4P21, 4P31, 4P32, 4P45, 4P80

Cognition:

PSYC 2F20, 2F91, 2P96, 2P97, 2P98, 2P99
3P54, 3P55, 3P88, 3Q91, 3Q92
4P22, 4P47, 4P70, 4P81

Comparative Psychology, Neuropsychology and Physiological Psychology:

PSYC 2F36, 2F45, 2F91
3F45, 3F46, 3F91, 3P68, 3P92, 3P97, 3P98, 3P99, 3Q97, 3Q98
4P82

Development:

PSYC 2F12
3P11, 3P18, 3P23, 3P27, 3P56, 3P74, 3P93, 3P94, 3Q93, 3Q94
4F11, 4P83

Methodology:

PSYC 4P48, 4P84

Psychology

Personality and Social Psychology:

PSYC 2F25, 2F30, 2P92, 2P93, 2P94, 2P96
3F10, 3F97, 3P33, 3P36, 3P80, 3Q90, 3Q95, 3Q96, 3Q99
4P44, 4P85

Program Notes

1. Honours students with a single major must select psychology credits from at least three different content areas (see listings above). Honours students with a combined major must select psychology credits from at least two different content areas (see listings above). Students intending to pursue graduate studies in Psychology are encouraged to select from at least five. Single BA with a Major students are encouraged to select from at least three.
2. Students enrolled in PSYC 4F91 are encouraged to enrol concurrently in PSYC 4P94.
3. In all 20 credit degree programs, at least 12 credits must be numbered 2(alpha)00 or above, six of which must be numbered 2(alpha)90 or above and of these, three must be numbered 3(alpha)90 or above. In all 15 credit degree programs, at least seven credits must be numbered 2(alpha)00 or above, three of which must be numbered 2(alpha)90 or above.

Honours Program

Year 1
PSYC 1F90; one Humanities and one Science context credit; two elective credits.

Year 2
PSYC 2F23; three credits from PSYC 2F12, 2F20, 2F25, 2F30, 2F36, 2F45; one elective credit.

Year 3
PSYC 3P39; two and one-half PSYC credits numbered 2(alpha)90 to 3(alpha)99, including either PSYC 3F40 or 3P30 (see program note 1); two elective credits.

Year 4
PSYC 4F90 or 4F91 (see program note 2); PSYC 4P92 and 4P93; one PSYC credit numbered 3(alpha)90 to 4(alpha)99 (see program note 1); two elective credits.

BA with a Major

This program is identical to the honours program listed in years 1 and 2.

Year 3
PSYC 3P30; two and one-half PSYC credits numbered 2(alpha)90 to 3(alpha)99 (see program note 1); two elective credits.

Year 4
PSYC 4P92; two and one-half PSYC credits numbered 3(alpha)90 to 4(alpha)99 (see program note 1); two elective credits.

Pass Program

Year 1
PSYC 1F90; one Humanities and one Science context credit; two elective credits,

Year 2
PSYC 2F23; two PSYC credits numbered 2(alpha)00 to 2(alpha)99 (see program note 1); two elective credits.

Year 3
Three PSYC credits numbered 2(alpha)90 to 3(alpha)99; two elective credits.

Combined Major Programs

Students may take a combined major in Psychology and a second discipline. For requirements in the other discipline, the student should consult the relevant department. It should be noted that not all departments provide a combined major option. All combined major students should consult with the Co-ordinator to avoid duplication of courses.

Honours

PSYC 1F90, 2F23, 3P39, 4P92; two credits from PSYC 2F12, 2F20, 2F25, 2F30, 2F36, 2F45; one and one-half PSYC credits numbered 2(alpha)90 to 3(alpha)99 including either PSYC 3F40 or 3P30; one and one-half PSYC credits numbered 3(alpha)90 to 4(alpha)99 (see program note 1). In addition students must complete one of PSYC 4F90, 4F91, an honours thesis in the second discipline.

BA with a Major in Psychology

For a combined major the psychology requirements are PSYC 1F90, 2F23, 3P30; two credits from PSYC 2F12, 2F20, 2F25, 2F30, 2F36, 2F45; one and one-half PSYC credits numbered 2(alpha)90 to 3(alpha)99; two PSYC credits numbered 3(alpha)90 to 4(alpha)99.

Pass

PSYC 1F90, 2F23; one PSYC credit numbered 2(alpha)00 to 2(alpha)99; two PSYC credits numbered 2(alpha)90 to 3(alpha)99.

Psychology and Biology

Consult the Biological Sciences entry for a listing of course requirements.

Psychology and Child and Youth Studies

Consult the Child and Youth Studies entry for a listing of course requirements.

Master of Arts (MA) Program

The MA program allows for study and directed research with a concentration in behavioural neuroscience, life span development and social-personality. Specific research areas include: expert knowledge systems; human/computer interface; media and communications; the social psychology of justice; women's issues; the historical and cultural development of language; dreams and other states of consciousness; hypnosis; mechanisms of sleep; drug and alcohol use; eating behaviours; motivation and emotion in health; social and cognitive development across the life span; parenting; the neuropsychology of aging; acquired brain injury; stuttering; the control of attention; memory; neuroimaging, EEG and biofeedback.

For details about graduate courses, programs and entry requirements, see the Graduate Calendar.

Prerequisites and Restrictions

Students must check to ensure that prerequisites are met. Students may be deregistered, at the request of the instructor, from any course for which prerequisites and/or restrictions have not been met. PSYC 4F90 and 4F91 have different prerequisites. Students should plan accordingly.

Description of Courses

Note that not all courses are offered in every session. Refer to the applicable term timetable for details.

PSYC 1F90**Introduction to Psychology**

Basic concepts and contemporary issues in psychology with special attention to learning, physiological, developmental, clinical and social psychology.

Lectures, seminar, 3 hours per week.

Note: prerequisite to all courses in Psychology except PSYC 2F23, 3Q91 and 3Q92.

PSYC 2F12**Life Span Development**

An introduction to the conceptual bases of life span development, a survey of relevant research and an overview of methodological issues. Topics illustrating life span developmental research and theory will be drawn from the following areas: intellectual, moral, personality, physiological, sexual and social development.

Lectures, seminar, 3 hours per week.

Restriction: open to PSYC (single or combined), CHSC (HLST) (single or combined), HLSC, LING and WKHL majors until date specified in BIRT guide.

Prerequisite: PSYC 1F90.

Students completing this course will forfeit credit in CHYS(CHST) 2F10.

PSYC 2F20**Cognition**

The acquisition and utilization of knowledge. Topics include attention and memory, concepts, imagery and cognitive maps, problem solving and reasoning, judgment and decision making, language and thought, intelligence and creativity, cognitive development, applications of cognitive psychology.

Lectures, seminar, 3 hours per week.

Prerequisite: PSYC 1F90.

PSYC 2F23**Statistics and Research Design in the Behavioural Sciences**

Principles of experimental design, systematic assessment and data analysis in the context of psychological research.

Lectures, tutorial, 4 hours per week.

Restriction: open to PSYC (single or combined), NEUR, BA/BEEd, CHYS (single or combined) and LING majors.

Prerequisite: PSYC 1F90 or one Social Science credit.

Note: at least one OAC Mathematics or equivalent background recommended.

Students completing this course will forfeit credit in PSYC 2F24.

Psychology

PSYC 2F25

Introduction to Personality

Main approaches/theories of personality, current issues and applications.

Lectures, seminar, 3 hours per week.

Restriction: open to PSYC (single or combined) majors until date specified in BIRT guide.

Prerequisite: PSYC 1F90.

PSYC 2F30

An Introduction to Social Psychology

Theories, methods, research and issues of contemporary social psychology. Topics include social perception and cognition, attitudes, influence, attraction, aggression, altruism, communication, conflict, group and collective behaviour; the psychological study of social issues pertaining to prejudice, law, environment and health.

Lectures, seminar, 3 hours per week.

Restriction: open to PSYC (single or combined), COMM (single or combined), CHSC (HLST) (single or combined), HLSC and WKHL majors until date specified in BIRT guide.

Prerequisite: PSYC 1F90.

PSYC 2F36

Physiological Psychology

(also offered as NEUR 2F36)

Biological aspects of behaviour; the functional activities of the neuron and the interrelationships among neural systems (brain organization). Topics include the psychobiology of sensory and motivational systems, emotion and affect, learning, memory, language and consciousness.

Lectures, 2 hours per week; lab, 3 hours alternating weeks.

Restriction: open to PSYC (single or combined), CHSC (HLST) (single or combined), HLSC, NEUR and WKHL majors with a minimum 67 percent major average until date specified in BIRT guide.

Prerequisite: PSYC 1F90.

PSYC 2F45

Learning

A presentation of variables and/or conditions which contribute to the learning process including a survey of the basic experimental findings and theoretical issues related to learning. Emphasis on learning in non-human animals.

Lectures, seminar, 3 hours per week.

Restriction: open to PSYC (single or combined) majors until date specified in BIRT guide.

Prerequisite: PSYC 1F90.

PSYC 2F91

Perception

Theoretical problems and actual mechanisms of seeing and hearing. Basic problems of pattern recognition, memory and attention; the influence of culture, motivation, personality and pathology on perception.

Lectures, seminar, 3 hours per week.

Restriction: open to PSYC (single or combined), CHSC

(HLST) (single or combined), HLSC, NEUR and WKHL majors until date specified in BIRT guide.

Prerequisite: PSYC 1F90.

PSYC 2P91

Health Psychology

Psychological aspects of health and illness. The prevention and treatment of illness and the maintenance of wellness. The behavioural and social factors that play a role in the etiology of health and illness. Contributions from scientific investigation and from professionals in the health care system.

Lectures, seminar, 3 hours per week.

Restriction: open to PSYC (single or combined) and CHSC (HLST) (single or combined), HLSC and WKHL majors until date specified in BIRT guide.

Prerequisite: PSYC 1F90.

PSYC 2P93

Psychology of Women

(also offered as WISE 2P93)

The social, personal and political implications of gender. Topics include theoretical perspectives on the study of gender differences, stereotypes, sexuality, biological influences, as well as issues related to achievement, intimacy, mental and physical health, power and justice.

Lectures, seminar, 3 hours per week.

Restriction: open to PSYC (single or combined) and WISE majors until date specified in BIRT guide.

Prerequisite: PSYC 1F90 or WISE 1F90.

PSYC 2P94

Psychology of Men

The history of psychological thought about maleness, from sociobiological theory to modern feminist critiques. Topics include theoretical perspectives on the study of gender differences, stereotypes of masculinity, male sexuality, the biology of masculinity/maleness, and issues related to self-awareness, intimacy, health, the misuse of power and the possibility of reconstructing a more justifiable image of masculinity/maleness.

Lectures, seminar, 3 hours per week.

Restriction: open to PSYC (single or combined) majors until date specified in BIRT guide.

Prerequisite: PSYC 1F90.

PSYC 2P96

Experiential Psychology

The study of states of consciousness (dreaming and altered states of awareness) as an alternative approach in psychology. Contemporary and historical research on dreams, meditation, hypnosis, and psychedelic drugs are considered from the perspectives and their phenomenological, neuro-cognitive, personality and social-cultural bases.

Lectures, seminar, 3 hours per week.

Restriction: open to PSYC (single or combined) majors until date specified in BIRT guide.

Prerequisite: PSYC 1F90.

Students completing this course will forfeit credit in PSYC 2F97 and PSYC 2P92.

PSYC 2P97

The Nature of Consciousness

Contemporary approaches to consciousness including phenomenological, cognitive, neurophysiological, and evolutionary bases of awareness, with emphasis on the use of transpersonal and altered states of consciousness to illuminate the processes underlying human experience.

Lectures, seminar, 3 hours per week.

Restriction: open to PSYC (single or combined) majors until date specified in BIRT guide.

Prerequisite: PSYC 2P92 or 2P96.

Students completing this course will forfeit credit in PSYC 2F97.

PSYC 2P98

Child Language Acquisition: Early Stages

(also offered as CHYS 2P98 and LING 2P98)

Theories, research and methods in early language development. Linguistic stages in the development of child language at the level of grammar and meaning (phonology, morphology, syntax, semantics, pragmatics). Discourse as an indicator of the socialization process. The effect of interaction with care givers. Early bilingualism.

Lectures, seminar, 3 hours per week.

Prerequisite: LING 1F91 or PSYC 1F90 or permission of the instructor.

Students completing this course will forfeit credit in PSYC (CHST/LING) 2F90 and CHST 2P98.

PSYC 2P99

Child Language Acquisition: Late Stages

(also offered as CHYS 2P99 and LING 2P99)

Later acquired aspects of language, especially syntactic, semantic and pragmatic. Development of ability to use linguistic ambiguity, humour. Reading and writing skills, registers. Abnormal language development.

Lectures, seminar, 3 hours per week.

Prerequisite: LING 2P98 or permission of the instructor.

Students completing this course will forfeit credit in PSYC (CHST/LING) 2F90 and CHST 2P99.

PSYC 3F10

Psychology of Television

(also offered as COMM 3F10)

Psychological aspects of the visual, auditory and content dimensions of television viewing. Evaluation of several psychological and communication theories.

Lectures, lab, 3 hours per week.

Restriction: open to PSYC (single or combined) and COMM (single or combined) majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits.

Prerequisite: PSYC 1F90 or COMM 1F90 or permission of the instructor.

PSYC 3F20

Abnormal Psychology

Major theories which have emerged to explain aberrant and dysfunctional behaviour are considered and evaluated. Consideration is given to the scientific, moral/ethical and political foundation of this area of study.

Lectures, seminar, 3 hours per week.

Restriction: open to PSYC (single or combined) majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits or 3.0 PSYC credits above PSYC 1F90.

PSYC 3F40

Psychological Research

Research methods in several areas of psychology; emphasis on developing the student's capacity to evaluate psychological hypotheses through participation in group and individual research projects.

Lectures, lab, 3 hours per week.

Restriction: open to PSYC (single or combined) and NEUR majors with a minimum 75 percent major average. Students must have a minimum of 8.0 overall credits or 3.0 PSYC credits above PSYC 1F90.

Prerequisite: PSYC 2F23.

Co-requisite: PSYC 3P39.

Note: NEUR majors should consult the Neuroscience calendar entry.

Students completing this course will forfeit credit in PSYC 3P30.

PSYC 3F45

Comparative Psychology

Problems of experimental method and research findings in comparative psychology; emphasis on the mechanisms of behaviour pattern in infra-human species.

Lectures, seminar, 3 hours per week.

Restriction: open to PSYC (single or combined) and NEUR majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits or 3.0 PSYC credits above PSYC 1F90.

PSYC 3F46

Psychology of Eating

Biological and environmental factors influencing food consumption in animals and in humans, both theoretical and applied issues. Topics include physiological control of food intake; the nature and importance of taste and smell; biological, social and cultural factors influencing the choice of foods; the effects of food upon behaviour; abnormal food-related behaviours, such as overeating, anorexia nervosa and bulimia.

Lectures, seminar, 3 hours per week.

Restriction: open to PSYC (single or combined), CHSC (HLST) (single or combined), HLSC and WKHL majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits or 3.0 PSYC credits above PSYC 1F90.

Psychology

PSYC 3F91

Neuroscience

(also offered as NEUR 3F91)

Integrative approach to neuroscience from basic elements of molecular neuroscience, physiology of excitable cells, neurophysiology of major brain systems to behavioural neuroscience and selected topics in affective and cognitive neuroscience. Emphasis on the interdisciplinary nature of the subject and the integrative aspects of brain function. A general insight into a number of classical disciplines including neuroanatomy, neurophysiology, neuropharmacology, electrophysiology, neurochemistry.

Lectures, 2 hours per week, lab, 3 hours alternating weeks.

Restriction: open to PSYC (single or combined), CHSC (HLST) (single or combined), HLSC, NEUR and WKHL majors with a minimum major average of 70 percent until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits or 3.0 PSYC credits above PSYC 1F90.

Prerequisite: PSYC 2F36 or permission of the instructor.

PSYC 3F97

Personality Assessment and Research

Issues in the general areas of individual social development, interpersonal communication, person perception, friendship formation, personality change, implicit personality theory, schizophrenia, neurosis, marital, individual and group therapy, perception of the environment, professional training and role playing.

Lectures, seminar, 3 hours per week.

Restriction: open to PSYC (single or combined) majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits or 3.0 PSYC credits above PSYC 1F90.

PSYC 3P11

Theories in Developmental Psychology

(also offered as CHYS 3P11)

Theories in developmental psychology and recent controversies and evidence.

Lectures, seminar, 3 hours per week.

Restriction: open to PSYC (single or combined), CHYS (single or combined) and BA/BED majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits or 3.0 PSYC credits above PSYC 1F90.

Prerequisite: PSYC 2F12 or CHYS (CHST) 2F10.

Students completing this course will forfeit credit in CHST 3P11.

PSYC 3P18

Adolescent Development

Theories and methods of life span development as they apply to the special issues that emerge during adolescence. Topics include thinking processes, identity formation, physiological change, sexuality and sex roles, family and peer relationships, schooling, vocational choices and moral development.

Lectures, seminar, 3 hours per week.

Restriction: open to PSYC (single or combined), CHSC (HLST) (single or combined), HLSC and WKHL majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits or 3.0 PSYC credits above PSYC 1F90.

Not open to CHYS (single or combined) and BA/BED majors.

PSYC 3P23

Psychology of Parenting

(also offered as CHYS 3P23)

The determinants, varieties and consequences of parenting. Focus on psychological research findings in contemporary parenting/parenthood issues. Topics include the transition to parenthood, different styles of parenting, dual-career parents and abusive parents.

Lectures, seminar, 3 hours per week.

Restriction: open to PSYC (single or combined), CHYS (single or combined) and BA/BED majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits or 3.0 PSYC credits above PSYC 1F90.

Prerequisite: PSYC 2F12 or CHYS (CHST) 2F10.

Students completing this course will forfeit credit in CHST 3P23.

PSYC 3P27

Psychology of the Exceptional Child

An integration of theoretical, experimental and clinical approaches to the development of the child with special needs, such as the child who is developmentally delayed or perceptually handicapped.

Lectures, seminar, 3 hours per week.

Restriction: open to PSYC (single or combined) majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits or 3.0 PSYC credits above PSYC 1F90.

Prerequisite: PSYC 2F12 or permission of the instructor.

Students completing this course will forfeit credit in PSYC(CHST) 3F96 and CHST 3P96.

PSYC 3P30

Critical Thinking in Psychology

The development of scientific thinking and discovery procedures in psychology. The design of experiments and quasi-experiments. Control of variables, statistical power and alternative sources of data. Critical analysis of typical examples of contemporary psychological research.

Lectures, seminar, 3 hours per week.

Restriction: open to PSYC (single or combined) and NEUR majors. Students must have a minimum of 8.0 overall credits or 3.0 PSYC credits above PSYC 1F90.

Prerequisite: PSYC 2F23.

Students completing this course will forfeit credit in PSYC 3F40.

PSYC 3P33

Psychology of Intergroup Behaviour

(also offered as COMM 3P33)

Social psychological theories and research in the area of intergroup relations and intergroup conflict. Topics include realistic conflict theory, social identity theory, social exchange, relative deprivation, elite theory and research on intergroup perceptions and attitudes. Current issues/controversies and implications for the resolution of intergroup conflict.

Lectures, seminar, 3 hours per week.

Restriction: open to PSYC (single or combined) and COMM

(single or combined) majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits or 3.0 PSYC credits above PSYC 1F90.
Prerequisite: PSYC 1F90.

PSYC 3P34

Psychology of Human Sexuality

Introduction to the psychological study of human sexuality. Psychological methods, along with developmental, social/personality, cognitive, and neuropsychological approaches are applied to different issues in human sexuality, including sexual differentiation, gender identity and sexual orientation, attraction and love, patterns of sexual behaviour, sexual dysfunctions, sex differences in sexual behaviour, erotica and pornography, sexual coercion and paraphilias, and sexually transmitted diseases.

Lectures, seminar, 3 hours per week.

Restriction: open to PSYC (single or combined) majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits or 3.0 PSYC credits above PSYC 1F90.
Prerequisite: PSYC 1F90.

PSYC 3P36

Applied Social Psychology

Theories, research and practice of social psychology as applied to specific areas of personal and social concern, including physical and mental health, law, commerce, environment, communication and gerontology. Methods of conducting applied research, assessing public opinion and evaluating program efficacy. Consideration of Lewin's proposition that "there is nothing so practical as a good theory".

Lectures, seminar, 3 hours per week.

Restriction: open to PSYC (single or combined) majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits or 3.0 PSYC credits above PSYC 1F90.

PSYC 3P39

Computer Data Analysis

Applications of computers to management and analysis of data, including data entry, statistical procedures and interpretation of output, using SPSS.

Lectures, lab, 3 hours per week.

Restriction: open to PSYC (single or combined) and NEUR majors with a minimum 75 percent major average until date specified in BIRT guide. After that date open to PSYC (single or combined) and NEUR majors. Students must have a minimum of 8.0 overall credits or 3.0 PSYC credits above PSYC 1F90.

Prerequisite: PSYC 2F23.

Note: not open to students with credit in PSYC 3F40 prior to 1999.

PSYC 3P48

Directed Studies I

Topics, readings and/or research chosen in consultation with a faculty member who is willing to supervise the student.

Restriction: permission of the department. Students must have a minimum of 8.0 overall credits or 3.0 PSYC credits above PSYC 1F90.

PSYC 3P49

Directed Studies II

Topic, readings and/or research chosen in consultation with a faculty member who is willing to supervise the student.

Restriction: permission of the department. Students must have a minimum of 8.0 overall credits or 3.0 PSYC credits above PSYC 1F90.

PSYC 3P54

Psychology of Western Consciousness

Attention, memory, hemispheric laterality and language are examined from a general systems theory perspective. Topics include altered states of consciousness, lucid dreams, self-concepts and the effects of stress on consciousness. Western approaches to consciousness are contrasted and integrated with American Indian shamanistic techniques for altering consciousness.

Lectures, seminar, 3 hours per week.

Restriction: open to PSYC (single or combined) majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits or 3.0 PSYC credits above PSYC 1F90.

PSYC 3P55

Psychology of Eastern Consciousness

Asian psychology approached from a Buddhist perspective; the history, evolution, and migration of Buddhism. Topics include meditation, Taoism, Zen Buddhism, Sufism and Western applications such as biofeedback and therapy. Eastern approaches to consciousness are contrasted and integrated with Western psychology by examining attention, memory and language.

Lectures, seminar, 3 hours per week.

Restriction: open to PSYC (single or combined) majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits or 3.0 PSYC credits above PSYC 1F90.
Prerequisite: PSYC 3P54.

PSYC 3P56

Maturation and Development

(also offered as CHYS 3P56)

The influences of brain physiology and maturation on psychological development and vice versa and the role of heredity in understanding human development.

Lectures, seminar, 3 hours per week.

Restriction: open to PSYC (single or combined), CHYS (single or combined), NEUR and BA/Ed majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits or 3.0 PSYC credits above PSYC 1F90.

Students completing this course will forfeit credit in CHST 3P56.

PSYC 3P68

Sleep and Wakefulness

The functions, mechanisms, rhythms, physiology and psychology of sleep contrasted with counterparts during wakefulness. Current issues in sleep and dream research raised in lecture/seminar and labs. Experimentation encouraged.

Lecture/seminars, lab, 4 hours per week.

Psychology

Restriction: open to PSYC (single or combined) and NEUR majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits or 3.0 PSYC credits above PSYC 1F90.

PSYC 3P74

Psychology of Computers in Education

(also offered as CHYS 3P74)

Uses of computers in education in light of current theories of child development.

Lectures, seminar, 3 hours per week.

Restriction: open to PSYC (single or combined), CHYS (single or combined) and BA/BEEd majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits or 3.0 PSYC credits above PSYC 1F90.

Prerequisites: PSYC 1F90; one of PSYC 2F23, MATH 1F92 or, for combined CHYS/SOCI majors, SOCI 2F10 (may be taken concurrently).

Note: this is not a computer programming course.

Students completing this course will forfeit credit in CHST 3P74.

PSYC 3P80

Psychology of Interpersonal Behaviour

(also offered as COMM 3P80)

The social psychology of interpersonal attraction and relationships, as studied through experimental, correlational and longitudinal designs. Reinforcement, exchange, attributional, equity and balance models. Levels of relationships. Aspects of the maintenance and dissolution of relationships and of interpersonal psychopathology.

Lectures, seminar, 3 hours per week.

Restriction: open to PSYC (single or combined) and COMM (single or combined) majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits or 3.0 PSYC credits above PSYC 1F90.

Note: PSYC 2F30 recommended.

PSYC 3P88

Language and Meaning

(also offered as COMM 3P88)

Psychological aspects of the meaning of words and sentences, including word families, mental lexicon, reference and attribution, categorizing experience, drawing distinctions and semantic relations within sentences.

Lectures, lab, 3 hours per week.

Restriction: open to PSYC (single or combined) and COMM (single or combined) majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits or 3.0 PSYC credits above PSYC 1F90.

Prerequisite: one of PSYC 1F90, COMM 1F90 or LING 1F94 or permission of the instructor.

PSYC 3P92

Drugs and Behaviour

Basic principles of drug action and the effects of psychoactive drugs on behaviour and experience. Focus on recreational drugs and the use of drugs in psychiatry.

Lectures, 3 hours per week.

Restriction: open to PSYC (single or combined), CHSC (HLST) (single or combined), HLSC, NEUR and WKHL majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits or 3.0 PSYC credits above PSYC 1F90.

PSYC 3P93

Infant Development

The development of infants from the prenatal period through the second year of life. Topics include perception, cognition, attachment and social development; at-risk infants and infant intervention programs.

Lectures, seminar, 3 hours per week.

Restriction: open to PSYC (single or combined) majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits or 3.0 PSYC credits above PSYC 1F90. Not open to CHYS (CHST) (single or combined) and BA/BEEd majors.

Prerequisite: PSYC 2F12 or CHYS (CHST) 2F10 or permission of the instructor.

PSYC 3P94

Psychology of Aging

Focus on theories and methods of life span development as applied to the special issues that emerge during late adulthood; how physiological, social and cognitive factors interact as individuals cope with the tasks of later years.

Lectures, seminar, 3 hours per week.

Restriction: open to PSYC (single or combined), CHYS (CHST) (single or combined), CHSC (HLST) (single or combined), HLSC, NEUR and WKHL majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits or 3.0 PSYC credits above PSYC 1F90.

PSYC 3P95

Stress

Stress as related to occupations, environments, life events; methods of appraisal, ways of coping and consequences for health. Three current approaches: stimulus, process, response. Cognitive, emotional and behavioural factors.

Lectures, seminar, 3 hours per week.

Restriction: open to PSYC (single or combined) CHSC (HLST) (single or combined), HLSC majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits or 3.0 PSYC credits above PSYC 1F90.

PSYC 3P97

Bases of Neuropsychopharmacology

(also offered as NEUR 3P97)

Mechanisms of drug action and classification of psychoactive agents. Elements of pharmacokinetics (drug absorption, distribution, metabolism and elimination) and a review of the major groups of psychoactive agents including hypnotics, analgesics, anxiolytics, antidepressants, psychostimulants and neuroleptics. Emphasis on mechanisms and consequences of drug action on selected neurotransmitter systems (dopaminergic, cholinergic, serotonergic).

Lectures, seminar, 3 hours per week.

Restriction: open to PSYC (single or combined), CHSC

(HLST) (single or combined), HLSC, NEUR and WKHL majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits or 3.0 PSYC credits above PSYC 1F90.

PSYC 3P98

Introduction to Human Neuropsychology

(also offered as NEUR 3P98)

Focus on clinical syndromes that result from brain damage. Topics include disorders of memory, language, attention and problem solving.

Lectures, seminar, 3 hours per week.

Restriction: open to PSYC (single or combined), CHSC (HLST) (single or combined), HLSC, NEUR and WKHL majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits and 1.0 PSYC credit above PSYC 1F90.

PSYC 3P99

Cognitive Neuropsychology

Theories and research methods in cognitive neuropsychology, focussing on the investigation of brain models of information processing.

Lectures, seminar, 3 hours per week.

Restriction: open to PSYC (single or combined), CHSC (HLST) (single or combined), HLSC, NEUR and WKHL majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits or 3.0 PSYC credits above PSYC 1F90.

Prerequisite: one of PSYC 2F36, 3P68, 3P98 or permission of the instructor.

PSYC 3Q90

Consciousness and Society

(also offered as PHIL 3Q90)

Psychoanalytic approaches to modern clinical pathologies of narcissism, transpersonal psychologies of meditation and consciousness, and socio-cultural approaches to radical salvation movements are used to examine both the nature and history of religious-mystical experience and the repeated appearance of mystical movements and gnostic cults throughout the 20th century. Emphasis on the personal, social, and political conflicts associated with these phenomena.

Lectures, seminar, 3 hours per week.

Restriction: open to PSYC (single or combined) and PHIL (single or combined) majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits or 3.0 PSYC credits above PSYC 1F90.

Prerequisite: PSYC 1F90.

PSYC 3Q91

Second-Language Acquisition and Learning

(also offered as LING 3Q91)

Theories of second- or subsequent-language learning. Topics include psychological aspects of language learning (behaviourism, cognitivism, humanism), language and culture, contrastive analysis, error analysis, interlanguage.

Lectures, seminar, 3 hours per week.

PSYC 3Q92

Methodology in Second-Language Instruction

(also offered as LING 3Q92)

Approaches to teaching and learning, and their influence on classroom methods. Overview of methods from the Greeks to the modern era.

Lectures, seminar, 3 hours per week.

Prerequisite: PSYC 3Q91.

PSYC 3Q93

Conflict, Contradictions and Development

(also offered as CHYS 3Q93)

Conflict in early human development including the understanding of the causes, management and outcomes of conflicts. Emphasis on cognitive and social strategies used to resolve conflicts.

Lectures, seminar, 3 hours per week.

Restriction: open to PSYC (single or combined), CHYS (single or combined) and BA/BEEd majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits.

Prerequisite: PSYC 2F12 or CHYS (CHST) 2F10 or permission of the instructor.

Students completing this course will forfeit credit in CHST 3Q93.

PSYC 3Q94

Advanced Topics in Social Development

(also offered as CHYS 3Q94)

Social competence, aggression, friendship and other topics in social development from a variety of developmental perspectives. Methodological and training issues relevant to the study of social development.

Lectures, seminar, 3 hours per week.

Restriction: open to PSYC (single or combined), CHYS (single or combined) and BA/BEEd majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits or 3.0 PSYC credits above PSYC 1F90.

Prerequisite: PSYC 2F12 or CHYS (CHST) 2F10 or permission of the instructor.

Students completing this course will forfeit credit in CHST 3Q94.

PSYC 3Q95

Theories of Personality: Freud and Jung

(also offered as PHIL 3Q95)

Major clinically derived theories of personality with special attention to their bases in case study/life history methodology; focus on Freud and Jung and their continuing relevance for current personality, developmental and transpersonal psychology. The possibly unique relation of "depth psychology" to numinous experience (mysticism, creativity, psychosis).

Lectures, seminar, 3 hours per week.

Restriction: open to PSYC (single or combined) and PHIL (single or combined) majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits or 3.0 PSYC credits above PSYC 1F90.

Prerequisite: PSYC 1F90.

Psychology

PSYC 3Q96

Theories of Personality: Developments in Psychodynamic and Transpersonal Psychology (also offered as PHIL 3Q96)

Major developments in the psychoanalytic tradition (Kohut, Winnicott, Klein) as they relate to analogous developments within transpersonal and Jungian approaches to "higher" states of consciousness. The conflicts and congruences between these perspectives illustrated by selected life histories (Melanie Klein, Wilhelm Reich, G. Gurdjieff).

Lectures, seminar, 3 hours per week.

Restriction: open to PSYC (single or combined) and PHIL (single or combined) majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits or 3.0 PSYC credits above PSYC 1F90.

Prerequisite: PSYC 1F90.

PSYC 3Q97

Neuropsychopathology

An integration of neuroscience and psychology to offer hypotheses for mental and neurological pathologies. Topics include the underlying physiological abnormalities associated with disease states such as schizophrenia, depression, anxiety, autism, and cerebrovascular accidents. Emphasis on both the neuroanatomical and neurochemical basis of these and other disorders.

Lectures, seminar, 3 hours per week.

Restriction: open to PSYC (single or combined) and NEUR majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits or 3.0 PSYC credits above PSYC 1F90.

Prerequisite: PSYC 2F36 or permission of the instructor.

PSYC 3Q98

Neural Mechanisms of Behaviour

Brain control of motivated behaviour in animals and humans. Functions of the limbic system and behaviour. Neural circuitries involved in initiation of orientation, locomotion and vocalization in animals. Neural mechanisms of translation of motivational limbic signals into behavioural motor acts. Mechanisms of vocal communication. Vocalization and speech.

Lectures, seminar, 3 hours per week.

Restriction: open to PSYC (single or combined) and NEUR majors until the date specified in the BIRT guide. Students must have a minimum of 8.0 overall credits or 3.0 PSYC credits above PSYC 1F90.

Prerequisite: PSYC 2F36 or permission of the instructor.

PSYC 3Q99

Media: Fantasy and Reality (also offered as COMM 3Q99)

Media images and reality, the role of absorption as well as other personality and cognitive aspects of the experience of reality vs. fantasy, virtual reality, computer effects and images.

Lectures, lab, 3 hours per week.

Restriction: open to PSYC (single or combined) and COMM (single or combined) majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits or 3.0 PSYC credits above PSYC 1F90.

Prerequisite: PSYC 1F90 or COMM 1F90 or permission of the instructor.

PSYC 4F11

Applications and Theories of Human Development

Integration of classical and contemporary theories of human development, focussing on the connection between theory and application, including analysis of social policies and practice.

Seminars, 3 hours per week.

Restriction: open to PSYC (single or combined) and CHYS (single or combined) majors with a minimum of 13.5 overall credits.

PSYC 4F50

Introduction to Clinical Psychology

Issues in assessment techniques, major theories of psychotherapy and research findings concerning treatment strategies for specific disorders.

Lectures, seminar, 3 hours per week.

Restriction: open to PSYC (single or combined), CHSC (HLST) (single or combined), HLSC and WKHL majors with a minimum 13.5 overall credits.

PSYC 4F90

Literature Review Thesis

Review of the research and theory in a focussed area or problem in psychology.

Lectures, seminar, 3 hours per week.

Restriction: open to PSYC (single or combined) majors with approval to year 4 (honours).

Prerequisites: PSYC 3P30 and PSYC 3P39.

Note: Topics may be selected from a list assigned by the course co-ordinator or chosen in consultation with a faculty supervisor.

Students completing this course will forfeit credit in PSYC 4F92.

PSYC 4F91

Empirical Research Thesis

A research project carried out with a faculty supervisor whose permission must be obtained prior to registration.

Restriction: open to PSYC (single or combined) majors with approval to year 4 (honours) and permission of the department.

Prerequisites: PSYC 3F40 and PSYC 3P39.

PSYC 4P10

Advanced Directed Studies I

Topic, readings and/or research chosen in consultation with a faculty member who is willing to supervise the student.

Restriction: open to PSYC (single or combined) and NEUR majors with a minimum of 13.5 overall credits and permission of the department.

PSYC 4P11

Advanced Directed Studies II

Topic, readings and/or research activity chosen in consultation with a faculty member who is willing to supervise the student.

Restriction: open to PSYC (single or combined) and NEUR

majors with a minimum of 13.5 overall credits and permission of the department.

PSYC 4P21

Psychology of Addictive Behaviour

Theory and research on substance use. Focus on psychopharmacological, cognitive, psychodynamic and social psychological models and on longitudinal research. Implications for treatment and prevention.

Lectures, seminar, 3 hours per week.

Restriction: open to PSYC (single or combined), CHSC (HLST) (single or combined), HLSC, NEUR and WKHL majors with a minimum of 13.5 overall credits.

Prerequisite: PSYC 3P92.

PSYC 4P22

Advanced Seminar in Human Memory

Historic and current ideas about memory and the implications these have for our approach to memory in research, in medical and in legal contexts. Topics include hypnosis and memory, eyewitness testimony, varieties of memory disorders and the question of rehabilitation. Various clinical and experimental tools for assessing memory.

Lectures, seminar, 3 hours per week

Restriction: open to PSYC (single or combined) and NEUR majors with a minimum of 13.5 overall credits.

PSYC 4P31

Treatment Alternatives for Children and Adolescents: Dynamic Therapies

(also offered as CHYS 4P31)

The theoretical background, research and evaluation of current therapeutic approaches to emotionally and behaviourally disturbed children and adolescents. Topics include play therapies, non-directive, expressive and Gestalt approaches; group methods, use of modelling, goal setting and evaluation methods.

Lectures, seminar, 3 hours per week.

Restriction: open to PSYC (single or combined) and CHYS (single or combined) majors with a minimum of 13.5 overall credits.

Prerequisite: PSYC 2F12 or CHYS (CHST) 2F10.

Note: students participate in a practicum placement.

Students completing this course will forfeit credit in CHST 4P31.

