

### Notes

*Subject Code* INTN

*Office* Faculty of Arts and Science

*ASC Internship Coordinator* Interim, Assoc. Dean J. Atkinson

*Telephone* 613-533-2470

*Office* Career Services

*QUIP ASC Internship Coordinator* K. Eppel

*Telephone* 613-533-2992

### Overview

The *Arts and Science Professional Internship Program* leverages the excellent academic foundation provided by the Queen's curriculum into career opportunities by helping to bridge university life and the working world for students. Through this program, students will have the opportunity to develop their job-search skills through a structured career development program and get hands-on professional experience in their field of study while building professional networks with employers and improving their communication, teamwork and time management skills in a professional environment.

### Program

The Professional Internship Program is a combination of career-related workshops and career coaching sessions followed by a 12- to 16-month paid internship opportunity for which academic credit will be given, available to qualified students registered in any Plan in a Bachelor of Arts (Honours) or Bachelor of Science (Honours) program. The internship normally occurs following the student's third year of study, after which the student completes the final year of the honours degree.

The program consists of the current B.A.(Hons.) or B.Sc.(Hons.) program requirements plus additional courses totaling 6.0 units: INTN 301/1.5, INTN 302/1.5 and INTN 303/3.0 for 12 month internships, and INTN 301/1.5, INTN 302/1.5, INTN 304/1.5 and INTN 305/1.5 for 16 month internships. The INTN courses do not count toward the 120.0 total units required for the B.A.(Hons.) or B.Sc.(Hons.) degree requirements.

During the internship, students may optionally pursue a further 3.0 to 9.0 units of independent study that may be used as academic credit towards their Major or Specialization Plan requirements, or towards the elective requirements of the degree program, at the discretion of the student's home Department. Upon successful completion of the 6.0 units of INTN courses, students will be eligible for a Bachelor of Arts (or Science) (Honours) degree with a professional internship designation.

### Advice to Students

Students should enroll in the internship program during the Fall Term of Year 3 by contacting Career Services.

Students participating in the Arts and Science Internship Program must 1) normally be enrolled in their third year of study, 2) be in good academic standing as defined by the Faculty's academic regulations, and 3) have a minimum cumulative GPA of 1.90.

### Enrolment Limitations

In addition to the INTN course, students may also enrol in one course only during each internship term, including but not limited to an independent study course, to a maximum of 6.0 units per term.

**Art History:** G.A.Bailey, P.du Prey (Emeritus), U.D'Elia, S.Dickey, J.Helland (Emerita), C.Hoeniger, L.Jessup, J.Kennedy, A.Morehead, M.Reeve, K.Romba, J.Russell-Corbett, J.M.Schwartz, R.Spronk, N.Vorano

**Art Conservation:** R.Hill, A.Murray, P.Smithen

The **Art History** program offers degrees at the undergraduate and graduate level. Art History courses offer students a unique opportunity to develop the essential skill of visual literacy -- learning to look carefully and think critically about the visual images and material objects that surround us. Encompassing global art traditions from prehistory to the present, courses introduce students to a range of interdisciplinary methods, topics, and media. We explore how visual and material culture shapes human society across time and around the world. Queen's Art History students can take advantage of experiential learning opportunities in Venice (Venice Summer School / Venice and Its Biennale) and at the Bader International Study Centre at our 15th-century castle in England, in addition to internships for course credit at the Agnes Etherington Art Centre on campus and in other museums across Canada. Research opportunities abound at Queen's which is home to the magnificent Bader Collection of European art as well as collections of contemporary, Indigenous, African, and Canadian art. Through field trips, internships, and other activities in and out of the classroom, students gain first-hand experience in analyzing and interpreting works of art and architecture in preparation for careers in museums and archives, academic institutions, heritage preservation and tourism, journalism, art business, art law, and cultural policy. For more information, visit the Art History website: [www.queensu.ca/art/art-history](http://www.queensu.ca/art/art-history)

The **Art Conservation** program is offered at the graduate level only. It is the only Master of Art Conservation program in Canada. Art conservation is an exciting and challenging multidisciplinary field that involves the examination, interpretation, analysis and treatment of cultural, historical and artistic objects. Professional conservators rely on their knowledge of both the humanities and the sciences in order to understand the creation and production of material culture in the past and present and to ensure its preservation for future generations. For more information, visit the Art Conservation website: <http://www.queensu.ca/art/art-conservation>

### Departmental Notes

*Subject Code for Art History* ARTH

*Head of Department* J.M.Schwartz

*Departmental Office* Ontario Hall, Room 316

*Departmental Telephone, Art History* 613-533-2517

*Departmental Fax, Art History* 613-533-6891

*E-Mail Address* [art.history@queensu.ca](mailto:art.history@queensu.ca)

*Chair of Undergraduate Studies* K. Romba

*Chair of Graduate Studies (Art History)* A.Morehead

*Chair of Graduate Studies (Art Conservation)* P.Smithen

Popular courses include the introductory "Art in the West from Antiquity to Modernity" and courses in Gothic, Renaissance, Baroque, Latin American, modern, and contemporary art; the Indigenous Arts of the Americas; Culture and Conflict; Technical Art History; Feminism; and Art and Popular Culture. These explore diverse aspects of visual and material culture, situating art with the contexts of museums, collecting, and cultural policy and in relation to key concerns such as gender, class, and race. Cross-cultural interactions are investigated in post-colonial perspective.

### Advice to Students

#### Languages

Students who plan to proceed to graduate work in Art History are advised to acquire reading skills in languages appropriate to the area of specialization.

**Special Study Opportunities**

Fourth-year Honours students can apply for a practicum course at the Agnes Etherington Art Centre to work directly with curators on exhibitions and other projects. Given the importance of studying works of art first hand, students in Art History are also encouraged to take courses at the Bader International Study Centre (BISC) at Herstmonceux Castle in their second or third year. Summer, fall, and winter courses at Herstmonceux take advantage of architecture, painting, sculpture and the decorative arts on both sides of the English Channel within easy travelling distance from the Castle. The Department also offers month-long programs in Venice and internships in cultural institutions across Canada. For more information, visit the website: [www.queensu.ca/art](http://www.queensu.ca/art).

## Biochemistry

S. Abraham, J.Allingham, R.L.Campbell, G.P.Côté, A.Craig, P.L.Davies, C.D.Funk, Z.Jia, G.Jones, M.Ormiston, C.R.Mueller, M.P.Petkovitch, S.P.Smith

### Program Notes

*Subject Code for Biochemistry* BCHM

*Associate Dean, Life Sciences and Biochemistry* L.Winn

*Program Chairs* J. Allingham

*Office* Botterell Hall, Room 650

*Telephone* 613-533-2900

*World Wide Web Address* <http://healthsci.queensu.ca/liscbchm/biochemistry>

*E-mail Address* [biochem@queensu.ca](mailto:biochem@queensu.ca)

### Overview

The Biochemistry program provides the student with an in-depth training in modern experimental Biochemistry. The first two years of the program provide background preparation in Chemistry (organic, analytical and physical), Molecular Biology, general Physics and Mathematics, Statistical Analysis. In the upper years of the program students receive in-depth exposure to all areas of Biochemistry and Molecular Biology, Cell Biology, including extensive hands-on laboratory experiences. The Biochemistry program has enough flexibility for students to take elective courses offered in other programs within the Faculty of Arts and Science, including the Life Sciences program, for which they are eligible.

The Department of Biomedical and Molecular Sciences is responsible for *Biochemistry* Plans (General/Minor (Science), Major, Specialization) and plays a primary role in the *Life Sciences* Plans (General/Minor (Science), Major, Specialization). For specific information related to the Biochemistry and Life Sciences Programs, please consult the Biochemistry Program and Life Sciences Program entries in the *Calendar*.

### Program Policies

Students pursuing entry into the fourth-year of the *Biochemistry* Major Plan require a minimum GPA of 2.5 in the core BCHM courses (BCHM 218/3.0, BCHM 313/3.0, BCHM 315/3.0, BCHM 316/3.0, and BCHM 317/6.0) to access those fourth-year courses required to complete the Plan. See Academic Regulations **2.4** and **2.6**.

Students wishing to continue in *Biochemistry* Specialization Plan (BCHM-P-BSH) in their fourth-year must 1) achieve a minimum GPA in the core BCHM courses (see above) of 2.9 and 2) acceptance into the Plan. Students who secure a research project but do not attain the minimum GPA of 2.9 will not be allowed to enroll in BCHM 421/6.0 and BCHM 422/6.0 but will be allowed to complete the *Biochemistry* Major Plan.

### Laboratory Safety

Departmental Safety Rules are strictly enforced. A standard white laboratory coat is required for all laboratory courses. Shoes must be closed at both heel and toe. Additional safety requirements will be described at the first laboratory in each laboratory-based course.

### Advice to Students

Students should seek **academic counseling** from the staff in the Associate Dean's office or from the counselor listed below.

COURSE PREFIX	COUNSELLOR	CONTACT INFORMATION
BCHM	J. Allingham	<a href="mailto:allinghj@queensu.ca">allinghj@queensu.ca</a>
BCHM and LISC	L. Winn	<a href="mailto:lifesci@queensu.ca">lifesci@queensu.ca</a>
BCHM and LISC	D. Cameron	<a href="mailto:biochem@queensu.ca">biochem@queensu.ca</a>
BCHM and LISC	K. Rudder	<a href="mailto:lifesci@queensu.ca">lifesci@queensu.ca</a>

### Biochemistry Plans

The flagship program is the Biochemistry Specialization Plan (BSCH-P-BSH), which is recommended for students who wish to gain in-depth training in modern experimental Biochemistry and Biochemical processes involved in human health and disease. This program culminates in an intensive fourth-year thesis research project. It equips students with a solid foundation for entry into a variety of science-based graduate programs. Students may access this Plan at the start of their fourth year, on securing a research project.

A Cooperative program in Biochemistry is available that is integrated into the Specialization program. It provides two relevant work experiences in industry, business, research institutes or government but requires that the student complete their degree requirements in four and a half years, not four.

The Biochemistry Major Plan (BSCH-M-BSH) is designed for those students who want comprehensive training in Biochemistry but may wish to pursue interests outside of experimental Biochemistry. This option provides flexibility for students to take a minor in another subject. To accommodate these interests there are opportunities for more elective credits in the final year of the program. Typically, students interested in pursuing alternate plans than graduate studies in experimental Biochemistry should enroll in this Plan.

L.W.Aarssen, S.E.Arnott, F.Bonier, W.Bendena, M.G.Blennerhassett, P.T.Boag, I.D.Chin-Sang, A.K.Chippindale, R.Colautti, B.F.Cumming, A.J.Daugulis, P.L.Davies, T.Day, E.Dumont, C.G.Eckert, V.L.Friesen, P.Grogan, , P.V.Hodson, K.Ko, , D.D.Lefebvre, W.C.Leggett, S.C.Lougheed, P.R.Martin, J.Monaghan, R.D.Montgomerie, C.D.Moyes, W.A.Nelson, D.Orihel, W.Paterson, W.C.Plaxton, L.M.Ratcliffe, S.M.Regan, R.M.Robertson, L.Seroude, J.P.Smol, W.A.Snedden, P.D.Taylor, N.Troje, B.L.Tufts, S.Vanner, V.K.Walker, Y.S.Wang, P.G.Young

### Departmental Notes

*Subject Code* BIOL

*Head of Department* B.F.Cumming

*Associate Head of Department* P.G.Young

*World Wide Web Address* <https://biology.queensu.ca/>

*Departmental Office* BioSciences Complex, Room 3111

*Undergraduate Office* BioSciences Complex, Room 3109D

*Departmental Telephone* 613-533-6160

*Departmental Fax* 613-533-6617

*Undergraduate Telephone* 613-533-6344

*Undergraduate E-Mail* [frenchj@queensu.ca](mailto:frenchj@queensu.ca)

*Chair of Undergraduate Studies* K.Ko

*Associate Chair of Undergraduate Studies* V.Friesen

*Chair of Graduate Studies* D.Lefebvre

*Associate Chair of Graduate Studies* L.Aarssen

*Director of Biological Station* S.C.Lougheed

### Overview

Queen's Biology students have the opportunity to explore the full breadth of biology: the inner workings of cells; the integrative biology of organisms; the interactions between organisms in ecological communities; and the central roles of genetics and evolution in shaping the diversity of life. Hands-on laboratory exercises, field courses offered locally at our renowned Queen's University Biological Station and around the world, and independent research opportunities in professors' laboratories on selected topics are hallmarks of a Degree Plan in Biology. The mission of Queen's Biology is to prepare graduating students to be engaged, independent, and critically thinking citizens, well-prepared for further study and with a variety of career options.

### Departmental Policies

Academic policies of the Department of Biology are outlined on the Department's website and course syllabi. Some Biology courses may require students to cover costs such as laboratory manuals and field trips. Laboratory manuals may contain important information on issues specific to the course of study such as laboratory safety, the ethical use of animals, and academic integrity. All students are expected to read and follow these departmental policies, which complement the Code of Conduct and Academic Regulations described elsewhere in this *Calendar* and on the Biology website.

### Advice to Students

Students have some flexibility in selecting courses that can be credited toward biology concentrations. However, judicious planning is required in order to avoid conflicts. For example, physics is optional for B.Sc. degree plans but is recommended in specific areas of biology. To avoid course conflicts in upper years, students are advised to plan their course of study in consultation with an Academic Adviser in the Department of Biology upon admission, and again at the beginning of second year. Academic Advisers are available for consultation and program approval.

To assist students in designing a Biology degree Plan, planners for four different course streams are described on the departmental website. These streams are (i) Genetics and Molecular Biology, (ii) Plant Biology, (iii) Integrative Animal Biology, and (iv) Ecology and Evolutionary Biology, each representing a sub-discipline within biology corresponding to teaching and research specializations of faculty within the Department of Biology. Students who wish to cater their degree Plan and specialize in one of these areas are encouraged to use the appropriate planner to help in mapping out course selections. Suggestions are given for courses to select from Biology as well

as supporting courses that are offered by other departments. Course streams are not formal degree Plan options in Biology, and some students may prefer to sample broadly from across all four areas.

Students wishing to take a single elective course in Biology are advised to take BIOL 110/3.0, BIOL 111/3.0, or BIOL 350/3.0. Those wishing to take more elective courses in Biology are advised to consider that most courses have prerequisites, which include the core courses described in the following Plans.

### **Special Study Opportunities**

#### *Advanced Honours Seminars (BIOL 501 – 536)*

Biology offers a series of advanced 3.0 unit seminars with emphases on reading primary literature, writing, presentation skills and experimental enquiry. Small class sizes and extensive interaction with faculty help promote an independent, discovery-based learning experience. Topics and course numberings for seminar offerings vary from year to year and are listed each spring for third-year students to consider. Normally, due to enrolment restrictions, students taking BIOL 537/12.0 will be permitted to take only one of these seminar courses and all other fourth-year students will be permitted to take a maximum of two. Preferred access will be given to students at Level 4 and registered in a B.Sc.(Hons.) program with a BIOL Plan.