PSYC 4P32

Treatment Alternatives for Children and Adolescents: Cognitive and Behavioural Approaches

(also offered as CHYS 4P32)

Behavioural theory and techniques; social skills training, cognitive theories, contingency management and relaxation.

Lectures, seminar, 3 hours per week.

Restriction: open to PSYC (single or combined) and CHYS (single or combined) majors with a minimum of 13.5 overall credits.

Prerequisite: PSYC 2F12 or CHYS (CHST) 2F10.

Note: students participate in a practicum placement.

Students completing this course will forfeit credit in CHST 4P32.

PSYC 4P44

The Social Psychology of Justice

Social psychological research and theories, including equity theory and relative deprivation, in relation to the concept of justice. The application of social psychology to the legal system will also be explored, especially with regard to eyewitness testimony, jury decision making and dispute resolution.

Lectures, seminar, 3 hours per week.

Restriction: open to PSYC (single or combined) majors with a minimum 13.5 overall credits.

PSYC 4P45

Community Psychology

Community psychology as conceptualized in the past 20 years. Emphasis on the interplay between community psychology, deinstitutionalization and the community mental health movements. The contemporary drive for consumer involvement in the development and provision of service will be a major perspective.

Lectures, seminar, 3 hours per week, plus field work.

Restriction: open to PSYC (single or combined), CHSC (HLST) (single or combined) majors with a minimum of 13.5 overall credits.

PSYC 4P47

Contemporary Approaches to Consciousness

(also offered as PHIL 4P47)

Cognitive, philosophical, neuropsychological, physical and phenomenological perspectives on consciousness including the work of James, Sperry, Gibson, Penrose, Wittgenstein, Husserl and Heidegger and research on metaphor and self-organizing natural systems.

Lectures, seminar, 3 hours per week.

Restriction: open to PSYC (single or combined) and PHIL majors with a minimum of 13.5 overall credits.

PSYC 4P48

Qualitative Methods

The nature and role of qualitative research methodology in psychology in relation to the variety of research functions psychologists perform in the community. Various formal theories with emphasis on program evaluation and action research strategies in the community.

Lectures, seminar, 3 hours per week.

Restriction: open to PSYC (single or combined) majors with a minimum of 13.5 overall credits.

PSYC 4P70

Cognitive Science

(also offered as COSC 4P70 and PHIL 4P70)

Interdisciplinary study of the mind. Computer models of the human mind are examined in three ways: as a branch of computer science related to artificial intelligence, as a form of psychological theory, and as a source of philosophical puzzles about the mind.

Lectures, lab, 4 hours per week.

Restriction: permission of the instructor.

Psychology

PSYC 4P80

Special Topics in Applied, Clinical and Health Psychology
Structure and content of course varies.

3 hours per week.

Restriction: open to PSYC (single or combined) majors with approval to year 4 (honours).

Note: a description of upcoming course offering(s) will be posted by April in the Department and in the Psychology Major's Manual.

PSYC 4P81

Special Topics in Cognition

Structure and content of course varies.

3 hours per week.

Restriction: open to PSYC (single or combined) majors with approval to year 4 (honours).

Note: a description of upcoming course offering(s) will be posted by April in the Department and in the Psychology Major's Manual.

PSYC 4P82

Special Topics in Comparative Psychology, Neuropsychology and Physiological Psychology.

Structure and content of course varies.

3 hours per week.

Restriction: open to PSYC (single or combined) majors with approval to year 4 (honours).

Note: a description of upcoming course offering(s) will be posted by April in the department and in the Psychology Major's Manual.

PSYC 4P83

Special Topics in Development

Structure and content of course varies.

3 hours per week.

Restriction: open to PSYC (single or combined) majors with approval to year 4 (honours).

Note: a description of upcoming course offering(s) will be posted by April in the Department and in the Psychology Major's Manual.

PSYC 4P84

Special Topics in Methodology

Structure and content of course varies.

3 hours per week.

Restriction: open to PSYC (single or combined) majors with approval to year 4 (honours).

Note: a description of upcoming course offering(s) will be posted by April in the Department and in the Psychology Major's Manual.

PSYC 4P85

Special Topics and Personality and Social Psychology

Structure and content of course varies.

3 hours per week.

Restriction: open to PSYC (single or combined) majors with approval to year 4 (honours).

Note: a description of upcoming course offering(s) will be posted by April in the Department and in the Psychology Major's Manual.

PSYC 4P92

History of Psychology

The historical development of different orientations to psychology. Topics include philosophical and physiological influences in psychology, introspectionism, functionalism, behaviourism, Gestalt theory, psychoanalysis.

Lectures, seminar, 3 hours per week.

Restriction: open to PSYC (single or combined) and NEUR majors with approval to year 4 (honours).

Prerequisite: PSYC 3F40 or 3P30.

PSYC 4P93

Honours seminar

A survey of issues in various areas of Psychology.

Lectures, seminar, 3 hours per week.

Restriction: open to PSYC (single or combined) majors with approval to year 4 (honours).

PSYC 4P94

Thesis Seminar

Thesis students undertake detailed study of current research in various areas of psychology.

Lectures, seminar, 3 hours per week.

Restriction: open to PSYC (single or combined) majors with approval to year 4 (honours).

Co-requisite: PSYC 4F91.

Recreation and Leisure Studies

Chair

John K. Larsen
TBA (as of July 1, 2000)

Associate Professors

Ann Marie Guilmette, Peggy Hutchison, John K. Larsen,
George S. Nogradi, John K. Yardley

Assistant Professors

Sherry L. Dupuis, David A. Fennell, Atsuko Hashimoto, David J. Telfer

General Information

Administrative Assistant, extension 3259
Physical Education 238
<http://www.brocku.ca/recandleisure/>

The Department of Recreation and Leisure Studies offers a four-year honours and a three-year pass program leading to a Bachelor of Recreation and Leisure Studies. The program is designed to qualify graduates for a wide range of positions in the rapidly expanding field of leisure services. Following a common year 1 and part of year 2 students choose one of the following for the honours degree: general; outdoor recreation; inclusive and therapeutic recreation.

Program Notes

1. A minimum grade of 60 percent in RECL 1P90 and 1P91 is required to continue as a major in Recreation and Leisure Studies.
2. All students must take 3 context credits: one Humanities, one Social Science and one Science. Two credits must be used to satisfy context credit requirements in year 1. If all three context credits are taken in year 1, two elective credits may be taken in year 2.
3. At least three elective credits (excluding context credits) must be taken outside of the Department of Recreation and Leisure Studies.
4. Admission to year 4 (honours) requires second-class honours standing and credit in RECL 3P07 or 3P17. Students must submit an application by July.

5. RECL 3F92, 3P12, 3P14, 3P42 or 3P43 are recommended.

6. RECL 3F92, 3P04, 3P12 or 3P14 are recommended.

7. In all 20 credit degree programs, at least 12 credits must be numbered 2(alpha)00 or above, six of which must be numbered 2(alpha)90 or above and of these, three must be numbered 3(alpha)90 or above. In all 15 credit degree programs, at least seven credits must be numbered 2(alpha)00 or above, three of which must be numbered 2(alpha)90 or above.

Honours Program

General

Year 1

RECL 1P90 and 1P91; COSC 1P90 or 1P98; WRIT 1P80; three elective credits (see program notes 1 and 2).

Year 2

RECL 2P00, 2P07 and 2P11; one-half RECL credit numbered 2(alpha)00 or above; three elective credits (see program notes 2 and 3).

Year 3

RECL 3P01 and 3P05; two RECL credits numbered 3(alpha)00 or above; two elective credits (see program notes 3 and 4).

Year 4

RECL 4F05, 4P01 and 4P11; one RECL credit numbered 4(alpha)00 or above; two elective credits.

Concentration in Outdoor Recreation

Year 1

RECL 1P90 and 1P91; COSC 1P90 or 1P98; ENVI 1P90; GEOG 1F90 or 1F91; WRIT 1P80; one and one-half elective credits (see program notes 1 and 2).

Year 2

RECL 2P00, 2P06, 2P07 and 2P11; ENVI 2P28; one-half RECL credit; two elective credits (see program notes 2 and 3).

Year 3

RECL 3P01 and 3P06; RECL 3P07 or 3P17; one credit from RECL 3P16, 3P26, 3P66; two and one-half elective credits (see program notes 3 and 4).

Year 4

RECL 4F07, 4P01, 4P06 and 4P16; one-half RECL credit numbered 4(alpha)00 or above; two elective credits.

Recreation and Leisure Studies

Concentration in Inclusive and Therapeutic Recreation

Year 1

RECL 1P90 and 1P91; COSC 1P90 or 1P98; WRIT 1P80; three elective credits (see program notes 1 and 2).

Inclusive Recreation stream

Year 2

RECL 2P00, 2P02, 2P07, 2P11 and 2P32; one-half RECL credit; two elective credits (see program notes 2 and 3).

Year 3

RECL 3P01, 3P02, 3P05, 3P21 and 3P22; RECL 3P07 or 3P17; one RECL credit (see program note 5); one elective credit (see program note 3).

Year 4

RECL 4F05, 4F07, 4P01 and 4P02; one RECL credit (see program note 5); one elective credit.

Therapeutic Recreation stream

Year 2

RECL 2P00, 2P02, 2P07, 2P11 and 2P42; one-half RECL credit; two elective credits (see program note 2).

Year 3

RECL 3P01, 3P02, 3P05, 3P22 and 3P32; RECL 3P07 or 3P17; CHSC 2P93; one-half RECL credit (see program note 6); one elective credit (see program note 3).

Year 4

RECL 4F05, 4F07, 4P01 and 4P02; one RECL credit (see program note 6); one elective credit.

Pass

Satisfactory completion of the first three years of the honours program entitles a student to apply for a pass degree.

Executive Management Degree Completion Program

Students who have completed 13 credits, at least five of which must be Brock credits, and who are eligible for recertification with Parks and Recreation Ontario (PRO), may Challenge for Credit the remaining two RECL credits for a pass BRLS degree.

Brock/Mohawk College, Brock/Centennial College and Brock/Humber College Articulation Agreements

Mohawk College, Centennial College and Humber College Recreation and Leisure Services Diploma graduates who have achieved at least an overall 75 percent average will be granted up to six credits, as determined by the Office of the Registrar at Brock, towards their BRLS pass degree.

Brock BRLS pass degree students, who have obtained at least a 65 percent overall average, may complete their Recreation and Leisure Studies Diploma at Mohawk College, Centennial College or Humber College in two semesters as full-time students.

Prerequisites and Restrictions

Students must check to ensure that prerequisites are met. Students may be deregistered, at the request of the instructor, from any course for which prerequisites and/or restrictions have not been met.

Description of Courses

Note that not all courses are offered in every session. Refer to the applicable term timetable for details.

RECL 1P90

Introduction to Recreation Services

(also offered as TOUR 1P90)

Foundations of recreation service delivery systems. The development of public, quasi-public and private/commercial recreation systems in Canada.

Lectures, seminar, 3 hours per week.

Students completing this course will forfeit credit in RECL 1F91.

RECL 1P91

Introduction to Leisure Studies

(also offered as TOUR 1P91)

Reviewing past and present leisure experiences. Theoretical and conceptual bases of understanding leisure.

Lectures, seminar, 3 hours per week.

Students completing this course will forfeit credit in RECL 1F91.

RECL 2P00

Program Planning and Supervision

Consumer behaviour and factors affecting recreation participation. Planning, developing, implementing and evaluating programs and services; leadership and supervision responsibilities.

Lectures, seminar, 3 hours per week.

Restriction: open to RECL majors.

Prerequisites: RECL 1P90 and 1P91.

Note: field experience fee will be charged; consult department. Students completing this course will forfeit credit in RECL 1F91.

RECL 2P02

Introduction to Inclusive and Therapeutic Recreation

Nature and needs of individuals and groups who are devalued in our society due to disability, illness, age (youth and older adults), gender, sexual diversity, and ethnicity. Emphasis on attitudes, creating meaningful leisure opportunities and leisure lifestyles in diverse communities, and different models of practice with a leisure context.

Lectures, seminar, 3 hours per week.

Prerequisites: RECL 1P90 and 1P91 (1F91).

RECL 2P06

Introduction to Outdoor Recreation

The outdoor environment as a recreation setting, with an emphasis on natural resources, parks management and outdoor activities.

Lectures, seminar, 3 hours per week.

Prerequisites: RECL 1P90 and 1P91 (1F91).

RECL 2P07

Introduction to Research Designs and Evaluation

(also offered as SPMA 2P07 and TOUR 2P07)

Principles and techniques for research. Issues concerning the construction, administration and evaluation of data collection as well as the processing and analysis of data.

Lectures, lab, 3 hours per week.

Restriction: open to RECL, SPMA and TOUR majors.

Prerequisite: COSC 1P90 or 1P98 or permission of the instructor.

Students completing this course will forfeit credit in CHSC 2Q07, HLST 2P07, PHED 2P08 and PHED 2Q07.

RECL 2P08

Introduction to Tourism

(also offered as TOUR 2P08)

Socio-cultural, environmental and economic impact of tourism. Elements drawn from recreation, sociology, psychology, geography, economics and business.

Lectures, seminar, 3 hours per week.

Prerequisite: RECL 1P90 and 1P91 (1F91).

RECL 2P10

Introduction to Recreation Administration

Principles of administration applied to the organization and operation of a recreation agency. The need for developing goals

and objectives and the criteria for evaluation in both the public and private sector.

Lectures, seminar, 3 hours per week.

Prerequisite: RECL 1P90 and 1P91 (1F91).

Students completing this course will forfeit credit in SPMA 2P10.

RECL 2P11

The Social Psychology of Leisure and Recreation

(also offered as TOUR 2P11)

The social psychological dimensions of human behaviour during free time including lifestyle, social habits and motives for leisure and recreation.

Lectures, seminar, 3 hours per week.

Prerequisite: RECL 1P90 and 1P91 (1F91) or CHSC (HLST) 1F90.

RECL 2P32

Principles of Inclusive Recreation

History, philosophies, theories and procedures underlying inclusive recreation, as well as issues related to the practice of inclusive recreation.

Lectures, seminar, 3 hours per week.

Prerequisite: RECL 2P02.

RECL 2P41

Economics of Tourism and Leisure Activities

(also offered as ECON 2P41 and TOUR 2P41)

The nature and structure of the entertainment industry including professional sports, film, television, music and broadcasting industries; how the demand for tourism and leisure activities is affected by age, fluctuations in income levels, work practices and exchange rates. Government funding for education-related activities and leisure activities.

Lectures, 3 hours per week.

Restriction: open to students with a minimum of 4.0 credits. Not open to ECON (single or combined) majors, BBE or ENEC students.

RECL 2P42

Principles of Therapeutic Recreation

History, philosophies and theories underlying therapeutic recreation, as well as issues related to the practice of therapeutic recreation.

Lectures, seminar, 3 hours per week.

Prerequisite: RECL 2P02.

RECL 3F92

Internship in Inclusive or Therapeutic Recreation

Minimum of three months (full-time) internship in either an inclusive recreation setting (e.g., integrated camp, municipal program) or a therapeutic recreation setting (specialized camp for children with disabilities, nursing home, hospital).

Orientation, seminar, evaluation workshops, 12 hours.

Prerequisite: RECL 3P05.

Note: internship proposal must be submitted no later than April 15th each year for approval by the Department. Internship may involve more than one setting, be remunerated or be volunteer.

Recreation and Leisure Studies

RECL 3P01

Issues in Leisure and Lifestyles

Classical, modern and contemporary concepts of play, recreation and leisure. Research strategies, lifestyle implications and models for interpreting leisure and lifestyles.

Lectures, seminar, 3 hours per week.

Restriction: open to RECL majors with a minimum of 9.5 overall credits.

Prerequisites: RECL 2P07 and 2P11.

RECL 3P02

Leisure and Disabilities

Examination of various disabilities (e.g., intellectual, emotional, social and physical) and illnesses. Leisure lifestyles within these contexts and the facilitation of meaningful leisure opportunities for all persons.

Lectures, seminar, 3 hours per week.

Prerequisite: RECL 2P02.

RECL 3P04

Leisure and Health Relationships

The physical, psychological and social factors that affect leisure and health behaviours, including self-concept, social support and stress management. The role of leisure in the pursuit of life satisfaction.

Lectures, seminar, 3 hours per week.

Prerequisites: RECL 1P90 and 1P91 (1F91).

RECL 3P05

Leisure Services Field Work

(also offered as TOUR 3P05)

Practical experiences in specific leisure service agencies. Leadership, programming and community resource development and placement in a community recreation or tourism setting.

Seminars, field work, 3 hours per week.

Restriction: open to RECL and TOUR majors with a minimum 60 percent major average and a minimum of 9.5 overall credits.

RECL 3P06

Outdoor Recreation Resource Management

Social and ecological principles in the management of people in outdoor settings on how the concept of carrying capacity has evolved over the past four decades.

Lectures, seminar, 3 hours per week.

Restriction: open to students with a minimum 9.5 overall credits.

Prerequisite: RECL 2P06.

RECL 3P09

Commercial Leisure Services

The development and role of commercial leisure services in Canadian society. An overview of the concepts, principles and practices for developing a commercial recreation business.

Lectures, seminar, 3 hours per week.

Prerequisite: RECL 2P10.

RECL 3P10

Managing Recreation Service Organizations

Theories, research and current practices related to primary management functions in recreation service organizations. Emphasis on planning, organizing, staffing, directing, controlling and maintaining services and facilities.

Lectures, 3 hours per week.

Prerequisite: RECL 2P10.

RECL 3P12

Leisure in Later Life

Characteristics of the aging population and theoretical aspects of aging, particularly as related to recreation, leisure and lifestyle. Practical aspects of recreation and leisure program development, delivery and facilitation for both community-based and institution-based older adults.

Lectures, seminar, 3 hours per week.

Prerequisite: RECL 2P02.

RECL 3P13

Play and Culture

Play in socio-cultural contexts; children's play and playgrounds; games and gaming; word play (storytelling, drama, humour); adult play and leisure; festivals and celebrations.

Lectures, seminar, 3 hours per week.

Prerequisites: RECL 1P90 and 1P91 (1F91).

RECL 3P14

Interpersonal Communication in Recreation

The interpersonal qualities, abilities and insights that play an important role in facilitating a recreation experience. Emphasis on self-concept, perception/values, language, non-verbal communication, listening, disclosure, relationships and resolving conflicts in the recreation setting.

Lectures, lab, 3 hours per week.

Prerequisites: RECL 1P90 and 1P91 (1F91).

Students completing this course will forfeit credit in SOCI (COMM) 2P55.

RECL 3P16

Parks Management

Historical and contemporary philosophies related to the development, planning and management of parks in Canada and around the world.

Lectures, seminar, 3 hours per week.

Prerequisite: RECL 2P06.

Note: case studies are used to illustrate the problems related to preservation and use of protected areas.

RECL 3P18

Tourism Planning and Development

(also offered as TOUR 3P18)

Planning and development of tourism resorts, attractions, tourism sites and regional economies through tourism; consideration of regional, provincial and national developments.

Lectures, seminar, 3 hours per week.

Prerequisite: RECL 2P08.

RECL 3P20

Managing People in Recreation Service Organizations

Theories, research and current practices. Fundamentals of managing individuals and groups. Emphasis on leadership, motivation, problem solving, conflict resolution and organizational change and development.

Lectures, 3 hours per week.

Prerequisite: RECL 2P10.

Students completing this course will forfeit credit in SPMA 3P20.

RECL 3P21

Community Development in Recreation

Various theoretical perspectives on community organization and development, as well as methods available to the recreation practitioner to facilitate the development of recreation services in communities.

Lectures, seminar, 3 hours per week.

Prerequisite: RECL 1P90 and 1P91 (1F91).

RECL 3P22

Leisure Education and Counselling

Tools, techniques and strategies for leisure education and counselling. Creating leisure awareness in inclusive and therapeutic recreation settings.

Lectures, lab, 3 hours per week.

Prerequisite: RECL 2P02.

RECL 3P23

Therapeutic Benefits of Humour

(also offered as HLST 3P23)

Functions and dynamics of superiority, arousal and incongruity humour theories. Contributions of humour to well-being, tension relief, personal efficacy and competency and social facilitation.

Lectures, seminar, 3 hours per week.

Prerequisite: RECL 2P11.

RECL 3P26

Interpretation and Outdoor Education

The importance of interpreting natural and cultural resources; how to interpret these resources.

Lectures, seminar, 3 hours per week.

Prerequisites: RECL 2P06 and ENVI (ENVP) 1P90.

RECL 3P28

Interactive Travel Distribution Channels

(also offered as TOUR 3P28)

The nature and scope of interactive market distribution channels for travel products and services including the Internet and global distribution systems.

Lectures, seminar, 3 hours per week.

Prerequisite: RECL 2P08.

RECL 3P30

Employee Wellness Programs

Employee recreation, fitness, assistance and service programs and their impact in the workplace.

Lectures, seminar, 3 hours per week.

Prerequisite: RECL 2P10.

RECL 3P32

Therapeutic Techniques and Programs

Procedures necessary for assessment, planning, implementation, management and evaluation in therapeutic recreation services. Tools and techniques used in a variety of therapeutic recreation settings.

Lectures, seminar, 3 hours per week.

Prerequisites: RECL 2P00 and 2P02; RECL 2P32 or 2P42.

RECL 3P42

Leisure and Ethnicity

Theoretical aspects of Canada's ethnic groups within the recreation and leisure context. Practical considerations for recreation and leisure services in Canada's multicultural mosaic.

Lectures, seminar, 3 hours per week.

Prerequisite: RECL 2P02.

RECL 3P43

Women and Leisure

(also offered as WISE 3P43)

A feminist critique of leisure theory. Women's leisure explored from an ecological perspective. The ways that women's leisure influences and is influenced by the various domains of their environment (social, political, cultural, physical, historical, psychological, and biological).

Lectures, seminar, 3 hours per week.

Prerequisite: RECL 2P11 or permission of the instructor.

RECL 3P66

Ecotourism

(also offered as TOUR 3P66)

Importance of ecotourism as a global phenomenon. Analysis of ecotourism as it relates to sustainability and other forms of alternative tourism, including impacts, risk management, programming, tour operation, ethics, development, marketing and parks management.

Lectures, seminar, 3 hours per week.

Prerequisite: RECL 2P08.

Students completing this course will forfeit credit in RECL (TOUR) 3V66.

RECL 3P78

International Tourism

(also offered as TOUR 3P78)

Changes in power relations, environment, society and economy through the globalization of tourism. Human rights and other critical issues of international tourism.

Lectures, seminar, 3 hours per week.

Prerequisite: RECL 2P08 or permission of instructor.

RECL 3Q07

Quantitative Methods of Inquiry

(also offered as CHSC 3Q07, PHED 3Q07, SPMA 3Q07 and TOUR 3Q07)

Quantitative means of understanding, evaluating and interpret-

Recreation and Leisure Studies

ing statistical information.

Lectures, lab, 3 hours per week.

Prerequisite: RECL 2P07.

Students completing this course will forfeit credit in HLST 3P07, PHED 3P08, SPMA 3P07 and TOUR 3P07.

RECL 3Q17

Qualitative Approaches to Inquiry

(also offered as CHSC 3Q17, PHED 3Q17, SPMA 3Q17 and TOUR 3Q17)

Theories, approaches, designs, methods and procedures for conducting evaluative analyses.

Lectures, seminar, 3 hours per week.

Prerequisite: RECL 2P07.

Students completing this course will forfeit credit in HLST 3P17, PHED 3P18, SPMA 3P17 and TOUR 3P17.

RECL 3V50-3V99

Special Studies in Recreation and Leisure

A series of lectures, seminars and practical experiences offered in specialized areas of recreation and leisure.

Restriction: open to RECL majors with a minimum 70 percent major average and a minimum 60 percent non-major average. Consult the department regarding permission to register.

RECL 4F04

Leisure and Lifestyle Benefits

Personal, social, economic and environmental benefits of incorporating leisure into lifestyle changes.

Seminars, 3 hours per week.

Restriction: open to RECL majors with approval to year 4 (honours).

RECL 4F05

Field Work Project

(also offered as TOUR 4F05)

Practical experience through placement in community recreation or tourism agencies which may be government funded or privately owned.

Seminars, field work, 3 hours per week.

Restriction: open to RECL and TOUR majors with approval to year 4 (honours).

RECL 4F07

Research Project

(also offered as TOUR 4F07)

Development of appropriate and relevant research designs in recreation and leisure studies.

Lectures, seminar, 3 hours per week.

Restriction: open to RECL and TOUR majors with approval to year 4 (honours).

Note: students propose a research problem, review the literature, discuss methodology, collect and analyze the data, and make a formal presentation.

RECL 4P01

Contemporary Issues in Leisure Studies

Significant historical, contemporary and future issues and concerns in recreation and leisure studies. Emphasis on creative

lifestyle development and change at all ages.

Lectures, seminar, 3 hours per week.

Restriction: open to RECL majors with approval to year 4 (honours).

Students completing this course will forfeit credit in RECL 4F01.

RECL 4P02

Senior Seminar in Inclusive and Therapeutic Recreation

Philosophical and ethical issues related to inclusive and therapeutic recreation.

Lectures, seminar, 3 hours per week.

Restriction: open to RECL majors with approval to year 4 (honours).

Prerequisite: RECL 2P32 or 2P42.

RECL 4P06

Issues in Outdoor Recreation

Cultural, contemporary and future issues and concerns in outdoor recreation.

Lectures, seminar, 3 hours per week.

Restriction: open to RECL majors with approval to year 4 (honours).

Prerequisite: RECL 3P06.

RECL 4P11

Contemporary Issues in Recreation Services

Issues and concerns related to administration and management of recreation services.

Lectures, seminar, 3 hours per week.

Restriction: open to RECL majors with approval to year 4 (honours).

RECL 4P16

Wilderness Leadership

Minimum impact camping and leadership of outdoor recreation pursuits.

Field trip, seven days, pre-trip session, two days.

Restriction: open to RECL majors with approval to year 4 (honours) and permission of the instructor.

Prerequisite: RECL 3P06.

Note: students must register with the department by the last day of classes of the preceeding winter term. Field experience fee; consult the department.

RECL 4P97

Honours Project

Further work on the research project in consultation with a faculty adviser.

Seminar, 3 hours per week.

Restriction: open to RECL majors with approval to year 4 (honours).

Prerequisite: RECL 4F07 (may be taken concurrently).

Note: options include a formal honours project, a research journal manuscript or a presentation for a research symposium or professional conference.

Science

Co-ordinators

Ian Brindle, Department of Chemistry
Joseph F. Ingemann, Faculty of Education

General information

Administrative Assistant, extension 3406
Mackenzie Chown E206

Science courses (SCIE) are special offerings from the Faculty of Mathematics and Science which provide an overview of scientific endeavour, rather than concentrating on any single discipline. These courses treat the growth of theory and practice in the context of historical development and social issues.

The following courses offered by the Faculty of Mathematics and Science are primarily designed for students not majoring in a science or combined science program.

ASTR 1F00; BIOL 1F25, 2F95, 2P97; ERSC 1F90, 2P99;
SCIE 1F30.

Prerequisites and Restrictions

Students must check to ensure that prerequisites are met. Students may be deregistered, at the request of the instructor, from any course for which prerequisites and/or restrictions have not been met.

Description of Courses

Note that not all courses are offered in every session. Refer to the applicable term timetable for details.

SCIE 1F30

Science and Society

For non-science majors, basic questions and problems in understanding the nature of science and technology and their impact on contemporary society. Some questions addressed: how are scientific theories formulated? What is pollution? What is the relation of science to ethics and public policy?

Lectures, 3 hours per week; seminar, 1 hour, alternate weeks.

SCIE 1P10

Science for Primary/Junior Teachers

Science instruction and curriculum at the Primary and Junior level. Instruction in individual disciplines ensure a solid foundation and level of scientific literacy and comfort. Background, materials, exercises and resources for doing hands on science reflecting content of the provincial Primary and Junior science curriculum.

Lectures, lab, 4 hours per week.

Restriction: students must have a minimum of 5.0 overall credits.

Note: designed to meet the science admission requirement for the Primary/Junior Pre-service program of the Faculty of Education at Brock University. Not open to students holding credit in any grade 12/OAC or university science course.

SCIE 3P91

Science at the Elementary Level

Focus on the foundations of the science curriculum at the elementary level (grades 4-8). Selected issues in contemporary science education, as well as the application of computer software in the science classroom.

Lectures, seminar, practicum, 3 hours per week.

Restriction: open to BSc/BEEd majors with a minimum of 9.0 overall credits.

Note: a school-based practicum is required. Designed for students in the concurrent BSc/BEEd program.

Sociology

Chair

Judith C. Blackwell

Undergraduate Co-ordinator

June S. Corman

TBA (as of July 1, 2000)

Professors

Susan M. Clark (on leave), Ann Duffy, Daniel G. Glenday

Associate Professors

Judith C. Blackwell, June S. Corman, Jane Helleiner, Murray E. G. Smith, John S. Sorenson, Walter Watson

Assistant Professors

Robert Andersen, Lloyd Gordon Ward

General Information

Administrative Assistant, extension 3455

Mackenzie Chown A332

<http://paradigm.soci.brocku.ca/>

The various disciplines of the Department of Sociology (social anthropology, social psychology and sociology) are concerned broadly with processes, structure and behaviour conditioned by participation in social groups. The department at Brock is committed to a conception of the social sciences as scientific disciplines and to the belief that sound social action projects should be based on rigorous scientific effort. The department is also committed to the view that social analysis is a complex process and that no one discipline can provide a complete perspective.

Business, government, organized labour and voluntary associations increasingly require an understanding of group behaviour. Sociology in Canada has made significant contributions to our knowledge of elites and the class structure, the tensions between Québec and the rest of the country, gender relations, ethnic and sex segregation in the work force, crime and delinquency, regional underdevelopment, equality of opportunity and Canada's role in the Third World. Sociological input has been invited by and contributed to the Royal Commission on Bilingualism and Biculturalism, the Task Force on Canadian Unity, the Commission on the Non-medical Use of Drugs and other government agencies and departments. Public policies in the areas of education, aboriginal peoples, crime and delinquency, official languages and regionalism have all benefited from sociological analysis. Undergraduate training in Sociology provides students with a broad and scientific approach to

society that both enhances understanding of social issues and provides a valuable basis for employment in human service industries.

Students declaring a major in Sociology can pursue one of four programs: an honours BA program either in Sociology alone or as a combined major and a pass BA program either single or combined. In addition to combined major programs in other academic departments, Sociology students may co-major in interdisciplinary Centres/Programs such as Canadian Studies, Environment, Labour Studies or Women's Studies.

Students may be admitted to the BA honours or combined honours program at any time. The honours program provides students with the opportunity for a more intensive examination of issues in the field.

Students declaring a major in Sociology (honours, pass, single or combined) are responsible for ensuring that their programs satisfy the departmental requirements. Faculty advice is available on request.

Program Notes

1. All students are advised to take WRIT 1P80 and WRIT 1P81.
2. Students with limited experience in computer applications are advised to take COSC 1P90.
3. SOCI 4F90 is restricted to students with a single or combined major average of 80 percent or above or permission of the department.
4. SOCI 4F91 is restricted to students with a single or combined major average of 75 percent or above or permission of the department.
5. Students taking SOCI 4F90 are required to take SOCI 4P01 and one of 4V90 to 4V99 as part of their additional SOCI credits.
6. Acceptable alternatives from the student's co-major may be substituted for SOCI 4F90 or 4F91 (honours only). However, the student must take additional SOCI credits at the same level, to total eight SOCI credits for an honours degree.
7. SOCI 3P11 is highly recommended.
8. Courses given outside the department may be given SOCI credit provided that they are part of an integrated program and written approval is obtained from the Undergraduate Co-ordinator or the Department Chair.

9. With permission of the Chair of Sociology, courses in related disciplines numbered 3(alpha)90 or above may be considered for SOCI credit.

10. In all 20 credit degree programs, at least 12 credits must be numbered 2(alpha)00 or above, six of which must be numbered 2(alpha)90 or above and of these, three must be numbered 3(alpha)90 or above. In all 15 credit degree programs, at least seven credits must be numbered 2(alpha)00 or above, three of which must be numbered 2(alpha)90 or above.

Honours Program

Year 1

SOCI 1F90; one Humanities context credit and one Science context credit; two elective credits (see program notes 1 and 2).

Year 2

SOCI 2F10; SOCI 2P10; one and one-half SOCI credits; two elective credits.

Year 3

SOCI 3P00, 3P01 and 3P12; one and one-half SOCI credits numbered 2(alpha)90 or above (see program note 7); two elective credits.

Year 4

SOCI 4F90 (thesis option) or 4F91 (practicum option) or one credit from 4F10, 4P02 or 4P70, 4P15, 4P16 (course work option); two SOCI credits numbered 3(alpha)90 or above; two elective credits (see program notes 3, 4 and 5).

Pass Program

The following courses are required: SOCI 1F90, 2F10, 3P00 and 3P01; four additional SOCI credits including two SOCI credits numbered 2(alpha)90 or above (see program notes 1, 2 and 8).

Combined Major Programs

Honours

A student taking a combined major honours degree is required to complete SOCI 1F90, 2F10, 2P10, 3P00, 3P01 and 3P12; one of SOCI 4F90 (thesis option), 4F91 (practicum option), one credit from SOCI 4F10, 4P02 or 4P70, 4P15, 4P16, (course work option); three SOCI credits, including at least one-half

credit numbered 2(alpha)90 or above and one credit numbered 3(alpha)90 or above (see program note 9).

Pass

A student taking a combined major pass program is required to complete SOCI 1F90, 2F10, 3P00 and 3P01; one SOCI credit; one SOCI credit numbered 2(alpha)90 or above.

Sociology and Child and Youth Studies

Consult the Child and Youth Studies entry for a listing of the course requirements.

Sociology and Labour Studies (Pass)

Consult the Labour Studies entry for a listing of the course requirements.

Prerequisites and Restrictions

Students must check to ensure that prerequisites are met. Students may be deregistered, at the request of the instructor, from any course for which prerequisites and/or restrictions have not been met.

Description of Courses

Note that not all courses are offered in every session. Refer to the applicable term timetable for details.

SOCI 1F90

Introduction to Sociology

Major theoretical paradigms, core concepts and research methodologies. Sociological perspectives on contemporary problems in a Canadian, cross-cultural and global contexts.

Lectures, seminar, 3 hours per week.

SOCI 2F10

Research Methods in Social Relations

Introduction to qualitative and quantitative social science research methods. The relationship between social theory and social research, ethical issues, measurement, sampling, survey research, experiments, content analysis, field research and historical research. Emphasis on basic analytical skills to evaluate and to write research papers.

Lectures, seminar, lab, 3 hours per week.

Restriction: open to SOCI (single or combined) majors until date specified in the BIRT guide.

Sociology

Prerequisite: SOCI 1F90.

Students completing this course will forfeit credit in COMM 2F10.

SOCI 2F21

The Family

(also offered as WISE 2F21)

Family patterns including gender roles and the dynamics of family change and development. Topics include marriage and family issues, gender role socialization and change, dual careers, alternative life styles, gender roles in cross-cultural perspective and marital and family relationships past, present and future.

Lectures, seminar, 3 hours per week.

Prerequisite: SOCI 1F90 or WISE 1F90 or permission of the instructor.

Students completing this course will forfeit credit in CHYS (CHST) 3P38.

SOCI 2F54

Documentary Film

(also offered as COMM 2F54 and FILM 2F54)

The history, theory, aesthetics and cultural implications of documentary film and other media.

Lectures, seminar, 3 hours per week; plus weekly film lab.

Prerequisite: one of SOCI 1F90, COMM 1F90, FILM 1F94 or permission of the instructor.

SOCI 2P10

Critical Thinking and Expression

Develop critical reading, thinking and expression skills identifying theoretical assumptions, assessing logic in arguments and evaluation of evidence. Finding sources, documentation, written expression and organizational skills in the context of article critiques, book reviews and library research papers.

Lectures, seminar, 3 hours per week.

Restriction: open to SOCI (single or combined) majors.

Prerequisite: SOCI 1F90.

SOCI 2P22

Education and Society

Social analysis of Canadian educational institutions emphasizing the influence of society on organizational structure, curriculum and goals; the relationship of education to other aspects of Canadian society.

Lectures, seminar, 3 hours per week.

Prerequisite: SOCI 1F90 or permission of the instructor.

SOCI 2P32

The Sociology of Work

(also offered as LABR 2P32)

Understanding changes in the organization of work and the composition of the workforce with emphasis on the Niagara Peninsula. Topics include unionization, management strategies, pay equity and employment equity, the international division of labour and other current issues in the Canadian labour movement.

Lectures, seminar, 3 hours per week.

Prerequisite: SOCI 1F90 or LABR 1P91 and 1P92 or permission of the instructor.

SOCI 2P33

Sociology of Deviance

Concept of deviance and its role in contemporary societies. Contemporary conceptions of deviance, sociological explanations of deviant behaviour, non-criminal deviant activity and victimless crimes.

Lectures, seminar, 3 hours per week.

Prerequisite: SOCI 1F90 or permission of the instructor.

SOCI 2P34

Sociology of Trade Unions

(also offered as LABR 2P34)

Labour process theories which focus on the relationship between technology, the division of labour, social relations of production and the manner in which the state, business and trade unions in Canada have responded to changes in the labour process.

Lectures, seminar, 3 hours per week.

Prerequisite: SOCI 1F90 or LABR 1P91 and 1P92 or permission of the instructor.

SOCI 2P38

Childhood, Youth and Society

(also offered as CHYS 2P38)

Historical, cross-cultural and sociological perspectives on the relationship between childhood, youth and society. Topics include children and youth in schools, communities, popular culture and state policy.

Lectures, seminar/lab, 3 hours per week.

Restriction: open to BA/BE and CHYS (single or combined) majors until date specified in BIRT Guide.

Prerequisites: CHYS (CHST) 1F90 and SOCI 1F90.

Students completing this course will forfeit credit in CHST 2P38 and 2P91.

SOCI 2P41

Urbanism and the Community

Communities in rural, urban and suburban settings; the impact of industrialization and increased population complexity on community structure, identity, decision making and the exercise of power.

Lectures, seminar, 3 hours per week.

Prerequisite: SOCI 1F90 or permission of the instructor.

SOCI 2P43

Human Ecology

The impact of the physical and cultural environment on the behaviour and social structure of human aggregates.

Lectures, seminar, 3 hours per week.

Prerequisite: SOCI 1F90 or permission of the instructor.

SOCI 2P52

Socialization

Development of shared meanings of symbols and commonly accepted forms of behaviour. Sources of influence including parents, peers and television; studies of variations in patterns of socialization both within Canada and transnationally.

Lectures, seminar, 3 hours per week.

Prerequisite: SOCI 1F90 or permission of the instructor.

SOCI 2P55

Interpersonal Communication

(also offered as COMM 2P55)

Perspectives on human communication including verbal and non-verbal communication.

Lectures, seminar, 3 hours per week.

Prerequisite: SOCI 1F90 or COMM 1F90 or permission of the instructor.

Students completing this course will forfeit credit in RECL 3P14.

SOCI 2P61

Introduction to Criminology

Criminology as a scientific discipline: historical development of major schools of criminology, the development of criminal laws. Topics may include methodological problems in the study of crime, victimization and selected types of criminal activity.

Lectures, seminar, 3 hours per week.

Prerequisite: SOCI 1F90 or permission of the instructor.

SOCI 2P62

The Criminal Justice System

Administration and operation of the Canadian criminal justice system. The flow of offenders through the system and the roles of police, courts and corrections in processing offenders. The degree to which the administration of justice is an interactive process. Identification of inequities in the Canadian criminal justice system.

Lectures, seminar, 3 hours per week.

Prerequisites: SOCI 1F90 and 2P61 or permission of the instructor.

SOCI 2P71

Social Class and Social Conflict

Classical and contemporary approaches to the study of social class. Topics may include class relations and class conflict, elites, social mobility, poverty and social marginalization, the Canadian class structure in comparison to other industrialized nations.

Lectures, seminar, 3 hours per week.

Prerequisite: SOCI 1F90 or permission of the instructor.

SOCI 2P73

Globalization, Inequality and New World Disorders

Global spread of capitalism, historical origins and perpetuation of underdevelopment, the destruction of traditional societies and environmental impact. Socio-economic structures and political institutions of selected Third World countries and their

relationships to metropolitan, industrialized power centres.

Lectures, seminar, 3 hours per week.

Prerequisite: SOCI 1F90 or permission of the instructor.

SOCI 2P82

Introduction to Anthropology

Social and cultural life from an anthropological perspective. Exploration of the scope and nature of the discipline through the study of selected cases drawn largely from non-Western, technologically simple communities.

Lectures, seminar, 3 hours per week.

SOCI 2P83

Social Anthropology

Concepts such as kinship and marriage and theories underlying the comparative study of social institutions.

Lectures, seminar, 3 hours per week.

SOCI 2P85

Animals and Human Society

Relationships between animals and human societies from various theoretical perspectives. Topics may include cultural attitudes, symbolism, social meanings, animal rights, animals as food, entertainment and models for human societies, experimentation, environmental issues and related matters.

Lectures, seminar, 3 hours per week.

Prerequisite: SOCI or permission of the instructor.

Students completing this course will forfeit credit in SOCI 2V85.

SOCI 2P86

Women in the Economy

(also offered as ECON 2P86, LABR 2P86 and WISE 2P86)
Women in the Canadian labour market. Topics include the allocation of time between the household and the labour market, gender segregation in the work place, how earnings are determined, causes of occupational and earnings difference by gender, the role of investment in education and discrimination, recent developments in the labour market and their impact on women and men, selected policy issues.

Lectures, 3 hours per week.

Restriction: open to WISE majors until date specified in the BIRT guide. Students must have a minimum of 4.0 credits.

Note: major credit will not be granted to Economics majors.

SOCI 2V80-2V89

Selected Topics in Sociology

Issues in sociology.

Lectures, seminar, 3 hours per week.

SOCI 2V90-2V99

Directed Studies

Guided readings on a particular topic not covered in the department's regular course offerings. Topics must be chosen in consultation with a faculty member willing to supervise the tutorial.

Seminar, 3 hours per week.

Restriction: permission of the instructor.

Sociology

SOCI 2V99

2000-2001: Mothering and Motherhood: Images, Issues and Patterns

(also offered as WISE 2V99)

Motherhood as it is theorized/analyzed in interdisciplinary feminist scholarship and portrayed in women's fictional or autobiographical writings and art forms. The historical, socio-cultural, psychological, political and philosophical meanings of motherhood, mothering roles. Class, cultural and racial differences in mothering and motherhood.

Seminars, 3 hours per week.

Prerequisite: SOCI 1F90 or WISE 1F90.

SOCI 3P00

Introduction to Early Modern Social Theory

Central ideas of the social sciences, their intellectual origin and their change over time. The works of major social philosophers from the 18th and 19th centuries as well as classical sociological theorists.

Lectures, seminar, 3 hours per week.

Restriction: open to SOCI (single or combined) majors until date specified in BIRT guide.

Prerequisite: SOCI 1F90.

Students completing this course will forfeit credit in SOCI 2F01 or 2P01.

SOCI 3P01

Introduction to 20th-Century Social Theory

Major contemporary theories of society including structural functionalism, symbolic interactionism, Marxist and neo-Marxist and feminist theories; their origins and development in historical context; their assumptions, conceptual distinctions, methodological features and ethical implications.

Lectures, seminar, 3 hours per week.

Restriction: open to SOCI (single and combined) majors until date specified in BIRT guide.

Prerequisite: SOCI 3P00 or permission of the instructor.

Students completing this course will forfeit credit in SOCI 3F01 or 2P02.

SOCI 3P11

Selected Topics in Qualitative Methods

Qualitative research designs and analysis. Methods may include participant observation, interviews, historical analysis. Analysis may include descriptive and inductive strategies.

Lectures, seminar, 3 hours per week.

Restriction: open to SOCI (single and combined) majors until date specified in BIRT guide.

Prerequisite: SOCI 2F10 or permission of the instructor.

SOCI 3P12

Introduction to Social Statistics

Social statistics and computer applications for the social sciences. Displaying and summarizing data, statistical inference, contingency tables, correlation and regression. Includes both handwritten mathematical calculations and computer exercises using the SPSS software program.

Lectures, lab, 3 hours per week.

Restriction: open to SOCI (single and combined) majors until date specified in BIRT guide.

Prerequisite: SOCI 2F10 or permission of the instructor.

SOCI 3P16

Mass Media

(also offered as COMM 3P16 and PCUL 3P16)

Introduction to methods of media analysis. Comparison of theoretical and methodological approaches to mass media content, structures, institutions and audiences. Analysis of relations among media, culture and society with reference to Canadian examples.

Lectures, seminar, 3 hours per week.

Prerequisites: COMM 2F50 or SOCI 2F10 or permission of the instructor.

Students completing this course will forfeit credit in SOCI(COMM) 2P23.

SOCI 3P26

Medical Sociology

Social factors associated with physical health, illness and impairments; health care delivery systems and the factors which influence their utilization.

Lectures, seminar, 3 hours per week.

Prerequisite: SOCI 1F90 or permission of the instructor.

SOCI 3P27

Psychiatric Sociology

Social factors associated with psychiatric illness; increased utilization of social science theory and research in the field of psychiatry.

Lectures, seminar, 3 hours per week.

Prerequisite: SOCI 1F90 or permission of the instructor.

SOCI 3P28

Introduction to Clinical Sociology

Application of sociological knowledge to intervention for individual and social change. The translation of symbolic interactionist and related theories into action. Units of analysis are groups or group settings, rather than isolated individuals whose problems are considered intrapsychic.

Lectures, seminar, 3 hours per week.

Prerequisite: SOCI 1F90 or permission of the instructor.

SOCI 3P30

Sociology of Women and Work

(also offered as LABR 3P30 and WISE 3P30)

Quantitative and qualitative research exploring the societal significance and implications of the change in women's participation in paid employment and domestic labour in this century. Topics include the ghettoization of the female labour force, women in professional and non-traditional occupations, microtechnology, part-time work and unionization.

Lectures, seminar, 3 hours per week.

Prerequisite: one of SOCI 1F90, WISE 1F90, LABR 1P91 and 1P92 or permission of the instructor.

SOCI 3P31

Complex Organizations

(also offered as LABR 3P31)

Research on the nature of complex organizations using theories such as those of the French Regulation school. The formal and informal aspects of organizational roles; how morale, motivation, work discipline and conflict are regulated, feminist critiques of the traditional literature.

Lectures, seminar, 3 hours per week.

Prerequisite: SOCI 1F90 or LABR 1P91 and 1P92 or permission of the instructor.

SOCI 3P33

Law and Society

(also offered as WISE 3P33)

Sociological theories of law, Canada's legal institutions, the Charter of Rights and Freedoms, feminist jurisprudence and critical race studies. Relationships between Canadian law and Canadian social structure and institutions.

Lectures, seminar, 3 hours per week.

Prerequisite: SOCI 1F90 or WISE 1F90 or permission of the instructor.

SOCI 3P34

Information Technology and Work

(also offered as LABR 3P34)

Application of information technology to the labour process. Topics include the relationship of this technology to the number and types of jobs available, to the total hours worked over a lifetime and to the increased importance given to education and work.

Lectures, seminar, 3 hours per week.

Prerequisite: SOCI 1F90 or LABR 1P91 and 1P92 or permission of the instructor.

SOCI 3P36

Critical Issues in Contemporary Society

Social problems in advanced industrial societies and Canada in particular. Focus on social problems stemming from economic and political crises. Topics may include unemployment, regionalism, ethnic/racial conflict, sovereignty, nationalism, concentrated economic power, and state and market. Proposed strategies of remedial social change.

Lectures, seminar, 3 hours per week.

Prerequisite: SOCI 1F90 or permission of the instructor.

SOCI 3P46

Aboriginal Peoples and Canadian Society

(also offered as ABST 3P46)

Relationship between Canada's Aboriginal peoples and selected institutions in Canadian society such as education, industry and government. Topics include the European impact on indigenous culture, the conflict between traditional life styles and Canadian institutions and the responses of Aboriginal peoples.

Lectures, seminar, 3 hours per week.

Prerequisite: SOCI 1F90 or 2P82 or permission of the instructor.

SOCI 3P47

Race and Ethnicity

Relations among ethnic groups in various parts of the world as examples of the ways in which physical, social and cultural differences are used to justify intergroup hostility, prejudice and discrimination. Understanding the nature of ethnic relations in Canada through topics such as multiculturalism, racism, immigration policy and the maintenance of ethnic identity.

Lectures, seminar, 3 hours per week.

Prerequisite: SOCI 1F90 or 2P82 or permission of the instructor.

SOCI 3P51

Gender and Society

(also offered as WISE 3P51)

Gender as an organizing principle in society. The social construction of masculinity and femininity from historical and cross-cultural perspectives. Focus on gender in principal institutions of Canadian society: economy, state, family, education and military. Issues include men and women in non-traditional occupations, women in the military, gender and power.

Lectures, seminar, 3 hours per week.

Prerequisite: SOCI 1F90 or WISE 1F90 or permission of the instructor.

SOCI 3P55

Interpersonal Behaviour

The processes through which individuals relate to one another, primarily in two-person and three-person contexts.

Lectures, seminar, 3 hours per week.

Prerequisite: SOCI 1F90 or permission of the instructor.

SOCI 3P56

Small Groups

Group properties, their development over time, their maintenance or modification in the face of changing situations; the impact of group membership on experience and behaviour of individuals.

Lectures, seminar, 3 hours per week.

Prerequisite: SOCI 1F90 or permission of the instructor.

SOCI 3P57

Gerontology and the Aging Process

Humanistic, social, historical and cross-cultural perspectives on gerontology and aging. Topics include examination of conceptual and methodological approaches to studying aging; surveys of programs and prospects for the elderly; cultural, social and personal images of aging; the impact of social, psychological and biological processes affecting aging and the elderly within communities; social planning for the elderly.

Lectures, seminar, 3 hours per week.

Prerequisite: SOCI 1F90 or permission of the instructor.

SOCI 3P61

Sociology of Punishment

Major sociological approaches to punishment in modern society. Critical assessment of the structure and policies of Canadian correctional institutions. Sentencing, rehabilitation, pris-

Sociology

oners' rights, special populations, subcultures, penal reform, pretrial detention and community sanctions (probation, fines, community service and parole).

Lectures, seminar, 3 hours per week.

Prerequisite: SOCI 2P61 or permission of the instructor.

SOCI 3P66

Social Movements

(also offered as LABR 3P66)

A general survey of the impact of ideology on behaviour and the subsequent development of social movements or specific examinations of particular movements such as separatism, nationalism, fascism, Marxism or feminism.

Lectures, seminar, 3 hours per week.

Prerequisite: SOCI 1F90 or LABR 1P91 and 1P92 or permission of the instructor.

SOCI 3P83

Family Conflict and Violence

Conflict within modern family relationships. Considerations include contemporary research on spousal violence, power and decision making, sexual abuse and child abuse. Socio-historical factors which contribute to increased family stress. Institutional and interpersonal strategies for reducing family conflict.

Lectures, seminar, 3 hours per week.

Prerequisite: SOCI 1F90 or permission of the instructor.

SOCI 3P92

Gender and Sexuality in Childhood and Youth

(also offered as CHYS 3P92 and WISE 3P92)

Historical, cross-cultural and sociological approaches to the development of gender identities and sexuality amongst children and youth. Topics include the role of families, schools, peers and state policies in such processes.

Lectures, seminar, 3 hours per week.

Restriction: open to BA/BEd, CHYS (CHST) (single or combined), SOCI (single or combined) and WISE majors until date specified in BIRT guide. Students must have a minimum of 8.0 overall credits.

Prerequisite: one of CHYS (CHST) 2P38, SOCI 2F10 or WISE 2F90 or 2P91.

Students completing this course will forfeit credit in CHST 3P92.

SOCI 3P93

Media and Minorities

(also offered as COMM 3P93 and PCUL 3P93)

Relations between mass media and minority groups in society including dominant representations and stereotypes of cultural, racial and sexual minorities and minority group access to alternative forms of media production.

Lectures, seminar, 3 hours per week.

Prerequisite: COMM 2F50 or SOCI 2F10 or permission of the instructor.

SOCI 3P99

Internet Research for the Social Sciences

The primary components of Internet research: determination of appropriate data, search for sites containing these data and methods of collection and processing Web data.

Lectures, lab, tutorial, 3 hours per week.

Prerequisites: SOCI 2F10 or permission of the instructor.

Students completing this course will forfeit credit in SOCI 3V99.

SOCI 3V10-3V19

Selected Research Topics

Selected methodological issues in sociology.

Lectures, lab, 3 hours per week.

SOCI 3V80-3V89

Selected Topics in Sociology

Selected issues in sociology.

Lectures, seminar, 3 hours per week.

SOCI 3V90-3V99

Directed Studies

Guided readings on a topic not covered in the department's regular course offerings. Topics must be chosen in consultation with a faculty member willing to supervise.

Seminar, 3 hours per week.

Restriction: permission of the instructor.

SOCI 4F10

Research Design for Policy and Planning

The relationship between theoretical analysis and research methods as a practical task. Emphasis on applied topics such as evaluation research and needs assessment, areas of study which are important to social policy and planning.

Lectures, seminar, 4 hours per week.

Restriction: open to SOCI (single or combined) majors with approval to year 4 (honours).

Prerequisite: SOCI 3P12 or permission of the instructor.

SOCI 4F90

Honours Thesis

Students electing this option will be required to undertake an independent research project under the supervision of a member of the department. The results of the project will be presented as a thesis.

Restriction: open to SOCI (single or combined) majors with a minimum 80 percent major average or permission of the department.

Prerequisites: SOCI 3P01 (2P02 or 3F01) and 3P12.

Co-requisite: SOCI 4P01 (4F01).

SOCI 4F91

Honours Practicum

A student electing this option typically will serve as a research associate with a local social service agency. The exact nature of projects will vary with the agency; however, the faculty director, agency supervisor and student will negotiate a mutually acceptable set of expectations.

Restriction: open to SOCI (single or combined) majors with a minimum 75 percent major average or permission of the department.

Prerequisites: SOCI 3P01 (2P02 or 3F01) and 3P12.

SOCI 4P01

Honours Seminar

Examination and assessment of problems in students' current research.

Seminar, 3 hours per week.

Restriction: open to SOCI (single or combined) majors with a minimum 80 percent major average or permission of the department.

Prerequisites: SOCI 3P01 (2P02 or 3F01) and 3P12.

Co-requisite: SOCI 4F90.

Students completing this course will forfeit credit in SOCI 4F01.

SOCI 4P02

Selected Topics in Social Theory

Selected topics in early or late modern theory and theoretical sociology. In-depth explorations of specific theoretical paradigms, philosophies of social science, theoretical research programs, or comparative analysis of alternative or contending theoretical strategies or projects.

Lectures, seminar, 3 hours per week.

Prerequisites: SOCI 3P00 (2F01 or 2P01) and 3P01.

Students completing this course will forfeit credit in SOCI 3P02.

SOCI 4P10

Advanced Topics in Quantitative Analysis

Topics may include an introduction to ANOVA, multiple regression, regression diagnostics, surveys, structural equation modelling and various computer software programs.

Lectures, lab, 3 hours per week.

Prerequisite: SOCI 3P12 or permission of the instructor.

SOCI 4P15

Advanced Critical Analysis I

Focus on the particular research project of the instructor. Topics include research design, critical literature review, theoretical assumptions, data collection, evidence, analysis and implications.

Seminar, 3 hours per week.

Restriction: approval to year 4 (honours).

SOCI 4P16

Advanced Critical Analysis II

Focus on the particular research project of the instructor. Topics include research design, critical literature review, theoretical assumptions, data collection, analysis and implications.

Seminar, 3 hours per week.

Restriction: approval to year 4 (honours).

SOCI 4P23

Research on Popular Culture

(also offered as COMM 4P23 and PCUL 4P23)

Advanced research seminar on the relations between mass

media and popular culture. Topics vary with the interests of instructor and students.

Seminar, 3 hours per week.

Restriction: open to SOCI (single or combined), COMM (single or combined) or PCUL (single or combined) majors with approval to year 4 (honours) or permission of the instructor.

Prerequisite: SOCI 3P16 (2P23) or COMM (FILM/PCUL) 2P20 or permission of the instructor.

SOCI 4P26

Advanced Seminar in Health

Selected social policy issues in medical sociology, psychiatric sociology or related subdisciplines. Topics may include the politics of individualizing health problems, clinical sociology and related topics.

Lectures, seminar, 3 hours per week.

Restriction: approval to year 4 (honours).

Prerequisite: SOCI 3P26 or 3P27 or permission of the instructor.

SOCI 4P32

Advanced Seminar in the Sociology of Work

(also offered as LABR 4P32 and WISE 4P32)

Theoretical and research developments in the sociology of work. Topics may include the impact of technological innovation on the labour process, reconceptualizations of work and leisure, changes in the gendered nature of work, the role of the contemporary labour movement and international perspectives on labour and the labour force.

Lectures, seminar, 3 hours per week.

Restriction: approval to year 4 (honours).

Prerequisites: two SOCI or LABR credits or permission of the instructor.

Note: SOCI 2P32 recommended.

SOCI 4P33

Advanced Seminar in Law and Society

(also offered as WISE 4P33)

Specific relationships between Canada's legal institutions and social structure and institutions; law and Aboriginal peoples, family and gender issues, environment, work and technology, feminist critique of legal theory and practice.

Lectures, seminar, 3 hours per week.

Restriction: approval to year 4 (honours).

Prerequisite: SOCI 3P33 or permission of the instructor.

SOCI 4P38

Issues in Childhood, Youth and Society

(also offered as CHYS 4P38)

Canadian and international research on childhood and youth in changing societies. Topics include the globalization of childhood and youth, child labour, child welfare and Canadian policy.

Lectures, seminar/lab, 3 hours per week.

Restriction: open to SOCI (single or combined) and CHYS (CHST) (single or combined) majors with a minimum of 14.0 overall credits and approval to year 4 (honours).

Prerequisite: one of CHYS (CHST) 3P23, 3P38 (2P91), 3P91, 3P92, 3Q93 or 3Q94.

Sociology

Students completing this course will forfeit credit in CHST 4P38.

SOCI 4P41

Advanced Seminar in Social Policy

Canadian and international social policy issues. Topics may include aboriginal peoples, women and public policy, labour relations, health care delivery, multiculturalism, Canadian federalism, family policy.

Lectures, seminar, 3 hours per week.

Restriction: approval to year 4 (honours).

Prerequisites: SOCI 3P00 (2P01 or 2F01) and 3P01 (2P02 or 3F01), or permission of the instructor.

SOCI 4P51

Advanced Seminar in Gender and Society

(also offered as WISE 4P51)

Selected issues in gender and society. Topics may include feminist theories, work, family, state, popular culture, race, militarism and violence.

Lectures, seminar, 3 hours per week.

Restriction: approval to year 4 (honours).

Prerequisites: two SOCI or WISE credits or permission of the instructor.

Note: SOCI 3P51 recommended.

SOCI 4P52

Sociology of Knowledge

Knowledge as a social product; the cultural and temporal variations in knowledge as causal and as limiting factors in human behaviour.

Lectures, seminar, 3 hours per week.

Restriction: approval to year 4 (honours).

Prerequisites: two SOCI credits or permission of the instructor.

Note: SOCI 2P01 (2F01) or 3P01 (2P02 or 3F01) recommended.

SOCI 4P61

Advanced Seminar in Criminology

Topics may include critical perspectives on law and social control, feminist perspectives on law and criminology and the politics of law and criminal justice.

Lectures, seminar, 3 hours per week.

Restriction: approval to year 4 (honours).

Prerequisites: SOCI 2P61, 2P62 and 3P61 or permission of the instructor.

SOCI 4P62

Advanced Seminar in Deviance and Moral Regulation

Topics may include critical theoretical perspectives on deviance, moral regulation and the politics of social control.

Lectures, seminar, 3 hours per week.

Restriction: approval to year 4 (honours).

Prerequisites: SOCI 2P33 and two of SOCI 2P61, 2P62, 3P33 or permission of the instructor.

SOCI 4P70

Social Issues in the Community

Organizational responses, resistance strategies, constraints on social action and policy alternatives.

Seminar, 3 hours per week.

Restriction: approval to year 4 (honours).

SOCI 4V10-4V19

Selected Research Topics

Selected methodological issues in sociology. Advanced methods for the measurement of variables and the analysis of data in the social sciences with emphasis on the implications of various theoretical categories of data, multiple approaches to the estimation of reliability and validity and the use of computer-assisted analytic procedures.

Seminar, lab, 3 hours per week.

Restriction: approval to year 4 (honours).

SOCI 4V11

2000-2001: Representations of Masculinity and Femininity

Changing social conceptions of masculinity and femininity as portrayed in the popular media including international comparisons. Implications of changing gender roles; interconnections between these changes and shifts in major social institutions.

Seminar, 3 hours per week.

SOCI 4V80-4V89

Special Topics in Sociology

Selected issues in sociology. Course content will vary, depending upon the interests of instructors and students.

Restriction: approval to year 4 (honours).

SOCI 4V90-4V99

Directed Studies

Guided readings on a topic not covered in the department's regular course offerings. Topics must be chosen in consultation with a faculty member willing to supervise the tutorial.

Seminar, 3 hours per week.

Restriction: permission of the instructor.

Sport Management

Chair

Danny Rosenberg
Cheri Bradish (as of July 1, 2000)

Assistant Professor

Shawn O'Rourke

Lecturers

Steve Barsby, Cheri Bradish, Julie Stevens

Undergraduate Co-ordinator

Stephanie Brooks

Work Study Co-ordinator

Cheryl Mallen

General Information

Assistant to the Dean, extension 3385

Physical Education 287

<http://arnie.pec.brocku.ca/spma/>

The Department of Sport Management offers a four-year program and a three year program leading to a Bachelor of Sport Management. A Co-op option is available as an honours program that combines academic and work terms over a four and one-half year period.

The programs are designed to meet the needs of a rapidly expanding sport industry and incorporates a series of fieldwork experiences for students.

Core course offerings in Sport Management reflect curriculum and content areas that comply with the accreditation standards established by the joint task force of the North American Society of Sport Management (NASSM) and the National Association for Sport and Physical Education (NASPE). Students will be prepared for sport management career opportunities that include marketing, public relations, promotions, communications, human resources and financial, facility, and/or event management in a variety of public and private organizations.

Admission to the Co-op program is based on achieving a minimum 80 percent OAC average, the completion of the Sport Management Co-op application form and submission of a resumé. A personal interview may be required. As this is a limited enrolment program, admission is not guaranteed by attainment of the minimum requirements.

Co-op students will be required to maintain a minimum 70 percent overall average in each year to continue. In addition to the current fees for courses in academic study terms, Sport Management Co-op students are assessed an annual administrative fee (see Schedule of Fees). For additional information, prospective students should contact the Work Study Co-ordinator or the Chair.

Program Notes

1. A minimum overall average of 65 percent in the first five credits, including SPMA 1F90 is required to continue as a major in Sport Management.
2. Students may choose to take COSC 1P90 or 1P98 in year 2. If students choose this option, then an additional one-half elective credit must be taken in year 1.
3. Entrance to year 4 (honours) requires second-class honours standing and submit an application by July 1.
4. In all 20 credit degree programs at least 12 credits must be numbered 2(alpha)00 or above, six of which must be numbered 2(alpha)90 or above and of these, three must be numbered 3(alpha)90 or above. In all 15 credit degree programs, at least seven credits must be numbered 2(alpha)00 or above, three of which must be numbered 2(alpha)90 or above.

Honours Programs

Year 1

SPMA 1F90; COSC 1P90 or 1P98 (see program note 2); MGMT 1P91 and 1P92; one Humanities context credit; one Science context credit or Social Science context credit; one-half elective credit.

Year 2

SPMA 2P05, 2P06, 2P07, 2P96 and 2P97; ENTR 2P51; the Science context credit or Social Science context credit not taken in year 1; one elective credit.

Year 3

SPMA 3F01, 3P06, 3P21, 3P95, 3P97; SPMA 3P07 or 3P17; POLI 2P62; one elective credit.

Year 4

SPMA 4F02, 4F05, 4P06 and 4P07; SPMA 4P11 or 4P95; one and one-half elective credits.

Sport Management

Sport Management Co-op (honours only)

Year 1

SPMA 1F90; COSC 1P90 or 1P98 (see program note 2); MGMT 1P91 and 1P92; one Humanities context credit; one Science context credit or one Social Science context credit; one-half elective credit.

Year 2

SPMA 2P05, 2P06, 2P07, 2P96 and 2P97; ENTR 2P51; the Science context credit or Social Science context credit not taken in year 1; one elective credit.

Year 3

Fall Term: SPMA 0N01

Winter Term: SPMA 3P07 or 3P17; SPMA 4P07; SPMA 4P11 or 4P95; one SPMA credit numbered 3(*alpha*)00 or above; one-half elective credit.

Summer Term: SPMA 0N02

Year 4

Fall Term: SPMA 4F05; one SPMA credit numbered 3(*alpha*)00 or above; one elective credit.

Winter Term: SPMA 0N03

Summer Term: SPMA 4P06; one-half elective credit,

Year 5

one SPMA credit numbered 3(*alpha*)90 or above; SPMA 4P11 or 4P95; one and one-half elective credits.

Sport and Exercise stream

Years 1 and 2 of the Sport and Exercise Studies stream are now closed.

Year 3

SPMA 2P91, 3P95 and 3P97; SPMA 3P07 or 3P17; ENTR 2P51; PHED 3P70; 3P90 and 3P95; one elective credit.

Year 4

SPMA 3P10, 4F05 and 4P11; ENTR 3P52; PHED 3P75; two elective credits.

Pass Program

Satisfactory completion of the first three years of the honours program entitles a student to apply for a pass degree.

Prerequisites and Restrictions

Students must check to ensure that prerequisites are met. Students may be deregistered, at the request of the instructor, from any course for which prerequisites and/or restrictions have not been met.

Description of Courses

Note that not all courses are offered in every session. Refer to the applicable term timetable for details.

SPMA 1F90

Introduction to Sport Management

Principles of management applied to sport and sport related organizations. Topics may include sport industries, politics and sport, human resource management, sport marketing and sponsorship, fiscal and facility management, sport law and contemporary issues.

Lectures, seminar, 3 hours per week, plus field experience.

Note: a field experience fee may be charged.

Students completing this course will forfeit credit in SPMA 1P90 and SPMA 2P00.

SPMA 2P05

Management Concepts in Sport Organizations

Organizational theory related to sport organizations; topics may include organizational structure, strategy, technology, power and politics.

Lectures, seminar, 3 hours per week.

Restriction: open to SPMA majors until date specified in BIRT guide.

Prerequisite: SPMA 1F90 (1P90 and 2P00).

SPMA 2P06

Sport Policy

Sport policy within the Canadian sport system. Topics include government involvement in sport and policy issues.

Lectures, seminar, 3 hours per week.

Restriction: open to SPMA majors until date specified in BIRT guide.

Prerequisite: SPMA 1F90 (1P90 and 2P00).

SPMA 2P07

Introduction to Research Design and Evaluation (also offered as RECL 2P07 and TOUR 2P07)

Issues concerning the construction, administration and evaluation of data collection as well as the processing and analysis of data.

Lectures, lab, 3 hours per week.

Restriction: open to SPMA, RECL and TOUR majors.
Prerequisite: COSC 1P90 or 1P98.
Students completing this course will forfeit credit in CHSC 2Q07, HLST 2P07, PHED 2P08, PHED 2Q07.

SPMA 2P22

Media and Sport

(also offered as COMM 2P22 and PCUL 2P22)

The representation of sport in film, television and advertising. Topics may include issues of race, gender, business, politics and ideology in both professional and non-professional sports.
Lectures, seminar, 3 hours per week.

Restriction: open to COMM (single or combined) PCUL and SPMA majors with a minimum of 5.0 overall credits or permission of the instructor.

SPMA 2P40

Gerontology: Approaches to Well-being

(also offered as CHSC 2P40)

Aspects of aging; issues relating to health, in terms of both lifestyle and health services.

Lectures, seminar, 3 hours per week.

Restriction: open to SPMA, CHSC (HLST) (single or combined) and HLSC majors until date specified in BIRT guide.

Prerequisite: CHSC (HLST) 1F90.

SPMA 2P91

Nutrition

(also offered as CHSC 2P91)

An introduction to nutrition with emphasis on diet for health maintenance.

Lectures, seminar, 3 hours per week.

Restriction: open to SPMA, CHSC (HLST) (single or combined), HLSC, NUSC and WKHL majors until date specified in BIRT guide.

Prerequisite: CHSC (HLST) 1F90.

SPMA 2P93

Basic Anatomy

(also offered as CHSC 2P93)

An overview of the gross anatomy of the musculo-skeletal, neurological and cardio-respiratory systems.

Lectures, lab, 3 hours per week.

Restriction: open to SPMA, CHSC (HLST) (single or combined), HLSC and RECL majors until date specified in BIRT guide.

Prerequisite: CHSC (HLST) 1F90 or PHED 1P90.

Students completing this course will forfeit credit in PHED 2P04.

SPMA 2P94

Functional Human Anatomy

(also offered as CHSC 2P94)

A clinical systems approach to explore the structures of the human body and their interrelationships.

Lectures, lab, 3 hours per week.

Restriction: open to SPMA, CHSC (HLST) (single or combined), HLSC and NUSC majors until date specified in BIRT guide.

Prerequisite: CHSC (HLST) 2P93 or PHED 2P04.
Students completing this course will forfeit credit in HLST 2P90 and SPMA 2P92.

SPMA 2P96

Sport Law

Introduction to sport-related legal issues and concepts. Topics include discrimination, legislation, regulation and rights; competition, contract, labour, tort and trademark law; administrative, antitrust and constitutional law.

Lectures, seminar, 3 hours per week.

Restriction: open to SPMA, CHSC (HLST) and HLSC majors until date specified in BIRT guide.

Prerequisite: SPMA 1F90 (1P90 and 2P00).

SPMA 2P97

Facility Management

Sport facility theory and operation with an emphasis on the planning, assessment and feasibility functions in private and public facilities.

Lectures, 3 hours per week, plus field experiences.

Restriction: open to SPMA majors until date specified in BIRT guide.

Prerequisite: SPMA 1F90 (1P90 and 2P00).

Note: a field experience fee may be charged.

Students completing this course will forfeit credit in SPMA 3P96.

SPMA 3F01

Event and Program Management

Planning and evaluation theory and practice for sport-related events and programs. Topics may include the bidding process, logistical management and future trends.

Lectures, 3 hours per week.

Prerequisites: SPMA 2P05 and 2P97.

Students completing this course will forfeit credit in SPMA 3P01.

SPMA 3P02

Sport Management Field Work

Placement in a local sport or sport-related organization.

Seminar, 2 hours per week; plus field work.

Prerequisites: SPMA 2P05 and 2P06.

SPMA 3P06

Globalization of Sport

The growth and development of sport within the global community. The management structures and organizations which govern international sport organizations and how these interact with the Canadian sport industry.

Lectures, seminar, 3 hours per week.

Prerequisite: SPMA 2P06.

SPMA 3P10

Biomechanics

(also offered as PHED 3P10)

Basic biomechanical concepts applied to the study of human motion. Focus on the action of bodies, kinematically and kinetically, during the performance of various movements.

Sport Management

Lectures, lab, 3 hours per week.

Restriction: open to SPMA and PHED majors with a minimum of 8.0 overall credits.

Prerequisite: PHED 2P04.

Students completing this course will forfeit credit in SPMA 4P10 (PHED 3V90).

SPMA 3P21

Behavioural Concepts in Sport Organizations

Theories, research and current practices emphasizing the fundamentals of managing individuals and groups. Selected topics may include leadership, volunteer recruitment and management, motivation, problem solving; conflict resolution and organizational change.

Lectures, 3 hours per week.

Prerequisite: SPMA 2P05.

Students completing this course will forfeit credit in SPMA 3P20.

SPMA 3P95

Sport Marketing

Marketing concepts and strategies utilized in and through sport and the sport industry. Topics include segmentation, the components of the marketing mix, market research, and the development of a marketing plan.

Lectures, seminar, 3 hours per week.

Prerequisite: SPMA 2P97.

SPMA 3P97

Financial Management

Topics include public and private sector funding, economic impact analysis, sponsorship, partnerships and fundraising related to sport and sport organizations.

Lectures, 3 hours per week.

Prerequisite: SPMA 2P97.

Students completing this course will forfeit credit in SPMA 3P96.

SPMA 3P99

Special Studies in Sport Management

Directed study in specialized areas of sport and exercise management.

Restriction: open to SPMA majors with permission of faculty.

SPMA 3Q07

Quantitative Methods of Inquiry

(also offered as CHSC 3Q07, PHED 3Q07, RECL 3Q07 and TOUR 3Q07)

Quantitative means of understanding, evaluating and interpreting statistical information.

Lectures, lab, 3 hours per week.

Prerequisite: SPMA 2P07.

Students completing this course will forfeit credit in HLST 3P07, PHED 3P08, RECL 3P07, SPMA 3P07 and TOUR 3P07.

SPMA 3Q17

Qualitative Approaches to Inquiry

(also offered as CHSC 3Q17, PHED 3Q18, RECL 3Q17 and TOUR 3Q17)

Theories, approaches, designs, methods and procedures for conducting evaluative analyses.

Lectures, seminar, 3 hours per week.

Prerequisite: SPMA 2P07.

Students completing this course will forfeit credit in HLST 3P17, PHED 3P18, RECL 3P17, SPMA 3P17 and TOUR 3P17.

SPMA 3V90-3V99

Special Topics in Sport Management

Lectures, seminars and practical experiences offered in specialized areas of sport and exercise management.

Lectures, seminar, 3 hours per week.

Restriction: open to SPMA majors with a minimum of 9.0 overall credits.

SPMA 3V90

2000-2001: Internationalization of Sport: A Case Study

The international, national and regional structures which govern the Canadian hockey industry from amateur and professional perspectives. Topics may include management and marketing strategies, youth development, legal and political influences, business and capital challenges and contemporary and future issues.

Lectures, seminar, 3 hours per week, plus field experiences.

Prerequisite: SPMA 2P05 and 2P06.

Note: a field experience fee may be charged.