#### *Honours Thesis (BIOL 537)*

The thesis course in Biology is a 12.0-unit, two-semester immersion in research that provides ideal preparation for graduate studies and research. Students follow the main steps of a graduate degree on a compressed schedule, from conception and proposal of a project to its execution, presentation in the form of a poster and public talk, a written thesis and a formal defense. Third-year students should consult the Biology website for further information on the faculty members offering BIOL 537 placements, the specific projects available, and details on the application process.

#### *Research Mentorship (BIOL 538, 539, 540)*

This family of courses offers students the opportunity to arrange, with a Biology faculty member and permission of the Department, a placement in a laboratory and literature-based research project of either 3.0 or 6.0 units. Students undertaking a Research Mentorship gain the hands-on experience of contributing to an active research laboratory and interacting with the researchers, as well as undertaking a customized independent study that compliments the laboratory's research program.

#### *Field Studies in Biology (BIOL 307, 317, 327)*

The Department of Biology is an active participant in the Ontario Universities' Programme in Field Biology (OUPFB) and a leader among Canadian universities in providing unique learning experiences via one- and two-week modules locally and around the globe. Superb resources are available close to Kingston at our Queen's University Biological Station and the Elbow Lake Environmental Education Centre, and recent courses have touched every continent except for Antarctica.

#### *Joint Program with St. Lawrence College - Bachelor of Science (Honours) Degree/Advanced Diploma in Biotechnology*

The Department of Biology and the Biotechnology unit at St. Lawrence College are offering a joint program in Biotechnology available to both Queen's and St. Lawrence College students. Students may begin the program at either institution, and then transfer to the partner institution after 2.5 or 3 years to finish the program. Such joint program students will be eligible for both the Queen's B.Sc.(Honours) degree and the St. Lawrence College Advanced Diploma after a total of 5 years of full-time study. The program focuses on a laboratory-based curriculum with both a work placement part-way through the program and a final independent research project. Interested students should contact the Program Assistants in either Department for further information and admission requirements.

D.Beauchemin, R.S.Brown, N.M.Cann, C.Capicciotti, J.Carran, T.Carrington, C.Crudden, P.A.Evans, S.A.M.Hesp, J.H.Horton, G.Jerkiewicz, P.G.Jessop, I.Kozin, G.Liu, H.-P.Loock, D.H.Macartney, M.Mombourquette, N.J.Mosey, J.M.Nunzi, R.D.Oleschuk, A.Petitjean, A.Ross, K.Stamplecoskie, P.Wang, S.Wang, G.Wu, D.Zechel

### Departmental Notes

*Subject Code* CHEM

*World Wide Web Address* <http://www.chem.queensu.ca/>

*Acting Head of Department* H.-P.Loock

*Departmental Office* Chernoff Hall, Room 200

*Departmental Telephone* 613-533-2616

*E-Mail Address* [ugadm@chem.queensu.ca](mailto:ugadm@chem.queensu.ca)

*Chair of Undergraduate Studies* A.Petitjean

*Coordinator of Graduate Studies* N. Mosey

*Department Manager* H.Drouillard

### Overview

As one of the top chemistry teaching and research departments in Canada, we offer a stimulating learning environment for undergraduate and graduate students. Queen's Chemistry programs have rich practical laboratory components, where you will put into practice key concepts learned from your lectures. In upper years, you can specialize in one or more of the fundamental branches of chemistry – analytical, inorganic, organic, physical, and theoretical – or explore new applications such as environmental, materials, biological, computational, or polymer chemistry.

### Departmental Policies

#### Safety in the Laboratories

The Departmental Safety Rules are strictly enforced. Everyone is required to wear protective goggles of an approved type at all times in the laboratories. If contact lenses are used, they must be worn underneath protective goggles. Arms, legs, and feet must be covered while working in laboratories. Open-toed shoes (sandals) are not permitted. The use of a laboratory coat is required. Protective gloves may be required.

Students must complete Queen's WHMIS and Safety Awareness training in order to take a laboratory course in Chemistry. WHMIS and Safety Awareness training will normally be offered during the first two weeks of the Fall Term by the Department of Environmental Health and Safety.

#### Laboratory Costs

Some chemistry courses require students to purchase a laboratory manual produced in the Department for that particular course. The cost of these manuals will be approximately equal to their cost of production.

A standard scientific calculator (cost of about \$25) is required for use in tests and examinations in many chemistry courses.

### Advice to Students

#### Programs in Chemistry (Overview)

The Department of Chemistry offers a number of Plans, from the Minor (30.0 units plus 6.0 supporting units) to the Specialization (90.0 units). Students wishing to specialize in chemistry should follow the Major or Specialization Plans. Students wishing to study chemistry and another subject should consider chemistry as one component of a Major-Minor degree combination, or the Specialization Plan in Environmental Chemistry found in the Environmental Studies section of this *Calendar*.

#### Second-Year Courses in Organic Chemistry

CHEM 281/3.0 and CHEM 282/3.0 are intended primarily for students in Life Sciences or Biology Plans who are interested in organic chemistry. Students registered in or considering registering in any Plan in Chemistry or Biochemistry should *not* enrol in these courses. Organic chemistry is covered in a more integrated fashion in the courses CHEM 211/3.0, CHEM 212/3.0, CHEM 222/3.0 and CHEM 223/3.0; approximately 60% of the unit



weighting in these courses involves instruction in organic chemistry, as determined by external accreditation. Students who are undecided about their choice of Plan before entering second year are strongly recommended to consult the Chair of Undergraduate Studies in Chemistry. Priority will be given to students in Chemistry and Biochemistry Plans for enrolment in CHEM 211/3.0, CHEM 212/3.0, CHEM 213/3.0, CHEM 221/3.0, CHEM 222/3.0 and CHEM 223/3.0.

**Accreditation by the Canadian Society of Chemistry (CSC)**

The Chemistry Major and Chemistry Specialization Plans are fully accredited by the Canadian Society of Chemistry. Students completing these plans will be eligible for membership in the Chemical Institute of Canada and for membership in the various provincial professional chemical associations.

**Special Study Opportunities**

*Seminars in Chemistry*

The seminar program is an important aspect of departmental offerings although seminars do not carry course credit. They may occur at various times during the week, but Friday (11:30 a.m.-12:30 p.m.) is the regularly scheduled seminar time. All third- and fourth-year students in chemistry programs are encouraged to attend.

## ARCHAEOLOGY, GREEK AND ROMAN STUDIES

F.Colivicchi, M.S.Cummings, A.D'Elia, A.M.Foley, R.D.Griffith, B.J.Kavanagh, D.R.Lehoux, M.B.Reeves, C.Zaccagnino

### Departmental Notes

*Subject Code for Classical Studies* CLST

*Subject Code for Classics* CLAS

*Subject Code for Greek* GREK

*Subject Code for Hebrew* HEBR

*Subject Code for Latin* LATN

*Head of Department* R.Griffith

*World Wide Web Address* <http://queensu.ca/classics>

*Departmental Office* Watson Hall, Room 505

*Departmental Telephone* 613-533-2745

*E-Mail Address* [classics@queensu.ca](mailto:classics@queensu.ca)

*Chair of Undergraduate Studies* B.J.Kavanagh

### Overview

Classics refers to the study of the Greek and Roman worlds. Multi-disciplinary in approach, it involves the studies of history, literature, archaeology, religion, mythology, drama and philosophy, in addition to the ancient languages of Greek and Latin. Today our understanding of Greek and Roman culture is further enhanced by the latest digital techniques that increasingly pervade studies in archaeology, epigraphy, papyrology, and ancient science and medicine. At Queen's, students have the opportunity to get hands-on experience in the latest techniques by participating in one of two archaeological excavations supervised by our own faculty, or through a variety of projects and assignments.

### Advice to Students

A good place to begin is the Undergraduate Degree Programs and Plans section of the Classics website, which outlines the requirements for various Classics Degree Plans.

The movement through, and selection of, courses for your Classics degree are dependent on a prerequisite system. You can enrol in a course if the course is not full and if you have the correct prerequisite(s), which may include specific courses taken, a specific grade in previous courses, and a required Arts and Science year level. Prerequisites for a course cannot be taken concurrently with that course.

#### Other planning considerations:

Not all Classics courses are offered every year, so it is important to check the Course Offerings for the upcoming academic year.

It is best to take first-year courses early in your program. As long as you meet the prerequisites, it is possible to take upper-year courses in your second year.

### Special Study Opportunities

International opportunities (**excavations, language schools, and Classics-related studies**) are available, some of which can be found posted on our Classics Department bulletin boards on the 5th floor of Watson Hall.

The Department currently offers two archaeological excavations, one in Italy (CLST 409 – Archaeological Fieldwork Practicum II) and two in the Balkans (CLST 412 Archaeological Fieldwork Practicum IIIa and CLST 413 Archaeological Fieldwork Practicum IIIb). During the summer, the Bader International Study Centre offers a Field School in British Archaeology. This intensive five-week program incorporates two for-credit courses on Roman Britain and Medieval Britain with the practical learning experience of excavation.

For other dig and study opportunities, check out the Archaeological Fieldwork Opportunities Bulletin (AFOB) and [Archaeological Projects in the Near East and Egypt](#). You should also check out information at the International Programs Office (IPO) located in Mackintosh-Corry Hall, or by dropping by the Department and speaking with our Undergraduate Chair.

Students wishing to enrol in an approved course offered by another university related to Classical Studies or Archaeology for credit towards their Plan should consult the Faculty of Arts and Science office for information.

*International Studies Certificate*

For students wishing to enhance their degree program with an international perspective, the Faculty of Arts and Science offers a Senate-approved Certificate in International Studies, the requirements for which could be met by your Classics degree in combination with a study-abroad experience.

## Computing

S.G.Akl, D.Blostein, J.R.Cordy, R.W.Dawes, J.Dingel, D.Dove, Q.Duan, J.Dunfield, R.E.Ellis, G.Fichtinger, T.C.N.Graham, A.E.Hassan, H.S.Hassanein, D.A.Lamb, M.Lamb, R.Linley, A.McLeod, P.Mousavi, D.Rappaport, K.T.Salomaa, D.B.Skillicorn, J.Stewart, R.P.H.Vertegaal, F.Zulkernine, M.Zulkernine,

### Departmental Notes

**Subject Code for Biomedical Computing** BMCO

**Subject Code for Cognitive Science** COGS

**Subject Code for Computer Science** CSCI

**Subject Code for Computing** COMP

**Subject Code for Computing and Information Science** CISC

**Subject Code for Computing and Mathematics** COMA

**Subject Code for Computing and the Creative Arts** COCA

**Subject Code for Software Design** SODE

**World Wide Web Address** [www.cs.queensu.ca](http://www.cs.queensu.ca)

**Director of the School** H.Hassanein

**School Office** Goodwin Hall, Room 557

**School Telephone** 613-533-6050

**School E-Mail Address** [inquiries@cs.queensu.ca](mailto:inquiries@cs.queensu.ca)

**Chair of Undergraduate Studies** D.A.Lamb

**Coordinator of Graduate Studies** J.Stewart

### Overview

The School of Computing offers many broad, flexible Plans, each providing you with a solid foundation in the science and principles of computing. Theory and application are balanced as you put your knowledge to work under the guidance of award-winning researchers. Choose from a Computing-specialist Plan (Computer Science, Software Design), a multi-disciplinary Plan (Biomedical Computing, Cognitive Science, Computing and the Creative Arts, Computing and Mathematics), or design your own program by incorporating a Major or Minor Plan in Computing with another Plan in the Creative Arts, Humanities, Languages, Social Sciences, or Natural and Physical Sciences.

### Advice to Students

**Students should seek academic counseling from one of the counselors listed below**

SUBJECT CODE	COUNSELOR	CONTACT INFORMATION
BMCO	<b><u>Department of Biomedical and Molecular Sciences</u></b>	
	G. Blohm	<a href="mailto:Gunnar.Blohm@queensu.ca">Gunnar.Blohm@queensu.ca</a>
	Q. Duan	<a href="mailto:Quinling.duan@queensu.ca">Quinling.duan@queensu.ca</a>
	<b><u>School of Computing</u></b>	
COGS	R. Ellis (Goodwin Hall 737)	<a href="mailto:ellis@cs.queensu.ca">ellis@cs.queensu.ca</a>
	<b><u>Life Sciences</u></b>	
	G. Blohm	<a href="mailto:Gunnar.Blohm@queensu.ca">Gunnar.Blohm@queensu.ca</a>
	<b><u>School of Computing</u></b>	
	F. Zulkernine (Goodwin Hall 754)	<a href="mailto:farhana@cs.queensu.ca">farhana@cs.queensu.ca</a>
	<b><u>Linguistics Program</u></b>	
COCA	C. Reinholtz	<a href="mailto:cr19@queensu.ca">cr19@queensu.ca</a>
	B. Bjorkman	<a href="mailto:bronwyn.bjorkman@queensu.ca">bronwyn.bjorkman@queensu.ca</a>
	<b><u>Department of Philosophy</u></b>	
	Paul Fairfield	
	Watson 312	<a href="mailto:philug@queensu.ca">philug@queensu.ca</a>
COCA	<b><u>Department of Art History and Art Conservation</u></b>	
	Katherine Rombac	<a href="mailto:rombak@queensu.ca">rombak@queensu.ca</a>
	<b><u>School of Computing</u></b>	
	R. Vertegaal (Jackson Hall, 3 <sup>rd</sup> Floor HML Lab)	<a href="mailto:roel@cs.queensu.ca">roel@cs.queensu.ca</a>
	<b><u>Dan School of Drama and Music</u></b>	
J. Stephenson (Harrison-Caine Hall)	<a href="mailto:Jenn.Stephenson@queensu.ca">Jenn.Stephenson@queensu.ca</a>	
<b><u>Department of Film and Media</u></b>		
Scott MacKenzie (Rm 316 Isabel Bader Centre)	<a href="mailto:undergraduatefilm@queensu.ca">undergraduatefilm@queensu.ca</a>	

<b>COMA</b>	<b><u>Department of Mathematics and Statistics</u></b> Devon Lin <b><u>School of Computing</u></b> D. Rappaport (Goodwin Hall 532)	<a href="mailto:mastugch@queensu.ca">mastugch@queensu.ca</a> <a href="mailto:daver@cs.queensu.ca">daver@cs.queensu.ca</a>
<b>COMP</b>	<b><u>School of Computing</u></b> J. Dingel	<a href="mailto:dingel@cs.queensu.ca">dingel@cs.queensu.ca</a>
<b>CSCI</b>	<b><u>School of Computing</u></b> J. Dingel	<a href="mailto:dingel@cs.queensu.ca">dingel@cs.queensu.ca</a>
<b>SODE</b>	<b><u>School of Computing</u></b> M. Zulkerine (Goodwin Hall 535)	<a href="mailto:mzulker@cs.queensu.ca">mzulker@cs.queensu.ca</a>

### Introductory Courses

Students considering pursuing any Plan offered through the School of Computing must take CISC 102/3.0 or MATH 110/3.0. Students without programming experience should take either CISC 101/3.0 or CISC 110/3.0 before CISC 121/3.0. (Students entering CISC 121/3.0 should be able to express a procedural solution to a natural-language problem, properly using modularity, repetition, conditionals, and simple (rectangular) data structures. Students with considerable programming experience may be allowed to take CISC 121/3.0 and CISC 124/3.0 concurrently, or to substitute a more advanced course for CISC 121/3.0; consult the Undergraduate Chair.