SPMA 4F02

Sport Management Internship

Advanced placement in a major sport or sport-related organization. Completion of a major project is required.

Seminar, 3 hours per week; plus field work.

Restriction: open to SPMA majors with approval to year 4 (honours).

SPMA 4F05

Research Project

Analysis of research assumptions, methodologies and methods in sport management. Students design and conduct a research project that includes: identification of a research problem, review of literature and methodology, a research proposal, an ethics application, data management and analysis and a formal presentation and report.

Lectures, seminar, 3 hours per week.

Restriction: open to SPMA majors with approval to year 4 (honours).

SPMA 4P06

Economics of Sport and the Sport Industry

Topics may include principles of economic development, commercialization, labour policy and social impacts.

Lectures, 3 hours per week.

Restriction: open to SPMA majors with approval to year 4 (honours).

SPMA 4P07

Sport Sponsorship

Examines the management and delivery of the sport marketing exchange process. Topics include the acquisition, pricing, assessment and evaluation functions of sponsorship.

Lectures, 3 hours per week.

Restriction: open to SPMA majors with approval to year 4 (honours).

SPMA 4P11

Sport Ethics

(also offered as PHED 4P11)

A speculative philosophical approach to ethical issues in sport. Ethics of competition, sportsmanship, cheating and violence in sport, the use of performance-enhancing drugs, equality and excellence, gender equity and the role of intercollegiate sport.

Lectures, 3 hours per week.

Restriction: open to PHED and SPMA majors with a minimum of 12.0 overall credits.

SPMA 4P95

Women in Sport

(also offered as PHED 4P95 and WISE 4P95)

Historical and current issues relating to women's participation in sport. The influence of physiological, psychological and sociological factors on performance.

Lectures, seminar, 3 hours per week.

Restriction: open to SPMA, PHED and WISE majors with a minimum of 12.0 overall credits.

NON-CREDIT

SPMA 0N01

Co-op Work Placement I

First co-op work placement (4 months) with an approved employer.

Restriction: open to SPMA Co-op students.

SPMA 0N02

Co-op Work Placement II

Second co-op work placement (4 months) with an approved employer.

Restriction: open to SPMA Co-op students.

SPMA 0N03

Co-op Work Placement III

Third co-op work placement (4 months) with an approved employer.

Restriction: open to SPMA Co-op students.

Theatre

This program is co-ordinated by the Department of Fine Arts.

Chair
Murray Kropf

General Information

Administrative Assistant, extension 3214
Thistle west 135
<http://www.brocku.ca/finearts/>

The premise of the Theatre program is that the study and practice of theatre is a significant discipline adding to the resources of a liberally-educated person. The program offers a comprehensive introduction to all aspects of theatre. Each year's work includes study of dramatic and theatre theory and opportunities to explore this theory in practice and to develop the skills and awareness necessary to apply it.

Production is to the theatre student what laboratories are to the science student; therefore the program includes a major production in each term as well as various minor productions and projects such as participation in the Spring Arts Festival.

Students in upper year courses have the opportunity to work on major productions in capacities determined by their particular course choices.

Students of all years participate in the Spring Arts Festival according to the demands of their particular courses and their own need for varied experience.

Theatre courses are not normally available to auditors.

Program Notes

1. Some DRAM courses are cycled every two years. Students should consult with the Undergraduate Program Adviser in planning course patterns.
2. A minimum of 60 percent in each of DRAM 1F93 and THEA 1F99 is required in order to proceed as a major.
3. This is a limited enrolment program. Admission to THEA 2F41 and 2F42 is limited to 20 students, determined by academic standing in DRAM 1F93 and THEA 1F99.

4. Students must satisfy context requirements before year 3.
 5. Year 3 courses are normally restricted to students with at least three 2(alpha)00 credits or permission of the instructor.
 6. Students seeking admission to year 4 of the BA with a Major in Theatre must have a minimum average of 65 percent over years 2 and 3 and must consult the Theatre and Dramatic Literature programs before registering for this program.
 7. Students seeking admission to the honours program must have a minimum 70 percent major average and a minimum 70 percent in their DRAM courses. Enrolment in some year 4 courses may be restricted due to space limitations.
 8. In all 20 credit degree programs, at least 12 credits must be numbered 2(alpha)00 or above, six of which must be numbered 2(alpha)90 or above and of these, three must be numbered 3(alpha)90 or above. In all 15 credit degree programs, at least seven credits must be numbered 2(alpha)00 or above, three of which must be numbered 2(alpha)90 or above.
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Honours Program

DRAM 1F93; THEA 1F99, 2F41, 2F42, 2F50, 3F00 and 4F90; two credits from DIEE 3F12, 3P06 and 3P07, THEA 3F40, 3F41, 3F50, 3F52, 3F91; one credit from THEA 4F40, 4F56, 4F94; three credits from DRAM 2F95, 2F97 or 2M93, 2F98, 3F93, 3F97.

BA with a Major

DRAM 1F93, 3F93 or 3F97; THEA 1F99, 2F41, 2F42, 2F50, 3F00, 4F40 or 4F56; one credit from DIEE 3F12, 3P06 and 3P07, THEA 3F40, 3F41, 3F50, 3F52, 3F91; two credits from DRAM 2F95, 2F97 or 2M93, 2F98, 3F93, 3F97; one THEA or DIEE credit numbered 3(alpha)00 or above.

Pass Program

DRAM 1F93; THEA 1F99, 2F41, 2F42, 2F50 and 3F00; one credit from DIEE 3F12, 3P06 and 3P07, THEA 3F40, 3F41, 3F50, 3F52, 3F91; two credits from DRAM 2F95, 2F97 or 2M93, 2F98, 3F93, 3F97.

Combined Major Programs

Honours

DRAM 1F93; THEA 1F99, 2F41, 2F42, 2F50 and 4F90; THEA 4F40 or 4F56; one credit from DIEE 3F12, 3P06 and 3P07, THEA 3F00, 3F40, 3F41, 3F50, 3F52, 3F91, 4F56, 4F40, 4F94, DRAM 2F95, 2F97 or 2M93, 2F98, 3F93, 3F97.

Note: it is recommended that students take one additional DRAM credit before registering in THEA 4F90.

A combined honours program in THEA and DRAM must include at least seven credits from each discipline.

Pass

DRAM 1F93; THEA 1F99, 2F41, 2F42 and 2F50; one additional credit from DIEE 3F12, 3P06 and 3P07, THEA 3F00, 3F40, 3F41, 3F50, 3F52, 3F91, DRAM 2F95, 2F97 or 2M93, 2F98, 3F03, 3F97, FILM 1F94 or other Fine Arts credits are recommended as electives. A combined pass program in THEA and DRAM must include at least five credits from each discipline.

Prerequisites and Restrictions

Students must check to ensure that prerequisites are met. Students may be deregistered, at the request of the instructor, from any course for which prerequisites and/or restrictions have not been met.

Description of Courses

Note that not all courses are offered in every session. Refer to the applicable term timetable for details.

THEA 1F99**Introductory Theatre Practice**

Basic theories of practical theatre and their application. Fundamentals of acting and theatre production. Students will also have the opportunity to develop their potential in production situations.

Lectures, workshops, voice, 5 hours per week; additional production and rehearsal time as required.

Restriction: permission of the instructor (audition required). Consult the department.

Co-requisite: DRAM 1F93.

Note: contact the department office for audition details by May

1. Materials fee required.

Students completing this course will forfeit credit in THEA 1P40 and 1P50.

THEA 2F04**Introduction to Mime**

The study and practice of some aspects of non-verbal theatre performance including mime techniques, mask, pantomime and improvisation. The theoretical component focusses on critical analysis. Development of the ability to express perceptions, both physically in the practical performance work and verbally in the work on critical analysis.

Lectures, seminar, workshop, 20 hours per week for 3 weeks; additional production and rehearsal time as required.

Restriction: permission of the instructor.

Prerequisite: THEA 1F99 (1P40 and 1P50) or DIEE 2P01 and 2P09 (THEA 2F10) or permission of the instructor.

Note: this course is taught by working theatre professionals (*Theatre Beyond Words* - resident company at Brock) and reflects some of the methods used in the creation of their productions. Enrolment limited to 20 students.

THEA 2F41**Stage Craft**

Theory and application of technical theatre production.

Lectures, lab, 5 hours per week.

Restriction: permission of the instructor.

Prerequisites: DRAM 1F93 and THEA 1F99 (1P40 and 1P50).

Co-requisites for theatre majors: THEA 2F42 and THEA 2F50.

Note: enrolment limited to 20 students. Materials fee required.

THEA 2F42**Stage Production I**

Practical work in technical theatre. Students are required to crew senior level productions.

Labs, 5 hours per week; additional crew calls and production time as required.

Restriction: permission of the instructor.

Prerequisites: DRAM 1F93 and THEA 1F99 (1P40 and 1P50).

Co-requisites for theatre majors: THEA 2F41 and THEA 2F50.

Note: enrolment limited to 20 students. Materials fee required.

THEA 2F50**Acting I**

Acting and the principles of dramatic action. Emphasis on developing an increased understanding of the active process and personal technique through both group and individual exercises.

Lectures, workshop, lab, movement lab, 5 hours per week.

Prerequisite: THEA 1F99 (1P40 and 1P50) or permission of the instructor.

Co-requisites for theatre majors: THEA 2F41 and 2F42.

THEA 2M90-2M99**Special Studies in Theatre**

Studies in a specialized area of theatre. Topics to be announced by the department.

Theatre

THEA 3F00

Theatre History and Theory

(also offered as DRAM 3F00)

Studies in theatre history and theoretical perspectives on theatre, emphasizing the relation of theatre to social process.

Lectures, seminar, 3 hours per week.

Prerequisite: THEA 1F99 (1P40 and 1P50) or DRAM 1F93 or permission of the instructor.

Note: Dramatic Literature majors must take this course as DRAM 3F00.

THEA 3F40

Stage Production II

Advanced studies in stage craft and theatre management which may take the form of internships.

Lectures, seminar, workshop, 5 hours per week; additional production time as required.

Restriction: permission of the instructor.

Prerequisites: THEA 2F41 and 2F42 or permission of the instructor.

Note: materials fee required.

THEA 3F41

Design I

Specialist studies in design.

Lectures, seminar, workshop, 5 hours per week; additional production time as required.

Restriction: permission of the instructor.

Prerequisites: THEA 2F41 and 2F42 or permission of the instructor.

Note: materials fee may be required.

THEA 3F50

Acting II

Further studies in acting technique emphasizing the creation of character in dramatic situations.

Lectures, seminar, workshop, 5 hours per week.

Prerequisite: THEA 2F50 or permission of the instructor.

Note: enrolment restricted to 16 students.

THEA 3F52

Directing I

Specialist studies in directing.

Lectures, seminar, workshop, 5 hours per week; additional production time as required.

Prerequisites: THEA 2F41, 2F42, 2F50, DRAM 1F93 and one other DRAM course or permission of the instructor.

Note: materials fee required.

THEA 3F91

Writing for Stage, Screen and Radio

Theory and practice of stage, screen and radio writing. Workshops on scripts in progress. Selected scripts may be produced in the department's annual Spring Arts Festival.

Seminars, workshop, 3 hours per week.

Restriction: permission of the instructor.

Prerequisite: DRAM 1F93 or permission of the instructor.

Note: admission will be based upon submission of a sample of written work and a reading list of plays read in recent past.

THEA 3F99

Honours Tutorial

Advanced study of an independent nature in an area of mutual interest to the student and the instructor.

Restriction: permission of a faculty supervisor.

Note: materials fee may be required.

THEA 3M90-3M99

Advanced Special Studies in Theatre

Topics to be announced.

THEA 3M92

2000-2001: Collective Alternative Theatre

Practical study in small theatre company collective creation.

Seminar, lab/workshop, 4 hours twice a week plus additional rehearsal time.

Restriction: permission of the instructor (audition/interview required). Consult the department.

Prerequisites: THEA 2F41, 2F42 and 2F50 or permission of the instructor.

Note: working as a production team with staff from *Theatre Beyond Words* - resident company at Brock - students will create an original theatre piece on a topic to be determined, interweaving all theatrical disciplines, which can be continued in the community during the summer months.

THEA 4F40

Theatre Administration

Issues in theatre production and administration: theatre structures, creative team work production, operation and outreach.

Lectures, seminar, workshop, 5 hours per week; additional production time as required.

Restriction: permission of the instructor.

Note: materials fee may be required.

THEA 4F56

Advanced Study in Acting and Directing

Students will work together as a small theatre company, collaborating on one or more productions. Acting and directing are taught in tandem as facets of the same analytical technique and then extended into production work.

Lectures, seminar/workshop, 5 hours per week; additional production time as required.

Restriction: approval to year 4 (honours) and permission of the instructor.

Prerequisite: THEA 3F50 or 3F52.

Co-requisite: for THEA (honours) majors: THEA 4F90.

THEA 4F90

Critical Theory and Practice

(also offered as DRAM 4F90)

An advanced study of critical theory, its roots, its application to theatre, dramatic literature and television.

Seminar, 3 hours per week.

Restriction: open to THEA (single or combined) and DRAM (single or combined) majors with a minimum of 14.0 overall credits and a minimum 70 percent major average and a minimum 60 percent non-major average and approval to year 4 (honours).

THEA 4F94

Honours Thesis in Applied Critical Theory

A critical, historical or contemporary thesis. Subject and supervision must be approved by a faculty supervisor before October 15.

Restriction: approval to year 4 (honours) and permission of a faculty supervisor.

Prerequisite: THEA 4F90 (may be taken concurrently).

Tourism Studies

This program is co-ordinated by the Department of Recreation and Leisure Studies.

Co-ordinator
David J. Telfer

Participating Faculty

Mohammed Dore (Economics), Sherry L. Dupuis (Recreation and Leisure Studies), Corrado Federici (French, Italian and Spanish), David A. Fennell (Recreation and Leisure Studies), Dan Glenday (Sociology), Anne Marie Guilmette (Recreation and Leisure Studies), Atsuko Hashimoto (Recreation and Leisure Studies), Peggy Hutchison (Recreation and Leisure Studies), (Jane Koustas (Canadian Studies), John K. Larsen (Recreation and Leisure Studies), Eli Levanoni (Management, Marketing and Human Resources), John Middleton (Environment), Don McRae (Germanic and Slavic Studies), George S. Nogradi (Recreation and Leisure Studies), David J. Telfer (Recreation and Leisure Studies), John K. Yardley (Recreation and Leisure Studies)

General Information

Administrative Assistant, extension 3259
Physical Education 238
<http://www.brocku.ca/tourism/>

The program in Tourism Studies offers four-year programs of study leading to a Bachelor of Tourism Studies honours degree and a Bachelor of Tourism Studies. The requirement for graduation with a Bachelor of Tourism Studies honours degree is a minimum 70 percent major average and a minimum 60 percent non-major average in the remaining credits. The minimum major average for graduation with a Bachelor of Tourism Studies is 60 percent and a minimum 60 percent overall average.

Students must select a program stream in either Tourism Management or Tourism Planning and Development. The program offers an interdisciplinary approach to the study of tourism.

The program stream in Tourism Management provides opportunities for students to pursue tourism careers such as supervisors and entry level managers in: guest services, attractions, transportation, recreation facilities and travel services such as tour operations and travel agency management, visitor and convention bureaus, and is designed to qualify graduates for a wide range of positions in both the public and private sectors. Students acquire management and administrative skills from tourism, recreation and leisure studies and business perspectives.

The program stream in Tourism Planning and Development is designed for students pursuing careers such as economic development officers, planning consultants in local to multinational organizations, municipal, provincial or national government agencies, attractions or visitor activity managers. This stream combines elements of recreation and leisure studies, environmental studies and geography to examine aspects of tourism planning and development in depth.

Program Notes

1. A minimum 60 percent in both TOUR 1P90 and 1P91 is required to continue as a major in Tourism.
2. ERSC 1F90 or GEOG 1F91 is recommended as the Science context credit and CANA 1F91 as the Humanities context credit. In the Management stream ECON 1P91 and 1P92 are recommended as the Social Science context credit. In the Planning and Development stream GEOG 1F90 is recommended as the Social Science context credit (students taking GEOG 1F90 are not eligible to take GEOG 1F91 as the Science context credit).
3. FREN 1P01, 1P02, 1P03, 1F90; ITAL 1F00, 1F01, 1F90; SPAN 1F00, 1P10, 1F90; GERM 1P01, 1P02, 1F90; JAPA 1P00, 1P01, 1P80, 1P81; MAND 1P00, 1P01, 1P80, 1P81 are approved language courses.
4. LABR 1P92, 2P92, 2P32, ENTR courses, RECL 2P10, 3P09, 3P10, 3P20, OBHR 2P51, ACTG and MKTG courses are recommended electives for the Tourism Management stream.
5. TOUR 3P49; 3V10-3V99, 4P21; ENVI 3P02; GEOG 2P91, 3P45, 3P60, 3P83 are recommended electives for the Tourism Planning and Development stream.
6. In all 20 credit degree programs, at least 12 credits must be numbered 2(alpha)00 or above, six of which must be numbered 2(alpha)90 or above and of these, three must be numbered 3(alpha)90 or above.

Honours Program

Tourism Management stream

Year 1

TOUR 1P90 and 1P91; COSC 1P90 or 1P98; INTL 1P95; MGMT 1P91 and 1P92; one Humanities context credit or one Science context credit; one Social Science context credit (see program note 2).

Year 2

TOUR 2P07, 2P08, 2P11 and 2P41; ACTG 1P91 and 1P92; the Humanities or Science context credit not taken in year 1 (see program note 1); one language credit (see program note 2).

Year 3

TOUR 3P05, 3P28 and 3P78; TOUR 3P07 or 3P17; MKTG 2P51 and 2P52; one-half RECL credit numbered 2(alpha)90 or above; one-half ACTG, MGMT or MKTG credit numbered 2(alpha)90 or above; one elective credit.

Year 4

TOUR 4F01, 4F02, 4F05 and 4F07; one elective credit.

Tourism Planning and Development stream

Year 1

TOUR 1P90 and 1P91; COSC 1P90 or 1P98; INTL 1P95; one Humanities or one Science context credit; one Social Science context credit (see program note 2).

Year 2

TOUR 2P07, 2P08, 2P11, 2P41, 2P92 and 2P94; the Humanities or Science context credit not taken in year 1 (see program note 2); one language credit (see program note 3).

Year 3

TOUR 3P05, 3P18, 3P66, 3P78 and 3V60; TOUR 3P07 or 3P17; one-half RECL credit numbered 2(alpha)90 or above; one-half ENVI credit numbered 2(alpha)90 or above; one elective credit.

Year 4

TOUR 4F01, 4F02, 4F05 and 4F07; one elective credit.

Bachelor of Tourism with a Major

This program is identical to the honours program listed above in years 1 to 3. It differs from the honours program in that honours standing is not required for entry into year 4, and year 4 does not include the research project and thesis courses.

Year 4

TOUR 4F01, 4F05, 4F08 and 4P03; one and one-half elective credits.

Brock/Niagara College Articulation Agreement

Niagara College Tourism diploma graduates who have achieved a minimum 70 percent overall average will be granted up to seven and one-half credits, as determined by the Office of the Registrar towards their Bachelor of Tourism Studies degree.

Prerequisites and Restrictions

Students must check to ensure that prerequisites are met. Students may be deregistered, at the request of the instructor, from any course for which prerequisites and/or restrictions have not been met.

Description of Courses

Note that not all courses are offered in every session. Refer to the applicable term timetable for details.

TOUR 1P90

Introduction to Recreation Services

(also offered as RECL 1P90)

Foundations of recreation service delivery systems. The development of public, quasi-public and private/commercial recreation systems in Canada.

Lectures, seminar, 3 hours per week.

Students completing this course will forfeit credit in RECL 1F91.

TOUR 1P91

Introduction to Leisure Studies

(also offered as RECL 1P91)

Reviewing past and present leisure experiences. Theoretical and conceptual bases of understanding leisure.

Lectures, seminar, 3 hours per week.

Students completing this course will forfeit credit in RECL 1F91.

TOUR 2P07

Introduction to Research Designs and Evaluation

(also offered as RECL 2P07 and SPMA 2P07)

Principles and techniques for research. Issues concerning the construction, administration and evaluation of data collection as well as the processing and analysis of data.

Lectures, lab, 3 hours per week.

Restriction: open to TOUR, RECL and SPMA majors.

Prerequisite: COSC 1P90 or 1P98 or permission of the instructor.

Students completing this course will forfeit credit in CHSC 2Q07, HLST 2P07, PHED 2P08 and PHED 2Q07.

TOUR 2P08

Introduction to Tourism

(also offered as RECL 2P08)

Socio-cultural, environmental and economic impact of tourism. Elements drawn from recreation, sociology, psychology, geography, economics and business.

Lectures, seminar, 3 hours per week.

Prerequisites: TOUR 1P90 and 1P91 (RECL 1F91).

Tourism Studies

TOUR 2P11

The Social Psychology of Leisure and Recreation

(also offered as RECL 2P11)

The social psychological dimensions of human behaviour during free time including lifestyle, social habits and motives for leisure and recreation.

Lectures, seminar, 3 hours per week.

Prerequisites: TOUR 1P90 and 1P91 (RECL 1F91) or CHSC (HLST) 1F90.

TOUR 2P41

Economics of Tourism and Leisure Services

(also offered as ECON 2P41 and RECL 2P41)

The nature and structure of the entertainment industry including professional sports, film, television, music and broadcasting industries; how the demand for tourism and leisure activities is affected by age, fluctuations in income levels, work practices and exchange rates. Government funding for education-related activities and leisure activities.

Lectures, 3 hours per week.

Restriction: open to students with a minimum of 4.0 credits.

Not open to ECON (single or combined) majors, BBE or ENEC students.

TOUR 2P92

Conservation Planning

(also offered as ENVI 2P92)

Application of ecological theory to environmental planning for conservation of species and ecosystems in a world dominated by human activities. Attitudes, values and approaches: conservation, preservation, utilitarianism, stewardship and management. Co-existence of humans and wild life in parks, reserves, zoos and productive landscapes. Combining conservation with development. Conservation programs, policies and legislation.

Lectures, seminar, workshop, 3 hours per week.

Prerequisites: ENVI (ENVP) 1P90, 1P91 and MATH 1P98 or permission of instructor.

Students completing this course will forfeit credit in ENVP 2P92 and 3P42.

TOUR 2P94

Global Conventions on Environment and Development

(also offered as ENVI 2P94 and INTL 2P94)

Attempts of the global community to set policy through processes such as the World Conservation Strategy, the Brundtland Commission, Agenda 21 and the Commission on Sustainable Development.

Workshop, seminar, 3 hours per week.

Prerequisites: ENVI (ENVP) 1P90 and 1P91 or INTL 1P95 and MATH 1P98 or permission of instructor.

Students completing this course will forfeit credit in ENVP 2P94 and 3P44.

TOUR 3P05

Leisure Services Field Work

(also offered as RECL 3P05)

Practical experiences in specific leisure service agencies. Leadership, programming and community resource develop-

ment and placement in a community recreation or tourism setting.

Seminars, field work, 3 hours per week.

Restriction: open to TOUR and RECL majors with a minimum 60 percent major average and a minimum of 9.5 overall credits.

TOUR 3P18

Tourism Planning and Development

(also offered as RECL 3P18)

Planning and development of tourism resorts, attractions, tourism sites and regional economies through tourism; consideration of regional, provincial and national developments.

Lectures, seminar, 3 hours per week.

Prerequisite: TOUR 2P08.

TOUR 3P28

Interactive Travel Distribution Channels

(also offered as RECL 3P28)

The nature and scope of interactive market distribution channels for travel products and services including the Internet and global distribution systems.

Lectures, seminar, 3 hours per week.

Prerequisite: TOUR 2P08.

TOUR 3P49

Gender and Environment

(also offered as ENVI 3P49 and WISE 3P49)

Theoretical perspectives on feminism and eco-philosophies such as eco-feminism, deep ecology and social ecology. Implications for local, national and global policy.

Lectures, seminar, 3 hours per week.

Restriction: open to TOUR majors, ENVI (ENVP) (single or combined) majors, ENVI (ENVP) certificate students and WISE majors.

Prerequisites: one of ENVI (ENVP) 1P90, 1P91, WISE 2F90, 2P91 or permission of the instructor.

Students completing this course will forfeit credit in ENVP 3P49.

TOUR 3P66

Ecotourism

(also offered as RECL 3P66)

Importance of ecotourism as a global phenomenon. Analysis of ecotourism as it relates to sustainability and other forms of alternative tourism, including impacts, risk management, programming, tour operation, ethics, development, marketing and parks management.

Lectures, 3 hours per week.

Prerequisite: TOUR 2P08.

Students completing this course will forfeit credit in TOUR (RECL) 3V66.

TOUR 3P78

International Tourism

(also offered as RECL 3P78)

Changes in power relations, environment, society and economy through the globalization of tourism. Human rights and other critical issues of international tourism.

Lectures, seminar, 3 hours per week.

Prerequisite: TOUR 2P08 or permission of the instructor.

TOUR 3Q07

Quantitative Methods of Inquiry

(also offered as CHSC 3Q07, PHED 3Q08, RECL 3Q07 and SPMA 3Q07)

Quantitative means of understanding, evaluating and interpreting statistical information.

Lectures, lab, 3 hours per week.

Prerequisite: TOUR 2P07.

Students completing this course will forfeit credit in HLST 3P07, PHED 3P08, RECL 3P07, SPMA 3P07 and TOUR 3P07.

TOUR 3Q17

Qualitative Approaches to Inquiry

(also offered as CHSC 3Q17, PHED 3Q17, RECL 3Q17 and SPMA 3Q17)

Theories, approaches, designs, methods and procedures for conducting evaluative analyses.

Lectures, seminar, 3 hours per week.

Prerequisite: TOUR 2P07.

Students completing this course will forfeit credit in HLST 3P17, PHED 3P18, RECL 3P17, SPMA 3P17 and TOUR 3P17.

TOUR 3V10-3V99

Variable Topics in Tourism

Specific topics to be selected.

Lectures, seminar, 3 hours per week.

TOUR 3V60

2000-2001: Tourism and Rural Development

(also offered as GEOG 3V60)

Provides overview of tourism as it intersects with rural development theory, processes and planning. Examines various social, environmental, cultural and economic problems, consequences and opportunities of tourism in a rural development context. Incorporates examples of rural festivals, wineries and agri-tourism as means to understand appropriate rural tourism development.

Lectures, 4 hours per week.

Prerequisite: TOUR 2P08 or GEOG 1F90.

TOUR 3V64

2000-2001: Third World Cities

(also offered as ENVI 3V64)

Sustainable development policy for cities in the Third World, in the context of the 1996 HABITAT II Conference; principles of the city as an ecosystem; ecological, economic, political and social constraints and opportunities for creative change.

Lectures, seminar, 3 hours per week.

Prerequisites: ENVI (ENVP) 1P90 and 1P91 or permission of the instructor.

Students completing this course will forfeit credit in ENVP 3V64.

TOUR 3V88

2000-2001: Tourism Field Trip

Investigations into tourism through applications of methods and techniques to analyse field data.

Lectures, seminar, fieldwork.

Prerequisites: TOUR 2P07 and 2P08; TOUR 3P07 or 3P17 or permission of the instructor.

Note: Orientations begin in January to design and plan a one-week field trip in a selected area departing in early May. Additional expenses will be incurred depending on destination selected.

TOUR 4F01

Contemporary Issues in Tourism

Issues and trends in tourism management and planning. Economic, social, environmental and political aspects of tourism management and development. Management and planning case studies are examined at local to international levels.

Lectures, 3 hours per week.

Restriction: open to TOUR majors.

TOUR 4F02

Honours Thesis

Individual research thesis carried out under the direction of a faculty advisor in a student's area of interest.

Lectures, 3 hours per week.

Restriction: open to TOUR majors with a minimum 70 percent major average.

Note: involves submission of detailed written proposal before May 1 prior to entering year 4. Options include a formal thesis, a research journal manuscript or presentation for a research symposium or professional conference.

TOUR 4F05

Field Work Project

(also offered as RECL 4F05)

Practical experience through placement in community recreation and tourism agencies which may be government funded or privately owned.

Seminars, field work, 3 hours per week.

Restriction: open to TOUR and RECL majors with approval to year 4 (honours).

TOUR 4F07

Research Project

(also offered as RECL 4F07)

Development of appropriate and relevant research designs in recreation and leisure studies.

Lectures, seminar, 3 hours per week.

Restriction: open to TOUR and RECL majors with approval to year 4 (honours).

Note: students propose a research problem, review the literature, discuss methodology, collect and analyze the data, and make a formal presentation.

Tourism Studies

TOUR 4F08

Destination Planning and Management

Tourism destination planning and management concepts through the use of case studies. Procedures and standards for planning and implementing tourism development in destinations while examining the interrelationship between physical planning and other factors.

Lectures, 3 hours per week.

Prerequisite: TOUR 2P08 or permission of the instructor.

TOUR 4P03

Directed Project

Development of an applied research project in student's area of interest.

Lectures, 3 hours per week.

Prerequisite: TOUR 3Q07 (3P07) or 3Q17 (3P17).

Note: students propose a research problem, review the literature, discuss appropriate methodology, analyze data, recommend solutions and make a formal presentation.

TOUR 4P21

Issues of the Global System

(also offered as ENVI 4P21 and INTL 4P21)

Emphasis on power relationships, economic factors, business transactions, technological transnationalism and extra-state phenomena such as pollution and disease. Activities to share and enhance the learning experiences of participants. The role and possibilities for leadership, with a view to leadership development.

Seminar, 3 hours per week.

Restriction: students must hold a minimum 14.0 overall credits or permission of the Chair.

Students completing this course will forfeit credit in ENVP 4P21.

Visual Arts

*This program is co-ordinated by
the Department Fine Arts.*

Chair
Murray Kropf

General Information

*Administrative Assistant, extension 3214
Thistle west 135
<http://www.brocku.ca/finearts/>*

The Visual Arts program consists of studio and art history courses which provide a practical and critical understanding of the visual arts. Emphasis is placed on personal development. To this end students are introduced to a range of historical, theoretical and critical approaches to art-making and to the investigation of cultural documents. Students are encouraged to extend their experience through exposure to events sponsored by Visual Arts and the Department of Fine Arts.

Studio activities which include intuitive, analytical and conceptual approaches are designed with the aspirations of the student artist in mind. Options are encouraged in the studio with introductory or advanced courses in foundation, drawing, painting and interdisciplinary studio; additional courses in sculpture, photography or computer imaging broaden the experience and introduce the photographic, video or electronic medium to students. Students are assisted by artist-teachers who have professional experience and standing in the disciplines they teach.

Art history courses examine the development of artistic styles as well as the critical and aesthetic issues that these styles bring into play. Major artists and movements are related to their cultural contexts and artistic traditions with the goal of developing critical as well as aesthetic acumen.

Enrolment in all studio courses is limited to 15 students. VISA 4F06 may also be restricted due to space limitations.

Program Notes

1. VISA 1F90 must be taken in year 1. VISA majors should also take VISA 1P93 and 1P94 or 1P96 and 1P97 in year 1.
2. From the following list, no more than three VISA credits

may be counted toward an honours degree, single or combined major, and no more than two for a pass degree: VISA 3P22, 3P23, 3P24, 3P25, 4M00-4M09, 4P13, 4P14.

3. Students who do not have the necessary prerequisites for studio courses (VISA 1P93, 1P94, 1P96, 1P97, 2F05, 2F26, 2F95, 2F96, 2P02, 2P03, 2P93, 2P94, 3F96, 3P02, 3P03, 3P93, 3P94, 4F06) may be admitted by portfolio. Details are available from the Administrative Assistant. Enrolment in these courses will be limited to 15 students; participation as an auditor is not permitted.

4. Year 3 courses are normally restricted to students with a minimum of three credits numbered 2(alpha)00 or above or permission of the instructor.

5. Non-majors may enrol in a maximum of one VISA studio course without a portfolio.

6. Portfolio evaluation and interview are required for admission to the Visual Arts Program. Consult the department.

7. In all 20 credit degree programs, at least 12 credits must be numbered 2(alpha)00 or above, six of which must be numbered 2(alpha)90 or above and of these, three must be numbered 3(alpha)90 or above. In all 15 credit degree programs, at least seven credits must be numbered 2(alpha)00 or above, three of which must be numbered 2(alpha)90 or above.

Honours Program

VISA 1F90, 1P93, 1P94, 1P96, 1P97, 3P90, 3P91 and 4F06; VISA 2P93, 2P94, 3P93 and 3P94 or VISA 2F96 and 3F96; two credits from VISA 2F05, 2F26, 2F94, 2F95, 2M90-2M99, 2P02, 2P03, 3M90-3M95, 3P02, 3P03; one credit from VISA 2P40, 2P41, 2P50, 2P51, 2P90, 2P91, 3M00-3M04, 3P05, 3P06, 3P22, 3P23, 3P24, 3P25; two VISA studio credits.

Pass Program

VISA 1F90, 1P93, 1P94, 1P96 and 1P97; one credit from VISA 2F05, 2F26, 2F95, 2P02, 2P03; two credits from VISA 2F94, 2F96, 2M90-2M99, 2P93, 2P94, 3P02, 3P03; one credit from VISA 2P40, 2P41, 2P50, 2P51, 2P90, 2P91, 3M00-3M04, 3P05, 3P06, 3P22, 3P23, 3P24, 3P25, 3P90, 3P91; one VISA studio credit.

Visual Arts

Combined Major Programs

Honours

VISA 1F90, 1P93, 1P94, 1P96 and 1P97; four VISA credits.

Pass

VISA 1F90; four VISA credits.

Prerequisites and Restrictions

Students must check to ensure that prerequisites are met. Students may be deregistered, at the request of the instructor, from any course for which prerequisites and/or restrictions have not been met.

Description of Courses

Note that not all courses are offered in every session. Refer to the applicable term timetable for details.

**VISA courses which are cycled every two years.

VISA 1F90

Introduction to the History of Art: from Prehistory to the Present

A critical survey of major styles in architecture, sculpture and painting from antiquity to the 20th century. The principal monuments, buildings or studio artifacts, their period characteristics, the artist's cultural role and the critical or theoretical trends that have influenced our reading of the history of art.

Lectures, seminar, 3 hours per week.

Note: no studio work.

VISA 1P93

Introduction to Drawing

Fundamental principles of drawing. Analytic, creative and graphic notation.

Lectures, studio work, 5 hours per week.

Restriction: open to students admitted to VISA or VISA (single or combined) majors.

Note: portfolio assessment required prior to registration. Enrolment limited to 15 students. Materials fee required. Students may need additional materials which they must supply.

Students completing this course will forfeit credit in VISA 1F92.

VISA 1P94

Figure Drawing

Fundamentals of drawing the figure anatomically and expressively.

Lectures, studio work, 5 hours per week.

Restriction: open to students admitted to VISA or VISA (single or combined) majors.

Prerequisite: VISA 1P93.

Note: enrolment limited to 15 students. Materials fee required. Students may need additional materials which they must supply.

Students completing this course will forfeit credit in VISA 1F92.

VISA 1P96

Foundation Studio

The fundamental processes, aesthetic and intellectual conventions of studio practice, the application and history of studio techniques, and analysis of stylistic, formal and creative concepts that have sustained art-making from the beginning. Emphasis on individual and group projects, problem solving, two- and three-dimensional principles and the formal, conceptual and historical influences that define the artist's role within the context of the studio.

Lectures, studio work, 5 hours per week.

Restriction: open to students admitted to VISA or VISA (single or combined) majors.

Prerequisite: permission of Chair.

Note: portfolio assessment required prior to registration. Enrolment limited to 15 students. Materials fee required. Students may need additional materials which they must supply.

Students completing this course will forfeit credit in VISA 1F96.

VISA 1P97

Studio Now: Introduction to Contemporary Practice

The making, thinking and language of contemporary art from the perspective of the studio practitioner. Field trips, visits to exhibitions, studio and written assignments exploring the dynamics between contemporary art practice, popular, critical or theoretical perceptions of art. Emphasis on multimedia, alternative or marginal practices, current studio trends and the cultural reception of art.

Lectures, studio work, gallery visits, 5 hours per week.

Restriction: open to students admitted to VISA or VISA (single or combined) majors.

Prerequisite: VISA 1P96.

Note: enrolment limited to 15 students. Materials fee required. Students may need additional materials which they must supply.

Students completing this course will forfeit credit in VISA 1F96.

VISA 2F05

Introduction to Sculpture

The fundamentals of three-dimensional work: design, construction and formal analysis. Emphasis on modelling techniques and principles of assemblage including mold or form

making, casting and fabrication.

Lectures, studio work, 20 hours per week.

Restriction: open to VISA (single or combined) majors until date specified in BIRT guide.

Note: offered in summer session only. Enrolment limited to 15 students. Materials fee required. Students may need additional materials which they must supply.

VISA 2F26

Introduction to Photography

The fundamentals of the camera, the exposure and processing of black and white film and basic darkroom printing with an emphasis on non-silver and alternative processes and their relationship to other art forms. Reference to the history of photography, critical analysis and photographic theory will supplement group critiques.

Lectures, studio work, off-campus visits, 20 hours per week.