### Special Study Opportunities

#### Computing Facilities

Undergraduates in the School of Computing can take advantage of our 22 research labs such as the Human Media Lab, which, as one of Canada's premier media laboratories, has a mandate to develop disruptive technologies and new ways of working with computers. Through the School's network of labs, students access leading software such as Unity and Matlab. Our hosted cloud services give students a platform to learn industry-leading technologies like managing virtual hosts and collaborative development using Gitlab.

#### Professional Internship Program

Qualified students in any of the Plans leading to a Bachelor of Computing (Honours) degree may register in a 12- or 16-month Professional Internship program for their degree. Students who meet the minimum GPA requirement of 1.90 in at least 54.0 units and no more than 90 units must seek approval of the Chair of Undergraduate Studies in the School of Computing. These students have the opportunity to pursue a 12- or 16-month paid work term in a career-related position after completing their second or third year of study. Upon successful completion of the internship program, students' transcripts will be annotated with a statement certifying that they have completed their degree with a Professional Internship.

The requirements for the Professional Internship versions of the B.Cmp.(Hons.) degrees are the same as the standard versions of these degree programs except for the following change.

The project course normally required in the Plan (i.e. CISC 496/3.0 or CISC 498/6.0 or CISC 499/3.0 or COGS 499/3.0) is replaced by (for a 12-month internship) the courses COMP 390/6.0 and COMP 391/3.0, or COMP 390/6.0 and COMP 392/3.0, or COMP 393/3.0, COMP 391/3.0 and COMP 392/3.0. In the case of a 16-month internship, they are replaced by COMP 390/6.0, COMP 391/3.0 and COMP 392/3.0. The unit requirements for the Professional Internship versions of B.Cmp.(Hons.) degrees are increased accordingly.

In all cases the internship report documents how the internship work has satisfied the requirements for a conventional CISC 496/3.0 or CISC 498/6.0 or CISC 499/3.0 or COGS 499/3.0 project.

## Drama and Music

D.Baird, C.Brunette, J.Brook, J.Burge, G.Dalbec-Szczesniak, T.Davidson, T.Fort, P.Freeman, J.Hanlon, B.Kelly, E.Kwasniewska, J.Lazarus, S.Lind, R.MacKay, S.Matrix, D.Moses, D.Namer, K.Pegley, A.Redish, C.Reid, C.Renihan, K.Renders, G.Renyk, N.Rewa, M.Rogalsky, G.Runions, J.Salverson, A.Shannon, G.E.Smith, J.Stephenson, M.Szczesniak, C.Tormann, W.Tormann, D.Tremblay, C.Walker, M.Walker, G.Wanless, I.Zuk

The Dan School of Drama and Music was created through a merger of two formerly independent units that were respectively devoted to music and drama. Those disciplines continue to have comprehensive representation within the Dan School, but in addition we offer a rich opportunity to study music theatre. In the Dan School, we offer a welcoming environment in which the pursuit of excellence in artistic practice is accompanied by an education in the theory and history of the disciplines. Our students become excellent communicators, imaginative collaborators and disciplined critical thinkers as well as developing extensive experience as creators, performers and broadly skilled technicians in the theatre and the concert hall. Our shared facilities in the beautiful Isabel Bader Centre for the Performing Arts, on the shore of Lake Ontario, offer state-of-the art equipment and superb spaces such as a world-renowned Performance Hall, a Studio Theatre, a lake view Rehearsal Hall/Recording Studio and a suite of smart classrooms and soundproof studio spaces.

Some of our popular offerings include Music Theatre, Music Education, Composition, Acting, Vocal Music, Playwriting, Technical Production, online courses in Entrepreneurship and Innovation, our summer courses in residence at the Shaw Festival, and our courses in Medieval performance taught at Herstmonceux Castle in England. We also offer an internship course in which students work with a professional arts organization. Our graduates are broadly resourceful thinkers and practitioners able to work comfortably and confidently in a wide range of professions. Studying Drama and Music at Queen's can take place in three main locations – Theological Hall, one of Queen's oldest buildings and often referred to as the most dramatic building on campus; Harrison-LeCaine Hall; or at the new, world-class Isabel Bader Centre for the Performing Arts.

### Unit Notes

*Subject Codes* DRAM / ENIN / MUSC / MUTH / STSC

*World Wide Web Address* <http://sdm.queensu.ca/>

*Director of School* C.Walker

*Office* Harrison-LeCaine Hall, Room 204

*Telephone* 613-533-2066

*E-Mail Address* [info.danschool@queensu.ca](mailto:info.danschool@queensu.ca)

*Chair of Undergraduate Studies* J.Stephenson

*Academic Advisers* L. Atkinson, K. Gudlausk

### Overview

At Queen's, you can balance the study of drama and music from theoretical and practical perspectives. Presentations and workshops by guest artists and scholars as well as student participation in mainstage and studio theatre productions and ensemble concerts for the public bring breadth and depth to our programs. For students interested in collaboration between the fields of Drama/Music and Film/Media, there is a Specialization Plan in Stage and Screen Studies. Queen's Music studies include courses in applied study (performance), musicology/ethnomusicology, music education, and theory and composition with a strong focus on the Western classical tradition. Drama at Queen's offers a range of focus areas including performance, production, theatre history, dramaturgy and design.

The School offers Major, Medial and Minor/General Plans as part of the regular Bachelor of Arts and Bachelor of Arts (Honours) degree Programs, and also specialization degrees: the Bachelor of Music and the Bachelor of Music Theatre. Students who apply to B.A.Honours and B.Mus. programs can also pursue a concurrent Bachelor of Education degree program with Queen's Faculty of Education.

The Bachelor of Music degree program is a four-year direct-entry degree program and is subject to special admission conditions including an audition, music theory and aural skills tests, and an interview. Students must also meet the minimum academic requirements for admission to the University. (See below and Admission

Regulation 12 for details). B.Mus. students achieving a grade of B+ or lower on the music theory test will be expected to do remedial work to strengthen their skills before commencing the program.

Students entering the Bachelor of Music degree program may also apply for the concurrent B.Mus./Music and Digital Media (MDM) Program with St. Lawrence College. Students in this program combine up-to-date skills in sound and digital technology with a high-standard education in music performance and academics, receiving both a Queen's degree and a St. Lawrence diploma.

The Bachelor of Music Theatre degree program is a joint program with St. Lawrence College (Brockville). Students acquire practical skills in singing, dancing, and acting in the first two years of the program hosted by St. Lawrence College. This practical training is then augmented with two years academic study at Queen's to attain the B.M.T. degree.

### **Departmental Policies**

1. Students enrolled in DRAM courses will be expected to attend theatre shows. Cost will vary depending on the venue of each show. Further details can be found in each course syllabus.
2. Students enrolled in MUSC courses will be expected to attend musical performances. Cost will vary depending on the venue of each show. Further details can be found in each course syllabus.
3. Procurement and costs of musical accompaniment are the students' responsibility.
4. Students in the following categories will be able to rent instruments from the School (for \$75 for four months in 2017-18, but subject to change): i) who are enrolled in the secondary instrument courses MUSC 181-187/3.0 and MUSC 189/3.0; ii) who are enrolled in applied studies courses (MUSC 121/6.0, 221/6.0, 321/6.0, 421/6.0, MUSC 120/6.0, 220/6.0, 320/6.0, 420/6.0, or MUSC 124/6.0, 224/6.0, 324/6.0, 424/6.0); or iii) who require an instrument for participation in a Music program ensemble.

### **Advice to Students**

#### First Year Courses and Electives

Students who wish to pursue a BAH Drama Plan are advised to take either DRAM 100/6.0 or (if studying at the Bader International Study Centre) BISC 100/3.0 and BISC 101/3.0.

Students who wish to pursue a BAH Music Plan are advised to take MUTH 110/3.0 or MUTH 111/3.0 (Minor/General) and also MUSC191/3.0 (Major/Medial); and MUSC104/3.0 if no previous experience with music rudiments.

#### Course Load

B.Mus. students may register for a maximum of 37.5 units over the Fall and Winter Terms. All other students must follow the normal course load restrictions as detailed in Academic Regulation 3.

#### Ensembles

Ensemble courses are open to all students in Arts and Science for credit, upon successful audition. All students wishing to participate in large and medium ensembles must audition in early September. Contact Music ([music@queensu.ca](mailto:music@queensu.ca)) regarding admission procedures for small ensembles.

#### Access to and Credit for DRAM, MUSC, MUTH courses in other Arts and Science Programs

Most DRAM, MUSC, and MUTH courses may be used to fulfill the elective or Plan requirements of Arts and Science degree Programs. Students interested in Music courses who cannot read music notation may take MUTH 110/3.0, MUTH 111/3.0, MUSC 102/3.0, MUSC 104/3.0, MUSC 114/3.0, MUSC 156/3.0, MUSC 171/3.0, MUSC 289/3.0, or MUSC 255/6.0 without conditions; such students interested in enrolling courses beyond this list should consult with the Dan School regarding music notation requirements.

#### Admission

Students in Major, Medial or Minor/General Plans follow the standard Arts and Science admission regulations. Admission to the Bachelor of Music and Bachelor of Music Theatre Programs is by direct-entry. Once admitted to these Programs, students will be automatically enrolled in the appropriate Specialization Plan. Admission will generally require an audition. Students seeking admission to the concurrent B.Mus./Music and Digital Media Diploma Program should follow the same admission procedures for the direct-entry B.Mus. Upon receiving an offer of admission from Queen's for the B.Mus., students complete a Program Application Form to St. Lawrence College for part-time study through the concurrent MDM Program. Forms are available through the Dan School Office.

Transfer students from other universities or from any other Faculty at Queen's must also apply through Undergraduate Admission to the B.Mus. Program. This includes any students who were previously required to withdraw from the B.Mus. Program and who wish to gain re-entry. See Admissions Regulation **12** for complete details.



## Economics

B.Abbott, R.Clark, C.Cotton, I.Cromb, C.Ferrall, D.Garvie, A.W.Gregory, J.M.Hartwick, A.C.Head, B.Hickman, G.Jenkins, I.Keay, M.Kennedy, T.Koepl, B.Lapham, H.Lloyd-Ellis, J.G.MacKinnon, S.Majumdar, F.Milne, M.Nielsen, G.W.Smith, A.Stewart, H.Sun, M.L.Viero, R.Wang, R.Ware, J.Zabojnik

### Departmental Notes

*Subject Code for Applied Economics* APEC

*Subject Code for Economics* ECON

*Subject Code for Politics-Philosophy-Economics* PPEC

*World Wide Web Address* [www.econ.queensu.ca/](http://www.econ.queensu.ca/)

*Head of Department* H. Lloyd-Ellis

*Chair of Undergraduate Studies* I.Cromb

*Undergraduate Office* Dunning Hall, Room 221

*Undergraduate Telephone* 613-533-2296

*E-Mail Address* [ballj@econ.queensu.ca](mailto:ballj@econ.queensu.ca)

*Academic Advisers* [www.econ.queensu.ca/academics/undergraduate](http://www.econ.queensu.ca/academics/undergraduate)

### Overview

The Economics Department at Queen's has a long tradition as one of Canada's leading teaching and research centres in economics. The undergraduate programs we offer promote a comprehensive investigation of many aspects of the subject, with an emphasis on contemporary analytical principles and methods. Those who pursue a concentration in economics or applied economics will take courses in advanced economic analysis, statistical techniques, the historical background of today's economies, and the application of economic theory to public finance, international relations, natural resources and the environment, business cycles, labour markets, and the economic systems of other countries. Economics students at Queen's acquire a diverse portfolio of analytical, quantitative, computational, and communications skills that provide excellent preparation for a wide range of post-graduation education and career opportunities. Our recent graduates have pursued graduate studies in economics and professional programs such as finance, business administration, public administration, law, industrial relations, information technology and resource management, and they have embarked on careers in the private sector, with non-governmental organizations and with the public sector in key positions of responsibility at all three levels of government.

### Advice to Students

#### First Year Mathematics

All Economics Plans require a supporting course in first year calculus. Normally this course is taken in first year. Students choose MATH 126/6.0 (for those without any prior knowledge of calculus) or MATH 121/6.0 (for those who have taken calculus in high school). The calculus courses MATH 120/6.0 or (MATH 123/3.0 and MATH 124/3.0) may also be accepted. Note that first year calculus is a corequisite for ECON 212/3.0, ECON 222/3.0, and ECON 250/3.0 and a prerequisite for ECON 255/3.0 and all third- and fourth-year economics courses.

#### Elective Courses

The Department provides several options for students studying other subjects who wish to take one or more courses in economics. Students wishing to take a 200-level course should take ECON 111/3.0 or ECON 112/3.0 as required, followed by the 200-level course of interest. All Economics Plans require ECON 110/6.0, or ECON 111/3.0 and ECON 112/3.0.

### Special Study Opportunities

#### Study Abroad Option at the Bader International Study Centre (BISC) or on Exchange

Economics Majors and Medials who plan to attend the BISC or go on exchange should do so before their fourth year. These students should plan to have completed by the end of their third year: i) a total of at least 84.0 units; ii) all 300-level ECON courses required for their Plan, with particular emphasis on ECON 310/3.0, ECON 320/3.0 and ECON 351/3.0; iii) at least 42.0 ECON units in the case of ECON and APEC Majors, and at least 27.0 ECON units in the case of ECON Medials.