Restriction: open to VISA (single or combined) majors until date specified in BIRT guide.

Prerequisite: VISA 1P97 (1F96) or permission of the instructor.

Note: offered in summer session only. Enrolment limited to 15 students in studio courses. Materials fee required. Students may need additional materials which they must supply.

VISA 2F95

Introduction to Digital Imaging

(also offered as COMM 2F95)

Digital image creation and processing from basic concepts to applications in print and screen-ready production including the use of vector-based draw, bit-map paint and page layout software. Projects emphasizing resolution, scanning, file formats, colour dimensions and calibration, use of the digital camera, colour-print technologies and web page construction. Readings on the theoretical implications of digital imagery and Internet communications to complement project-based assignments.

Lectures, lab, 5 hours per week.

Restriction: open to VISA (single or combined) or COMM (single or combined) majors until date specified in BIRT guide.

Prerequisite: VISA 1P97 (1F96) or COMM 1F90 or permission of the instructor.

Note: enrolment limited to 15 students. Materials fee required. Students may need additional materials which they must supply.

VISA 2F96

Interdisciplinary Workshop I

The currency of multimedia and the influences of interdisciplinary practice on conceptual, video, performance and information art, public projections and site-specific or installation art. Emphasis on collective and individual exhibition practices, alternative spaces, applied technology and critical approaches to institutional, cultural or independent models of art.

Lectures, studio work, off-campus projects, 5 hours per week.

Prerequisite: VISA 1P97 (1F96) or permission of the instructor.

Note: enrolment limited to 15 students. Materials fee required. Students may need additional materials which they must supply.

VISA 2M90-2M99

Special Studies in Studio

Studies in a specialized area of the visual arts.

VISA 2P02

Painting I

The fundamentals of painting: introduction to colour theory, media and methods.

Lectures, studio work, 5 hours per week.

Restriction: open to VISA (single or combined) majors.

Prerequisites: VISA 1F90 and either VISA 1P94 (1F92) or 1P97 (1F96) or permission of the instructor.

Note: enrolment limited to 15 students. Materials fee required. Students may need additional materials which they must supply.

Students completing this course will forfeit credit in VISA 2F03.

VISA 2P03

Painting II

The fundamentals of painting: introduction to the analytic, narrative and expressive concepts of acrylic painting.

Lectures, studio work, 5 hours per week.

Restriction: open to VISA (single or combined) majors.

Prerequisite: VISA 2P02.

Note: enrolment limited to 15 students. Materials fee required. Students may need additional materials which they must supply.

Students completing this course will forfeit credit in VISA 2F03.

VISA 2P40

Early to High Renaissance Art and Architecture

The major monuments, buildings and artworks of the period from several critical perspectives including the humanist influence on the arts in Florence and Rome, the issue of patronage and the question of the artist's cultural status.

Lectures, seminar, 3 hours per week.

Prerequisite: VISA 1F90 or permission of the instructor.

Students completing this course will forfeit credit in VISA 2F40.

VISA 2P41

Baroque Art and Architecture

The influence of artists such as Caravaggio, Gentileschi, Rembrandt, Rubens and Poussin examined in terms of the broader definition of Baroque art within 17th- and 18th-century Europe.

Lectures, seminar, 3 hours per week.

Prerequisite: VISA 1F90 or permission of the instructor.

Students completing this course will forfeit credit in VISA 2F40.

**VISA 2P50

Canadian Identities: From Nouvelle France to the Mid-20th Century

Canadian cultural life from *Nouvelle France* to the art and architecture of Confederation; from 18th-century topographi-

Visual Arts

cal sketches to the landscape icons of the Group of Seven from the Social Realism of the 1930s to the beginnings of abstraction; with an emphasis on historical identity, cultural definition and nationalism in art.

Lectures, seminar, 3 hours per week.

Prerequisite: VISA 1F90 or permission of the instructor.

Students completing this course will forfeit credit in VISA 2F50.

**VISA 2P51

Canadian Art since 1945: Contemporary Trends

Major conceptual, critical and theoretical concerns of the visual artist; from Les Automatiste to neo-expressionism, Pop to neo-Pop, conceptual art to photo-conceptualism, installation to site-specific sculpture, video to multi-media.

Lectures, seminar, 3 hours per week.

Prerequisite: VISA 1F90 or permission of the instructor.

Students completing this course will forfeit credit in VISA 2F50.

**VISA 2P90

Art in Revolution: 1750-1851

Art's role and function within the paradigm shifts of the modern world, its relation to politics, social and cultural change. Neoclassicism and the principal movements leading up to the French Revolution and beyond, Romanticism, Realism and the Industrial Revolution.

Lectures, seminar, 3 hours per week.

Prerequisite: VISA 1F90 or permission of the instructor.

Students completing this course will forfeit credit in VISA 2F90.

**VISA 2P91

Modernism, Modernity and Contemporaneity: 1851-1907

Thematic examination of individuality, contemporaneity and progress in the context of the period's cultural, political and technological changes.

Lectures, seminar, 3 hours per week.

Prerequisite: VISA 1F90 or permission of the instructor.

Students completing this course will forfeit credit in VISA 2F90.

VISA 2P93

Drawing III

Further investigation of drawing materials and techniques with emphasis on compositional structures.

Lectures, studio work, 5 hours per week.

Restriction: open to VISA (single or combined) majors.

Prerequisite: VISA 1P94 (1F92).

Note: enrolment limited to 15 students. Materials fee required.

Students may need additional materials which they must supply.

Students completing this course will forfeit credit in VISA 2F92.

VISA 2P94

Drawing IV

Idea development, integration of media and conceptual approaches.

Lectures, studio work, 5 hours per week.

Restriction: open to VISA (single or combined) majors.

Prerequisite: VISA 2P93.

Note: enrolment limited to 15 students. Materials fee required.

Students may need additional materials which they must supply.

Students completing this course will forfeit credit in VISA 2F92.

VISA 3F96

Interdisciplinary Workshop II

Development of independent strategies leading to self-sustained projects with emphasis on public exhibition, networking, group or individual dissemination; consideration of the influences of new technologies including video, computer imaging and information vectors and their influence on current art practice; the examination of the artist's persona within the context of media, cultural or institutional definitions; critical approaches to image and gender in contemporary studio practice.

Lectures, studio work, off-campus projects, 5 hours per week.

Prerequisite: VISA 2F96.

Note: enrolment limited to 15 students. Materials fee required.

Students may need additional materials which they must supply.

VISA 3F99

Honours Tutorial

Advanced study in an area of mutual interest to the student and the instructor.

Restriction: permission of the Chair.

Note: a written proposal must be approved before registration.

VISA 3M00-3M04

Special Studies in Art History

Prerequisite: VISA 1F90 or permission of the instructor.

VISA 3M01

2000-2001: Women in Art

(also offered as WISE 3M01)

Contributions of women artists to the history of Western Art.

Lectures, seminar, 6 hours per week.

Note: artists presentations and gallery visits.

VISA 3M05-3M10

Art Studies Abroad

A unique cultural, architectural or regional setting examined through the eye of the visual artist, critic or art historian. Utilizing the host country's institutional resources, museums and galleries. For students with an interest in both studio and art history.

Restriction: permission of the Chair.

Prerequisite: one VISA credit or permission of the instructor.

VISA 3M90-3M95

Special Studies in Visual Arts: Praxis
Studies that combine theory and studio.

VISA 3P02

Painting III

Further studies in the painting process with emphasis on the search for personal mythology.

Lectures, studio work, 5 hours per week.

Prerequisite: VISA 2P03 (2F03).

Note: enrolment limited to 15 students. Materials fee required. Students may need additional materials which they must supply.

Students completing this course will forfeit credit in VISA 3F03.

VISA 3P03

Painting IV

Further studies in the painting process with emphasis on the interrelationship between idea, material and imagery.

Lectures, studio work, 5 hours per week.

Prerequisite: VISA 3P02.

Note: enrolment limited to 15 students. Materials fee required. Students may need additional materials which they must supply.

Students completing this course will forfeit credit in VISA 3F03.

**VISA 3P05

The European Avant-Garde: 1905-1960

Contextual analysis of the European and Russian avant-garde movements in art, design and architecture with an emphasis on principal artists, theoretical or primary documents and the critical reaction.

Lectures, seminar, 3 hours per week.

Prerequisite: VISA 1F90 or permission of the instructor.

Students completing this course will forfeit credit in VISA 3F05.

**VISA 3P06

The American Avant-Garde: 1912-1970

From the Armory Show to the European influence on American art and photography of the Early Century, the International Style in architecture, to the emergence of the New York school, the Pop movement, Minimalism and conceptual art and their hold on the art and culture of the 60s.

Lectures, seminar, 3 hours per week.

Prerequisite: VISA 1F90 or permission of the instructor.

Students completing this course will forfeit credit in VISA 3F05.

VISA 3P22

The Art and Architecture of Iron Age Italy and the Roman Republic

(also offered as CLAS 3P22)

The art and architecture of the cultures of the Italian peninsula, in the first millennium BC, within the framework of cultural change and external influences.

Lectures, seminar, 3 hours per week.

Prerequisite: VISA 1F90 or one credit from CLAS 1P91, 1P92, 1P93, 1P95, 1P97.

VISA 3P23

The Art and Architecture of Rome in the Imperial Age

(also offered as CLAS 3P23)

Roman art and architecture from Augustus to Late Antiquity. Christian art and architecture and the influence of Roman aesthetics on the Renaissance and beyond.

Lectures, seminar, 3 hours per week.

Prerequisite: VISA 1F90 or one credit from CLAS 1P91, 1P92, 1P93, 1P95, 1P97.

VISA 3P24

The Art and Architecture of Early Greece

(also offered as CLAS 3P24)

Greek art and architecture from the Bronze age through the end of the Archaic period within the framework of historical and cultural change.

Lectures, seminar, 3 hours per week.

Prerequisite: VISA 1F90 or one credit from CLAS 1P91, 1P92, 1P93, 1P95, 1P97.

VISA 3P25

The Art and Architecture of Classical Greece and the Hellenistic World

(also offered as CLAS 3P25)

Greek art and architecture from the early Classical era through the Hellenistic period within the framework of historical and cultural change.

Lectures, seminar, 3 hours per week.

Prerequisite: VISA 1F90 or one credit from CLAS 1P91, 1P92, 1P93, 1P95, 1P97.

**VISA 3P90

Readings in Contemporary Art I: 1970-1990

Advanced seminar with an emphasis on what constitutes the paradigm shift from Late Modernism to Postmodernism.

Lectures, seminar, 3 hours per week.

Prerequisite: VISA 1F90 and two credits from VISA 2P50, 2P51, 2P90, 2P91, 3P05, 3P06 or permission of the instructor.

Note: required for all honours students in VISA but open to students with third year standing.

Students completing this course will forfeit credit in VISA 3F95.

**VISA 3P91

Readings in Contemporary Art II: Art Now

Current trends in the production, reception and interpretation of art and discursive approaches to contemporary issues including the critical text, theoretical and cultural readings.

Lectures, seminar, 3 hours per week.

Prerequisite: VISA 3P90.

Note: required for all honours students in VISA but open to students who have a minimum of 9.0 overall credits.

Students completing this course will forfeit credit in VISA 3F95.

Visual Arts

VISA 3P93

Expressive Drawing

Advanced drawing as a means of expressing personal and subjective imagery.

Lectures, studio work, 5 hours per week.

Prerequisite: VISA 2P94 (2F92).

Note: enrolment limited to 15 students. Materials fee required. Students may need additional materials which they must supply.

Students completing this course will forfeit credit in VISA 3F92.

VISA 3P94

Contemporary Drawing

Advanced drawing which questions the boundaries of media, process and creative expression.

Lectures, studio work, 5 hours per week.

Prerequisite: VISA 3P93.

Note: enrolment limited to 15 students. Materials fee required. Students may need additional materials which they must supply.

Students completing this course will forfeit credit in VISA 3F92.

VISA 4F06

Honours Studio

An advanced course in studio concepts.

Studio work, 5 hours per week.

Restriction: permission of the Chair.

Note: enrolment may be restricted due to limitations of space. Each student must submit a written project proposal for Program approval before May 1. Honours standing in VISA is required. Materials fee required. Students may need additional materials which they must supply. Students should contact the department for further information.

VISA 4F99

Honours Thesis

A critical, historical or creative project in the visual arts of mutual interest to the student and the instructor.

Restriction: permission of the Chair.

Note: projects must be arranged in the spring for the following year. A written proposal must be approved before registration. Honours standing in VISA is required.

VISA 4M00-4M09

Study in Mediterranean Lands

(also offered as CLAS 4M00-4M09)

Topographical investigations of ancient sites and monuments. Study tours of the great cities and museums of the Mediterranean world with emphasis on the art and architecture of the Prehistoric, Classical and later periods.

Restriction: permission of the department.

Note: offered in the Summer Session for three or four weeks abroad.

VISA 4P13

The Art and Archaeology of Cyprus

(also offered as CLAS 4P13)

The cultural history of Cyprus from the Neolithic period through the early Byzantine period, based on the archaeological record. The role of Cyprus in the civilization of the eastern Mediterranean.

Lectures, seminar, 3 hours per week.

Prerequisite: VISA 1F90 or one CLAS credit numbered 2(alpha)90 or above or permission of the instructor.

VISA 4P14

The Aegean Bronze Age

(also offered as CLAS 4P14)

The development of the Bronze Age cultures of the Aegean Basin from 3000 to 1100 BC. The art and architecture of the Minoans on Crete and the Mycenaeans on the Greek mainland will be stressed.

Lectures, seminar, 3 hours per week.

Prerequisite: VISA 1F90 or one CLAS credit numbered 2(alpha)90 or above or permission of the instructor.

VISA 4V30-4V39

2000-2001: Topics in Mediterranean Art and Architecture

(also offered as CLAS 4V30-4V39)

Topics and problems in current art historical and archaeological research pertaining to the art and architecture of the ancient Greek or Roman world.

Lectures, seminar, 3 hours per week.

Prerequisite: VISA 1F90 or one credit from CLAS 3P22, 3P23, 3P24, 3P25.

Women's Studies

Director

Robertta Robb, Department of Economics

Participating Faculty

Sharon Abbey (Education), Robert Anderson (Sociology), Barbara Austin (Management, Marketing and Human Resources), Sandra Beckett (French, Italian and Spanish), Judith Blackwell (Sociology), Maureen Connolly (Physical Education), June Corman (Sociology), Nancy DeCourville (Psychology), Ann Duffy (Sociology), Ann Marie Guilmette (Recreation and Leisure Studies), Jane Helleiner (Child and Youth Studies), Peggy Hutchinson (Recreation and Leisure Studies), Karen Krug (Environment), Anna Lathrop (Physical Education), Deborah Leslie (Geography), Ingrid Makus (Political Science), John Michielsen (Germanic and Slavic Studies), MeriJean Morrissey-Clayton (Fine Arts), Joan Nicks (Communications, Popular Culture and Film), John Novak (Education), Donna Patrick (Applied Language Studies), Carmela Patrias (History), Esther Raventos-Pons (French, Italian and Spanish), Mary Frances Richardson (Chemistry), Marilyn Rose (English Language and Literature), Elizabeth Sauer (English Language and Literature), Susan Spearey (English Language and Literature)

Co-operating faculty from:

Applied Language Studies; Canadian Studies; Chemistry; Child and Youth Studies; Classics; Communications, Popular Culture and Film; Community Health Sciences; Economics; English Language and Literature; Environment; Education; Fine Arts; French, Italian and Spanish; Geography; Germanic and Slavic Studies; History; Music; Physical Education; Political Science; Psychology; Recreation and Leisure Studies; Sociology

General Information

Administrative Assistant, extension 4330

Mackenzie Chown C330

The Centre for Women's Studies was approved by the Brock Senate in December, 1990 and is dedicated to the memory of fourteen young women of the École Polytechnique whose death in 1989 dramatized the need for more understanding among women and men.

The combined major program in Women's Studies is designed for students who realize the value of interdisciplinary, cross-cultural approaches to learning and who wish to participate in a program whose subject matter and perspective are neither androcentric nor ethnocentric. The program offers to students a critical awareness of the importance of gender as an essential factor in cultural expressions, human relations and scholarly production.

Students are expected to develop the analytical skills to examine questions derived from feminist theories, as well as to evaluate scholarship that does not take this perspective into account. The program also encourages students to undertake self-generated projects in order to explore the validity of established theoretical frameworks as well as feminist alternatives.

The Centre for Women's Studies examines how gender influences both men and women. It encourages students to develop a critical perspective on assumptions about institutions, ideologies, history, human nature, science, language and culture. Women's Studies serves as an alternative to the traditional curriculum which tends to describe and analyse phenomena from an androcentric viewpoint. One of the strengths of the program is its diversity of perspectives in the critical examination of theoretical and empirical issues. Its ultimate aim is to further human understanding through exploring and respecting differences.

Although the primary objectives of Women's Studies are academic, the program also provides an environment supportive to women in the University and in the community at large. Hence, Women's Studies emphasizes the importance of women's perceptions and self-definition. Because of the level of community interest in and support for Women's Studies, the program promotes activities and encourages research that benefits both the Brock community and women in the greater Niagara Region. It provides a forum for community issues of relevance to women and maintains a liaison with community organizations.

The academic program in Women's Studies is based upon a combined major with humanities, science or social science discipline. The interdisciplinary emphasis of the program encourages any combined major programs which are consistent with its academic objectives and the interests of students.

Students may be admitted to the BA honours program at any time. This program provides students with the opportunity for a more intensive examination of issues in the field than is offered in the pass degree program.

The following course patterns are based on the normal combined major requirements: seven credits in each discipline plus six additional credits for an honours degree; five credits in each discipline plus five additional credits for a pass degree. Students enrolling in a combined humanities and WISE program will be required to complete one credit in a language other than English. Students should consult the co-major discipline department with respect to ancillary requirements.

Students will meet with the Director and with the Chair of the co-major discipline department at the end of the first year of study to ensure that the choice of courses meets the criteria for the combined major degree.

Women's Studies

Program Notes

1. If students are required to do an honours thesis in their co-major discipline they should contact the Director and the Chair of the co-major department to make alternative arrangements. Students are responsible for selecting their own adviser, preferably by the end of year 3. Students will work independently with their adviser to formulate and execute their thesis. Meetings of all students registered in WISE 4F90 will be held to facilitate completing the thesis projects. Each thesis will be graded by two people: the adviser and a designate of the Director.
 2. Students intending to pursue an honours degree should take WISE 2P90 and 2P91 in year 2.
 3. Students in the honours program are required to take seven credits from the core courses in Women's Studies, cross-listed courses or courses approved for credit.
 4. In all 20 credit degree programs, at least 12 credits must be numbered 2(*alpha*)00 or above, six of which must be numbered 2(*alpha*)90 or above and of these, three must be numbered 3(*alpha*)90 or above. In all 15 credit degree programs, at least seven credits must be numbered 2(*alpha*)00 or above, three of which must be numbered 2(*alpha*)90 or above.
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Honours Program

Year 1

WISE 1F90; one credit from the co-major discipline; one Science context credit (SCIE 1F30 or BIOL 1F25 are recommended); one Humanities context credit; one elective credit.

Year 2

WISE 2P90 and 2P91; WISE 2P92 or 2P97; WISE 2P96 or 2P99; two credits from the co-major discipline; one elective credit.

Year 3

WISE 3P90 and 3P91; one WISE credit or one credit from the list of approved WISE courses; two credits from the co-major discipline; one elective credit.

Year 4

WISE 4F90 and 4P91; one-half WISE credit or one-half credit from the list of approved WISE courses; two credits from the co-major discipline; one elective credit.

Pass Program

Satisfactory completion of the first three years of the honours program entitles a student to apply for a pass degree.

Certificate Program

The Centre for Women's Studies also offers a Certificate in Women's Studies. It provides an overview for interested persons who already have a degree in a different field or who do not wish to proceed to a degree. It is of special interest to people working in a related field. The admission requirements are the same as for the degree program. Prospective students should consult with the Director before beginning the certificate program.

The certificate is awarded upon completion of at least five credits in WISE with an overall average of 60 percent.

Required courses:

WISE 1F90, 2P90, 2P91.

Additional courses:

WISE 2P92 or 2P97; WISE 2P96 or 2P99; two additional credits from the list of approved or WISE courses.

Prerequisites and Restrictions

Students must check to ensure that prerequisites are met. Students may be deregistered, at the request of the instructor, from any course for which prerequisites and/or restrictions have not been met.

Description of Courses

Note that not all courses are offered in every session. Refer to the applicable term timetable for details.

WISE 1F90

Introduction to Women's Studies

Gendered character of society and culture from women's perspectives within a variety of feminist theoretical frameworks. Includes issues of violence, equity, class, race, body, sexuality

and diversity. May examine religion and science, legal systems, work, health, history, education and popular culture.
Lectures, seminar, 3 hours per week.

WISE 2F21

The Family

(also offered as SOCI 2F21)

Family patterns including gender roles and the dynamics of family change and development. Topics include marriage and family issues, gender role socialization and change, dual careers, alternative lifestyles, gender roles in cross-cultural perspective and marital and family relationships past, present and future.

Lectures, seminar, 3 hours per week.

Prerequisite: SOCI 1F90 or WISE 1F90 or permission of the instructor.

Students completing this course will forfeit prior credit in CHYS (CHST) 3P38.

WISE 2P61

Women in the Ancient World

(also offered as CLAS 2P61)

Problems and issues of particular relevance to women in Greek and Roman society. Topics include social, political and legal rights, prostitution, religious duties, marriage and children, birth control and abortion.

Lectures, seminar, 3 hours per week.

WISE 2P62

The Politics of Gender in Archaic and Classical Greece

(also offered as CLAS 2P62)

Social issues of ancient Greece as viewed from a modern perspective. Topics include familial bonding, female and male identity, domestic and civil violence, sexuality and social status, power dynamics within the family and the city-state.

Lectures, seminar, 3 hours per week.

WISE 2P86

Women in the Economy

(also offered as ECON 2P86, LABR 2P86 and SOCI 2P86)

Women in the Canadian labour market. Topics include the allocation of time between the household and the labour market, gender segregation in the work place, how earnings are determined, causes of occupational and earning difference by gender - the role of investment in education and discrimination, recent developments in the labour market and their impact on women and men, selected policy issues.

Lectures, 3 hours per week.

Restriction: open to WISE majors until date specified in the BIRT guide. Students must have a minimum of 4.0 overall credits.

WISE 2P90

Women's Issues: Sexuality, Class, Ethnicity

Diverse theoretical perspectives on the intersecting locations of women in terms of sexuality, class, ethnicity and other expressions of social inequality. Classic feminist perspectives

as applied to these issues and related social policies.

Lectures, seminar, 3 hours per week.

Restriction: open to WISE majors until date specified in BIRT guide.

Prerequisite: WISE 1F90 or permission of the instructor.

Students completing this course will forfeit credit in WISE 2F90.

WISE 2P91

The Status of Women: Historical Perspectives

The status of women within Western societies from Neolithic times to 20th-century traditional histories. Feminist and postcolonial perspectives on the development of feminist consciousness through analysis of lives and literary remains.

Lectures, seminar, 3 hours per week.

Prerequisite: WISE 1F90 or permission of the instructor.

WISE 2P92

Women in World Literature

Feminist perspectives on representations of women throughout Western literature by men and women. Barriers to women's writings and analyses of current writings in English by women from diverse, often marginalized backgrounds.

Lectures, seminar, 3 hours per week.

Prerequisite: WISE 1F90 or permission of the instructor.

WISE 2P93

Psychology of Women

(also offered as PSYC 2P93)

The social, personal and political implications of gender. Topics include theoretical perspectives on the study of gender differences, stereotypes, sexuality, biological influences, as well as issues related to achievement, intimacy, mental and physical health, power and justice.

Lectures, seminar, 3 hours per week.

Restriction: open to PSYC (single or combined) and WISE majors until date specified in BIRT guide.

Prerequisite: PSYC 1F90 or WISE 1F90.

WISE 2P94

Women Writers to 1900

(also offered as ENGL 2P94)

Prose, poetry and drama by women from the 17th to the 19th century including Anne Bradstreet, Katherine Philips, Lucy Hutchinson, Aphra Behn, Mary Wollstonecraft, Mary Shelley and Charlotte Brontë.

Lectures, seminar, 3 hours per week.

Prerequisite: one ENGL credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

WISE 2P95

Twentieth-Century Women Writers

(also offered as ENGL 2P95)

Prose, poetry and drama by women in the 20th century including Edith Wharton, Virginia Woolf, Sylvia Plath, Margaret Atwood, Joan Didion, Fay Weldon, Angela Carter and Denise Levertov.

Women's Studies

Lectures, seminar, 3 hours per week.

Prerequisite: one ENGL credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

WISE 2P96

Global Issues for Women in Under-Resourced Nations

Diverse experiences of women and girls in under-resourced nations. Selection of social, political, economic and cultural issues varies. Topics may include war zones, sustainable economies, family planning, global restructuring, legacy of colonial traditions, activist movements and socio-cultural traditions, resistance strategies and policy proposals.

Lecture, seminar, 3 hours per week.

Restriction: open to WISE majors until date specified in BIRT guide.

Prerequisite: WISE 2P90 or permission of the instructor.

Students completing this course will forfeit credit in WISE 2F90.

WISE 2P97

The Mythical Woman in Legend and Religion

The status of women and representations of females within Western myth and mainstream religion from Neolithic to contemporary times. Links between culture, law, education and tradition. Feminist critiques of religious symbolism. Students are required to demonstrate scholarship using feminist frameworks and methodologies.

Lectures, seminar, 3 hours per week.

Prerequisite: WISE 1F90 or permission of the instructor.

WISE 2P98

Women in Germany from 1800 to the Present

(also offered as GERM 2P98)

Literature by women including the Romantics, Realists and post-World War II writers. Men's views of women's issues (Bebel, Forel) and their support of equal rights for women at the end of the 19th century. Lily Braun's social activism.

Lectures, seminar, 3 hours per week.

Prerequisite: WISE 1F90 or GERM 1F90 or permission of the instructor.

Note: given in English.

WISE 2P99

Canadian Women in a Global Context

Social, political, economic and cultural issues. Topics may include rights of Aboriginal women, reproductive rights and ethics, marginalization of immigrant women, activist movements and the impact and inadequacy of government policy.

Lectures, seminar, 3 hours per week.

Restriction: open to WISE majors until date specified in BIRT guide.

Prerequisite: WISE 2P90 or permission of the instructor.

Students completing this course will forfeit credit in WISE 2F90.

WISE 2Q95

Women in North America

(also offered as HIST 2Q95)

Major themes in the history of women in Canada and the United States: native and European women in New France and British North America; women in the American Revolution; the lives of enslaved women; women and industrialization; women in the West; suffrage and social reform; women and the two World Wars; and feminism in the 1960s and 1970s.

Lectures, seminar, 3 hours per week.

WISE 2V90-2V99

Selected Topics in Women's Studies

Topics selected on the basis of faculty expertise.

Seminar, 3 hours per week.

Prerequisite: WISE 1F90.

WISE 2V99

2000-2001: Mothering and Motherhood: Images, Issues and Patterns

(also offered as SOCI 2V99)

Motherhood as it is theorized/analyzed in interdisciplinary feminist scholarship and portrayed in women's fictional or autobiographical writings and art forms. The historical, socio-cultural, psychological, political and racial differences of mothering and motherhood roles, class, cultural and racial differences in mothering and motherhood.

Prerequisite: WISE 1F90 or SOCI 1F90.

WISE 3F97

Screened Women

(also offered as COMM 3F97 and FILM 3F97)

A critical study of women's representation as an aesthetic and cultural subject, from classical Hollywood cinema to contemporary women's cinema, in the context of feminist film theories and including other popular media (i.e., music videos, television).

Lectures, seminar, 3 hours per week; plus weekly film lab.

Prerequisite: one of FILM 2P20 and 2P21, FILM 2F90, WISE 1F90 and WISE 2P91 or permission of the instructor.

WISE 3M00-3M10

Special Topics in Women's Studies

Topics selected on the basis of faculty expertise.

Prerequisite: WISE 2P90 (2F90) or permission of the instructor.

WISE 3M01

2000-2001: Women in Art

(also offered as VISA 3M01)

Contributions of women artists to the history of Western Art.

Lectures, seminar, 6 hours per week.

Prerequisite: VISA 1F90 or permission of the instructor.

Note: gallery visits and artists' presentations.

WISE 3P30

Sociology of Women and Work

(also offered as LABR 3P30 and SOCI 3P30)

Quantitative and qualitative research exploring the societal significance and implications of the change in women's participation in paid employment and domestic labour in this century. Topics include the ghettoization of the female labour force, women in professional and non-traditional occupations, microtechnology, part-time work and unionization.

Lectures, seminar, 3 hours per week.

Prerequisite: one of WISE 1F90, LABR 1P91 and 1P92, SOCI 1F90 or permission of the instructor.

WISE 3P33

Law and Society

(also offered as SOCI 3P33)

Sociological theories of law, Canada's legal institutions, and the Charter of Rights and Freedoms, feminist jurisprudence and critical race studies. Relationships between Canadian law and Canada's social structure and institutions.

Lectures, seminar, 3 hours per week.

Prerequisite: WISE 1F90 or SOCI 1F90 or permission of the instructor.

WISE 3P41

Directed Studies I

Guided readings on a topic that is not covered in the program's regular course offerings.

Restriction: consult the Program Director regarding permission to register. A faculty supervisor must be confirmed prior to registration. Students must have a minimum of 8.0 overall credits.

Note: topics must be chosen in consultation with a faculty member willing to supervise the tutorial.

WISE 3P42

Directed Studies II

Guided readings on a topic that is not covered in the program's regular course offerings.

Restriction: consult the Program Director regarding permission to register. A faculty supervisor must be confirmed prior to registration. Students must have a minimum of 8.0 overall credits.

Note: topics must be chosen in consultation with a faculty member willing to supervise the tutorial.

WISE 3P43

Women and Leisure

(also offered as RECL 3P43)

A feminist critique of leisure theory. Women's leisure explored from an ecological perspective. The ways that women's leisure influences and is influenced by the various domains of their environments (social, political, cultural, physical, historical, psychological and biological).

Lectures, seminar, 3 hours per week.

Prerequisite: RECL 2P11 or permission of the instructor.

WISE 3P49

Gender and Environment

(also offered as ENVI 3P49 and TOUR 3P49)

The intersection between gender and the environment. Theoretical perspectives on feminism and ecophilosophies such as ecofeminism, deep ecology and social ecology. Implications for local, national and global policy.

Lectures, seminar, 3 hours per week.

Restrictions: open to WISE, ENVI (ENVP) (single or combined) and TOUR majors and ENVI (ENVP) certificate students.

Prerequisite: one of ENVI (ENVP) 1P90, 1P91, WISE 2P90 (2F90), 2P91 or permission of the instructor.

WISE 3P51

Gender and Society

(also offered as SOCI 3P51)

Gender as an organizing principle in society. The social construction of masculinity and femininity will be addressed from historical and cross-cultural perspectives. Focus on gender in principal institutions of Canadian society: economy, state, family, education and military. Issues include men and women in non-traditional occupations, women in the military, gender and power.

Lectures, seminar, 3 hours per week.

Prerequisite: SOCI 1F90 or WISE 1F90 or permission of the instructor.

WISE 3P71

Gender and Politics

(also offered as POLI 3P71)

Theoretical and practical issues in the relationships among gender, sex and politics, such as sexual equality and its nature and implications for public and private life.

Lectures, seminar, 3 hours per week.

Prerequisite: WISE 1F90 or one POLI credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

WISE 3P72

Women in Politics

(also offered as POLI 3P72)

Women's participation and influence in the political institutions, processes and policies of modern states, with an emphasis on contemporary Canada.

Lectures, seminar, 3 hours per week.

Prerequisite: WISE 1F90 or one POLI credit numbered 1(alpha)90 to 1(alpha)99 or permission of the instructor.

WISE 3P74

Geography and Gender

(also offered as COMM 3P74 and GEOG 3P74)

The work of feminist geographers. The relationship between gender and space with respect to the organization of the city, architecture of the home, design of the shopping mall, the media, fear, homelessness, gentrification and employment.

Lectures, seminar, 4 hours per week.

Prerequisites: one of WISE 2P90 (2F90), 2P91, COMM 2P20 and 2P21, GEOG 2P02, 2P03, 2P06 or permission of the instructor.

Women's Studies

WISE 3P85

Women Writers of *la francophonie*

(also offered as FREN 3P85)

Francophone women writers outside of France. Ideological and esthetic perspectives. Texts chosen from various genres. Authors may include Hébert, Marchessault, Brossard.

Lectures, seminar, 3 hours per week.

Prerequisites: FREN 2F00 and 2F03.

WISE 3P86

Women Writers of France

(also offered as FREN 3P86)

Texts chosen from various genres. Authors may include M. de France, M. de Navarre, Sévigné, Sand, Colette, de Beauvoir, Duras, Yourcenar.

Lectures, seminar, 3 hours per week.

Prerequisites: FREN 2F00 and 2F03.

WISE 3P90

Contemporary Feminist Thought

Intersections of contemporary and feminist theories as applied to the critical analysis of such issues as pornography, sexuality, humour, work, social inequities, intimacy and identity politics. Controversies and debates among feminists around the world.

Seminar, 3 hours per week.

Restriction: open to WISE majors until date specified in BIRT guide.

Prerequisite: WISE 2P90 (2F90) or permission of the instructor.

Students completing this course will forfeit credit in WISE 3F90.

WISE 3P91

Contemporary Feminist Research Methods

Influence of various feminist and contemporary theoretical orientations on methodologies of cultural, political and rhetorical analysis and critique. The relationships between theory and research methods and the intersections of feminist theories with traditional practices in the process of developing potential research projects.

Seminar, 3 hours per week.

Restriction: open to WISE majors until date specified in BIRT guide.

Prerequisite: WISE 3P90 or permission of the instructor.

Students completing this course will forfeit credit in WISE 3F90.

WISE 3P92

Gender and Sexuality in Childhood and Adolescence

(also offered as CHYS 3P92 and SOCI 3P92)

Historical, cross cultural and sociological approaches to the development of gender identities and sexuality amongst children and adolescents. Topics include the role of families, schools, peers and state policies.

Lectures, seminar, 3 hours per week.

Restriction: open to WISE, CHYS (CHST) (single or combined), SOCI (single or combined) and BA/BEJ majors until date specified in the BIRT guide. Students must have a minimum of 8.0 overall credits.

Prerequisite: one of WISE 2P90 (2F90), 2P91, CHYS (CHST) 2P38, SOCI 2F10.

Students completing this course will forfeit credit in CHST 3P92.

WISE 3P93

Gender and Language

(also offered as LING 3P93)

A survey of major debates concerning language, gender and power in the 20th century.

Lectures, seminar, 3 hours per week.

WISE 3P95

Experiential Learning in Women's Studies

Co-ordinated and theoretically grounded work relating to the participation in and reflection on practical experiences.

Seminars, 3 hours per week; community placements.

Prerequisite: WISE 2P90 (2F90) or permission of the instructor.

WISE 3P96

Women, Men and the Body

(also offered as PHED 3P96)

A critical and reflective examination of historical, philosophical, socio-cultural and religious influences on the body from a variety of feminist perspectives.

Lectures, tutorial, lab, 3 hours per week.

Restriction: open to students with a minimum of 8.0 overall credits.

Prerequisite: WISE 1F90 or PHED 1P93.

Note: Experiential work (somatic, movement, expressive) is part of the course experience.

WISE 3V90-3V99

Special Topics in Women's Studies

Topics selected on the basis of faculty expertise.

Prerequisite: WISE 2P90 (2F90).

WISE 4F90

Honours Thesis

An independent research project under the supervision of a faculty adviser. Directed studies tutorial.

Restriction: open to WISE majors with approval to year 4.

Prerequisite: WISE 3P90 and 3P91.

Co-requisite: WISE 4P91.

Note: provisional registration only. Students contemplating a thesis should consult with the Director at the end of year 3 and must submit a detailed proposal in writing before May 15, prior to entering year 4.

WISE 4P01

Contemporary Hispanic Women Writers

(also offered as SPAN 4P01)

Experimental prose by Hispanic women writers. The study of narrative which challenges the conventions of genre, language, characterization, narration and the act of reading and how these innovations allow women writers to rearticulate the relationships of power, to redefine stereotypes and to reintroduce a feminine

voice and field of vision. Authors may include Bombal, Allende, Poniatowska, Moix, Tusquets and Riera.

Lectures, seminar, 3 hours per week.

Prerequisite: WISE 1F90 or SPAN 2F00 or permission of the instructor.

Note: given in English. Spanish majors complete written assignments and exams in Spanish.

WISE 4P32

Advanced Seminar in the Sociology of Work

(also offered as LABR 4P32 and SOCI 4P32)

Theoretical and research developments in the sociology of work. Topics may include the impact of technological innovation on the labour process, reconceptualizations of work and leisure, changes in the gendered nature of work, the role of the contemporary labour movement and international perspectives on labour and the labour force.

Lectures, seminar, 3 hours per week.

Restriction: approval to year 4 (honours).

Prerequisites: two LABR or SOCI credits or permission of the instructor.

Note: SOCI 2P32 recommended.

WISE 4P33

Advanced Seminar in Law and Society

(also offered as SOCI 4P33)

Specific relationships between Canada's legal institutions and social structure and institutions; law and Aboriginal peoples, family and gender issues, environment, work and technology, feminist critique of legal theory and practice.

Seminars, 3 hours per week.

Restriction: approval to year 4 (honours).

Prerequisite: WISE 3P33 or permission of the instructor.

WISE 4P41

Directed Studies III

Guided readings on a topic that is not covered in the program's regular course offerings. Topics must be chosen in consultation with a faculty member willing to supervise the tutorial.

Restriction: consult the Program Director regarding permission to register. A faculty supervisor must be confirmed prior to registration. Students must have a minimum of 12.0 overall credits.

WISE 4P42

Directed Studies IV

Guided readings on a topic that is not covered in the program's regular course offerings. Topics must be chosen in consultation with a faculty member willing to supervise the tutorial.

Restriction: consult the Program Director regarding permission to register. A faculty supervisor must be confirmed prior to registration. Students must have a minimum of 12.0 overall credits.

WISE 4P51

Advanced Seminar in Gender and Society

(also offered as SOCI 4P51)

Selected issues in gender and society. Topics may include feminist theories, work, family, state, popular culture, race,

militarism and violence.

Lectures, seminar, 3 hours per week.

Restriction: approval to year 4 (honours).

Prerequisites: two SOCI or WISE credits or permission of the instructor.

Note: WISE 3P51 recommended.

WISE 4P91

Honours Seminar

Facilitation of individual thesis proposals including the development of a research question, review of relevant literature and integration of theoretical orientations with methodological applications.

Prerequisite: WISE 3P90 and 3P91.

Co-requisite: WISE 4F90.

Note: consult the Director regarding permission to register.

WISE 4P95

Women and Sport

(also offered as PHED 4P95 and SPMA 4P95)

Historical and current issues relating to women's participation in sport. The influence of physiological, psychological and sociological factors on performance.

Lectures, seminar, 3 hours per week.

Restriction: open to WISE, PHED and SPMA majors with a minimum of 12.0 overall credits.

WISE 4V20-4V29

Selected Topics in Women's Studies

Topics selected on the basis of faculty expertise.

Prerequisite: WISE 1F90.

Departmental Offerings which are Approved Women's Studies Credits

CHSC 2P50	Aspects of Human Sexuality
COMM 2F92	Popular Narrative
COMM 3P96	Issues in Popular Culture
FILM 2F97	Canadian Cinema (also offered as COMM 2F97)
POLI 4P06	Philosophy, Politics and the Family
RECL 3P17	Qualitative Approaches to Inquiry (also offered as CHSC (HLST), SPMA, TOUR 3P17, PHED 3P18)
RECL 3P23	Therapeutic Benefits of Humour (also offered as CHSC (HLST) 3P23)
SOCI 3P83	Family Conflict and Violence

Scholarships, Bursaries, Awards and Financial Assistance

Administration of Awards

Awards which are administered by the University will be made by Senate to qualified candidates; Senate may withhold any award if no candidates qualify. The award of scholarships, bursaries, prizes and medals shall be final when formally announced by the University.

Scholarships

Students need not apply for scholarships administered by the University unless otherwise indicated. Scholarships and awards are allocated at the discretion of the Senate Committee on Awards and Bursaries. In order to ensure equitable distribution of funds, the Committee reserves the right to limit the cumulative monetary value of scholarships and awards that any one student may receive.

Normally, to be eligible for other than an entrance scholarship, a student must be presently registered full-time at Brock and have successfully completed four or more credits in the previous Fall/Winter Session. Students with Special Needs who are full-time but carrying fewer than four credits because of the impact of a disability, as recommended by the Associate Vice-President (Student Services), are also eligible for scholarships. Awards based on donations cannot be guaranteed by the University and can only be forwarded after the funds have been received from the donor. A student who withdraws from the University will have their scholarship pro-rated.

Please note: An asterisk (*) appears beside the value of an endowed scholarship. The figure shown is the amount awarded last year. The value will vary from year to year depending upon income earned by the endowment.

Please visit www.brocku.ca/registrar (follow links to "Student Awards and Financial Aid")

Entrance Scholarships

All applicants, who have not previously attended a post-secondary institution and who apply for full-time study at the University on the basis of an OSSD, are automatically considered for entrance scholarships. Entrance scholarships are awarded on the basis of the six OACs used to establish the student's admission average and are subject to the availability of funds.

The minimum average required for the awarding of a scholarship is determined each year by the Senate Committee on Awards and Bursaries. Notification of an award is made together with the offer of admission.

Bluma Appel Scholarship in Health Studies

Value: \$2000*. Awarded to the student with the highest academic standing, entering the first-year of the Health Studies program.

Donor: Mr. Bram Appel

Established: 1991

Endowed: 1991

Paul Branscombe Memorial Scholarship

Value: \$1250. Awarded by application to a first-year student in the Great Books/Liberal Studies program. Renewable in subsequent years contingent on recipient maintaining a minimum 75% average in the program. Applicants must demonstrate financial need and meet OSAP residency requirements.

Donor: Group 2 Development Limited

Established: 1997

Endowed: 1997

Brock University Entrance Scholarships

Awarded to entering students with no advanced standing (i.e., transfer credits). Minimum averages are established annually to qualify for these scholarships. The scholarship levels for 1999-2000 are:

\$2,500.00 for admit averages 94% and above**

\$1,500.00 for 90.0% - 93.9%**

\$1,000.00 for 80.0% - 89.9%

**Renewable if student maintains 85% average on a minimum of 4.0 credits

Burgoyne Family Scholarships

Value: \$5,000 each. To support five students who are residents of Niagara. A minimum of two recipients will be enrolled in a Business program. The awards will be entrance scholarships which will be renewable to graduation conditional on the above conditions and maintaining a minimum average of 75%. Applicants must demonstrate financial need and meet OSAP residency requirements.

Donor: Burgoyne Holdings Limited

Established: 1997

Endowed: 1997

Scholarships, Bursaries, Awards and Financial Assistance

Roy Cairns Scholarship

Value: \$6000. Awarded annually, by application to a student who is entering first year in the Oenology and Viticulture Program. Applicants must demonstrate financial need and meet OSAP residency requirements.

Donor: Roy Cairns
Established: 1997
Endowed: 1997

Columbia International College Entrance Scholarship

Value: \$3,000. Awarded to the four entering students with the highest admit average from the Columbia International College. Students must have a minimum average of 80% to qualify. This scholarship would replace the Brock Entrance Scholarship and may be renewable, at a lower value, if the student enters with a 90% average or higher.

Established: 1998

Crawford, Smith and Swallow Scholarship

Value: \$2500. Awarded annually to a student entering first-year of an Accounting program in the Faculty of Business. Preferences will be given to students from Regional Niagara. Applicants must demonstrate financial need and meet OSAP residency requirements.

Donor: Crawford, Smith and Swallow Chartered Accountants
Established: 1997
Endowed: 1997

Donohue Scholarships in Business and Science

Value: \$1250 each. Awarded to a student entering i) a Business program; ii) a Business program; with a concentration in Entrepreneurship; and iii) a Science program. The award is renewable contingent upon maintaining a minimum 75% average in the program of study. Applicants must demonstrate financial need and meet OSAP residency requirements.

Donor: Niagara/Baie Comeau Community Foundation
Established: 1997
Endowed: 1997

Edith and Bernard Ennis Scholarship

Value: \$2500. Awarded annually by application to any student who is a graduate of a Welland Public Secondary School (Welland Centennial Secondary School, Welland Eastdale Secondary School and Ecole Secondaire Confederation) and who is entering their first-year in any program. Applicants must demonstrate financial need and meet OSAP residence requirements.

Donor: Edith and Bernard Ennis Foundation
Established: 1997
Endowed: 1997

Kenneth A. Fowler Scholarship

Value: \$5000. Awarded to Niagara students entering the first-year in the Faculty of Business. Applicants will be recommended by the Dean of Business on the basis of the student demonstrating entrepreneurial skill and/or aptitude through a one-page resume. Recipients will continue to receive the

award until graduation contingent on maintaining a minimum average of 75% in full-time studies. Applicants must demonstrate financial need and meet OSAP residency requirements.

Donor: Kenneth A. Fowler
Established: 1997
Endowed: 1997

Allen Goar Scholarship

Value \$1250. Awarded annually to a student entering the first year of the business school who has declared an interest in pursuing the entrepreneur program. The minimum average required for the scholarship is 75%. Applicants must demonstrate financial need and meet OSAP residency requirements. Please indicate your interest in entrepreneurship within the comments section of your application.

Donor: Ann Louise Branscombe and Gail Goar.
Established: 1999
Endowed: 1999

Group 2 Development Scholarship

Value: \$1750. To be awarded by application to a student entering the first-year of a concurrent education program. Renewable in subsequent years contingent on recipient maintaining a minimum 75% average in the program. Applicants must demonstrate financial need and meet OSAP residency requirements.

Donor: Group 2 Development Limited
Established: 1997
Endowed: 1997

Bertha and Bernard Harrison Scholarships

Value: \$1150* each. Five scholarships: awarded to students with outstanding academic achievement, entering each of the faculties of Humanities; Mathematics and Science; Business; Physical Education and Recreation; and Social Sciences.

Donor: Bertha and Bernard Harrison
Established: 1994
Endowed: 1994

Katherine and Jacob Hildebrand Scholarship

Value: 2,500. Awarded to a student entering the Cool Climate Oenology and Viticulture Institute. Applicants must demonstrate financial need. The award is renewable provided satisfactory academic standing is maintained and financial need is demonstrated.

Donor: Katherine and Jacob Hildebrand
Established: 1998
Endowed: 1998

C. Bruce Hill Scholarship

Value: \$2800*. Awarded to incoming first-year student with the highest average.

David S. Howes Scholarship in Business

Value: \$2000. Awarded by application to a student entering the Business program with the highest academic average. Renewable upon maintaining academic average of 80%.

Scholarships, Bursaries, Awards and Financial Assistance

Applicants must demonstrate financial need and meet OSAP residency requirement.

Donor: David S. Howes
Established: 1997
Endowed: 1997

A. Stoddard Jones Scholarship

Value: \$2,400. Awarded as an entrance scholarship on the basis of academic merit. The award is renewable contingent on the student remaining in good standing in the University.

Donors: Mr. and Mrs. A. Stoddard Jones
Established: 1998
Endowed: 1998

KPMG Entrance Scholarship

Value: \$1550. Awarded to a student from the Niagara Region, with the highest academic standing, entering the Co-op Accounting program.

Donor: KPMG Chartered Accountants
Established: 1990
Endowed: 1990

Kerrio Family Scholarship

Value: \$1000. To be awarded annually, by application to a first-year student who is a resident of Niagara Falls. Applicants must demonstrate financial need and meet OSAP residency requirements.

Donor: Can Mar Manufacturing Inc.
Established: 1997
Endowed: 1997

H. H. Knoll Scholarships

Value: \$1100* each. Two scholarships: awarded to students entering undergraduate programs, who are graduates of secondary schools in the Niagara Region. Preference will be given to students from the greater Port Colborne area (graduates of Lakeshore Catholic High School and Port Colborne High School).

Donor: The family of H. H. Knoll
Established: 1989
Endowed: 1989

Lasting Impression Entrance Scholarship

Value: \$1,000. Awarded to a student with an outstanding record of merit entering an undergraduate program.

Donors: Brock University Faculty and Staff 1993
Established: 1993
Endowed: 1996

Leo LeBlanc Scholarship in Entrepreneurship

Value: \$1600. Awarded by application to a student entering first-year in the Bachelor of Business Administration program. Candidates must intend to pursue a concentration in entrepreneurship and have demonstrated both strong academic achievement and extracurricular, entrepreneurial activities.

Donor: Mr. Leo J. LeBlanc
Established: 1994
Endowed: 1994

Leon's Scholarship

Value: \$2000*. Awarded to a student entering full-time studies in the management stream of the Faculty of Business (excluding the accounting and finance concentration), who has graduated as an Ontario Scholar.

Donor: Mr. A. Thomas Leon
Established: 1994
Endowed: 1994

Sullivan Mahoney Scholarship

Value: \$1500. Awarded annually, by application to an incoming student who is enrolled in the Cool Climate Oenology and Viticulture program. Applicants must demonstrate financial need and meet OSAP residency requirements.

Donor: Sullivan Mahoney
Established: 1997
Endowed: 1997

William and Lorraine McNally Scholarship

Value: \$2500. Awarded by application to a student who is a graduate of Denis Morris High School in St. Catharines who is enrolled in an undergraduate program in Liberal Arts/Science, Social Science or Business. Applicants must demonstrate financial need and meet OSAP residency requirements.

Donor: William and Lorraine McNally
Established: 1997
Endowed: 1997

Molson - CHSC - Folk Arts Council Scholarship

Value: \$850*. Awarded to a student(s) entering university from a St. Catharines high school.

Donor: St. Catharines Folk Arts Council
Established: 1987
Endowed: 1987

Adam Neill Memorial Scholarship

Value: \$2000. Awarded by application to a student who is a graduate of Welland Centennial Secondary School and who is entering the Faculty of Business. If there are no candidates who satisfy these criteria the award shall be made to a student who is a graduate of Welland Centennial Secondary School and who is entering their first-year in any program. If there are no candidates who satisfy these criteria then the award will be made to a student who is a graduate of Welland Eastdale Secondary School or Ecole Confederation Secondaire in Welland. Applicants must demonstrate financial need and meet OSAP residency requirements.

Donor: Robert and Patricia Neill
Established: 1997
Endowed: 1997

Niagara Credit Union Scholarships

Value: \$500 each. Two scholarships: awarded to outstand-

Scholarships, Bursaries, Awards and Financial Assistance

ing students who are graduates of secondary schools in the Niagara Region and who are entering an undergraduate degree program.

Donor: Niagara Credit Union
Established: 1989

Niagara District Chartered Accountants Association Prize

Value: \$975*. Awarded to the student with the highest academic merit, entering the first-year of the Co-Op Accounting program.

Donor: Niagara District Chartered Accountants Association
Established: 1993
Endowed: 1993

The Niagara Industry Training Advisory Council (NITAC) and the Business Education Council (BEC) Scholarship in Business

Value: \$2500. To be awarded, in the first instance, to a student entering a degree in Business Administration with a concentration in entrepreneurship, and thereafter, if there are no suitable candidates, to be awarded to any other concentration in the Business Administration degree program. Students from the four Niagara region school boards (Niagara South, Lincoln County, Welland County Roman Catholic and Lincoln County Roman Catholic) will be considered for these awards.

Donor: The Business Education Council
Established: 1996
Endowed: 1996

Domenica and Andy Panko Scholarship in Oenology and Viticulture

Value: \$3000. Awarded annually, by application to an outstanding student who is entering the Oenology and Viticulture program. Should no qualifying students apply from these programs, the award will be available to a Niagara student entering the Earth Sciences program (including single majors, co-majors, environmental science students). If no Niagara students apply the geographic scope may be broadened to Ontario. Applicants must demonstrate financial need and meet OSAP residency requirements.

Dorothy and Jack Roberts Cerebral Palsy Scholarship

Value: \$1000. Awarded annually to a student with cerebral palsy at Brock as selected by the Associate Vice-President (Student Services) with the input of the disABILITIES Office. This scholarship is for full-time students as defined by the Services for Students with disABILITIES Office. Student must meet minimum academic requirements. While a student may receive this scholarship more than once, preference will be given to first-time recipients.

E.S. Rogers Communications Inc. Scholarship

Value: \$1000. Awarded to a student entering first-year studies with outstanding academic performance and a declared major in Communications Studies where no other scholarship is available to the student.

Donor: Rogers Communications Inc.
Established: 1995
Endowed: 1995

Dr. G.C. Shaver Scholarship

Value: \$2800*. Awarded to incoming first-year student with the highest average.

C. Boyd Slemmon Scholarship

Value: \$2800*. Awarded to incoming first-year student with the highest average.

3M Scholarships

Value: \$1000* each. Two scholarships: one awarded to the student with the highest average entering a Biology program; one awarded to the student with the highest average entering a Chemistry program.

Donor: 3M Canada Inc.
Established: 1992

The Betty and Gordon Vallee Scholarship

Value: \$3000. Two scholarships to be awarded as entrance scholarships to students on the basis of academic merit and financial need with a declared major in History and Biological Sciences who has graduated from a Niagara Region secondary school. Applicants must demonstrate financial need and meet OSAP residency requirements.

Donor: Betty and Gordon Vallee
Established: 1994
Endowed: 1994

Walker Industries Scholarship

Value: \$5000. Awarded annually, by application to a student who is entering their first-year of study at Brock and is a child of an employee of Walker Industries Holdings Limited. Should no applicant satisfy these terms, the award shall be made to a student who is entering their first-year of study at Brock and is a resident of the Niagara Region. Applicants must demonstrate financial need and meet OSAP requirements. Please indicate your relationship to a Walker Industries employee within the comments section of your application.

Donor: Dr. Norris Walker
Established: 1997
Endowed: 1997

Dr. D. G. (Bud) Willmot Scholarship in Business

Value: \$2900*. Awarded to the student entering the Bachelor of Business Administration program with the highest academic standing.

Donor: Estate of Dr. D. G. Willmot
Established: 1994
Endowed: 1994

Scholarships, Bursaries, Awards and Financial Assistance

In-course Scholarships

To be considered for Brock in-course scholarships and a number of donor in-course scholarships, students must normally have completed four credits or more in the previous Fall/Winter Session with an overall average of 80%. Students with Special Needs who are full-time but carrying fewer than four credits because of the impact of a disability, as recommended by the Associate Vice-President (Student Services) are also eligible for in-course scholarships. The minimum average required for the awarding of other donor in-course scholarship is determined each year by the Senate Committee on Awards and Bursaries.

Brock in-course scholarships have been made possible because of the generosity of many groups and individuals, including the following: the Findley estate, the Gardiner Estate, the Kinnear Estate and the Rose Estate.

Please visit www.brocku.ca/registrar for more information.

Professor Zygmunt Adamczewski Scholarship

Value: \$500. Awarded by application to a student who has completed their third-year of study (15 credits) upon entering fourth-year and is a declared major in Philosophy with the highest overall grade average. If the student identified for receiving the Professor Zygmunt Adamczewski Scholarship using the above criteria happens to have been the recipient of the Father John Nota Scholarship in their previous year, then the student with the second highest overall average should receive this award. Applicants must demonstrate financial need and meet OSAP residency requirements. Donor: Brock Philosophical Society
Established: 1997
Endowed: 1997

Alumni CCOVI Scholarship

Value: \$1400. Awarded annually to an applicant at the Cool Climate Oenology and Viticulture Institute in their first year of study; the applicant to be a member of the Brock University Alumni Association with a minimum of 75% average. If there are no candidates who satisfy the above in any given academic year than the award will be made to an applicant to the program in their first year who has graduated from a recognized university with a minimum 75% average. If there are no candidates who satisfy the above in any given academic year then the award will be made to a student in their second year of study in the BSc OEVI Program who has maintained a 75% average in their first year of study. Applicants must demonstrate financial need and meet OSAP residency requirements. Donor: Brock University Alumni Association and Friends
Established: 1997
Endowed: 1997

Alumni Scholarships

Value: \$5800 in total. Award amount to be divided at the discretion of Senate, to upper-year students with records of academic excellence. Applicants must demonstrate financial need and meet OSAP residency requirements. Donor: Brock University Alumni Association
Established: 1985

The John W. Bean and Kathryn Bean Becker Scholarship

Value: \$1350* each. Six scholarships: one awarded to a student in each of the faculties entering the fourth (honours) year, who has demonstrated diligence and industriousness. Candidates are nominated by the appropriate Dean to the Senate Committee on Awards and Bursaries. (For the Faculty of Education, the candidate must be registered in one of the University's concurrent education programs.) Donor: Estate of John W. Bean and Kathryn Bean Becker
Established: 1994
Endowed: 1994

Ian D. Beddis Family Scholarship

Value: \$1250. Awarded annually to a third or fourth year student who is specializing in Mathematics or Economics and who is actively involved in Brock University extra-curricular activities. Applicants must have a minimum average of 75%. Applicants must also demonstrate financial need and meet OSAP residency requirements. Donor: Ian D. Beddis & Family
Established: 1999
Endowed: 1997

J.P. Bickell Foundation Scholarship

Value: \$3500 (\$1300 in second year, \$1100 in each of the third- and fourth-years). Awarded to an outstanding student majoring in Earth Sciences who has completed the first-year of the program. The student must maintain at least a 75% average in subsequent years to retain the scholarship. Donor: The J.P. Bickell Foundation; National Trust, Trustee
Established: 1968

Birks Family Foundation Scholarships

Value: \$800*. Awarded to outstanding students at the discretion of Senate. Donor: Birks Family Foundation
Established: 1968
Endowed: 1968

Helen S. Bremner and the Bremner Family Memorial Scholarships

Value: \$1200*. Two scholarships: one awarded to a student majoring in English, the other to a student majoring in Geography. The recipients will be entering their third- or fourth-year, will have made a significant contribution to extracurricular activities and must not have received other major awards. Donor: Mr. James Bremner
Established: 1994

**Scholarships, Bursaries, Awards and
Financial Assistance**

Sir Isaac Brock Music Scholarship

Value: \$475*. Awarded to the student with the highest sessional average entering the third- or fourth-year of a Music program.

Established: 1990

Endowed: 1990

Brock University In-Course Scholarship

Value: \$350 - \$1500. Awarded to continuing full-time undergraduate students who have attained a minimum of 80.0% on 4.0 or more credits in the previous Fall and Winter Sessions.

\$1500 for averages over 93.9%

\$1000 for averages above 89.9%

\$550 for averages above 84.9%

\$350 for averages above 79.9%

Chateau Des Charmes Wines Scholarship

Value: \$1300. Awarded by application to a student who is completing their third-year of the Oenology and Viticulture Program. Applicants must demonstrate financial need and meet OSAP residency requirements.

Donor: Chateau Des Charmes Wines

Established: 1997

Endowed: 1997

W. Frank Cooper and Trevor C. Cooper Scholarship

Value: \$1250. Awarded by application to a student in the Accounting and Finance Program, Faculty of Business. Applicants must demonstrate financial need and meet OSAP residency requirements.

Donor: W. Frank Cooper and Trevor C. Cooper

Established: 1997

Endowed: 1997

Raffaele DeLuca Memorial Scholarship

Value: \$150*. Awarded to a student of Italian language on the basis of distinguished scholastic performance.

Donor: Friends of the late Professor DeLuca

Established: 1984

Endowed: 1984

Joseph Dennis Scholarship in Italian

Value: \$500. Awarded to a first-, second- or third-year student in Italian on the basis of distinguished scholastic performance.

Donor: The Grand Lodge of the Order Sons of Italy of Ontario

Established: 1975

Durward, Jones, Barkwell and Company Scholarship

Value: \$1500. Awarded annually by application to a third- or fourth-year student who has declared their major in accounting and is a resident of the Niagara Region. Applicants must demonstrate financial need and meet OSAP residency requirements.

Donor: Durward Jones Barkwell and Company

Established: 1997

Endowed: 1997

Dr. Alan Earp Alumni Scholarship

Value: \$500. Awarded to a student with a record of academic excellence.

Donor: Brock University Alumni Association

Established: 1988

Dr. Alan Earp Scholarship

Value: \$4000. Awarded annually to a Brock University student who is entering third- or fourth-year of any program and who has demonstrated academic excellence. Applicants must demonstrate financial need and meet OSAP residency requirements.

Donors: Friends and colleagues of Dr. Alan Earp

Established: 1966

Endowed: 1996

The Lloyd and Norma Edwards Scholarship

Value: \$1300. Awarded annually to a student who is, in the first instance, an amputee, in the second instance, the son or daughter of an amputee, in the third instance, a student with special needs. The award will be made by application and will be verified by the disABILITIES Office.

Donors: Mr. David Edwards and Ms. Susan Hughes

Established: 1996

Endowed: 1996

M. J. ('Mel') Farquharson Scholarship

Value: \$1100. Awarded to the student with the highest average in Chemistry courses entering the third- or fourth-year of a single or combined major in Chemistry. Candidates are recommended by the Chair of Chemistry to the Senate Committee on Awards and Bursaries.

Donor: Mrs. Jan Farquharson and friends

Established: 1992

Endowed: 1992

Frederick William Ford Scholarship

Value: \$500. Awarded by application to a student who has completed their first-year of study (five credits) upon entering second-year who has a declared major in Philosophy and who has the highest overall grade average. Applicants must demonstrate financial need and meet OSAP residency requirements.

Donor: Brock Philosophical Society

Established: 1997

Endowed: 1997

Sophia Gampel Memorial Scholarships

Value: \$720*. Divided between two students from the city of Niagara Falls, Ontario.

Donor: Mr. Abraham Gampel

Established: 1970

Endowed: 1970

Martin S. Gibson Scholarship

Value: \$170. Awarded to students approaching the end of third-year (14 or 15 credits completed) with a 75% average. First preference to a student in which Chemistry is an integral part of their program of study (currently Chemistry sin-

Scholarships, Bursaries, Awards and Financial Assistance

gle and combined majors and Biotechnology). Second preference to other students in the Faculty of Mathematics and Science.

Donors: Department of Chemistry colleagues of Dr. Gibson

Established: 1993

Endowed: 1996

Goldsmith-Wyatt Mathematics and Science Scholarship

Value: \$6100. Awarded to a full-time student at the undergraduate or graduate level in the area of Mathematics or Science, who is a graduate of Niagara College of Applied Arts and Technology and who has both academic strength and financial need. If no applications are received from individuals meeting these criteria, the scholarship will be awarded to a student in the faculty of Mathematics and Science on the basis of financial need and academic merit. Applications are available from the Scholarships Officer; deadline date is October 15.

Donor: Prof. E.E. Goldsmith and Mr. Alan Wyatt

Established: 1994

Endowed: 1994

George Head Memorial Scholarship

Value: \$200. Awarded to a student majoring in Business Administration who demonstrates superior ability in Purchasing Management (MGMT 3P30).

Donor: Purchasing Management Association of Canada

Established: 1973

Club Heidelberg Scholarship

Value: \$200. Awarded to the top student entering second-, third- or fourth-year in the Department of Germanic and Slavic Studies, who is pursuing studies in German language and literature or in German area studies. Preference will be given to single majors.

Donor: The St. Catharines Club Heidelberg

Established: 1965

Aileen Hood Memorial Scholarship

Value: \$300*. Awarded to a student of superior ability entering the fourth-year of the Physical Education program.

Donor: Aileen Hood Estate

Established: 1982

Endowed: 1982

David S. Howes Scholarship

Value: \$1500 each. To be awarded, by application, to each of two returning students who are varsity athletes and have a minimum average of 80%. Renewable upon maintaining academic average of 80%. Applicants must demonstrate financial need and meet OSAP residency requirements.

Donor: David S. Howes

Established: 1996

Endowed: 1996

William H. N. Hull Scholarship in Politics

Value: \$300. Awarded to a student in their second-, third- or

fourth-year of studies for outstanding academic achievement and contribution to the life of the Department of Politics and the University. May not be held concurrently with the Father Sean O'Sullivan Scholarship.

Donors: Department of Politics colleagues of Dr. Hull

Established: 1995

Endowed: 1996

KPMG In-Course Scholarship

Value: \$1550. Awarded to the co-op accounting student with the highest academic standing, after completing the first-year of the program.

Donor: KPMG Chartered Accountants

Established: 1990

Endowed: 1990

Lasting Impression Part-Time Scholarship

Value: three scholarships of \$500. For part-time students (who have completed the first milestone of five credits and are taking fewer than three credits in the Fall/Winter Session).

Donors: Brock University Faculty and Staff 1993

Established: 1993

Endowed: 1996

John Lavery Scholarship

Value: \$1250. Awarded annually to a fourth-year student who has demonstrated a clear interest for research in the social or cultural areas of psychology. The awards will be made on these terms by the Senate Committee on Awards and Bursaries, based on the recommendation of the Undergraduate Officer in the Psychology Department. Applicants must demonstrate financial need and meet OSAP residency requirements.

Donor: John Lavery

Established: 1997

Endowed: 1997

Lubrizol Canada Ltd. Scholarship

Value: \$600 each. Awarded to two students of honours standing entering the second-, third- or fourth-year of a Physics program.

Donor: Lubrizol Canada Ltd.

Established: 1971

Endowed: 1971

Dante F. Marinelli/Niagara Duty-Free Shops Scholarship

Value: \$2500. Awarded to an undergraduate student or a graduate student who is enrolled in a program in the Faculty of Business and who is a resident of the Niagara Peninsula. The recipient will continue to receive the award annually throughout his or her Brock career, contingent on maintaining a minimum 75% average. Applicants must demonstrate financial need and meet OSAP residency requirements.

Donor: Niagara Duty-Free Shops Inc.

Established: 1997

Endowed: 1997

Scholarships, Bursaries, Awards and Financial Assistance

Margaret Megannety Scholarship in English

Value: \$1250. To be awarded to a third- or fourth-year English Language and Literature student. Applicants must demonstrate financial need and meet OSAP residency requirements.

Donor: Mrs. Margaret Megannety

Established: 1997

Endowed: 1997

Meloche-Monnex Scholarship

Value: \$1500. Awarded, by application, to a student who must demonstrate financial need and meet OSAP residency requirements.

Donor: Meloche-Monnex Inc.

Established: 1997

Endowed: 1997

Gertrude Millward Scholarship

Value: \$200. Awarded to a student in the Faculty of Humanities for outstanding performance.

Donor: Earl Mountbatten Chapter, IODE

Established: 1977

Niagara Regional Development Council Scholarships

Value: \$3450. Awarded to a student (or students) who will be entering fourth-year and is planning to write an honours thesis or major paper dealing with economic development and/or regional planning in the Niagara area. To be considered for the award the student must submit a plan of research including comments from the student's supervisor.

Donors: Niagara Regional Development Council

Established: 1974

Endowed: 1974

Niagara-on-the-Lake Vintage Inns Scholarship

Value: \$2500. Awarded to an upper year full-time student who demonstrates great academic potential, a strong desire to pursue a career in the Hospitality industry. Applicants must demonstrate financial need and meet OSAP residency requirements. Please indicate your interest in the hospitality industry within the comments section of your application.

Donor: Si Wai Lai

Established: 1997

Endowed: 1997

Father John Nota Scholarship

Value: \$500. Awarded by application to a student who has completed their second-year of study (10 credits) upon entering third-year who has a declared major in Philosophy and who has the highest overall grade average. If the student identified for receiving the Father John Nota Scholarship using the above criteria happens to have been the recipient of the Frederick William Ford Scholarship in their previous year, then the student with the second highest overall average should receive this award. Applicants must demonstrate financial need and meet OSAP residency requirements.

Donor: Brock Philosophical Society

Established: 1997

Endowed: 1997

Ontario Hostelry Institute Oenology and Viticulture Year Two Scholarship

Value: \$1500. Awarded annually to support a student entering their second year in the field of Oenology and Viticulture. The award recipient will be chosen on the basis of academic merit, extracurricular activities, work experience and letters of recommendation reviewed by a committee of the Ontario Hostelry Institute.

Donor: Ontario Hostelry Institute

Established: 1999

Ontario Hostelry Institute Oenology and Viticulture Year Four Scholarship

Value: \$3500. Awarded annually to support a student entering their fourth year in the field of Oenology and Viticulture. The award recipient will be chosen on the basis of academic merit, extracurricular activities, work experience and letters of recommendation reviewed by a committee of the Ontario Hostelry Institute.

Donor: Ontario Hostelry Institute

Established: 1999

W. G. Ormsby Memorial Scholarship

Value: \$350. Awarded to the student with the highest average, entering the third- or fourth-year of a single or combined major program in History.

Established: 1987

Endowed: 1987

Father Sean O'Sullivan Scholarship

Value: \$2350. Awarded to a student with the highest average in Politics courses entering third- or fourth-year of a single or combined major in Politics.

Donors: Friends of Father Sean O'Sullivan

Established: 1994

Endowed: 1994

Partridge Iggulden Scholarship

Value: \$250. Awarded to the full-time student enrolled in the Bachelor of Business Administration or Bachelor of Accounting program, who has obtained the highest overall standing at the end of second-year and who has chosen to enrol in the third-year Accounting option.

Donor: Partridge Iggulden Chartered Accountants

Established: 1971

RBC Dominion Securities Scholarship

Value: \$1500. Awarded to a student enrolled in a program in the Faculty of Business. Applicants must demonstrate financial need and meet OSAP residency requirements.

Donors: RBC Dominion Securities

Established: 1997

Endowed: 1997

Scholarships, Bursaries, Awards and Financial Assistance

Dorothy and Jack Roberts Cerebral Palsy Scholarship

Value: \$1000. Awarded annually to a student with cerebral palsy at Brock as selected by the Associate Vice-President (Student Services) with the input of the disABILITIES Office. This scholarship is for full-time students as defined by the disABILITIES Office. Preference will be given a student from the Niagara Region. Student must meet minimum academic requirements. While a student may receive this scholarship more than once, preference will be given to first-time recipients.

Donors: Niagara Peninsula Cerebral Palsy Association
Established: 1994

E. S. Rogers Communications In-Course Scholarships

Value: \$1500. Three \$500 scholarships to students with outstanding academic performance in the first-year of Communication Studies with a declared major in the program.

Donor: Rogers Communications Inc.
Established: 1995
Endowed: 1995

Rose, Horne & Stevenson Group Scholarship

Value: \$100. Awarded to two students with a record of academic excellence.

Donor: Rose, Horne & Stevenson Insurance Agency Ltd.
Established: 1970

Royal Bank Scholarship

Value: \$2500. Awarded by application to an upper year student enrolled in the Oenology and Viticulture Program who demonstrates academic excellence. Applicants must demonstrate financial need and meet OSAP residency requirements.

Donor: Royal Bank of Canada
Established: 1997
Endowed: 1997

St. Catharines Advertising and Sales Association Scholarship

Value: \$300. Awarded to an outstanding student entering the fourth-year of the marketing concentration of the honours Bachelor of Business Administration program, who is a permanent resident of St. Catharines.

Donor: St. Catharines Advertising and Sales Association
Established: 1989

Scholler Foundation Scholarship

Value: \$1800. Awarded to a student of honours standing majoring in Chemistry.

Donor: Scholler Foundation
Established: 1973
Endowed: 1973

Scotiabank Scholarship

Value: \$2500. Four awarded annually, by application to students who have completed their second year of studies in entrepreneurship and/or accounting and are in good academic standing (75% or above). Applicants must demon-

strate financial need and meet OSAP residency requirements.

Donor: Scotiabank
Established: 1997
Endowed: 1997

Senior Scholarship in Music I

Value: \$425. Awarded to the student, with the highest average in Music courses, entering the third-year of a degree program in Music.

Donor: Dr. and Mrs. J. A. Gibson
Established: 1975
Endowed: 1981

Senior Scholarship in Music II

Value: \$425. Awarded to a student of distinguished musical achievement, entering the final year of a degree program in Music.

Donor: Dr. and Mrs. J. A. Gibson
Established: 1986
Endowed: 1986

Senior Scholarship in Visual Arts

Value: \$400. Awarded to a second- or third-year student with high academic standing and distinguished artistic achievement, who is entering a third- or fourth-year program in Visual Arts.

Donor: Dr. James A. Gibson
Established: 1988
Endowed: 1988

Mel Swart Scholarship

Value: \$1300. Awarded to a senior student with a single major in Politics. The scholarship honours Mel Swart's 40 years of service at the municipal, regional and provincial levels of government, including 13 years as MPP for the Welland-Thorold riding.

Donor: Friends of Mel Swart
Established: 1988
Endowed: 1988

Technology Group (Machine and Electronic Shop) Scholarship

Value: \$1250. Awarded to a Canadian citizen who is a first- or second-year Bachelor of Science student majoring in either Biological Sciences, Chemistry, Earth Sciences or Physics. The minimum average required to be considered for the scholarship is 75%. Applicants must demonstrate financial need and meet OSAP residency requirements.

Donor: Mr. Roland Seehagel and Mr. John Rustenburg
Established: 1996
Endowed: 1996

Tinkham Scholarship

Value: \$750. Awarded to a fourth-year co-op accounting student, prior to the fourth work term, who is a graduate of a high school in the greater Toronto area. The candidate must have completed three work terms, have demonstrated leadership skills, and be an active participant in the University

Scholarships, Bursaries, Awards and Financial Assistance

community. Recommendations are made by the Department of Accounting and Finance to the Senate Committee on Awards and Bursaries.

Donor: Tinkham and Associates Chartered Accountants
Established: 1993

Tomarin Scholarship in Marketing

Value: \$1550*. Awarded to the student with the highest academic standing, entering the fourth-year marketing concentration in the Bachelor of Business Administration program.

Donor: Harry Tomarin, Seymour Tomarin
Established: 1989
Endowed: 1989

Lillie A. Traver Scholarship

Value: \$180. Awarded to a student with honours standing, majoring in History.

Donor: Miss Lillie A. Traver
Established: 1976
Endowed: 1976

25th Anniversary Scholarships

Value: \$2100 each. Awarded to the top student in each faculty returning to full-time studies in the fourth (honours) year. There is one award for each of the faculties of Business; Humanities; Mathematics and Science; Physical Education and Recreation; and Social Sciences.