M.Berg, C.Bongie, S.B.Cameron, G.Dujardin, H.Evans, P.Fachinger, C.Fanning, E.Hanson, M.C.Jones, S.King, R.May, G.McIntire, S.W.McKegney, K.Moriah, R.Morrison, L.Murray, M.Pappano, J.Pierce, P.M.Rae, L.Ritchie, A.G.Ruffo, Y.Schlick, C.Smart, S.Straker, M.Straznicky, A.Varadharajan, M.Wallace, T.Ware, R.C.Wehlau, G.Willmott

### Departmental Notes

*Subject Code for Language and Literature* ENGL

*Subject Code for Creative Writing* CWRI

*World Wide Web Address* <http://www.queensu.ca/english/>

*Head of Department* S. King

*Departmental Office* Watson Hall, Room 411

*Departmental Telephone* 613-533-2153

*E-Mail Address* donnelly@queensu.ca

*Chair of Undergraduate Studies* R.May

*Chair of Graduate Studies* M. Wallace

### Overview

The Department of English offers a comprehensive undergraduate program that exposes students to English literatures from a large range of communities, historical periods, and geographical regions. All three English Plans (Major, Medial, Minor) attempt to balance the study of canonical writers, literary forms, and traditions with the study of previously marginalized or unknown writing. The program as a whole is designed to develop cross-cultural and historical literacies by encouraging students to engage with literatures from diverse histories and traditions through a range of disciplinary and interdisciplinary approaches.

### Departmental Policies

#### Academic Integrity

The Department of English promotes an ethos of academic integrity, based on the values of honesty, trust, fairness, respect, responsibility and courage. It is the responsibility of all students to familiarize themselves with the University, Faculty and Department policies on academic integrity. The Department of English Statement on Academic Integrity is attached to all undergraduate syllabi and may be found online at <http://www.queensu.ca/english/integrity>. The Statement includes definitions and advice for recognizing and avoiding plagiarism.

#### Effective Writing

An important purpose of introductory courses in English is to offer training in effective writing. Further training in writing is available from the Writing Centre, which offers free services to all students in the form of workshops, tutorials, and consultations, as well as a variety of limited-enrolment courses. (See the section in this *Calendar* on the Writing Centre for further details.)

#### English Courses as Electives

A minimum grade of C in ENGL 100/6.0 is the standard prerequisite for virtually all English courses at the 200 level or above, so incoming students intending to register in other Plans, but who may wish to take Elective courses in English, should enroll in ENGL 100/6.0 in their first year. Upper-level students without this prerequisite, but who require an Elective course in English (e.g., for Medical School), may enroll in “Modern Prose Fiction” (ENGL 160/6.0). Because enrolments in all English courses are limited, students registered in an English Plan have priority when applying for courses over students applying to take them as Electives.

### Advice to Students

#### Course Selection

All students wishing to be admitted into an English Plan must, in their first year of study, take “Introduction to the Study of Literature” (ENGL 100/6.0, Core course 1.A.).

In their second year, all students registered in an English Plan, including Minors, take a required lecture class, “History of Literature in English” (ENGL 200/6.0, Core course 1.B.); students in a Major or Medial Plan also take a required seminar (ENGL 290/3.0, Core course 1.C.), which develops students’ writing abilities and introduces them

to the basic research tools of literary studies. ENGL 200/6.0 and ENGL 290/3.0 are prerequisites for coursework at the 300 level and above, so Majors and Medials should be sure to complete them in second year.

In their second year, in addition to ENGL 200/6.0 and 290/3.0, Majors normally take between 9.0 and 12.0 additional units at the 200 level that will count toward their Plan, and Medials normally take between 3.0 and 6.0 additional units at the 200 level. A select number of courses from other departments and programs, including Creative Writing, can also be counted toward an English Plan.

Whether one is registered in a Major, Medial, or Minor Plan, the number of 200-level units completed in second year is an important factor in determining course selection in third and fourth year, so students entering second year should be sure to map out in advance a viable trajectory through their English Plan; students are encouraged to seek advice from the Undergraduate Chair or from their instructors.

Having gained the historical and critical foundations provided, respectively, by ENGL 200/6.0 and 290/3.0, Majors and Medials proceed in third year to 300-level small lecture courses. These in-depth, full-year historical survey courses are organized into three categories: Group I (ENGL 305-339), which covers literature from before 1800; Group II (ENGL 340-359), which covers the long nineteenth century (roughly, 1780-1920); and Group III (ENGL 360-389), which covers literature from after 1900. Majors must take 6.0 units in each of these Groups (Core courses 1.D., 1.E., 1.F.), while Medials must take 6.0 units in Group I and 6.0 units in Group II or III (Core courses 1.D., 1.E.). Majors should take at least two of these full-year courses in their third year, while Medials should take at least one.

The fourth-year experience for Majors revolves almost entirely around advanced 400-level seminars. Majors take 15.0 units at the 400 level; 3.0 units of these must be in Groups I or II (ENGL 405-459; Core course 1.G.); 3.0 units must be in Groups III or IV (ENGL 460-499; Core course 1.H.); while the remaining 9.0 units are Option courses. Medials take 6.0 units at the 400 level. It is possible for Majors to take between 3.0 and 6.0 units at the 400 level during their third year, depending on how many 300-level courses they are also enrolled in; Medials will normally fulfill their upper-level seminar requirements in fourth year.

### **Special Studies Opportunities**

#### Study Abroad

A number of our students take the opportunity of studying abroad for a term or an entire year, benefiting from bilateral exchanges to universities in a wide array of countries. They also have access to the Bader International Study Centre (BISC) in Herstmonceux, England, where an array of Queen's English Department courses are offered, including ENGL 100/6.0. (For more on these study abroad opportunities, see the section on International Programs and Study Abroad Options in this *Calendar*, as well as the website for Herstmonceux <http://www.queensu.ca/bisc>).

Queen's students who study abroad frequently do so in their third year. English Majors and Medials normally take a set of core courses in their third year (Core courses 1.D., 1.E., and 1.F. for Majors; 1.D. and 1.E. for Medials), but there is no reason why going on exchange in third year should prevent English Majors and Medials from completing their Plans on time; it merely requires careful planning and consultation. Students who will be away from Queen's for the entire third year should enroll in at least 12.0 units of courses at their exchange institution that can be counted toward the 300-level Core course requirements. Half-year courses in similar chronological periods can be combined to satisfy a year-long 300-level requirement; this option is frequently used by students who are away only for one term during their third year. All students intending to study abroad in their third or fourth year are strongly advised to consult with the Undergraduate Chair of English before finalizing their course selections at other universities.

Students registered in an English Major or Medial Plan should be in residence at Queen's for the entirety of their second year, so that they can complete ENGL 200/6.0 and ENGL 290/3.0 (Core courses 1.B. and 1.C.), which are prerequisites for doing upper-level work in the Queen's English Department.

## Environmental Studies

K.J.Aronson, R.S.Brown, H.Castleden, D.Chen, B.F.Cumming, R.Danby, V.Friesen, A.Goebel, M.Hird, P.V.Hodson, A.Hovorka, H.E.Jamieson, S.C.Lougheed, W.Mabee, T.E.Massey, D.McDonald, D.Orihel, M.F.Smith, J.P.Smol, M.Taylor, R. Upititis, L.Viswanathan, N.Vlachopoulos, V.Walker, M.Wallace, Y.S.Wang, J.Webster, G.Whitelaw, L.M.Winn, B.Zeeb, F.Zeman

### Departmental Notes

*Subject Code* ENSC

*World Wide Web Address* <http://www.queensu.ca/ensc/>

*E-Mail Address* envst@queensu.ca

*Director* A.Hovorka

*Office* Biosciences Complex, Room 3134

*Telephone* 613-533-6602

*Chair of Undergraduate Studies* A.Goebel

Biosciences Complex, Room 3125, 613-533-6000 ext 77660

### Overview

In the School of Environmental Studies, you will acquire an appreciation of the scope and complexity of environmental systems, the ability to deal with the socio-economic dimensions of an issue, and the fundamental knowledge to adapt to changes in the future. Students will study environmental systems from both the perspective of the natural and physical sciences, while recognizing the human and cultural dimensions of the issues.

### Advice to Students

#### Counsellors

##### Environmental Studies

A.Goebel, Biosciences Complex, Room 3125, 613-533-6000 ext 77660

##### Department of Biology

, R.S. Brown, Biosciences Complex, Room 3130, 613-533-2655

##### Department of Chemistry

R.S.Brown, Biosciences Complex, Room 3130, 613-533-2655

##### Department of Geography

R.Danby, Biosciences Complex, Room 3244, 613-533-6000 ext 77105

##### Department of Geological Sciences and Geological Engineering

H.Jamieson, Biosciences Complex, Room 3131, 613-533-6181

##### Life Sciences

L.M.Winn, Biosciences Complex, Room 3127, 613-533-6465

The School of Environmental Studies offers Plans in both the Arts and Sciences. The following outlines describe each Plan:

#### **General (Arts)/Minor (Arts) Plan in Environmental Studies**

This Plan provides an introduction and overview of environmental studies.

#### **Medial (Arts) Plan in Environmental Studies**

This Plan provides disciplinary strength in the humanities and social science plus interdisciplinary environmental courses on the science side. Students will acquire a basic science background, an understanding of the complexity of environmental issues and their solutions.

#### **Major (Science) Plan in Environmental Science**

This Plan provides a multidisciplinary view of environmental science with an emphasis on sustainability, and ecosystem and human health. The Plan includes core courses in science, integrative courses in science and social science, and environmental courses in the humanities.

#### **Specialization (Science) Plans**

These Plans provides a multidisciplinary view of environmental science as well as in-depth study in one of six science subjects: Earth System Science, Biology, Chemistry, Geology, Life Sciences, or Toxicology. A strong link is made to environmental studies, stressing human response to environmental issues and to questions of environmental policy and management.

B.Allan, K.Bertrand, A.Guerrero Cortés, G.Kibbins, F.Leeming, S.Lord, S. MacKenzie, D.Naaman, E.Pelstring, K.Zaiontz,

**Departmental Notes**

*Subject Code* FILM

*Head of Department* G.Kibbins

*World Wide Web Address* <http://www.queensu.ca/filmandmedia/>

*Departmental Office* 390 King Street West Room 306

*Departmental Telephone* 613-533-2178

*Departmental Fax* 613-533-2063

*E-Mail Address* [filmdesk@queensu.ca](mailto:filmdesk@queensu.ca)

*Coordinator of Undergraduate Studies* S. MacKenzie

*Coordinator for Stage and Screen Studies* S. MacKenzie

*Department Administrator (Acting)* D.Arsenault

***Undergraduate Administrative Assistant*** S. Wilson

**Overview**

In the Film and Media Department at Queen's, you will examine modern forms of film, video, television, and emerging varieties of digital culture. You will study the forces that have shaped film and media communication, explore the history and theory of film production, and engage directly in the production of film and video. For students interested in collaboration between the fields of drama and film, there is a Specialization Plan in Stage and Screen Studies.

**Departmental Policies**

Screenings

All courses include the screening of films or video material during laboratory periods.

Production Costs

Courses involving film or video production may entail materials and processing expenses not covered by the University tuition fee. A student interested in such a course is advised to consult the instructor regarding the extra costs that must be anticipated.

Enrolment Limitation

Because of student demand for a limited number of spaces, a grade of B- in 100-level FILM courses *may not be sufficient* to merit entry into FILM 206/3.0, FILM 216/3.0, FILM 226/3.0, FILM 236/3.0 or FILM 250/6.0, hence into a concentration in FILM or STSC or COCA. Priority for admission to upper-year courses is determined by overall average in Film and Media courses including grades in prerequisite courses, and following Academic Regulation **2, Enrolment and Registration Priorities**, in the *Calendar*.

R.Anweiler, A.Arauz, S.Aziz, K.Rodgers, K.Sellars, J.Winton

### Program Notes

*Subject Code for Fine Art (Visual Art):* ARTV

*Interim Director, Fine Art (Visual Art):* G. Smith

*Program Telephone:* 613-533-6166

*Program Fax:* 613-533-2834

*Program E-Mail Address:* fineart@queensu.ca

*Chair of Undergraduate Studies:* **K. Rodgers**

Queen's Bachelor of Fine Art (Visual Art) Program is a small visual art program admitting 30 students per year. The intensive studio training, taught by instructors that are active in their field, alongside visiting artists from across the country and internationally, is complemented by lecture and seminar courses in Art History. The small class sizes and high professor-to-student ratios create an interactive learning environment focusing on three main areas of fine art: painting, printmaking and sculpture/new media. The Fine Art (Visual Art) Program is well equipped with studios and workshops that create an atmosphere where learning and research can flourish. Optional field trips are made to exhibitions and workshops, including annual trips to New York.

With its tradition of scholarship and research, and an environment that both stimulates and challenges, Queen's provides the ideal setting for the study and creation of Visual Art. Our program combines the technical, theoretical and critical studies required in the practice of visual art in four interrelated areas: painting, drawing, printmaking, and sculpture/new media. These media are seen as broad, overlapping areas of experience, each containing many approaches and procedures. Studio training is complemented by studies in Art History and elective courses.

### Advice to Students

#### Fine Art (Visual Art) Courses

Other than those students pursuing a B.F.A. or B.F.A.(Honours) degree program, no student in Arts and Science may apply more than 24.0 units in Fine Art (ARTF) courses towards their degree Plan. Only the courses ARTF 100/6.0; ARTF 101/3.0; ARTF 102/3.0; ARTF 106/3.0; ARTF 125/6.0; ARTF 260/3.0; ARTF 265/6.0 are open to non-B.F.A. students, and none of these courses may be used towards the requirements of a Visual Art Plan.

#### Material Costs

All courses require the purchase of materials in the production of art works. Students can expect to pay up to \$1200 per year for materials. An optional trip to New York City is scheduled annually for second-year B.F.A. students. Students who participate in this trip should expect to spend approximately \$800 for the cost of accommodation, transportation, meals and gallery entrance fees. A \$250 deposit for this trip is required to be paid in first year.

J.Bénard, C.Dhavernas, M.Dufresne, S.Inkel, M.Reyes, F.Rouget

**Departmental Notes**

*Subject Code for French* FREN

*Subject Code for French Studies* FRST

*Head of Department* S.Inkel (Interim Head 2017-2019); M.Dufresne (Acting Head Jan 2018-July2018)

*Departmental Office* Kingston Hall, Room 300

*Departmental Telephone* 613-533-2090

*Departmental Fax* 613-533-6522

*Chair of Undergraduate Studies* M.Dufresne (F.Rouget, Acting Chair Jan 2018-July 2018)

*Coordinator of Graduate Studies* TBA

**Overview**

At Queen's you can choose from a variety of courses dealing with oral and written French, literature and culture of France, Quebec and francophone countries, linguistics, and business French. You will have opportunities to study or work in a francophone context either in Quebec or Europe, through academic exchanges or work/study programs.

**Departmental Policies**

*Credit for Immersion Courses*

Students who have taken an immersion course elsewhere may have to be tested by the department in order to receive credit for such a course.