Donor: Faculty and Staff of Brock University

Terry and Sue White Athletics Scholarship

Value: \$1500. Awarded to a continuing student-athlete entering fourth-year with the highest cumulative average and who is a member of an interuniversity team. Applicants must have a minimum 75% average in their previous year, demonstrate financial need and meet OSAP residency requirements.

Donor: Friends of Terry and Sue White
Established: 1997
Endowed: 1997

Terry and Sue White Faculty Scholarships

Value: \$1700 each. Four awards, one each to be made to a continuing student in the Faculty of Business, Humanities, Mathematics and Science, and Social Sciences. The award will be made to the student entering fourth-year with the highest cumulative average. Applicants must demonstrate financial need and meet OSAP residency requirements.

Donor: Friends of Terry and Sue White
Established: 1997
Endowed: 1997

The Spencer Williams Scholarship

Value: \$325. Awarded to an outstanding student in the Faculty of Applied Health Sciences.

Donor: The Rotary Club of St. Catharines South
Established: 1973
Endowed: 1973

Willmot Scholarship in Administration

Value: \$500. Awarded to an outstanding student majoring in Business Administration.

Donor: Mr. D.G. Willmot
Established: 1972

Wood Gundy Scholarship

Value: \$450. Awarded to a student with a record of academic excellence.

Donor: Wood Gundy Securities Limited
Established: 1970
Endowed: 1970

Woodie (George) Woodwood Memorial Scholarship in Philosophy

Value: \$1250. Awarded annually by application to a student majoring in Philosophy who has completed two credits in either Greek or Latin languages. In the event that no candidates meet these criteria, then it is to be awarded to a student who is majoring in Philosophy and who has completed either one credit or two half credits in either Greek or Latin languages. This award will not be made to the same student twice. Applicants must demonstrate financial need and meet OSAP residency requirements.

Donor: The Family of George Woodward
Established: 1997
Endowed: 1997

Bursaries

Bursaries funds are never adequate to provide full support or even a major part of support for students. Rather, bursaries are intended to assist students whose personal resources (including eligibility for loans) are normally adequate or nearly so, but whose immediate circumstances have created a financial crisis or limited shortage. All students who are eligible to do so, are expected to have applied for assistance under the Ontario Student Assistance Program (OSAP) and to have accepted all loans granted under that program. Acceptance of a bursary implies the commitment of the recipient to complete the current academic year.

Bursaries are granted for the current academic year and applications may be submitted at anytime during the term. To be considered for some donor bursaries, applications must be submitted by January 15. Bursary applications are available on our website <http://www.brocku.registrar> and follow the links to "Student Awards and Financial Aid"

Barkley's of Avonmore Bursary

Value: \$500. Awarded as entrance bursaries to deserving students, with preference for students from the Third World. Applications for this bursary should be made through the

Scholarships, Bursaries, Awards and Financial Assistance

Scholarships Officer.

Donor: Mr. & Mrs. Fred Barkley

Established: 1980

Endowed: 1980

Basic Technologies Bursary

Value: \$750. Presented annually as an entrance award. Applicants must demonstrate financial need and display academic excellence (75%+). Preference will be given first to qualified applicants who are children of Basic Technologies employees and who are entering the first-year, particularly in the Faculty of Business. Preference will be given next to qualified applicants entering the first-year of a program in the Faculty of Business. Please indicate your relationship to a Basic Technologies employee within the comments section of your application.

Donor: Basic Technologies

Established: 1998

Endowed: 1997

John W. Bean and Kathryn Bean Becker Bursaries

Awarded to students in financial need who have completed one year of study. Bursary applications should be accompanied by a letter of reference from a faculty member showing the student's diligence and industriousness.

Donor: Estate of John W. Bean and Kathryn Bean Becker

Established: 1993

Endowed: 1993

Morris Berkowitz Memorial Bursary

Value: \$300. Established in memory of the late Morris Berkowitz, professor of Sociology. Awarded by the Department of Sociology to a full-time student or students who have a demonstrable need and a major average of 75% or better in his or her most recent year of study.

Donors: Friends of the late Professor Berkowitz

Established: 1981

Endowed: 1981

J. P. Bickell Foundation Bursary

Value: \$1750. For distribution to students in great need who are in Earth Sciences.

Donor: The J. P. Bickell Foundation, Trustees, National Trust

Established: 1969

Birks Family Foundation Bursary

Value: \$1000. Awarded by the Foundation on the recommendation of the University scholarship committee, these bursaries are not restricted to faculty or year and may be renewed.

Established: 1968

Branscombe Family Foundation Bursaries

Value: \$1000. To provide five annual awards to Canadian students of African Black ancestry. Applicants must demonstrate financial need and meet OSAP residency requirements.

Dr. Cora M. Briant Bursary for Women

Value: \$1750. Awarded annually by application to a female student in financial need who is continuing her studies in the sciences (not mathematics). Renewable in subsequent years contingent on recipient maintaining a minimum 75% average. Applicants must demonstrate financial need and meet OSAP residency requirements.

Donor: Dr. Cora M. Briant

Established: 1994

Endowed: 1994

Brock University Club Bursary

Value: \$300. Awarded to a student in financial need.

Donor: The University Club

Established: 1993

Endowed: 1993

Brock University Emergency Bursary Assistance

Value: up to \$500. Students may apply for emergency bursary assistance based solely on financial need. You are required to:

- Complete a bursary application form;
- Be currently registered for courses at Brock University;
- Be in satisfactory academic standing (i.e., not on probation).

Applications accepted beginning October 1 of each year.

Brock University Entrance Bursary

Value: \$325. Awarded to entering undergraduate students who have qualified for OSAP and who have not received any other financial assistance from Brock University. The award is tenable upon full-time registration. No application is required.

Established: 1996

Brock University Returning Student Bursary

Value: \$500. Awarded to returning undergraduate students who have qualified for OSAP and will have not received any other financial assistance from Brock University. The award is tenable upon full-time registration. No application is required.

Established: 1998

Effie Buck Memorial Prize in History

Value: \$900. Awarded to a full- or part-time student who has taken a minimum of two credits of which one is in History. Candidates must demonstrate financial need and have enhanced the University experience. Applications are reviewed by the Chair and faculty of the History department and a nomination is forwarded to the Senate Subcommittee on Bursaries for approval. Applications are available from the Scholarships Officer. Deadline date February 1.

Donor: Family and friends of Effie Buck

Established: 1994

Endowed: 1994

Scholarships, Bursaries, Awards and Financial Assistance

Brock University Student Union Bursary

Value: \$500. To be awarded to a student in financial need. Applicants must demonstrate financial need and meet OSAP residency requirements.

Donor: Brock University Student Union

Established: 1997

Endowed: 1997

Dr. Margaret Campbell Bursary

Value: \$650. Awarded annually to a first-year student who is enrolled in Science or Humanities. Applicants must demonstrate financial need and meet OSAP residency requirements.

Donor: Campbell and Company Insurance Consultants Ltd.

Established: 1997

Endowed: 1997

Campus Leasing Residence Award

Value: \$250. Awarded to a residence student of satisfactory academic standing in financial need.

Established: 1994

Donor: Campus Leasing

Campus Recreation Bursary

Value: \$1250. To be awarded annually to students who have worked in the Campus Recreation Program for a minimum of two years. Applicants must demonstrate financial need and meet OSAP residency requirements.

Donor: Campus Recreation Students and Staff of 1995-1997

Established: 1997

Endowed: 1997

Canada Trust Bursary

Value: \$1000. Awarded annually to a full-time undergraduate student enrolled in environmental studies. Applicants must demonstrate financial need and meet OSAP residency requirements.

Donor: Canada Trust

Established: 1997

Endowed: 1997

CIBC Bursary

Value: \$1000. To be awarded by application to a student enrolled in the Faculty of Business. Applicants must demonstrate financial need and meet OSAP requirements.

Donor: CIBC

Established: 1997

Endowed: 1997

Information Technology Services Bursary

Value: \$500. Awarded annually to a Computer Science student in their second- or third-year of study, who has a minimum 75% average.

Donor: Staff of Computing and Communications Services

Established: 1997

Endowed: 1997

John C. Cook Memorial Bursary in Entrepreneurship

Value: \$950. To be awarded, by application, to a second, third- or fourth-year student in an undergraduate program pursuing a concentration in entrepreneurship. Applicants must demonstrate financial need and have satisfactory academic standing.

Donor: Mr. Jan Cook

Established: 1996

Endowed: 1996

Gary Cornelius Bursary in Geography

Value: \$1000. To be awarded annually, by application, to an upper year student in Geography. Applicants must demonstrate financial need and have satisfactory academic standing.

Donor: Mr. Gary Cornelius

Established: 1996

Endowed: 1996

Richard R.P. Court Bursary Entrepreneurship

Value: \$500. To be awarded annually, by application to an upper-year student in the business entrepreneurship area of study who shows and demonstrates entrepreneurship and appears capable of pursuing a career as a business entrepreneur. Applicants must demonstrate financial need and meet OSAP residency requirements.

Donor: Court Holdings Limited

Established: 1997

Endowed: 1997

Nadine and Frank Coy Bursary

Value: \$500. To be awarded annually, by application to a returning student in Education or BA/BEEd program who also participates on the Swim team at an OUAA/CIAU level or other qualified student-athlete with minimum academic average of 70% in their previous year as a student-athlete. Applicants must demonstrate financial need and meet OSAP residency requirements.

Donor: Nadine and Frank Coy

Established: 1997

Endowed: 1997

CUPE Local 1295 Bursary

Value: \$500. Awarded to a son or daughter of a member of CUPE Local 1295 who demonstrates financial need. Applications are available from the Scholarships Officer. Deadline date February 1.

William J. Edgar Bursary

Value: \$1500. Awarded to needy students from the former county of Welland. Applicants must demonstrate financial need and meet OSAP residency requirements.

Donor: Jenny Bell Edgar Estate

Established: 1966

Endowed: 1966

Scholarships, Bursaries, Awards and Financial Assistance

Faculty of Education Bursary

Value: \$1250. To be awarded to Faculty of Education students. Applicants must demonstrate financial need, be in good academic standing and meet OSAP residency requirements.

Donor: Faculty and Staff of the Faculty of Education

Established: 1997

Endowed: 1997

Jim Gayman Bursary

Value: \$100. Awarded to a student living in residence who is in financial need.

Donor: Brock University Alumni Association

Established: 1981

Endowed: 1981

General Motors of Canada Limited Bursary

Value: \$1250. To be awarded annually to a first-year female or visible minority with demonstrated interest in Math and Science. Applicants must demonstrate financial need and meet OSAP residency requirements.

Donor: General Motors of Canada Limited

Established: 1997

Endowed: 1997

James A. Gibson Library Bursary

Value: \$500. Awarded to a deserving student. Applicants must demonstrate financial need, be in good academic standing and meet OSAP residency requirements to be eligible for this bursary.

Donor: James A. Gibson Library Staff and Friends

Established: 1996

Endowed: 1996

Professor Ernest E. Goldsmith Bursary Fund

Value: \$900. To be distributed among worthy students in financial need.

Donor: Brock University Alumni Association

Established: 1974

Endowed: 1974

Great Books/Liberal Studies Book Prize Bursary

Value: \$500. To be awarded to a student in the Great Books/Liberal Studies program, who can demonstrate financial need. Bursary applications are submitted to the Office of the Registrar and will be forwarded to the department of Great Books/Liberal Studies. The award will be in the form of a Brock University Book Store certificate.

Donor: John and Annette Enns-Wind

Established: 1998

Warren Hartman Bursary

Value: \$200. Awarded annually, by application. To be divided equally between each of three outstanding students majoring in Theatre/Dramatic Literature, in Film Studies and in Visual Arts, who have completed their first-year and are entering their second-year. Applicants must demonstrate

financial need and meet OSAP residency requirements.

Donor: Faculty and Staff, Fine Arts Department

Established: 1997

Endowed: 1997

Diane Helmky Memorial Bursary

Value: \$500 each. Three bursaries: Awarded to third- or fourth-year students in the BA/BEEd concurrent program who are in financial need.

Donor: Mr. Owen Helmky

Established: 1993

Endowed: 1993

Hiatt Bursary in Chemistry

Value: \$650. Awarded annually, by application to a student who is majoring in Chemistry or a Chemistry related program (joint majors, BSc/BEEd, Biochemistry, Biotechnology, Chemistry stream of Environmental Sciences etc.). Applicants must demonstrate financial need and meet OSAP residency requirements.

Donor: Faculty and Staff Chemistry Department

Established: 1997

Endowed: 1997

Robert C. Hoover Bursary

Value: \$600. Awarded to one or more eligible applicants. Eligibility: full-time combined majors in Environmental Policy Institute at the second-, third- or fourth-year level, who can demonstrate financial need, and who show academic promise. Awarded by Senate on the advice of the Director of the Environmental Policy Institute. Interested students should apply through the Institute.

Gail Jenkyns Memorial Bursary

Value: \$500. Awarded to a female student in the faculty of Humanities.

Donor: Canadian Federation of University Women - St. Catharines

Established: 1987

Endowed: 1987

Mallie Frances Jones Bursary

Value: \$500. To be awarded to a student in Women's Studies (single or joint major) who exhibits academic promise (70% or higher average). Applicants must demonstrate financial need and meet OSAP residency requirements.

Donor: Dr. Mary Frances Richardson

Established: 1996

Endowed: 1996

Harry Karowec Memorial Bursary

Value: \$100. Awarded to a student in great need, who is majoring in English literature.

Donor: Mrs. Ellen Cote

Established: 1982

Endowed: 1982

T. J. Kearney Bursary

Value: \$225. To provide assistance to worthwhile students in financial need, with preference to students of proven athletic ability. Students apply through the Department of Athletics and Services.

Established: 1979

Thomas Clifford (Bud) Kells Memorial Bursary

Value: \$600. Awarded by application to a student in their second-year or subsequent year with a declared major in Economics and who has maintained a minimum average of 70% in the program. Applicants must demonstrate financial need and meet OSAP residency requirements.

Donor: Daniel Pembleton

Established: 1997

Endowed: 1997

Rotary Ted Lancaster Bursary

Value: \$1500. Awarded annually to applicants who demonstrate financial need and meet OSAP residency requirements.

Donor: St. Catharines Rotary Club

Established: 1976

Endowed: 1997

Professor Bruce A. Liberty Memorial Bursary

Value: \$480. To be distributed by the Department of Earth Sciences to worthy undergraduate or graduate students, who have demonstrable need and a satisfactory record (normally a major average of 70% or better).

Donor: Friends of the late Professor Liberty

Established: 1982

London Field Study Program Bursary (GEOG 3M90)

Value: varies. Awarded to students participating in the program on the basis of financial need. Students must be residents of Ontario as deemed by the Ontario Student Assistance Program and have satisfactory academic standing. For additional information about the London Field Study Program, please visit

<http://www.brocku.ca/geography/London.html>.

KPMG Entrance Scholarship

Value: \$1550. Awarded to a student from the Niagara Region, with the highest academic standing, entering the Co-op Accounting program.

Donor: KPMG Chartered Accountants

Established: 1990

Endowed: 1990

Jean Luck Memorial Bursary

Value: \$500. Awarded to a mature student in her/his graduating year with a single major or combined major in Sociology, on the basis of financial need, academic merit and significant personal contribution and support to the Sociology department.

Donors: Friends and family of Jean Luck

Established: 1994

Endowed: 1995

MDS Inc. Bursary

Value: \$500. To be awarded annually by application to a student enrolled in the Health Studies program. Applicants must demonstrate financial need and meet OSAP residency requirements.

Donor: MDS Inc.

Established: 1997

Endowed: 1997

Manulife Financial Bursary

Value: \$1000. Awarded, by application, to an upper year student. Applicants must demonstrate financial need and meet OSAP residency requirements.

Donor: Manulife Financial

Established: 1997

Endowed: 1997

Howard Martin Memorial Bursary

Value: \$375. Awarded to a full-time student with a combined major in Environmental Policy in year 2, 3 or 4. Candidates must be Ontario residents, demonstrate financial need, demonstrate an interest in the natural environment and a desire to communicate their interest to others and have an acceptable academic average. By application to the Director, Environmental Policy Institute.

Established: 1991

Donor: The Niagara Falls Nature Club

Mexico Study Abroad Program Bursary (HIST 2V90)

Value: varies. Awarded to students participating in the program on the basis of financial need. Students must be residents of Ontario as deemed by the Ontario Student Assistance Program and have satisfactory academic standing.

Stan Mikita Bursary

Value: \$350. Provides funds to continuing students in financial need, who have satisfactory academic performance, and who have achieved a high level of accomplishment in extracurricular activities. Students apply through the Department and Athletics and Services.

Donor: Dr. S. Mikita

Established: 1972

Elizabeth Miller Bursary

Value: \$450. Awarded annually, by application to a first-year student who is enrolled in Fine Arts. The student must demonstrate financial need and meet OSAP residency requirements.

Donor: Dr. Mary Jane Miller and Dr. Jack Miller

Established: 1997

Endowed: 1997

Ed Miryneck Bursary

Value: \$100. Awarded to a full-time Earth Science major in their second or third year who has demonstrated financial need and has most improved in their studies.

Donor: Dr. E. Miryneck

Established: 1984

Endowed: 1984

Scholarships, Bursaries, Awards and Financial Assistance

Ken and Nancy Murray Bursary

Value: \$500. Awarded annually, by application to a returning student-athlete who is studying Physical Education. The recipient must have a minimum academic average of 70% in their previous year as a student-athlete. Preference will be given first to a student who is a member of the Men's Varsity Basketball team, then to a student who is a member of the Women's Varsity Basketball team. Should it not be possible to make the award to a student who is a member of either Varsity Basketball team, the award is to be made to a returning student-athlete who otherwise satisfies these terms. Applicants must demonstrate financial need and meet OSAP residency requirements.

Donor: Ken and Nancy Murray

Established: 1996

Endowed: 1996

Susan M. (Wills) Napper Bursary in Business

Value: \$800. Awarded to a student entering into a degree in Business. Applicants must demonstrate financial need, be in good academic standing and meet OSAP residency requirements. Applicants must also confirm they are non-smokers.

Donor: Mrs. Susan M. Napper

Established: 1997

Endowed: 1997

Non OSAP Student Bursary

Value: up to \$500. Awarded to students who do not qualify for OSAP or choose not to apply for OSAP and can demonstrate financial need. The student must meet OSAP residency requirements.

Old Badgers Rugby Alumni Bursary

Value: \$1500. Awarded by application, to a varsity rugby player in second or subsequent year with satisfactory academic progress (Minimum academic average of 70% in the previous year as a student-athlete), superior athletic ability and sportsmanship. The candidate must be in need of financial assistance. Applicants must demonstrate financial need and meet OSAP residency requirements.

Donor: Old Badgers Alumni Rugby Club

Established: 1996

Endowed: 1996

Recreation and Leisure Studies Student Bursary

Value: \$50. Awarded to a student in financial need who is currently enrolled in Recreation and Leisure Studies.

Donor: Ann Marie Guilmette

Established: 1966

Leroy Langdon Richardson Bursary

Value: \$500. Awarded by application to a student entering year 2, 3 or 4 in Mathematics or Physics who shows academic promise (70% or higher average). Single and joint majors are eligible. Applicants must demonstrate financial need and meet OSAP residency requirements.

Donor: Dr. Mary Frances Richardson

Established: 1996

Endowed: 1996

Mary Pat Richardson Bursary

Value: \$500. Awarded by application to a student in Music or English who shows academic promise (70% or higher), as well as financial need. Single and joint majors are eligible. Applicants must demonstrate financial need and meet OSAP residency requirements.

Donor: Dr. Mary Frances Richardson

Established: 1996

Endowed: 1996

Mary Rixey Richardson Bursary

Value: \$500. Awarded by application to a student in Chemistry (single or joint major) who shows academic promise (70% or higher average). Applicants must demonstrate financial need and meet OSAP residency requirements.

Donor: Dr. Mary Frances Richardson

Established: 1996

Endowed: 1996

Stella and Ann Robinson Memorial Award

Value: \$600. To be awarded annually, by application. Applicants must demonstrate financial need and meet OSAP residency requirements.

Donor: Mr. Nicholas Robinson

Established: 1997

Endowed: 1997

St. Catharines Business and Professional Women's Club Bursary

Value: \$200. To provide assistance to a female student in financial need who is a permanent resident of St. Catharines.

Donor: St. Catharines Business and Professional Women's Club

Established: 1989

St. Catharines Jaycee 60th Anniversary Bursary

Value: \$600. Awarded to an outstanding student entering the first-year of the honours Bachelor of Business Administration degree program who is a permanent resident of St. Catharines. Applicants must demonstrate financial need and meet OSAP residency requirements.

Donor: St. Catharines Jaycees

Established: 1989

Endowed: 1989

Auguste E. Schmid Bursary

Value: \$600. Awarded annually toward the end of the academic year, by application, to a student in good standing. Applicants must demonstrate financial need and meet OSAP residency requirements.

Donor: Family of Auguste E. Schmid

Established: 1997

Endowed: 1997

Scholarships, Bursaries, Awards and Financial Assistance

Lester Shoalts Bursary

Value: \$1000. To be awarded, by application, to a student who is entering the Faculty of Business. The award will be renewable to graduation contingent on the recipient continuing to satisfy these terms and remaining in good standing. Applicants must demonstrate financial need and meet OSAP residency requirements.

Donor: Lester Shoalts Ltd.

Established: 1997

Endowed: 1997

Helen J. Stewart Education Bursary

Value: \$1100. Awarded to a teacher candidate enrolled in (a) the consecutive pre-service program or (b) the Waterloo/Brock FTS program during the time on Brock's campus. Awarded by the Brock University Senate Committee on Awards and Bursaries, based on the recommendation of the Scholarships Officer. Applicants must demonstrate financial need and meet OSAP residency requirements.

Donor: Friends, Family and Colleagues of Helen J. Stewart

Established: 1996

Endowed: 1996

Student Services Bursary

Value: \$500. Awarded to a part-time student from the Niagara Region. Applicants must demonstrate financial need, be in good academic standing and meet OSAP residency requirements.

Donor: Faculty and Staff, Student Services

Established: 1996

Endowed: 1996

Larry Sweeney Bursary

Value: \$500. Awarded by application to a full-time student with a combined major in Environmental Policy in years 2, 3 or 4 maintaining a minimum academic average of 70% or better. The Scholarships Officer will forward the completed bursary application form to the Director, Environmental Policy. Applicants must also write to the Director indicating their desire to apply for the bursary and include a copy of their most recent letter of standing. The deadline for receipt of applications is the last Friday of October. Applicants must also meet OSAP residency requirements.

Donor: Family Savings and Credit Union

Established: 1991

University Women's Club of St. Catharines Bursary

Value: \$350. To provide assistance to a mature female student, who is continuing her interrupted education on a part-time basis, and who is in need of financial assistance.

Donor: Canadian Federation of University Women, St. Catharines Chapter.

Established: 1987.

Rita Welch Bursary

Value \$600. Awarded to a student entering year 2 of the Politics program who has demonstrated financial need. This

bursary is named in honour of Rita Welch, the late wife of the Chancellor of Brock University. Students may apply by completing an Bursary Application form to confirm financial need plus a one page statement on "the critical role the politician plays in a democracy" and how "Political service is an honourable profession". Both the Bursary Application and the statement will be submitted to the Scholarships Officer by October 31.

Donors: Friends of Dr. Robert Welch on the occasion of his appointment as an Officer of the Order of Canada (April 13, 1994).

Established: 1994

Endowed: 1995

Robert White C.A.W. Local 199 Bursary

Value: \$500 each. Two bursaries to be awarded: one to a female full-time student and one to a male full-time student in financial need, with preference to candidates entering their first-year. First consideration will given to children of members of C.A.W. 199, then secondly to members of C.A.W. Local 199. Further details available on the awarding of the bursary. Applications are available from the Scholarships Officer. Deadline date February 1.

Donor: C.A.W. Local 199

Established: 1993

David R. Wills Bursary in Communication Studies

Value: \$800. Awarded to a student from Centennial High School, Welland, Ontario entering into a degree in Communications Studies. Applicants must demonstrate financial need, be in good academic standing, and meet OSAP residency requirements. Applicants must also confirm they are non-smokers.

Donor: Mr. David Wills

Established: 1996

Endowed: 1996

Women's Basketball Alumni Bursary

Value: \$600. Awarded to female, varsity, basketball players in their third-, fourth- or fifth-year who are in financial need, have satisfactory academic standing superior athletic ability and who have exhibited fair play in the sport of basketball.

Donor: Former members of the Women's Basketball Team

Established: 1994

Margaret Woodrow Bursary

Value: \$750. Awarded annually by application to a student entering first-year in the Oenology and Viticulture Program. Preference will be given to students who are from the Niagara Region. Applicants must demonstrate financial need and meet OSAP residency requirements.

Donor: Family Savings Credit Union

Established: 1997

Endowed: 1997

Scholarships, Bursaries, Awards and Financial Assistance

Other Awards

Alumni Association Student Award

Value: \$500. Awarded to a full-time or part-time student, who has completed at least 10 credits at Brock University with a minimum B average, and who has made a meaningful contribution to extracurricular life in the Brock community. This award is by application or nomination to the Alumni Association. Forms are available from the Alumni Office, Thistle 263.

Donor: Brock University Alumni Association
Established: 1974

Badger Award for Leadership in Extracurricular Activities

Established in memory of Victoria Catherine Hull, this award is intended to honour graduating students who have demonstrated outstanding leadership qualities in their involvement in the extracurricular life of the University while maintaining an above-average academic standing. Nomination forms are available at the Alumni Office. Deadline for nominations is March 1. Awarded only after Spring Convocation.

Donors: The family and friends of Victoria Catherine Hull.
Established: 1980

CUPE Local 2220 Awards

Two awards: \$500 to a full-time student, \$300 to a part-time student or to be shared equally by up to three part-time students. Recipients must be members of CUPE Local 2220 or relatives of CUPE Local 2220 members. Applications are available from the Scholarships Officer. Deadline February 1.

The Campus Recreation Jubilee Award

Value: \$125. Divided between two deserving participants (1 male and 1 female) in the campus recreation program.
Donors: 1989-90 Campus Recreation Staff
Established: 1990
Endowed: 1990

Edward J. Freeland Award

Value: \$4000. Awarded to each of two students of proven financial need, who are entering the Faculty of Business or business related disciplines, and whose admission average is 75% or higher. Students must be residents of the greater Fort Erie area and graduates of one of: Fort Erie Secondary School, Lakeshore Catholic School, Niagara Christian College, Ridgeway or Crystal Beach High School. The award is renewable in each undergraduate year of full-time study, provided satisfactory academic standing is maintained.
Donor: Edward J. Freeland Foundation
Established: 1991

Halia Jordan Memorial Book Prize

Value: \$150. Awarded each October to a deserving international student.

Donors: Friends of the late Mrs. D. L. Jordan
Established: 1986
Endowed: 1986

Bev McCollom Memorial Award

Value: \$1500. Awarded to a member of the Brock University interuniversity hockey team who has attained a minimum 70% average the previous year at Brock, and displays a high level of dedication and commitment to the Brock interuniversity hockey program. Selection of the recipient will be determined by a committee appointed by the Brock University Scholarships Office. Applicants must demonstrate financial need and meet OSAP residency requirements.
Donor: The Brock University Hockey Alumni in the memory of Vev McCollom.

Established: 1999
Endowed: 1999

Lucia K. Pawlik Award

Value: \$500. Awarded annually to a returning female student competing in the intercollegiate rowing program. As an athletic award, the recipient must have a minimum academic average of 70%. Should it not be possible to make the award on these terms, the award is to be made to the male student who satisfies these terms. Applicants must demonstrate financial need, be in good academic standing and meet OSAP requirements to be eligible.

Established: 1997
Endowed: 1997

Sheaffe Hall Award

Value: \$50. Awarded to an upper year residence student of high academic standing, who has made a worthy contribution to residence life.

Donors: Residents of Sheaffe Hall, 1985-86

Silver Badger Alumni Award

Value: \$300. Established in memory of Barrie-Ann Bergsma, a member of Brock's first graduating class, by her family, this award will be made to a student who has maintained high academic standing, while making a significant on-going contribution to the extracurricular life of the University. Applications are available at the Alumni Office. The recipient is selected by the Alumni Board. Deadline for applications is March 1.

Donors: The family and friends of Barrie-Ann Bergsma
Established: 1987

Department/Centre/Program Prizes and Awards

Departmental prizes are awarded for achievement in a particular area of study. No application is required; selection and award is made by the department concerned.

Accounting and Finance

Distinguished Graduating Student Award - Accounting Co-operative Program

Value: \$100. Awarded to the most distinguished graduate for each department and program. The prize and a certificate will be awarded at the Convocation Luncheon. Established: 1998.

Distinguished Graduating Student Award - Accounting and Finance

Value: \$100. Awarded to the most distinguished graduate for each department and program. The prize and a certificate will be awarded at the Convocation Luncheon. Established: 1998.

Distinguished Graduating Student Award - Faculty of Business (BACC)

Value: \$100. Awarded to the most distinguished graduate for each department and program. The prize and a certificate will be awarded at the Convocation Luncheon. Established: 1998.

John Edds Prize in Accounting

Value: \$250. Awarded to the graduating student in the Faculty of Business, with the highest average in accounting courses prescribed for Accounting majors. Donor: Mr. J. A. Edds. Established: 1986.

George Rasula Memorial Award

Value: \$1100. Awarded annually to a student who has completed the first year of the Accounting Co-op program who has demonstrated academic excellence and involvement in extra-curricular activities. Applicants must demonstrate financial need and meet OSAP residency requirements. Donor: The Rasula Family. Established: 1998. Endowed: 1998.

Edith Toth Memorial Award

Value: \$200. Awarded to a fourth-year student in the Accounting or Finance stream of the Faculty of Business for strength in academics and participation in the University community. Donor: J. A. Toth.

Applied Language Studies

Department of Applied Language Studies Book Prizes

Value: \$50. Awarded to second-, third- or fourth-year majors in recognition of academic standing.

Distinguished Graduating Student Award - Applied Language Studies

Value: \$100. Awarded to the most distinguished graduate for each department and program. The prize and a certificate will be forwarded at the Convocation Luncheon. Established: 1998.

Biological Sciences

Biology Faculty Book Prizes

Value: varies. Awarded to the student achieving the highest grade in BIOL 1F90; the second- and third-year students receiving the highest marks in Biology courses; and the graduating honours students with the best overall record in Biology.

Distinguished Graduating Student Award - Biological Sciences

Value: \$100. Awarded to the most distinguished graduate for each department and program. The prize and a certificate will be awarded at the Convocation Luncheon. Established: 1998.

Business Administration

Sonja Bata Award for Entrepreneurship

A Bookstore voucher for \$200 awarded for the best overall combination of academic and entrepreneurial performance. Donor: Dr. Sonja Bata. Established: 1994.

Distinguished Graduating Student Award - Faculty of Business (BBA)

Value: \$100. Awarded to the most distinguished graduate for each department and program. The prize and a certificate will be awarded at the Convocation Luncheon. Established: 1998.

Faculty of Business Book Prize

Awarded to a student (or students) for outstanding academic achievement in the fourth-year of a Business Administration program.

Maurice Perkins Medal

A gold medal and \$200, awarded to the graduating student in the Faculty of Business with the highest academic standing in accordance with the standards used in awarding the faculty medal. Donor: Dr. Maurice F. Perkins. Established: 1977.

Chemistry

The Canadian Society for Chemistry

A silver medal and Institute book plates. Awarded to the student with the highest standing in the penultimate year of the honours Chemistry program. Donor: Chemical Institute of Canada. Established: 1967.

E. A. Cherniak Founders Prize in Chemistry

Value: \$200. Awarded to the best third- or fourth-year Chemistry major or combined major. Donor: Faculty and Staff, Department of Chemistry. Established: 1993. Endowed: 1993.

Scholarships, Bursaries, Awards and Financial Assistance

Distinguished Graduating Student Award - Chemistry
Value: \$100. Awarded to the most distinguished graduate for each department and program. The prize and a certificate will be awarded at the Convocation Luncheon.

Brenda Gibson Prize

Value: \$100. Awarded to the most insightful student in Science and Society (SCIE 1F30), or a corresponding Science elective offered by the Department of Chemistry

Blema Miller Book Prize

Value: \$200. Award to a Chemistry major or combined major with the highest standing in second-year.
Donors: Professors Mary Jane Miller and Jack Martin Miller
Established: 1992

Gail I. Neff Award: Chemistry Demonstrator of the Year

Value: \$350. Awarded to the best chemistry lab demonstrator or senior demonstrator. Nominations must be supported by student evaluations. May be awarded only once to any given individual.
Donor: Dr. Mary Frances Richardson
Established: 1993
Endowed: 1993

Society of Chemical Industry Merit Award

A medal awarded to an honours Chemistry student and an honours Biotechnology student with the highest standing in the graduating class, who has obtained a minimum average of 75% in his or her final year and who has completed the program in four years.
Donor: Society of Chemical Industry
Established: 1967

Child and Youth Studies

Child and Youth Studies Book Prizes

Awarded to the graduating students with the highest major averages in the pass and honours Child and Youth Studies programs; the graduating student with the highest overall average in the BA/BEd(Child and Youth Studies) program; and the graduating students who have made the most outstanding extracurricular contributions to Child and Youth Studies.

Child and Youth Studies Honours Award

Value: \$250. To be awarded to the student with the highest Child and Youth Studies major average entering the honours year of a single or combined major in Child and Youth Studies.
Established: 1995
Endowed: 1996

Margaret A. Clifford Memorial Award

Awarded annually by application, to a student who has been admitted to the BA/BEd (Child and Youth Studies) program. Applicants must demonstrate financial need and meet OSAP

residency requirements. Applications must be received by the Scholarships Officer by August 1.

Distinguished Graduating Student Award - Child and Youth Studies

Value: \$100. Awarded to the most distinguished graduate for each department and program. The prize and a certificate will be awarded at the Convocation Luncheon.
Established: 1998

Child and Youth Studies/Education

Kimberly Wells Memorial Book Prize

Value: \$175. Awarded to a student graduating from the BA/BEd (Child and Youth Studies) program, who displays strength in academics and participation in the University community.
Donors: The family and friends of Kimberly Wells
Established: 1992
Endowed: 1992

Classics

Brock Archaeological Practicum Award

Awarded triennially to a student participating in the Brock University archaeological practicum based on academic merit, financial need and service in the promotion of archeology within the University and wider community.
Donor: Alumni and friends of the Brock University Archaeological Practicum
Established: 1996
Endowed: 1996

Department of Classics Book Prize

Awarded to a graduating student for high standing in Classics.
Established: 1972

Department of Classics Book Prize in Greek

Awarded to a graduating student for high standing in Greek.
Established: 1972

Department of Classics Book Prize in Latin

Awarded to a graduating student for high standing in Latin.
Established: 1972

Department of Classics Prize in Art and Archeology

Awarded to a graduating student for high standing in Ancient Art and Archeology.
Established: 1972.

Distinguished Graduating Student Award - Classics

Value: \$100. Awarded to the most distinguished graduate for each department and program. The prize and a certificate will be awarded at the Convocation Luncheon.
Established: 1998

Bruce Lidsten Memorial Book Prize

Two prizes: awarded during the Fall/Winter Session to students with the highest averages in each of CLAS 1P91/1P92 and CLAS 1P95/1P97.

Established: 1995
Endowed: 1995

Communications, Popular Culture and Film

The Ken Boyle Cobra Radio Memorial Book Prize

Awarded to a graduating student with an outstanding record in Communications, Popular Culture and Film.

Established: 1993
Endowed: 1993

Distinguished Graduating Student Award - Communications

Value: \$100. Awarded to the most distinguished studies graduate for each department and program. The prize and a certificate will be awarded at the Convocation Luncheon.

L. Amy Kerr Book Prize

Awarded to a student in any year who has displayed strength in academics and participation in the University community.

Established: 1992

The Anne Perozuk Book Prize in Critical Writing

Awarded for excellence in an essay submitted by a student in a second- or third-year FILM course. Consult the department for details.

Donor: Joan Nicks
Established: 1993
Endowed: 1993

The Sam and Sophie Yacowar Prize

Awarded to the Film Studies major or combined major with the highest standing in two or more FILM courses in third- or fourth-year.

Donor: Maurice Yacowar
Established: 1989

Community Health Sciences

Distinguished Graduating Student Award - Community Health Sciences

Value: \$100. Awarded to the most distinguished graduate for each department and program. The prize and a certificate will be awarded at the Convocation Luncheon.

Established: 1998.

Computer Science

Department of Computer Science Book Prizes

Two book prizes; awarded to second- and third-year students, with the highest marks in Computer Science courses.
Established: 1981

Earth Sciences

The Canadian Society of Petroleum Geologists Book Prize

Awarded to the best undergraduate student in a petroleum related field, usually at the fourth-year (honours) level.

Canadian Society of Petroleum Geologists Student-Industry Field Trip

A prize of a one-week field trip to Calgary, for the best third-year student in "soft-rock" geology.