**Advice to Students**

*Introductory French Language Courses*

The French Department recognizes that students enter the University with a wide range of abilities in the French language. Therefore, all incoming students intending to take 100-level French courses should take an online French placement test before registering to ensure that they are placed in a course at the correct proficiency level. Students should note that once they have passed a course at one level of proficiency, they will not be allowed to take for credit a French language course at a lower level. These rules are enforced by a series of exclusions. Students who wish to pursue a French Plan should also note that courses below FREN 150 may not be used towards French Plan requirements, though they may be used as electives or partially towards the requirements of the French Certificate of Competence (see below).

*Communication and Culture Courses*

The Department of French Studies offers a series of Communication and Culture courses, both online and on campus, for students wishing to develop and perfect their French language skills. These include: practical communication skills to engage in a range of everyday situations; learning about various French cultures; vocabulary, grammar, pronunciation; interactive activities & group work. No auditors.

**Special Study Opportunities/Cultural Activities**

The Department of French Studies offers a range of cultural programs and educational opportunities for faculty, students and the Kingston community.

*Learning Resources*

Technological resources are available for students taking courses in the Department. These include language laboratories, Room 121 at Stauffer Library.

*Credit for Work Taken at a French-Language University*

The third year of a four-year program with a French Major, Media or Minor Plan may be taken at a French-language university. Credit for this work may be allowed if at least 60.0 units with a cumulative GPA of 1.90 have been attempted by the end of second year, including FREN 150/6.0, FREN 230/6.0, FREN 241/6.0 and FREN 250/3.0 with a GPA of 1.90 on these three courses. On returning to Queen's for the fourth year, students will be

allowed to transfer credits in French, if proof is submitted of having taken the equivalent of Queen's courses. All students spending their third year at such a university are required to take at least 9.0 further units in French at Queen's, normally at the 300 level.

*Certificate of Competence in French Language*

Students who are not registered in a French Plan but have taken certain courses in French at Queen's or received transfer credit for courses taken elsewhere are eligible for a Certificate of Competence in French Language. Note that this is *not* a Senate-approved Certificate Program and therefore will be noted as an Academic Milestone on the transcript. The Certificate will be issued by the French Department on behalf of the Faculty of Arts and Science.

**INTERMEDIATE LEVEL** includes courses in oral and written French, French literature, business French or French linguistics.

Requirements: 18.0 units in French. Required courses include FREN 150/6.0 or *FREN 100/6.0* or *FREN 110/6.0* or (*FREN 101/3.0* and *FREN 102/3.0*) and (FREN 250/3.0 or *FREN 344/3.0*) and 3.0 units from the Communication and Culture series of courses. All courses taken for the certificate must be at a level equal to or above FREN 150/6.0 (with the exception of FREN 118/3.0) **AND be in good standing**. No more than 6 transferred units can be counted towards the intermediate level certificate.

**INTERMEDIATE-ADVANCED LEVEL** includes courses in oral and written French and possibly French literature, business French or French linguistics.

Requirements: 24.0 units in French. Required courses include FREN 150/6.0 or *FREN 100/6.0* or *FREN 110/6.0* or (*FREN 101/3.0* and *FREN 102/3.0*) and (FREN 250/3.0 or *FREN 344/3.0*) and FREN 330/3.0 and 3.0 units from the Communication and Culture series of courses at the level of FREN 219/3.0 or above. All courses taken for the certificate must be at a level equal to or above FREN 150/6.0, **AND** be in good standing. Only 6.0 units from Communication and Culture courses (FREN 219/3.0, FREN 320/3.0) credit can be counted towards the certificate. No more than 9 transferred units can be counted towards the intermediate-advanced level certificate.

Applications for the Certificate should be received by the Department of French Studies before the Departmental deadline.



## Gender Studies

S.Aziz, B.Baines, A.Burfoot, J.Davidson, J.Davies, K.Dubinsky, G.A.Dumas, A.Goebel, E.Goldberg, L.Hanson, S.J.King, A.L.Kobayashi, K.A.Lahey, C.Levine-Rasky, M.Little, S.Lord, E.MacDonald, G.McIntire, K.McKittrick, S.Morgensen, B.Mullings, D.Naaman, I.Pande, K.Pegley, E.Power, L.M.Ratcliffe, K.Renders, N.Rewa, M.Rivera, D.Robinson, P.Salah, J.Scott, S.Srivastava, P.Thompson, J.Tolmie, A.Varadharajan, L.Viswanathan, B.Walker, P.Dickey Young

### **Departmental Notes**

*Subject Code* GNDS

*World Wide Web Address* <http://www.queensu.ca/gnds/home>

*Head of Department* S.King

*Office* Mackintosh-Corry Hall, Room D506

*Administrative Assistant* T.Easter Sheen

*Coordinator of Graduate Studies* Fall K. McKittrick/Winter S.Morgensen

*Graduate Assistant* T.Easter Sheen

*Chair of Undergraduate Studies* J.Tolmie

*Sexual and Gender Diversity Certificate Coordinator* J.Tolmie

*Undergraduate Assistant* K.Baer

*Departmental Office* Mackintosh-Corry Hall, Room D504

*Telephone* 613-533-6318

### **Overview**

The Department of Gender Studies at Queen's offers courses in politics; feminist, queer and gender theory; anti-racism; transgender studies; settler-colonial studies; social justice; popular culture and the critical analysis of everyday events. This innovative, interdisciplinary program combines the arts, humanities, and social sciences, offering students a unique opportunity to design a degree suited to their interests and career goals, including law, academia, medicine, public service, media and activism.

We offer a practicum for students invested in community engagement and social justice.

The Department also administers a Certificate Program in Sexual and Gender Diversity (SXGD) that is open to undergraduate students in all degree plans.

A.Agarwal, J.Andrew, G.Bevan, L.Cameron, H.Castleden, D.Chen, P.Collins, R.Danby, J.Davidson, B.Donald, A.Godlewski, D.Gordon, A.Hovorka, A.L.Kobayashi, M.Lafrenière, S.F.Lamoureux, W.G.Lovell, W.Mabee, J.Meligrana, B.A.Mullings, M.W.Rosenberg, N.Scott, L.Thomson, P.M.Treitz, L.Viswanathan, G.Whitelaw

### Departmental Notes

*Subject Code for Geography and Planning* GPHY

*World Wide Web Address* <http://queensu.ca/geographyandplanning/>

*Head of Department* W.Mabee

*Departmental Office* Mackintosh-Corry Hall, Room E208

*Departmental Telephone* 613-533-6030

*E-Mail Address* geography.info@queensu.ca

*Associate Head – Undergraduate Program* S.F.Lamoureux

### Overview

The Department of Geography and Planning is an integrated department that studies the earth's places, societies, environments and landscapes. The Department is unique in bridging the social sciences and humanities (i.e., human geography) with earth system science (i.e., physical geography). Geography and Planning puts this understanding of social and physical processes within the context of places and regions - recognizing the great differences in cultures, political systems, economies, landscapes and environments across the world, and the links between them. In earth system science we study natural processes, their interactions, and both naturally and human-generated environmental issues. In the social sciences we study a variety of social problems, with a special focus on the uneven distribution of resources and services at scales from the local to the global. In humanities research we explore how human beings have made, and continue to make, the places (physical, social and metaphorical) in which they live. In all these areas Queen's Geography and Planning has scholars and teachers of international repute who are dedicated to making a dynamic and innovative research and teaching environment and a warm and supportive interpersonal environment for our students and faculty. Students who choose geography and planning for their degree will develop the independent and self-directed learning skills needed to think laterally, critically and creatively. These are skills that are critical to meeting the demands of the world as they will find it, and over which they may have influence. Geography and Planning provides an ideal framework for integrating other fields of knowledge. It is not surprising that geographers and planners often contribute substantially to the applied management of urban and regional systems, resources and environments. Students in our program can select from courses in urban, economic, social, historical and cultural geography, urban planning, as well as earth system science. A degree from the Department of Geography and Planning also provides a solid foundation in qualitative and quantitative research methods, remote sensing, and geographic information science. Students will be exposed to teamwork, active learning and real-world projects.

### Departmental Policies

#### Ancillary Fees

Any student who participates in a Geography and Planning course where there are field trips may be required to pay a fee. Any student who participates in a course that uses the Geographic Information Systems (GIS) Lab will be required to pay a fee to set up a network account in this specialized facility (Mackintosh-Corry Hall, E223). The GIS access fee is fully refundable upon return of the GIS access card.

### Advice to Students

#### Prerequisites

Students majoring in geology may substitute GEOL 104/3.0 and GEOL 106/3.0 for GPHY 101/3.0 and GPHY 102/3.0 as a prerequisite for upper-level physical geography courses, but are expected to prepare themselves for these courses by extra reading.

Students wishing to take a course at the 200 or 300 level, for which they lack the stated prerequisites, may appeal to the Course Instructor to have the prerequisites waived. For admission to all 500-level courses, students need the consent of a supervising member of the Department and permission of the Undergraduate Committee based on the submission of a proposal.

Students in GPHY 502/3.0 and GPHY 503/6.0 are required to file a soft-cover, bound copy of their thesis with the Department upon completion of the course. Students in GPHY 503/6.0 are normally required to present their results orally to the department as a requirement for successful completion of the course. Students in GPHY 502/3.0 are encouraged, but not required, to do so.

Study Abroad Option

Students may take one or two terms of study at the Bader International Study Centre in their second or third year. Students participating in any international study program are expected to meet all fourth year prerequisites by the end of third year and need to plan their programs accordingly.

It is often difficult to equate directly courses completed on exchange programs to Queen’s courses. Therefore, students planning to participate in a third-year exchange must complete the following courses at Queen’s during their first two years:

General/Minor(Arts), Medial(Arts), Major(Arts):

(GPHY 101/3.0 and GPHY 102/3.0)
<b>TWO (2) OF:</b> (GPHY 240/3.0 or SOCY 210/3.0); GPHY 242/3.0; GPHY 243/3.0; GPHY 247/3.0
<b>TWO (2) OF:</b> GPHY 227/3.0; GPHY 228/3.0; GPHY 229/3.0

General/Minor(Science), Major(Science):

(GPHY 101/3.0 and GPHY 102/3.0), GPHY 207/3.0, GPHY 208/3.0, GPHY 209/3.0, GEOL 200/3.0; GPHY 247/3.0
<b>ONE (1) OF:</b> GPHY 242/3.0; GPHY 243/3.0
General/Minor (Science) 6.0 units from CHEM or MATH or STAT or PHYS at the 100 level or above
Major (Science) 6.0 units from MATH or STAT at the 100 level or above; 6.0 units from CHEM or PHYS at the 100 level or above

## Geological Sciences and Geological Engineering

D.A.Archibald, A.Braun, M.S.Diederichs, G.Fotopoulos, L.Godin, J.A.Hanes, R.Harrap, A.Harrison, D.J.Hutchinson, N.P.James, H.E.Jamieson, T.K.Kyser, D.Layton-Matthews, M.Leybourne, G.M.Narbonne, G.R.Olivo, R.C.Peterson, V.H.Remenda

### Departmental Notes

*Subject Code* GEOL

*World Wide Web Address* <http://www.queensu.ca/geol/>

*Head of Department* V.H. Remenda

*Departmental Office* Bruce Wing, Room 240

*Departmental Telephone* 613-533-2597

*E-Mail Address* geolundergradassistant@queensu.ca

*Chair of Undergraduate Studies Geological Sciences* D. Layton-Matthews

*Chair of Undergraduate Studies Geological Engineering* M. Diederichs (Fall)/ G. Fotopoulos (Winter)

*Coordinator of Graduate Studies* H.E.Jamieson

### Overview

Geoscientists are the interpreters of our natural world. They bring methods such as geophysics, geochemistry, geobiology and field geology together to understand the modern and ancient Earth. Clues concealed in rocks and fossils, minerals and fluids, mountains and sediments, glaciers and volcanoes are marshaled to understand and explain the Earth system at all scales. Managing water, mineral and energy resources, developing sustainable strategies for industrial growth and coping with natural and anthropogenic hazards facing increasing global populations, including climate change, all depend on a deep understanding of natural processes. Our graduates study the Earth in this context, with careers in diverse fields including, but not limited to, research, mineral and oil exploration, policy analysis, environmental science and resource management. The programs offered by this Department focus on the whole planet and global processes as a dynamic and integrated system.

### Departmental Policies

#### Field Trips

Field trips are a necessary part of geological training and are offered in each year of study because the Department wishes to provide the best education possible.

Students are required to possess basic safety equipment such as a hard hat, safety glasses, reflective vest and appropriate footwear, as specified for each course, and to have reviewed and signed the Departmental Field Safety Form and the OCASP form developed for each field trip or course. Field equipment is available for sale in the Main Office.

The cost of field trips and courses, including transportation, accommodation and food (when it is supplied), will be borne by the student.

A list of the field education costs for each course is provided on the departmental web page. These costs are subject to change, and will be finalized by June 1 each year for the following academic year. These costs will be payable by the due dates listed in the table. Subsidies will be provided by the Department when funding permits.

For students who are not registered in a Plan offered by the Department there will be a charge per field trip. Students are required to possess basic safety equipment such as a hard hat, safety glasses and appropriate footwear, and to have reviewed and signed the Departmental Field Safety Form and the OCASP form developed for each field trip or course.

### Advice to Students

Students should seek **academic advice** from one of the program consultants listed below

DEPARTMENTAL PROGRAM	CONSULTANT	CONTACT
Environmental Geology	H.E.Jamieson	jamieson@queensu.ca
Structural Geology/Tectonics/Economic Geology	L. Godin	godin@queensu.ca
Paleontology/Sedimentary Geology	N.P.James	jamesn@queensu.ca
Petrology/Geochemistry	D.Layton-Matthews	dlayton@queensu.ca

Geology Plans are offered as components of a degree Program within both the Faculty of Arts and Science and the Faculty of Engineering and Applied Science. Students applying to first year, with an interest in geology, should consult both *Calendars*. Within Arts and Science, a great deal of flexibility exists in the choice of Plans.

Students wishing to complete a Plan designed to train specialists in the Geological Sciences are encouraged to select one of the Geology Specialization or Major Plans. The Geology Specialization Plan provides the opportunity for intensive study of Geology and the supporting sciences. It is intended to fulfill the 'Knowledge Requirements' for registration as a Professional Geoscientist. The Geology Major Plan is ideal for students who are interested in a career-oriented program in the geosciences that also allows a wider choice of supporting and elective courses. Another alternative route, for students who are particularly interested in the solid-earth aspects of environmental science, is the Environmental Geology Plan (see the *EGEO Degree Plan in the Environmental Studies section of this Calendar*).

Students wishing to study geology and another subject should consider geology as one component of a Major-Minor degree combination. The Minor (Science) may be combined with a Major in virtually any other subject, and provides a solid introduction to the Geological Sciences. As the General (Science), this same Plan when taken alone leads to a 3-year B.Sc. degree in Geology. Students who want to explore the field of Geological Sciences but with greater flexibility in choice of courses should consider combining the Geology Minor (Arts) Plan in a Major-Minor degree combination. The General (Arts) in Geology, leading to a 3-year B.A. degree, is also available using the same suite of courses as the Minor (Arts).

If you have questions about the differences between the various programs, or on particular course selections, consult with the Chair of Undergraduate Studies before registration. Additional information about the various degree programs can be found by consulting the Geoscience Program webpage.

<http://www.queensu.ca/geol/undergrad/geological-sciences>

### Special Study Opportunities

Specialized graduate courses in some areas of Geology are available to qualified students in their final year, and may be counted for advanced standing in a Master's degree at Queen's University. For details, consult the Chair of Undergraduate Studies.

R.Day, M.Doxtater, K.Dubinsky, M.Epprecht, R.Hall, M.Hostetler, P.Kumar, R.Lovelace, D.A.McDonald, S.Soederberg, M.Taylor, K.Tienhaara

### Departmental Notes

*Subject Code* DEVS

*Head of Department* M.Taylor

*Office* Mackintosh-Corry Hall, Room A404

*Department Administrator* B.Brousseau

*Department Office* Mackintosh-Corry Hall, Room B401

*Telephone* 613-533-3301

*Fax* 613-533-2986

*E-Mail Address* devs.student@queensu.ca

*World Wide Web Address* <http://www.queensu.ca/devs/>

*Chair of Graduate Studies* M.Hostetler

*Chair of Undergraduate Studies* P.Kumar

*Placement Coordinator* P.Kumar

### Overview

Global Development Studies offers students critical insights into development theory and practice. We explore contested meanings of 'development' and analyze the institutions and practices through which development programmes are implemented at local, national and global levels. Our courses provide students with the analytical perspectives needed to understand how inequality is produced and reproduced, how resources are distributed, and how hierarchical relationships are maintained and challenged over time. Students in Global Development Studies gain a close understanding of how economic and political systems, cultural norms, physical environments, and status differences within and between countries of the North and the South shape development. A focus on issues such as poverty, cultural exchange, environmental sustainability, human rights, social policy, and Canadian indigenous communities help students appreciate 'development' as a relationship rather than as a characteristic of particular places and people.

The Department offers Major, Medial and Minor courses of study. We are an interdisciplinary department, working closely with the Departments of Geography, Economics, Environmental Studies, History, Languages, Literatures, and Cultures, Political Studies, Sociology and Gender Studies as well as the Queen's Aboriginal Council. Students enter the program in second year and follow a set curriculum of core courses, with latitude in choosing option courses around specific development themes and geographical regions.

### Special Study Opportunities

#### *DEVS 305 Cuban Society and Culture*

Cuban Culture and Society is a 6.0-unit undergraduate course. It is part of an exchange agreement between Queen's and the University of Havana. The aim is to introduce students to some of the main events and highlights of Cuban society, history, politics and culture, with a focus on the period from the Cuban revolution (1959) to the present. The course straddles Winter and Spring semesters. In the winter semester, participant meet intermittently until the exam period. It reconvenes after exams for several more pre-departure sessions, before leaving for Havana for two weeks in May. Queen's on-campus sessions combine readings, film screenings and active classroom discussions. In Havana the instructors are drawn from University of Havana faculty as well as practicing artists, filmmakers and musicians. Enrolment in the DEVS 305/6.0 course is through an application process. Ancillary fee is estimated to be \$3000 for travel costs. Course Application forms are available through the Global Development Studies Department, <https://www.queensu.ca/devs/undergraduate/international-study-program-cuba>.

*Independent Work Study Abroad Program: DEVS 410/6.0 and DEVS 411/3.0*

One of the most attractive features of the Development Studies program at Queen's is the opportunity it affords students to complete a placement in a development context and get hands-on field experience for credit. Many of our students maintain that their placement is the highlight of their academic career. Students have travelled to places such as Bangladesh, Bolivia, China, Costa Rica, Laos, Ghana; have worked with organizations such as United Nations Development Programme (UNDP), Oxfam, Shastri, Polaris Institute, World Bank, Canada World Youth, SOS Children's Village, Red Cross, Habitat for Humanity; and have been engaged with projects as diverse as AIDS education, land erosion prevention, human rights, and new immigrants to Canada.

The placement itself (6.0 units) usually takes place over the summer months following completion of the third year of study but requires pre-departure training in the Winter Term. These units are not considered complete until the co-requisite Post-Placement Seminar (3.0 units) is completed in the following Fall Term.

Enrolment in the DEVS 410/6.0 and DEVS 411/3.0 program is through an application process. Application forms are available through Global Development Studies Department, [www.queensu.ca/devs](http://www.queensu.ca/devs). Very limited funds are available through an application process to support internships but in general, students are responsible for all costs.

Courses taken in the Queen's Semester in Shanghai program offered through the International Programs Office are pre-approved as option courses in DEVS Plans.

<http://www.queensu.ca/ipo/outgoing-students/semester-shanghai>

New Certificate Program: Launch date September 2018

*Global Action and Engagement Certificate (GAEN)*

The Global Action and Engagement certificate is a new program bringing together the Department of Global Development Studies, Arts and Science Online within the Faculty of Arts and Science, and partners in the School of International Development and Global Studies at the University of Ottawa. The program design is flexible to meet the needs of a wide range of learners, from those seeking preparation for work overseas to those who have participated in activities such as global service learning, international experiential learning, volunteer abroad and community-engagement fieldwork and practicums, and seeking formal education or training in global development to better understand the contexts.

The program will comprise 18.0 units of undergraduate courses, including 15.0 units of core courses and 3.0 units selected from a number of option courses. The required courses for the certificate program will be made up of existing Arts and Science online courses along with the development of new online courses (DEVS 260, DEVS 280, DEVS 361, DEVS 362, and LLCU 111). The culminating courses will include a 3.0 course in Global Engagement (DEVS 280), centered on active, collaborative, and self-reflexive modes of learning. It will lead students to reflect upon and unpack previous experiential learning activities that have taken place in the context of global development, while preparing them for future global engagement. The launch date of this online certificate is Fall 2018.

## History

H.Adelman, D.H.Akenson, J.Brisson, C.-I.Caron, J.T.Carson, A.Chowdhury, J.R.Collins, R.Currarino, A.F.D'Elia, S.M.den Otter, K.Dubinsky, G.Dueck, A.English, E.J.Errington, R.P.H.Greenfield, M.Hardwick, J. Healey, E.M.Hill, A.Husain, A.Jainchill, R.L.Manley, S.Maynard, J.McNairn, I.Pande, D.S.Parker, L. Pasolli, A.Salzmman, A.Siljak, T.B.Smith, L.Trofimov, N.van Deusen, B.Walker, A.Weldemichael, D.Woolf

### Departmental Notes

*Subject Code* HIST

*Chair of Department* R.Manley

*Departmental Office* Watson Hall, Room 212

*Departmental Telephone* 613-533-2150

*Departmental Fax* 613-533-6298

*Department Manager* Matthew Colby

*E-Mail Address* <[matt.colby@queensu.ca](mailto:matt.colby@queensu.ca)>

*Chair of Graduate Studies* A.Jainchill

*Graduate Business* hist.grad@queensu.ca

*Chair of Undergraduate Studies* B.Walker

*Undergraduate Business* hist.undergrad@queensu.ca

*World Wide Web Address* <http://www.queensu.ca/history/>

### Overview

The History Department at Queen's will provide you with a sophisticated introduction to a variety of approaches to the past, and will hone your analysis, discussion, research, and writing skills. You can explore such diverse areas as the Crusades, slavery and race relations, Native history in the Americas, the Russian Revolution, the problems of 20<sup>th</sup> century Canadian unity, the economic development of Africa, and the perception and treatment of women in North America.

### Advice to Students

#### Introductory Courses

Any of the first-year history courses fulfills the prerequisite for further work in the subject. Students should therefore choose on the basis of the subject matter and method of instruction they prefer. HIST 121/6.0, HIST 122/6.0 and HIST 124/6.0 are in-class and follow a lecture/tutorial method. HIST 124/6.0 and HIST 125/6.0 are offered as online courses by Continuing and Distance Studies. A grade of C in any one of these courses is the minimum prerequisite for seminar work at the second year level.

#### Selection of Courses

History courses at Queen's are divided into four types: introductory courses (100-level), lecture courses (numbered 200-299), core seminars for those registered in the history Major or Medial Plans (numbered 300-329, and normally taken in *second* year), and upper-year seminar courses (numbered 333-499). The core seminars and the upper-year seminar courses form a fundamental and compulsory part of the program for students pursuing a Major or Medial Plan in History. History Minors and students in other subjects should normally choose 200-level lecture courses, which may be taken at any time in second, third, or fourth year. The specific prerequisites for admission to second-year core seminars and upper-year seminar courses are appended to the course descriptions.

Regarding which courses to choose, the History Department expects students to balance interest with breadth. 6.0 units in Canadian History is required for all History Plans; it is also recommended (but not required) that students take at least 6.0 units on the period before 1800. Majors and Medials should not take more than half their courses in the history of any one country.

#### Preparation for a Teaching Career

Students wishing to enter teaching as a career are advised by the Faculty of Education to acquire a general familiarity with most of the areas taught at the secondary school level: Canadian, American, and modern world



history. It would be advantageous to concentrate in one or more of these areas and to obtain some background in ancient and medieval history as well as in political studies, economics, and sociology.

**Special Study Opportunities**

Students in good academic standing who are pursuing a major or medial concentration in History would normally be eligible to take courses at the Bader International Study Centre, Herstmonceux. The History Department equally encourages and supports other study abroad options. Please consult the History Department website for further information and regulations, and please contact the Department for academic advice before registering.

R. Chaykowski, G. Fisk, R. Hickey, D. Leighton, J. Lilius, B. Weinberg

### Program Notes

*Subject Codes* EMPR (Undergraduate) MIR (Graduate)

*Office* Faculty of Arts and Science

*Professor and Director, MIR Program* R. Chaykowski

*Office* Robert Sutherland Hall 223

*Telephone* 613-533-6000 ext. 77322

*E-Mail Address* [mir.program@queensu.ca](mailto:mir.program@queensu.ca)

*World Wide Web Address* <http://mir.queensu.ca/>

*Employment Relations Undergraduate Certificate Coordinator* R. Hickey

*Coordinator of Graduate Studies* G. Fisk

### Overview

The study of employment relations in Canada and globally has a long tradition at Queen's. The Queen's **undergraduate Certificate in Employment Relations** focuses on core elements of the field of work and employee-management relations, while taking account of social science perspectives from economics, law, management, and history.

The **undergraduate Certificate in Employment Relations** provides a broad foundation in the field of employment relations, including the areas of labour/employment law, labour-management relations, conflict management and negotiations, human resources management, and labour policy. Taken together, these courses and the resulting Certificate form the basis for a recognized university credential that will support students who are seeking entry level jobs in labour relations and human resources management after leaving Queen's.

### Program

Graduates of the *Certificate in Employment Relations* will demonstrate a broad understanding of the major subjects and skills in employment relations. Through lectures, case studies, simulations, group discussions, team projects, and individual assignments, students will develop competencies in the use of appropriate methods to assess workplace challenges and problems. Students who successfully complete the *Certificate in Employment Relations* will be able to devise and sustain persuasive arguments and solve problems using a variety of disciplinary approaches.

The *Certificate in Employment Relations* consists of five (5) courses:

EMPR 200/3.0 Work and Employment Relations in Canada

EMPR 210/3.0 Employment Law

EMPR 220/3.0 Conflict Resolution

EMPR 230/3.0 Managing Human Resources and Employment Relations

EMPR 240/3.0 Labour Policy

The ***Certificate in Employment Relations*** can be completed fully online or through a combination of online and in-class courses.

### Advice to Students

The *Certificate in Employment Relations* is open to current undergraduate degree students at Queen's University as well as to current and new part-time students. The Certificate program can be taken either in conjunction with a degree program, in which case the Arts and Science regulations concerning limited double counting of courses apply; or the Certificate can be earned as a stand-alone credential. New part-time students for the *Certificate in Employment Relations* need to meet existing admission criteria for certificates. New part-time student applicants can also enter the Faculty of Arts and Science as non-degree students and, if they meet Arts and Science eligibility criteria for progression to a degree program, can enroll in the Certificate program at a later date.

All students enrolled in the *Certificate in Employment Relations* program need to meet the Faculty of Arts and Science progression criteria.

**Prerequisites**

Students wishing to take a course at the 200 or 300 level, for which they lack the stated prerequisites, may appeal to the Course Instructor to have the prerequisites waived.

## International Programs Office

### **Notes**

*Subject Code* INTS

*Associate Vice-Principal (International)* K. O'Brien

*Manager* L.Esford

*Study Abroad Coordinator* M.Marshall

*Exchange/Study Abroad Programs Assistant* J.Tough

*International Programs Assistant* H. McCormick

*International Programs Office* Mackintosh-Corry Hall, Room B206

*Telephone* 613-533-2815

*Fax* 613-533-6453

*E-Mail Address* ipo@queensu.ca

*World Wide Web Address* www.queensu.ca/ipo

H.Adelman

### Notes

*Subject Code for Jewish Studies* JWST

*Subject Code for Hebrew* HEBR

*Director* H.Adelman

*Office* Watson Hall, Room 212

*Telephone* 613-533-2150

*Fax* 613-533-6298

*E-Mail Address* [jewish.studies@queensu.ca](mailto:jewish.studies@queensu.ca);

*World Wide Web Address* [www.queensu.ca/jewishstudies](http://www.queensu.ca/jewishstudies); [www.queens.ca/history](http://www.queens.ca/history)

*Academic Advisers* H.Adelman

*Administrative Assistant* C.Fehr

Email Address: fehr@queensu.ca

### Overview

Jewish civilization has a recorded global history of 4,000 years. Drawing from texts spanning from the Hebrew Scriptures to post-modern writing, the study of the Jewish diasporas in their transnational historical and cultural contexts provides students with insight into the complexities of global culture, identity, religion, and politics. All Jewish Studies courses are offered in the History Department.

### Advice to Students

Students considering a minor in Jewish Studies should consult with the Director of Jewish Studies. Those considering any advanced work related to Jewish Studies or Jewish professional work are encouraged to study Hebrew at Queen's and abroad, especially in Israel, with prior approval of the Director.

No specific background is required to enroll in many Jewish studies courses. Students wishing to take advantage of the opportunity to study Jewish life in the context of the surrounding cultures are urged to consider a degree in History as a major, medial, or minor

### Special Study Opportunities

Courses taken at Israeli universities, subject to Faculty of Arts and Science regulations on credit for courses taken elsewhere, may be counted toward a Minor in Jewish Studies with the prior permission of the Director, toward credit in other departments, or toward general electives. Consult the International Programs Office as well as the Director for more information on Israeli and other universities, programs and scholarships.