Distinguished Graduating Student Award - Earth Sciences

Value: \$100. Awarded to the most distinguished graduate for each department and program. The prize and certificate will be awarded at the Convocation Luncheon.

The Edhorn Prize in Paleontology

Value: \$100. Awarded to the full-time student with the highest grade in a first course in paleontology.
Established: 1985-86

Earth Sciences Award

Awarded by the Department of Earth Sciences to students with the highest average in second-, third- or fourth-year Earth Sciences.

The Geological Association of Canada Book Prize

Awarded to the best third-year student in Earth Sciences.

Mineralogical Association of Canada Book Prize

Membership in the M.A.C. and a subscription to *Canadian Mineralogist*. Awarded to the student with the highest grade in a first course in mineralogy.

Brian Parker Memorial Award

Value: \$1600. Awarded, on the basis of academic excellence and extracurricular involvement, to a student completing third-year of the Earth Sciences stream of the Environmental Science Program.

Donors: Family and friends of the late Brian Parker
Established: 1994
Endowed: 1994

Peter Peach Memorial Award

Value: \$150. Awarded to the student with the highest mark at field camp - ERSC 3P99.

Walker Brothers Award

Value \$500. Awarded to a student in second-, third- or fourth-year majoring in Earth Sciences, on the basis of academic excellence and need.

Established: 1988

Scholarships, Bursaries, Awards and Financial Assistance

Economics

Department of Economics Book Prize

Awarded to a graduating student in Economics, Business Economics or Environmental Economics who has demonstrated outstanding achievement in economics.

Distinguished Graduating Student Award - Economics

Value: \$100. Awarded to the most distinguished graduate for each department and program. The prize and a certificate will be awarded at the Convocation Luncheon.

Established: 1998

Education

Canadian College of Teachers Award

The award is given to students who have demonstrated academic excellence, done outstanding work at their teaching schools and who have contributed to the University community. The award is given to a student from the Elementary and Senior Division, one from each campus. The award consists of a certificate and a letter of recommendation.

Dean's Award for Professional Growth

Value: \$75. One-year membership in a professional organization and one-year subscription to *Brock Education*. Awarded to two graduates in each of the Primary/Junior, Junior/Intermediate and Intermediate/Senior programs in the Pre-service Education Program. Evaluation based on meeting the characteristics of the image of the "Ideal Beginning Teacher", a demonstrated conceptualization of the characteristics of a good teacher, and professionalism. Nominees for this award are forwarded to the Faculty of Education Awards committee by the group counsellors in late April.

Donor: Faculty of Education

Established: 1995

Dean's Medal for Education

Awarded to the graduating student, selected by faculty members, exhibiting academic and professional excellence in Pre-Service Education.

Distinguished Graduating Student Award

Value: \$100. Awarded to the most distinguished graduate for each department and program. The prize and a certificate will be awarded at the Convocation Luncheon. Nominees for this award are forwarded to the Faculty of Education Awards Committee by the group counsellors in late April.

Established: 1998.

Russell N. Eden Art Award

Awarded to a student at the undergraduate, graduate or pre-service level in the Faculty of Education, who has studied art or who is studying art with a view to specialization in the teaching of art or the supervision of the teaching of art. The candidate is selected by the Dean of the Faculty of Education. Applicants must provide a letter of reference from a current professor or counsellor who can attest to their inter-

est and ability in visual arts education, a resume and academic transcript.

Donor: Estate of Russell N. Eden

Established: 1994

Endowed: 1994

Ontario Secondary School Teachers Federation Award

Value: \$350. Awarded each year to a student in regular attendance during the Fall/Winter session of the Faculty of Education in the intermediate/Senior division course, who, in the opinion of the Awards Committee of the Faculty of Education has shown the most outstanding ability and character. Nominees for this award are forwarded to the Faculty of Education awards Committee by a group of counsellors in late April.

Donor: Ontario Secondary School Teachers Federation

Milton Frederick Pummell Memorial Scholarship

Value: \$3000. Established by Mrs. Margarette Pummell in memory of her husband, Milton Frederick Pummell, BA 1932 (B.Paed, Toronto), who was the Director of Education for the St. Catharines Board of Education and also worked as an adult education consultant to school boards on behalf of the Canadian Association for Adult Education. Awarded by Senate, on a recommendation by the Dean of the Faculty of Education, to a student graduating from Brock University who has been accepted in the Faculty of Education Pre-service program. Preference will be given to students from the Niagara region. Applicants must demonstrate financial need and meet OSAP residency requirements.

Donor: Mrs. Margarette Pummell

Established: 1997

Endowed: 1997

Eleanor Shaw Award

Value: \$500. Awarded to a female student in her second term (completed the Fall Term) in the Pre-service Education Program who has demonstrated excellent potential in teaching and has involved herself in community affairs. Nominees for this award are forwarded to the Faculty of Education Awards Committee by the group counsellors in late April.

Donor: Canadian Federation of University Women, St. Catharines Branch

Established: 1995

Helen J. Stewart Award

Value: \$2500. Awarded annually at Spring Convocation, based on the recommendation of the Dean of the Faculty of Education, to a secondary Faculty of Education student who has demonstrated teaching excellence, academic excellence and professional integrity during the Pre-service program.

Established: 1997

Endowed: 1997

English Language and Literature

Eleanor Abram Prize for Fiction

Value: \$75. Awarded to the author of the best work of fic-

tion published in the *Harpweaver* magazine.
Donor: Ms. Patricia Abram
Established: 1995

The Lily Bell Memorial Award for English

Value: \$250. Awarded to the most deserving female student in second- or third-year English.
Donor: Canadian Federation of University Women, St. Catharines Chapter
Established: 1974

Brinkman Travel Prize for Photography

Value: \$50. To be awarded to the artist whose photograph submitted to the *Harpweaver* Magazine is considered to be the most exceptional.
Donor: Brinkman Travel Inc.
Established: 1996

Canadian Authors Association Prize for Poetry

Value: \$50. Awarded for the best poetry submission to be published in the *Harpweaver* Magazine.
Donor: Niagara Branch of the Canadian Authors Association
Established: 1994

Distinguished Graduating Student Award - English Language and Literature

Value: \$100. Awarded to the most distinguished graduate for each department and program. The prize and certificate will be awarded at the Convocation Luncheon.
Established: 1998

English Department Book Prize

Awarded to a student (or students) in third- or fourth-year for outstanding academic achievement in English.

First-Year English Essay Prize

Value: \$100. Awarded for the best essay submitted as part of the required workload of any first-year English course. Any entry must be submitted to the competition by the student.
Donor: Department of English
Established: 1981-1982

The Carole LaMothe Memorial English Essay Prize

Value: \$175. Awarded for the best essay submitted as part of the required workload in any English or Drama/English course during the academic year. Any entry must be submitted to the competition by the student.
Donors: Department of English and friends of Carole LaMothe
Established: 1981-1982

Niagara Region English Committee Award

Value: \$100. Awarded to a continuing student in the second-, third- or fourth-year of an English Language and Literature program, who is a graduate of a Niagara Region high school.
Donor: Niagara Region English Committee
Established: 1993

Environment

Frank Banfield Memorial Book Prize

Awarded to second-, third- or fourth-year majors in Environment in recognition of academic standing and contribution of the Centre.

Distinguished Graduating Student Award - Environmental Policy

Value: Awarded to the most distinguished graduate for each department and program. The prize and certificate will be awarded at the Convocation Luncheon.

Fine Arts

Amadeus Book Prize

An award in commemoration of the 200th anniversary of Mozart's death. Alternating between the Theatre program and the Music department, this award will be presented at Fall Convocation to a graduating student with a strong university record in performance and a high academic standing.
Established: 1993

Distinguished Graduating Student Award - Fine Arts

Awarded to the most distinguished graduate for each department and program. The prize and a certificate will be awarded at the Convocation Luncheon.
Established: 1998

The F. Janet Dolman Prize in Playwriting

Awarded to a student or students who show outstanding promise in playwriting.
Established: 1989

The Jane Forrest Prize in Dramatic and Theatre Arts

Awarded to the student who excels in second-year Theatre courses.
Established: 1979
Donor: Dr. Mary Jane Miller

The J. H. and J.F. Harding Prize in Dramatic Literature and Theatre

Awarded for excellence over three or four years in dramatic literature courses.
Established: 1977
Donor: Dr. Mary Jane Miller

Jean Harding Prize for Festival Achievement

A book prize awarded to the student judged to have made the most outstanding contribution to the Spring Festival of the Department of Fine Arts.
Donor: Dr. Mary Jane Miller

Harperweaver Prize for Visual Arts

Awarded to the artist of the best work of visual art published in *The Harperweaver* magazine.
Established: 1995
Donor: Dr. Alan Marcus

Scholarships, Bursaries, Awards and Financial Assistance

Arthur Houston Prize in Life Drawing

Awarded annually to a student in any year who has completed the best or most promising work in this area during the year in which the award is made. For the purposes of this prize, the term 'drawing' may refer to works executed in the traditional 'solid' media (pencil, charcoal, pastel, etc.) or, if in the view of the faculty of the Visual Arts Program this is appropriate, 'fluid' media (water colour, oil acrylic, etc.) as well. The Visual arts faculty only will determine the selection. The prize can take the form of a book or books or art supplies at the discretion of the student to whom the prize is awarded.

Donor: Dr. Arthur Houston

Established: 1999

Endowed: 1999

L. Amy Kerr Book Prize

Awarded to a student in any year in Film Studies or Theatre/Dramatic Literature/Drama-in-Education or Visual arts, who has displayed strength in academics and participation in the university community.

Established: 1992

The A. Miller and N. Mabee Prize

Awarded to the student who achieves the highest standing in fourth-year (honours) Dramatic Literature or Theatre program or a combined DRAM/THEA honours degree.

Established: 1989

The M.E. and L.E. Miller Prize in Drama and Theatre Arts

Awarded to the student who achieves the highest standing in DRAM 1F93 and THEA 1F99.

Established: 1971

Donor: Dr. Mary Jane Miller

Norah Morgan Book Prize for Drama in Education

Awarded to the student with academic merit over two years in D1EE 2P01, 2P02 or the equivalence of two credits of Drama in Education and Theatre in Education who has also demonstrated a flair for using drama as a subject or method of teaching in the classroom. A minimum academic average of 75% must be maintained.

Donor: Friends of Norah Morgan

Established: 1996

The Sylvia Osterbind Prize in Art History

Awarded to the student with the highest standing in Art History.

Established: 1989

Dr. Marion B. Smith Prize in Fine Arts

For excellence over three or four years in Fine Arts courses.

Established: 1976

Theatre Students and Alumni Book Prize for Theatre

Awarded to a second- or third-year student in the Theatre

and Dramatic Literature Program who has maintained at least a B average and who has made a distinctive contribution to the program or programs.

Donors: Brock Theatre graduates

Established: 1995

Endowed: 1996

VISA Faculty Award

Awarded to the student who has shown excellence over three or four years of study in studio and/or art history.

French, Italian and Spanish

Book Prize of the Consulate General of Mexico

Awarded to a student(s) who have shown excellence and promise in Spanish.

Donor: Consul-General of Mexico

Established: 1999

Book Prize of the Embassy of Spain

Awarded to an outstanding student graduating in Spanish.

Established: 1999

Book Prize of the French Consul-General, Toronto

Awarded to an outstanding student in French.

Donor: Consul-General de France

Established: 1965

Brock Community Italian Prize

Approximately \$400. Awarded to the most outstanding student taking Italian as a major or combined major, in any year.

Donor: The division of Italian and the Italian Club of Brock University

Department of French, Italian and Spanish Graduating Book Prize

Three book prizes to be awarded to graduating students of exceptional merit in each of the three languages, French, Italian and Spanish.

Established: 1999

Distinguished Graduating Student Award - French, Italian and Spanish

Value: \$100. Awarded to the most distinguished graduate for each department and program. The prize and a certificate will be awarded at the Convocation Luncheon.

Established: 1998

Graduating Book Prize of the Consulate General of Italy, Toronto

Awarded to an outstanding graduating student in Italian.

Donor: Consul General of Italy in Toronto

Established: 1997

Prize of the Ambassador of Switzerland to Canada/Italian

A book prize awarded to students who obtained the highest

standing in Italian.
Donor: Ambassador of Switzerland to Canada
Established: 1966

**Year 1 and Year 2 Book Prize of the Consulate
General of Italy, Toronto**

Awarded to outstanding students from first- and second-year who have shown excellence and promise.
Donor: Consul General of Italy in Toronto
Established: 1997

Geography

The Marie and Laurence Barber Award

Value: \$750. Awarded to a student entering their second- or third-year of study in any field of Geography. Priority will be given to a student resident of Ontario who attended a Niagara Region or Grey Bruce County school. The award recipients will be chosen on the basis of academic merit.
Donors: The Barber Family
Established: 1995
Endowed: 1995

Canadian Association of Geographers Book Prize

Awarded to the best graduating student in the fourth-year honours program of the Department of Geography.
Donor: Canadian Association of Geographers
Established: 1967

Department of Geography Graduating Prize

Value: \$50. Geographical books or equipment. Awarded to the student in honours Geography who attained the highest average in third- and fourth-year Geography. This award may be given to the winner of the Canadian Association of Geographers Book Prize.

Department of Geography Year 3 Book Prize

Value: \$50. Awarded to a third-year student in Geography in recognition of both high academic achievement and contribution to the University community.
Donor: Department of Geography
Established: 1986

Distinguished Graduating Student Award - Geography

Value: \$100. Awarded to the most distinguished graduate for each department and program. The prize and a certificate will be awarded at the Convocation Luncheon.
Established: 1998

John N. Jackson Prizes in Human Geography

Four awards, valued at \$150 each. Awarded to Bachelor of Arts students in Geography or Human Geography on the basis of high quality performance in a course assignment in a second- or third-year Human Geography course, which may be taken for BA credit.
Donors: Mr. & Mrs. John N. Jackson
Established: 1992

Edythe and William Meeker Memorial Book Prize

Value: \$125. Awarded to the BA or BSc student with a single major in Geography who is entering the fourth-year (honours), with the highest overall average.
Donor: Professor J. P. Meeker
Established: 1971

Germanic and Slavic Studies

**Department of Germanic and Slavic Studies Book Prize
in Russian 1F00**

Awarded to an outstanding student in Russian 1F00.

**Department of Germanic and Slavic Studies Book Prize
in German 1F90**

Awarded to an outstanding student in German 1F90.

**Department of Germanic and Slavic Studies Book Prize
in German 1P95**

Awarded to an outstanding student in German 1P95.

**Distinguished Graduating Student Award - Germanic
and Slavic Studies**

Value: \$100. Awarded to the most distinguished graduate for each department and program. The prize and a certificate will be awarded at the Convocation Luncheon.
Established: 1998

German Embassy Book Prize

Awarded to the top student in each course offered by the German division of the Department of Germanic and Slavic Studies.
Donor: German Embassy
Established: 1967

The Joyce Lucey Prize

Awarded to an outstanding student majoring in German or Russian in the Department of Germanic and Slavic Studies.
Donor: Friends of the late Mrs. Joyce Lucey
Established: 1989

Prize of the Ambassador of Switzerland to Canada

A book prize awarded to students who obtained the highest standing in German.
Donor: Ambassador of Switzerland to Canada
Established: 1966

Prize of the Embassy of Austria

A book prize to a student or students of outstanding academic achievement in German.
Donor: Austrian Embassy
Established: 1970

Royal Netherlands Embassy Book Prize

Awarded to the top student in Dutch courses.
Donor: Royal Netherlands Embassy
Established: 1991

Scholarships, Bursaries, Awards and Financial Assistance

Great Books/Liberal Studies

Distinguished Graduating Student Award - Great Books/Liberal Studies

Value: \$100. Awarded to the most distinguished graduate for each department and program. The prize and a certificate will be awarded at the Convocation Luncheon.
Established: 1998

Great Books/Liberal Studies Book Prize

Awarded to the graduating student with highest standing in Great Books/Liberal Studies.

History

The Donald G. Creighton Prize in History

Value: \$125. Awarded to the student obtaining the highest mark in a first-year HIST course.
Donor: W.G. (Bill) Ormsby
Established: 1966

Department of History Book Prizes

Four book prizes. Awarded to outstanding students of History in all years.

Distinguished Graduating Student Award - History

Value: \$100. Awarded to the most distinguished graduate for each department and program. The prize and a certificate will be awarded at the Convocation Luncheon.
Established: 1998

The Donald Goodspeed Book Prize

Value: \$125. Awarded to the student achieving the highest academic standing in HIST 1F95.

John M. McEwen Book Prize in British History

Value: \$100. Awarded to the student who excels in British history at the second-, third- or fourth-year level.
Donor: Prof. John M. McEwen
Established: 1991

Turner Book Prize in Canadian History

Value: \$100. Awarded by the Department of History to the student who is a declared History major and who is the outstanding student in Canadian History at the second-, third- or fourth-year level.
Donor: Mr. Wesley B. Turner
Established: 1998
Endowed: 1998

Mathematics

Distinguished Graduating Student Award - Mathematics

Value: \$100. Awarded to the most distinguished graduate for each department and program. The prize and a certificate will be awarded at the Convocation Luncheon.

Established: 1998

J. W. Reed Book Prizes in Mathematics

Two book prizes; Awarded to one female and one male student, graduating with first-class honours in Mathematics.
Donor: J. W. Reed
Established: 1991

Music

Amadeus Book Prize

An award in commemoration of the 200th anniversary of Mozart's death. Alternating between the Theatre program and the Music department, this award will be presented at Fall Convocation to a graduating student with a strong university record in performance and a high academic standing.
Established: 1993

Distinguished Graduating Student Award - Music

Value: \$100. Awarded to the most distinguished graduate for each department and program. The prize and a certificate will be awarded at the Convocation Luncheon.
Established: 1998

A. Whitmore Griffin Award in Music

Value: \$2,400. Awarded to a third- or fourth-year student with a declared major in Music. The award will be made in recognition of academic excellence, outstanding achievement and potential as a music educator. Preference will be given to a student who has been accepted in the Faculty of Education at Brock University. Applicants must demonstrate financial need and meet OSAP residency requirements.
Donor: Mrs. Kathleen Griffin in memory of A. Whitmore Griffin and in honour of his outstanding contribution to the musical life of St. Catharines, Lincoln County, the whole Niagara Region and in schools and communities across Ontario.
Established: 1997
Endowed: 1997

Ronald Tremain Prize in Music Composition

Value: \$50. Awarded to a Music major who shows outstanding achievement and potential as a composer.

Philosophy

Affleck Memorial Prize in Philosophy

Awarded to an outstanding fourth-year (honours) student on the basis of his or her whole record with the Department of Philosophy.
Donors: Relatives and friends of the late Mrs. Rheta Affleck
Established: 1972

Distinguished Graduating Student Award - Philosophy
Value: \$100. Awarded to the most distinguished graduate for each department, and program. The prize and a certificate will be awarded at the Convocation Luncheon.
Established: 1998

Physical Education

Department of Physical Education Book Prize
Awarded annually to the fourth-year student with the highest graduating average in Physical Education.

Distinguished Graduating Student Award - Physical Education
Value: \$100. Awarded to the most distinguished graduate for each department and program. The prize and a certificate will be awarded at the Convocation Luncheon.
Established: 1998

Physics

Distinguished Graduating Student Award - Physics
Value: \$100. Awarded to the most distinguished graduate for each department and program. The prize and a certificate will be awarded at the Convocation Luncheon.
Established: 1998

Physics Book Prize
Awarded to one or more students.

Political Science

Distinguished Graduating Student Award - Political Science
Value: \$100. Awarded to the most distinguished graduate for each department and program. The prize and a certificate will be awarded at the Convocation Luncheon.
Established: 1998

Dr. James A. Gibson Book Prize in Political Science
Value: \$150. Awarded to an honours student in or entering the senior year who has an outstanding scholarly record, intends to pursue graduate study and is active in the life of the University.
Donors: Friends and colleagues of the President Emeritus on the occasion of his 80th birthday
Established: 1992

Political Science Book Prizes
Four book prizes: awarded to outstanding student(s) from first-, second-, third- or fourth- year Political Science programs.
Established: 1966

The Purple Chair Award
Value: \$200. Awarded to a student in the second-, third- or

fourth-year of a Political Science program, with an outstanding academic record and who has made a significant contribution to the department.
Donor: Jory C. Sherman
Established: 1993

Psychology

The Cara Chefurka Memorial Book Prizes
Awarded to students with the highest graduating averages in pass and honours Psychology at Spring and Fall Convocation.
Established: 1990

Distinguished Graduating Student Award - Psychology
Value: \$100. Awarded to the most distinguished graduate for each department and program. The prize and a certificate will be awarded at the Convocation Luncheon.
Established: 1998

Psychology 3F40 Prize
Awarded to the PSYC 3F40 student with the most outstanding research project.

Sociology

Distinguished Graduating Student Award - Sociology
Value: \$100. Awarded to the most distinguished graduate for each department and program. The prize and a certificate will be awarded at the Convocation Luncheon.
Established: 1998

P. A. Sorokin Book Prize in Sociology
A book prize, normally awarded to a fourth-year graduating student in Sociology, whose thesis or class project as well as general academic performance are judged by the faculty to be outstanding.

Sport Management

E. Werner Awards
Value: \$650. Awarded by the Sport and Exercise Management Department to two second-year student athletes who are members of the Brock Inter-university hockey team and will work on a tournament/event project determined by the hockey coach in the year the award is presented. The recipients must have a minimum academic average of 70 percent and be interested in a career path that combines sport and business. Applicants must demonstrate financial need and meet OSAP residency requirements.
Donor: Edward M. Werner
Established: 1999
Endowed: 1999

Scholarships, Bursaries, Awards and Financial Assistance

Women's Studies

Rosalind (Hyman) Blauer Award

Value: \$500. Awarded to members of the Brock community (students, staff or faculty) engaged in activities which illuminate, research, bring attention to, or improve the position of women in contemporary society. Applications or nominations should be directed to the Director of Women's Studies. The award is in honour of the memory of Professor Rosalind (Hyman) Blauer, founding member of the Department of Economics.

Distinguished Graduating Student Award - Women's Studies

Value: \$100. Awarded to the most distinguished graduate for each department and program. The prize and a certificate will be awarded at the Convocation Luncheon. Established: 1998

Josephine Meeker Research Fund in Women's Studies

Value: \$250. Awarded annually by application to students in fourth-year of the Centre for Women's Studies to offset the costs of the honours project. Applicants must demonstrate financial need and meet OSAP residency requirements. Interested students should apply by the last Friday in October through the Director of Women's Studies for consideration by the Women's Studies Awards Committee.

Donor: Professor J. P. Meeker

Established: 1996

The Nellie

Value: \$100. Awarded to a second year Women's Studies major with the highest average in WiSE courses.

Established: 1994

Endowed: 1994

The Melvin Perlman Award

Value: \$450*. Awarded to the best all-round student in the Centre for Women's Studies. The award is in memory of the substantial contribution Professor Perlman made to the University during his years of teaching at Brock.

Donors: The family and friends of Dr. Melvin L. Perlman

Established: 1988

Endowed: 1991

Hazel M. Wood Prize

Value: \$125. Awarded to a student, in any year, who has displayed strength in academics and participation in the University community and who has financial need. Established in 1993 on the occasion of Mrs. Wood's 80th birthday and in recognition of her friendship and support.

Donor: H. Christina MacNaughton

Endowed: 1993

To Prospective Donors

The University welcomes offers of funds for scholarships, bursaries and prizes from individuals, companies and associations.

Enquiries should be addressed to:

The Office of External Relations
Brock University
St. Catharines, Ontario
L2S 3A1

(905) 688-5550, extension 4190

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Faculty Distinction

Alumni Association Teaching Award Recipients:

1980	William A. Matheson, Politics
1981	A. Victoria Soady, Classics
1982	Wayne T. Jolly, Geological Sciences
1983	Donald J. Ursino, Biological Sciences
1984	Angus A. Somerville, English Language and Literature
1985	Martha Husain, Philosophy
1986	Norah Carlsen, Psychology
1987	Alan G. Arthur, History
1988	John G. Benjafield, Psychology
1989	Clarke W. Thomson, Geography
1990	Eric R. Muller, Mathematics
1991	Mary Frances Richardson, Chemistry
1992	Joan M. Preston, Psychology
1993	Lorne J. Adams, Physical Education
1994	Joan Nicks, Film Studies, Dramatic and Visual Arts
1995	David DiBattista, Psychology
1996	Marilyn Rose, English Language and Literature
1998	Leslie Boldt-Irons, French, Italian and Spanish
1999	Roberta Robb, Economics

Brock Award for Distinguished Research or Creativity

1994	R. Peter Rand, Biological Sciences
1995	Herbert L. Holland, Chemistry
1996	W. D. Kenneth Kernaghan, Politics
1997	Sidney J. Segalowitz, Psychology
1998	Howard E. Bell, Mathematics
1999	Barry Grant, Communications, Popular Culture and Film

Brock Award for Distinguished Teaching

1998	John A. Lye, English Language and Literature
1999	Barry Joe, Germanic and Slavic Studies

OCUFA Award Recipients

1986	Donald J. Ursino, Biological Sciences
1991	Mary Frances Richardson, Chemistry
1992	Patricia Cranton, Education
1994	Lorne J. Adams, Physical Education
1995	Ann D. Duffy, Sociology
1995	Eric R. Muller, Mathematics
1998	Leslie Boldt-Irons, French, Italian and Spanish

3M Teaching Award Recipients

1989	Clarke W. Thomson, Geography
1991	Donald J. Ursino, Biological Sciences

CASE Canadian Professor of the Year

1992	Mary Frances Richardson, Chemistry
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Lieutenant Governor's Award for Teaching Excellence

1993	Patricia Cranton, Education
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Members of the Royal Society

1994	R. Peter Rand, Biological Sciences
1998	W. D. Kenneth Kernaghan, Politics

Chevalier dans l'Ordre des Palmes Académiques

1992	Alexandre L. A. Amprimoz, French, Italian and Spanish
1993	Leonard A. Rosmarin, French, Italian and Spanish
1995	Sandra L. Beckett, French, Italian and Spanish

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Economics

Faculty

Permanent full-time faculty (as of January 1, 2000)

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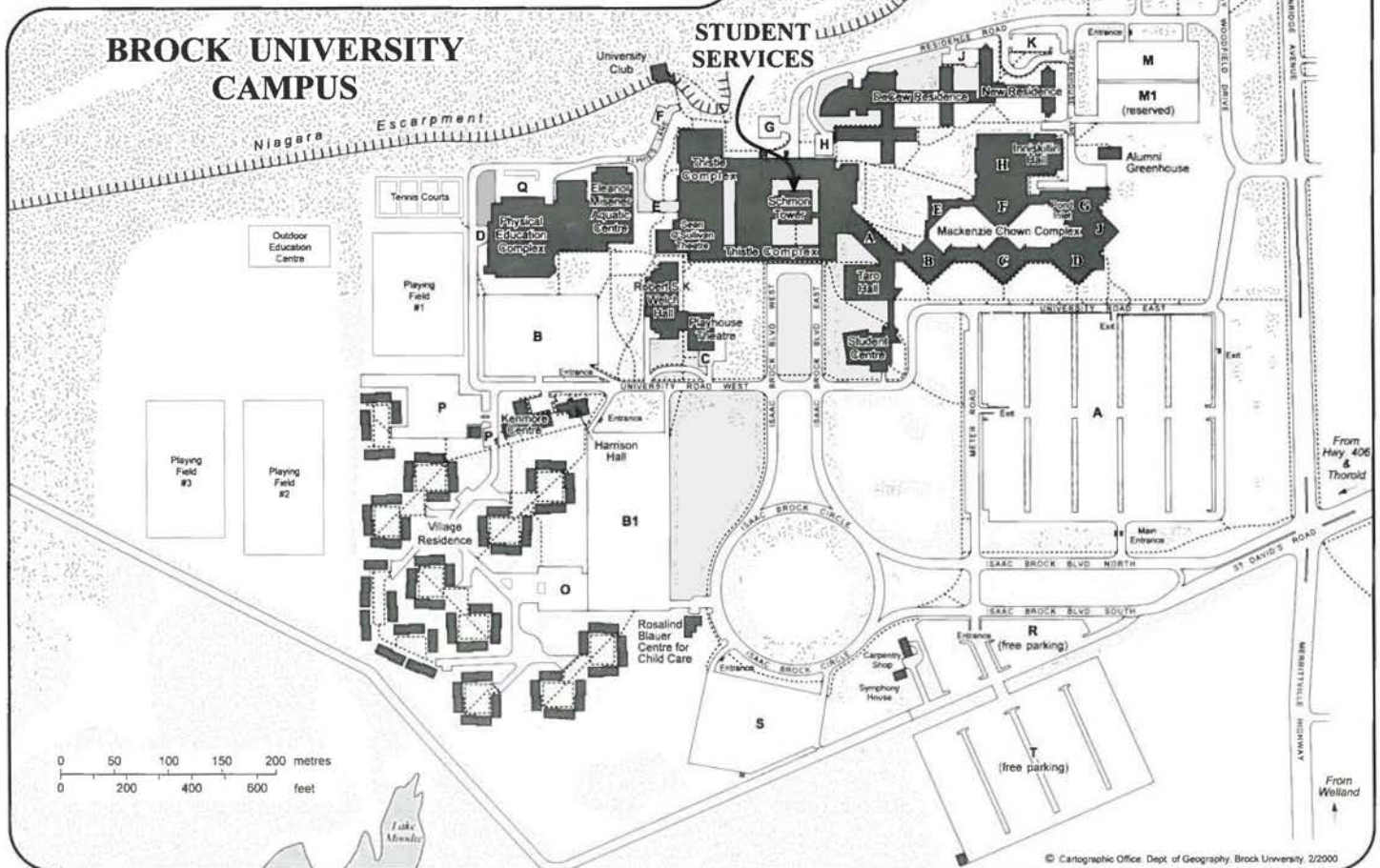
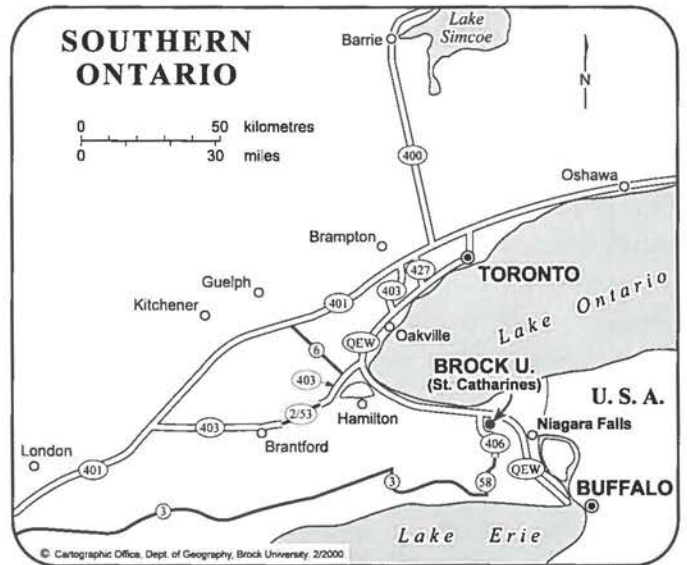
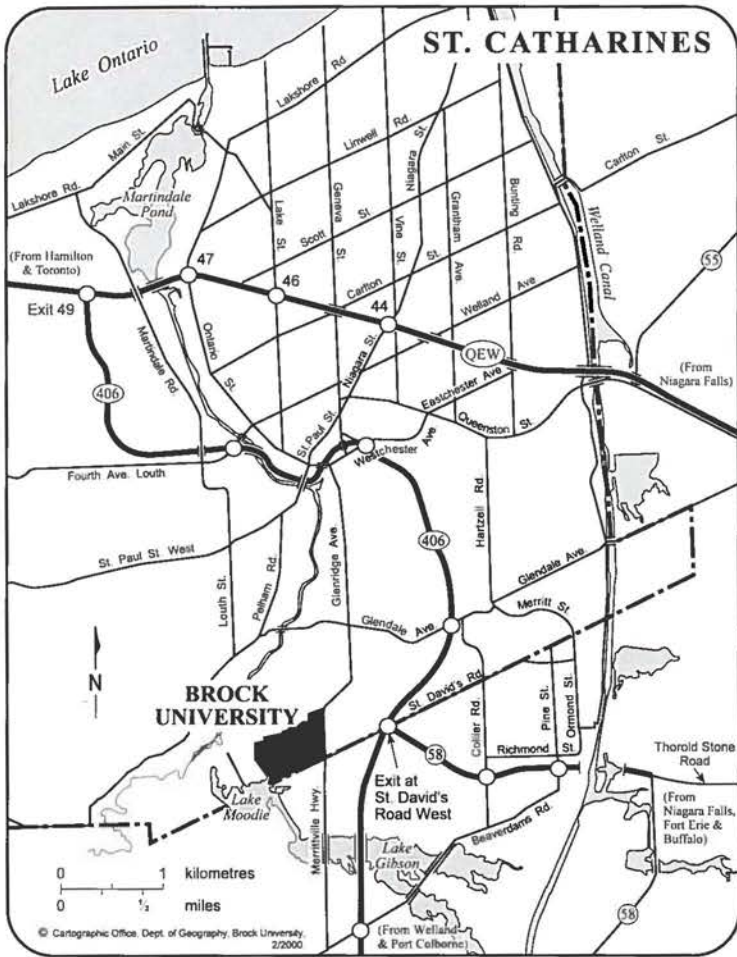
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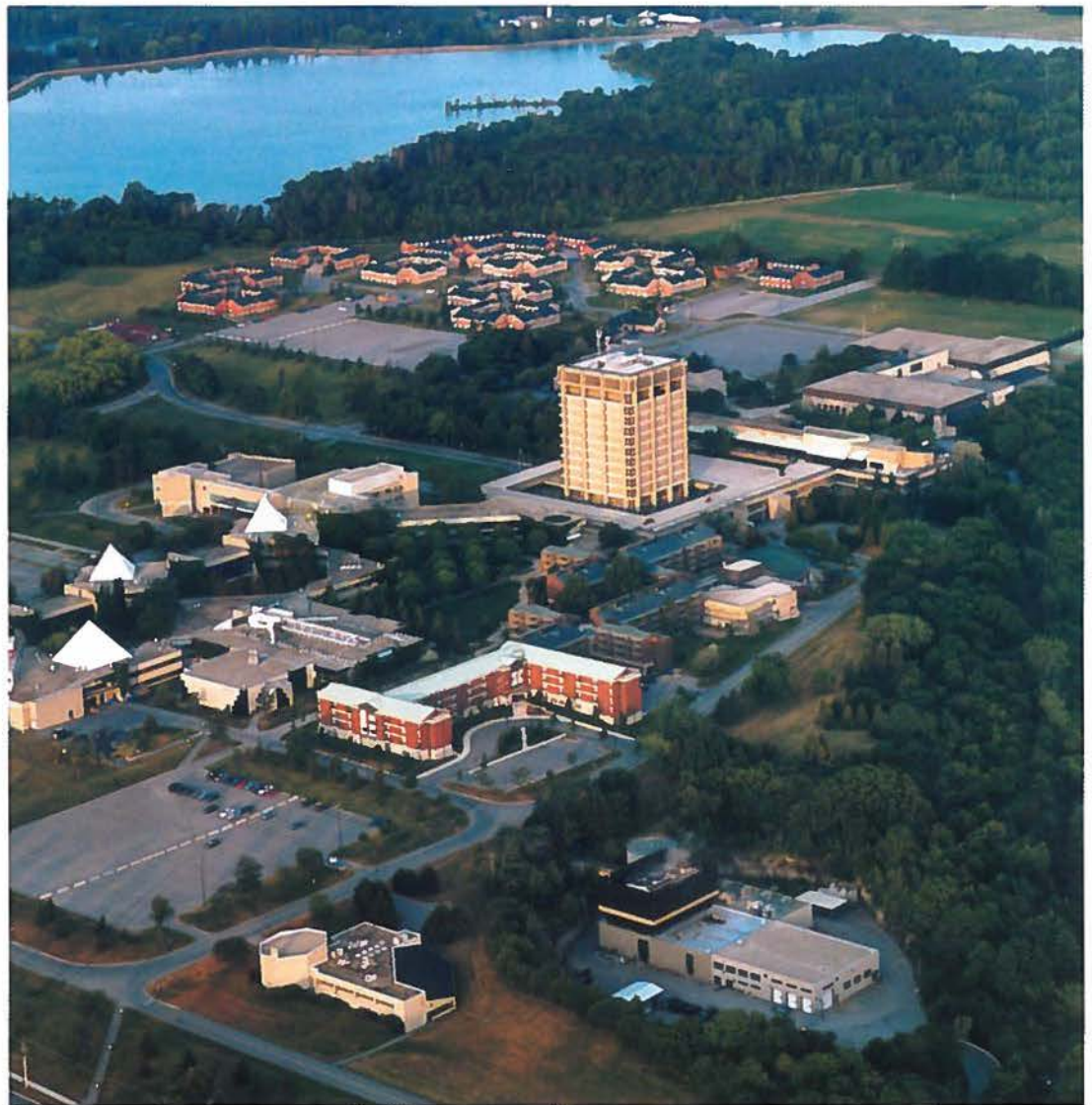
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