One of the special features of the Jewish Studies Program at Queen's is dialogue courses, particularly courses about Jewish-Muslim and Palestinian-Israeli relations. These seminar courses are taught by two instructors with training in parallel fields who engage narratives from different perspectives about historical situations and contemporary situations.

### Future Prospects

In addition to providing an undergraduate program, Jewish studies, like History, offers a background for many careers requiring liberal arts training, especially strong writing, research, and speaking skills. These include public service, government, education, law, business, social work, clergy, graduate study, journalism, and communal service. With backgrounds in the humanities, students also go to professional training in scientific fields such as medicine, nursing, physical and occupational therapy.

## School of Kinesiology and Health Studies

Faculty Members: M.L.Adams, E.Bisung, P.A.Costigan, J.Côté, S.Fergus, B.Gurd, I.Janssen, S.J.King, A.Latimer-Cheung, E.Y.Lee, L.Lévesque, L.Martin, J.Masuda, E.Power, K.E.Pyke, R.M.Ross, J.Selinger, C.Szto, J.Tomasone, M.E.Tschakovsky

Cross-Appointed Members: M.A.Adams, B.Brouwer, J.T.Bryant, P.Collins, G.A.L.Davies, G.A.Dumas, J.Freeman, E.L.Morin, D.E.O'Donnell, L.Pelland

### Departmental Notes

*Subject Code for Health Studies* HLTH

*Subject Code for Kinesiology and Physical Education* KNPE

*Subject Code for Physical Activity Practicum Course* PACT

*World Wide Web Address* <https://skhs.queensu.ca/>

*Director of the School* J.Côté

*Associate Director of the School* L.Lévesque

*School Office* School of Kinesiology and Health Studies, Room 206

*Telephone Number* 613-533-2666 Press 1

*E-Mail Address for Health Studies* [askhlth@queensu.ca](mailto:askhlth@queensu.ca)

*E-Mail Address for Kinesiology* [askkin@queensu.ca](mailto:askkin@queensu.ca)

*E-Mail Address for Physical Education* [askbphe@queensu.ca](mailto:askbphe@queensu.ca)

*Department Manager and Undergraduate Chair* A.van der Meulen

*Academic Advisor and Program Coordinator, Undergraduate Studies* M.Monte

*Coordinator of Graduate Studies* L.Lévesque

### Overview

The School of Kinesiology and Health Studies offers a range of Program and Plan options to students in Arts and Science:

The **Kinesiology Specialization** Plan is a multi-disciplinary, science-based program that focuses on human movement in the applied exercise-science fields of study such as biomechanics, ergonomics, exercise physiology, and physical activity epidemiology. While the Plan is primarily science-based, students also learn about human movement in the context of exercise and sport psychology, health promotion, and the socio-cultural aspects of physical activity. The B.Sc.(Hons.) Kinesiology Plan has been designed to meet the minimum accreditation standards for Kinesiology programs accredited by the Canadian Council of University Physical Education and Kinesiology Administrators (CCUPEKA). Admission to the Kinesiology Specialization Plan, leading to a Bachelor of Science (Honours) degree, is by direct-entry from high school.

The **Health Studies** Plan is a social science concentration that addresses subject areas bearing on human health. For the public health care system in Canada to function effectively both the social and physical determinants of health at the individual and societal level need to be understood in the context of health education, health policy, community health, and epidemiology. The core competencies of the Plan include health processes (e.g., implementation of programs and policies), health content (e.g., nutrition, sexuality), and supporting knowledge and concepts fundamental to the evaluation of health (e.g., behaviour, lifestyle choices). Major, Medial and Minor/General Plans in Health Studies are all available, leading to a Bachelor of Arts (Honours) degree, with admission based on first-year standing and grade in the foundational social determinants of health course (HLTH 101).

### Departmental Policies

#### Special Fee for the Outdoor Education Course

In addition to tuition, students registering in PACT 338/3.0 will pay a fee (subject to change) of \$400 in order to defray the extraordinary costs involved in offering this outdoor education course. The School will be responsible for providing transportation, accommodation, food, and general equipment for the outdoor education camp

school; personal equipment will be provided by the students. Financial penalties apply when these courses are dropped within 30 days of the start date. Consult the School of Kinesiology and Health Studies for details.

### **Advice to Students**

Students in a Health Studies Plan may access KNPE 125/3.0, KNPE 225/3.0, KNPE 251/3.0, KNPE 265/3.0, KNPE 335/3.0, KNPE 336/3.0, KNPE 337/3.0, KNPE 365/3.0, KNPE 400/3.0, KNPE 433/3.0, KNPE 436/3.0 and KNPE 450/3.0.

A limited number of seats are available to students in Arts & Science in KNPE 367/3.0. All other KNPE courses are only open to students registered in a Physical and Health Education or a Kinesiology Specialization Plan.

### **Admission**

Students wishing to enrol in Health Studies Major, Medial or Minor/General Plans follow the standard Arts and Science admission regulations, normally applying to these Plans at the end of first year. Admission to the Kinesiology Specialization Plan within the Bachelor of Science (Honours) Program is by direct-entry; students apply from high school directly to the Ontario Universities' Application Centre for access to this program. Once admitted, the student will be automatically enrolled in the Kinesiology Specialization Plan. Admission to the Physical and Health Education Plan, leading to a Bachelor of Physical and Health Education (Honours) degree is closed, effective September 2017. The program closure will not impact students currently enrolled in the BPHEH program, as they will continue to be able to fulfill all of the degree requirements of the program.

The Bachelor of Physical and Health Education Program – Physical and Health Education General Plan and the Bachelor of Science – Kinesiology General Plan are graduation credentials only available to students who are otherwise unable to complete the corresponding Honours Specialization Program/Plan.

## Languages, Literatures and Cultures

V.Altman, K.Aoki, C.Arndt, B.Bachmann, X.Bai, B.Bjorkman, N.Brinklow, D.F.Chamberlain, M.Chamberlain, M. Doxtater, N.Haklai, A.Halabi, M.Holzschuh Sator, J.Hosek, L.Jessop, C.Kani, M.Lizano, J.Luengo-Martinelli, A.Macedo, N.McDermott, D.J.Mennell, A.Nicaso, C.Palomares Salas, D.V.Pugh, C.Reinholtz, J.Rotermundt-de la Parra, D.Santeramo, H.J.Scott, I.St-Amand, P.E.Thompson, C.Zaccagnino

### Departmental Notes

*Subject Code for Anishinaabe Language* ANSH  
*Subject Code for Arabic Language* ARAB  
*Subject Code for Chinese* CHIN  
*Subject Code for German Language* GRMN  
*Subject Code for German Studies* GMST  
*Subject Code for Hispanic Studies* HISP  
*Subject Code for Indigenous Languages and Cultures* INDC  
*Subject Code for Indigenous Studies* INDG  
*Subject Code for Inuktitut* INUK  
*Subject Code for Italian* ITLN  
*Subject Code for Japanese* JAPN  
*Subject Code for Languages, Literatures and Cultures* LLCU  
*Subject Code for Linguistics* LING  
*Subject Code for Mohawk* MOHK  
*Subject Code for Portuguese* PORT  
*Subject Code for Spanish* SPAN  
*Subject Code for Spanish and Latin American Studies* SLAS  
*Subject Code for World Language Studies* LANG  
*World Wide Web Address* <http://www.queensu.ca/llcu/home>  
*Acting Head of Department* TBA  
*Associate Head of Department* TBA  
*Departmental Office* Kingston Hall, Room 416  
*Departmental Telephone* 613-533-2072  
*Email Address* llcu@queensu.ca  
*Fax* 613 533-6496  
*Chair of Undergraduate Studies* TBA  
*Administrative Assistants* M.Maliszewska, L.Young

### Overview

The Department of Languages, Literatures and Cultures is a multidisciplinary unit that offers students the opportunity to learn languages, develop an understanding of literary and cultural traditions, and pursue studies in the field of *Linguistics*. The Department offers language courses in *Anishinaabemowin*, *Arabic*, *Chinese*, *German*, *Hebrew*, *Inuktitut*, *Italian*, *Japanese*, *Mohawk*, *Portuguese* and *Spanish*, Degree Plans in: *German Studies*; *Hispanic Studies*; *Indigenous Studies*; *Italian*; *Languages, Literatures and Cultures*; *Linguistics*, *Spanish and Latin American Studies*; and *World Language Studies*, and a Certificate in *Indigenous Languages and Cultures*. Learning a language prepares students to travel, live, or work internationally and makes them more linguistically competent in Canada's multicultural environment. The Department of Languages, Literatures and Cultures also offers over 40 courses in English as on various cultural and literary topics. These are open to non-LLCU students and can be taken as electives. A degree focusing on languages, literatures and cultures, or focusing on Linguistics, provides students with valuable transferable skills that are increasingly important in our global world, especially intercultural competencies which are becoming ever more relevant in today's global work environment. The Department encourages students in all our disciplines to participate in one of the many international study opportunities supported by Queen's.

### Departmental Policies

Additional fees may be required for certain materials/courses.



## **Advice to Students**

Students with prior knowledge of a language they wish to study are advised to meet with the Undergraduate Chair to discuss their Degree Plan progress and course selection.

### Courses and Degree Plans

The Department of Languages, Literatures and Cultures offers a wide range of Degree Plans in the broad areas of languages, literatures and cultures, and linguistics as described below.

### Languages, Literatures and Cultures

Queen's University offers students the opportunity to learn to communicate in some thirteen different languages, other than English. Within the Department of Languages, Literatures and Cultures, language courses are offered in *Anishinaabemowin, Arabic, Chinese, German, Hebrew, Inuktitut, Italian, Japanese, Mohawk, Portuguese* and *Spanish*. Language courses form a central part of all the Department's Degree Plans (see below). Basic language courses are popular electives for students with little or no knowledge of these languages, but are also important starting points for the study of literature and culture, not to mention valuable background in *Linguistics* and many other disciplines available at Queen's, such as Global Development Studies, Political Studies, and Music.

The Department offers a wide selection of Degree Plans: Major (Hispanic Studies; Languages, Literatures and Cultures), Medial (*German Studies, Hispanic Studies*) and Minor/General (*German Studies, Hispanic Studies, Indigenous Studies, Italian, Spanish and Latin American Studies* and *World Language Studies* [which can include any of the above languages and also *Anishinaabemowin, Arabic, Chinese, French, Ancient Greek, Hebrew, Inuktitut, Japanese, Mohawk, Portuguese, and Latin*]).

The Major and Medial Degree Plans, and their associated courses, will examine the influence of key social, historical, political and artistic developments, and sharpen their awareness of varied cultural traditions. In many cases, studies can be enhanced through study abroad and exchange opportunities.

In the Minor/General Plans you will learn to communicate in one or more languages other than English and/or receive an introduction to their literatures and cultures. The Plans prepare you for an international career, allow you to gain insights into literatures and cultures, and prepare you for a global future.

### Linguistics

Linguistics is the scientific study of language, from the sounds of speech to the internal structure and meaning of words, phrases and sentences. Linguists (people who are specialists in Linguistics) investigate specific languages with a view to understanding the nature of language in general.

The Department offers foundation courses in the core areas of Formal Linguistics—Phonetics, Phonology, Morphology, Syntax and Semantics—as well as a wide selection of special interest courses in Linguistics. Students can choose from two Degree Plans in Linguistics: a Major in Linguistics, and a Minor/General in Linguistics.

### First-Year Language Courses and Acceleration

While students may be permitted to take certain language courses concurrently, they will not be allowed to take for credit a language acquisition course with a number lower than that of a course already completed. To ensure that students are properly placed according to their levels of linguistic competence, they will be allowed to change to a more advanced or to a more elementary language course during the first few weeks of term. Students must in any case consult with their instructors before changes are made in registration so that proper placement and progression in course-work may be determined. Students who are unsure of their linguistic level should consult with the Undergraduate Chair.

Students who have little or no knowledge of another language and are interested in pursuing a Plan in that language are encouraged to accelerate their language training by taking two courses in either their first or second year. Students wishing to complete a Medial or Major Plan are strongly encouraged to take advantage of study abroad opportunities.

Students who have completed 4U or equivalent in their language of study will normally begin at the intermediate level while students with native or near-native language proficiency should begin at the advanced level. Students with any previous training in their language of study will not be allowed to take beginning language courses.

### **Special Study Opportunities**

#### Exchange and Study Abroad Opportunities

Students in all our Plans are encouraged to take advantage of the study abroad opportunities, spend their third year abroad, or participate in the Certificate in International Studies. Those wishing to avail themselves of this opportunity should contact the Undergraduate Chair early in their second year of studies in order to discuss course selection and details of transfer credit arrangement. Resources are available in the Department (pamphlets, travel awards) for students to browse.

#### Certificate of Competence (in a language listed below)

Students who are not registered in one of our Degree Plans but have taken certain courses in the language at Queen's are eligible for a Certificate of Competence in the language. Note that this is *not* a Senate-approved Certificate Program and therefore will be noted as an Academic Milestone on the transcript. The Certificate will be issued by the Department of Languages, Literatures and Cultures on behalf of the Faculty of Arts and Science. Applications for the Certificate should be received by the Department of Languages, Literatures and Cultures before the last day of classes. An administrative fee will be charged (\$35).

#### *Chinese*

INTERMEDIATE LEVEL      6.0 units in CHIN 100/6.0  
6.0 units in CHIN 200/6.0  
6.0 units in CHIN 300/6.0  
With an overall GPA of 2.90 on these courses.

#### *German*

INTERMEDIATE LEVEL      6.0 units in GRMN 101/3.0 and GRMN 102/3.0  
6.0 units in GRMN 201/3.0 and GRMN 202/3.0  
6.0 units from GRMN at the 300 level  
With an overall GPA of 2.90 on these courses.

#### *Italian*

INTERMEDIATE LEVEL      6.0 units from (ITLN P10/3.0 and ITLN 112/3.0) or *ITLN 101/6.0*  
6.0 units from (ITLN 204/3.0 and ITLN 205/3.0) or *ITLN 201/6.0*  
6.0 units from ITLN  
With an overall GPA of 2.90 on these courses.

#### *Spanish*

INTERMEDIATE LEVEL      6.0 units from (SPAN P10/3.0 and SPAN 112/3.0) or *SPAN 101/6.0*  
6.0 units from (SPAN 204/3.0 and SPAN 205/3.0) or *SPAN 201/6.0*  
6.0 units from (SPAN 301/3.0 and SPAN 302/3.0) or (SPAN 303/3.0 and SPAN  
304/3.0)  
With an overall GPA of 2.90 on these courses.

#### *Certificate in Indigenous Languages and Cultures*

The Certificate in Indigenous Languages and Cultures is open to current undergraduate degree students at Queen's. The Certificate can be taken in conjunction with a degree program, in which case the Arts and Science regulations about limited double counting of courses apply, or as a stand-alone credential. All students enrolled in the Certificate in Indigenous Languages and Cultures need to meet the Faculty of Arts and Science 1.6 GPA or high school prerequisite and the progression criteria. The Certificate consists of 15.0 units in Mohawk Language and Culture (MOHK 101/3.0; MOHK 102/3.0), Inuktitut Language and Culture (INUK 101/3.0), and Anishinaabe Language and Culture (ANSH 101/3.0, ANSH 102/3.0).

**Notes**

*Subject Code* LIBS

*Faculty Coordinator* J.Carson, Department of History

*Email* [jc35@queensu.ca](mailto:jc35@queensu.ca)

*Office*

*Telephone*

**Overview**

Liberal Studies is designed to provide you with an integrated liberal studies education, structured around modes of critical thought, and focused on breadth rather than specialization. The Liberal Studies Minor/General will prepare you for work in the 21st-century, in jobs that may not yet exist but that will require you to have the transferable skills that can be gained through an interdisciplinary approach to intellectual inquiry, argument and analysis.

**Advice to Students**

The BA in Liberal Studies will start with a required foundational course, LIBS 100/3.0, which will introduce students to approaches, methodologies and fundamental questions in the humanities, social sciences and natural sciences. Students will then be required to select courses from each of the four modes of critical thought: scientific inquiry and reasoning, insights into contemporary society and culture, critical perspectives on history, and academic writing. Finally, a required capstone course, LIBS 300/3.0, will enable students to draw on and synthesize their learning using a collaborative, project-based approach. By fostering an interdisciplinary approach to intellectual inquiry, argument and analysis, the BA in Liberal Studies will prepare students for more in-depth study in a specific field or to enter a professional program such as law, as well as provide them with a strong comprehensive educational foundation and the adaptable skills for any career path or life activity

S.Abraham, M.A.Adams, J.Allingham, R.D.Andrew, A.Baer, B.Banfield, S.Basta, B.M.Bennett, G.Blohm, G.P.Côté, A.Craig, P.L.Davies, Q.Duan, E.C.Dumont, R.Easteal, A.V.Ferguson, J.T.Fisher, C.D.Funk, J. Gallivan, K.Gee, N. Ghasemlou, C.Graham, K.F.Jarrell, Z.Jia, G.Jones, F.Kan, M.D.Kawaja, M.Koti, A.E.Lomax, L.W.MacKenzie, R.J.MacLeod, N.S.Magoski, N.L.Martin, T.E.Massey, D.H.Maurice, C.R.Mueller, D.P.Munoz, R.Oko, M.Ormiston, T.R.S.Ozolins, S.Pang, M.Paré, M.P.Petkovitch, R.K.Poole, L.H.Raptis, J.N.Reynolds, S.H.Scott, S.P.Smith, P.Stroman, M.R.Szewczuk, C.Tayade, C.A.Ward, L.M.Winn, S.Zhang

### Program Notes

*Subject Code for Anatomy* ANAT

*Subject Code for Biochemistry* BCHM

*Subject Code for Cancer Research* CANC

*Subject Code for Cardiorespiratory Science* CRSS

*Subject Code for Drug Discovery and Human Toxicology* DDHT

*Subject Code for Life Sciences* LISC

*Subject Code for Microbiology and Immunology* MICR

*Subject Code for Neuroscience* NSCI

*Subject Code for Pathology and Molecular Medicine* PATH

*Subject Code for Pharmacology and Toxicology* PHAR

*Subject Code for Physiology* PHGY

*Subject Code for Public Health Sciences* EPID

*Associate Dean, Life Sciences and Biochemistry* L. Winn

*Office* Botterell Hall, Room 650

*World Wide Web Address* [www.healthsci.queensu.ca/liscbchm/](http://www.healthsci.queensu.ca/liscbchm/)

*Telephone* 613-533-6527

*Email Address* [lifesci@queensu.ca](mailto:lifesci@queensu.ca)

### Overview

The hallmark of the Life Sciences program is a unique blend of disciplines represented by basic and clinical biomedical science departments in the Faculty of Health Sciences. These departments include Biomedical and Molecular Sciences, Public Health Sciences, and Pathology and Molecular Medicine, in collaboration with the Cancer Research Institute, the Centre for Neuroscience Studies, and the Cardiac, Circulation and Respiratory Group.

The subjects that fall under the umbrella of the Life Sciences program include traditional biomedical disciplines devoted to the anatomical, biochemical, epidemiological, immunological, microbiological, pathological, pharmacological, and physiological sciences. In addition, there are Sub-plans dedicated to contemporary trans-disciplinary themes in the cardiovascular and respiratory sciences, drug development and human toxicology, cancer biology and genetics, and neuroscience.

The Department of Biomedical and Molecular Sciences is responsible for *Biochemistry* Plans (General/Minor (Science), Major, Specialization) and plays a primary role in the *Life Sciences* Plans (General/Minor (Science), Major, Specialization). The Department is a unique amalgam of scientists and teachers who share a common goal: to ameliorate the consequences of disease and trauma by training the next generation of health care scientists and professionals. To meet this goal, the Department draws on the depth and breadth of the scientific expertise of its members. Contemporary courses are offered in the anatomical, biochemical, microbiological, immunological, pharmacological, and physiological sciences and in a wide range of cross-disciplinary studies (e.g. cardiovascular and respiratory sciences, drug development, cancer biology and genetics, neuroscience). These courses are integral to the various Biochemistry and Life Sciences Plans.

## Program Policies

### Laboratory Safety

Departmental Safety Rules are strictly enforced. A standard white laboratory coat is required for all laboratory courses. Shoes must be closed at both heel and toe. Additional safety requirements will be described at the first laboratory in each laboratory-based course.

### Access to Third and Fourth Year Courses

Students in the Life Sciences Specialization Plan (LISC-P-BSH) will be given priority enrolment to those courses that are required to meet third- and fourth-year core and option requirements. Students in both the Life Sciences Specialization and the Life Sciences Major Plans (LISC-P-BSH and LISC-M-BSH) should further note that a minimum cumulative GPA of 2.50 is a required prerequisite to access those fourth-year courses to complete these Plans. See Academic Regulations **2.4** and **2.6**.

### Advice to Students

Students should seek **academic counseling** from staff in the Associate Dean's office:

COURSE PREFIX	COUNSELLOR	CONTACT INFORMATION
BCHM and LISC	L. Winn	<a href="mailto:lifesci@queensu.ca">lifesci@queensu.ca</a>
BCHM and LISC	K. Rudder	<a href="mailto:lifesci@queensu.ca">lifesci@queensu.ca</a>
BCHM and LISC	D. Cameron	<a href="mailto:biochem@queensu.ca">biochem@queensu.ca</a>

Students may also seek **academic counseling** from one of the counselors listed below.

COURSE PREFIX	COUNSELLOR	CONTACT INFORMATION
ANAT	L. MacKenzie	<a href="mailto:mackenzl@queensu.ca">mackenzl@queensu.ca</a>
BCHM	J. Allingham	<a href="mailto:allingham@queensu.ca">allingham@queensu.ca</a>
CANC and PATH	C. Nicol	<a href="mailto:nicolc@queensu.ca">nicolc@queensu.ca</a>
CRSS	D. Maurice	<a href="mailto:mauriced@queensu.ca">mauriced@queensu.ca</a>
EPID	A. Johnson	<a href="mailto:ana.johnson@queensu.ca">ana.johnson@queensu.ca</a>
DDHT and PHAR	N. Philbrook	<a href="mailto:nikki.philbrook@queensu.ca">nikki.philbrook@queensu.ca</a>
MICR	R. K. Poole	<a href="mailto:poolek@queensu.ca">poolek@queensu.ca</a>
NSCI	A. Lomax	<a href="mailto:lomaxa@queensu.ca">lomaxa@queensu.ca</a>
PHGY	A. Lomax	<a href="mailto:lomaxa@queensu.ca">lomaxa@queensu.ca</a>

- The Biomedical Discovery Sub-plan is recommended to students who wish to gain advanced laboratory experience or experiential learning in Anatomy or Epidemiology/Public Health or Immunology or Microbiology or Pathology or Pharmacology or Physiology.
- The Biomedical Sciences Sub-plan provides more flexibility in choice of options and electives than other sub-plans, and is recommended to students who wish to obtain a wide-ranging foundation in the life sciences with opportunities for advanced study in selected topics.

The remaining four sub-plans are devoted to contemporary trans-disciplinary streams and place a high premium on laboratory-based research and seminar-based learning.

- The Cancer Sub-plan is recommended to students who wish to proceed to graduate studies and research in Cancer Biology and Genetics. Students intending to take this sub-plan should consult the list of option courses required for completion of the program, and consider appropriate courses in Year 3.
- The Cardiorespiratory Sub-plan is recommended to students who wish to proceed to graduate studies and research in the cardiovascular and respiratory sciences. Students intending to take this sub-plan should complete PHGY 355/3.0 in Year 3.

- The Drug Discovery and Human Toxicology Sub-plan is recommended to students who are interested in enriched study in the fields of drug discovery and development as well as in mechanisms of drug and toxicant action. Students will gain advanced knowledge which will make them competitive for graduate studies and marketable in particular employment areas (e.g. government regulatory agencies and pharmaceutical companies).
- The Neuroscience Sub-plan is recommended to students who wish to proceed to graduate studies and research in the neurosciences. Students intending to take this option should complete either NSCI 323/3.0 or NSCI 324/3.0 in Year 3. It is strongly recommended that students in this sub-plan complete both courses.

The Life Sciences Major Plan is recommended to students who wish to pursue a wider range of study than is possible with the Life Sciences Specialization Plan. Access to specialized courses at the 400 level may be limited, with priority given to students in the Life Sciences Specialization Plan program.

*Preparation for a Teaching Career*

Students wishing to enter teaching as a career are advised to consult the Faculty of Education concerning the prerequisites for the B.Ed. program options.

NOTE Students enrolled in this program will be required to work with animals and tissues obtained from animals.

A.Ableson, S.G.Akl, F.Alajaji, T.Barthelme, G.Blohm, S.Blostein, O.Bogoyavlenskij, F.Cellarosi, B.E.Chen, T.Day, I.Dimitrov, B.Ghahsifard, M.Green, M.Guay, W.Jiang, E.Kani, B.Levit, A.Lewis, P.Li, D.Lin, T.Linder, F.Magpantay, A.-R.Mansouri, J.McLellan, J.A.Mingo, C.Molson, M.R.Murty, D.C.Offin, P.Peng, C.Pfaff, B.Rodgers, M.Roth, G.G.Smith, G.Takahara, P.D.Taylor, C.Tardif, D.J.Thomson, D.Tu, D.Wehlau, N.Yui, S.Yüksel

### Departmental Notes

*Subject Code for Biomathematics* BIOM  
*Subject Code for Mathematics* MATH  
*Subject Code for Statistics* STAT  
*World Wide Web Address* [www.queensu.ca/mathstat](http://www.queensu.ca/mathstat)  
*Head of Department* J.Mingo  
*Associate Head of Department* I.Dimitrov  
*Departmental Office* Jeffery Hall, Room 310  
*Departmental Telephone* 613-533-2390  
*E-Mail Address* [mathstat@mast.queensu.ca](mailto:mathstat@mast.queensu.ca)  
*Chair of Undergraduate Studies* D.Lin  
*Coordinator of Graduate Studies* S.Yüksel  
*Chair for Engineering Mathematics* A.-R.Mansouri  
*Department Manager* C. O'Brien

### Overview

The Department of Mathematics and Statistics offers degree Plans designed to appeal to a broad range of students, including those interested in pure mathematics, applied mathematics, the physical and the biological sciences, teaching, actuarial studies (science), probability, and statistics. Our instructors include leading researchers and many winners of national and university teaching awards. The Department offers various plans in Mathematics and in Statistics, leading to either a B.A., B.A.(Hons.), B.Sc. or B.Sc.(Hons.) degree. A Plan in Mathematics and Engineering is also offered through the Faculty of Engineering and Applied Science. For full details of this program, see the *Calendar* of the Faculty of Engineering and Applied Science.

### Advice to Students

#### Actuarial Science

Students interested in actuarial science should refer to the Actuarial Focus described in the Mathematics Major Plan. Examinations set by the Society of Actuaries are each intended to cover a range of topics in an integrated fashion. The first few of these examinations deal mainly with mathematics and statistics, plus some topics from economics and business. The Queen's courses listed in the Actuarial Focus will give students background in specific areas needed to prepare students for the Society of Actuaries examinations. Information about the examinations can be obtained from the Society of Actuaries.

#### Supporting Statistics Courses for Students in Other Disciplines

Students wishing to use statistics in their area of study should include in their degree plan at least 3.0 units beyond the introductory level.

### Special Study Opportunities

#### Applied Mathematics Courses

Some applied mathematics (MTHE) courses designed for students in the Faculty of Engineering and Applied Science may also be open to students in the Faculty of Arts and Science. See the Department for details on registration in these courses.

#### Courses of Instruction in the School of Graduate Studies and Research

With the permission of the instructor, the Department and the Registrar of the School of Graduate Studies and Research, undergraduate students may take for credit graduate courses in MATH or STAT for which they have the prerequisite background. This permission will require a minimum GPA of 3.50 in the mathematics and statistics courses of the first three years of their programs. Course descriptions are given in the *Calendar* of the *School of Graduate Studies and Research*.

### Notes

*Subject Code* MDVL

*Faculty Coordinator* S.Straker, Department of English

*Email* straker@queensu.ca

*Office* Watson Hall, Room 436

*Telephone* 613-533-6000 Ext. 74424

### Overview

Medieval Studies allows you to develop an interest in the history, literature, society, culture and language of the Middle Ages. Here you can discover what happened in Europe and the Mediterranean world after the fall of Rome, and can explore the roots of the modern world by learning about such things as Gothic art, medieval romances and sagas, the Crusades, Byzantine emperors, or early Muslim faith and politics. Language acquisition plays a vital part in the advanced pursuit of medieval studies, so you are encouraged to acquire skills in Latin, Old English, Arabic, Greek or more.

### Advice to Students

The Medieval Studies Minor/General is a multi-disciplinary Plan which brings together courses offered primarily in Art, Classics, English, and History. The requirements for each course are determined by the hosting academic unit and students should be aware that many of the option courses, particularly those in English and History, require prerequisites. In addition, you will not be able to take some of the possible option courses unless you are doing a Major in the relevant Plan. See Department listings for clarification or consult with the coordinator of Medieval Studies. To minimize limitations, students are advised to take the supporting courses ENGL 100/6.0, HIST 121/6.0 or HIST 122/6.0; a first year course in ARTH would also be useful, as would CLST 201/3.0. Up to 6.0 units of approved language courses count towards this Plan.

### Counsellors

<i>Department of Classics</i>	B.Reeves
<i>Department of English</i>	S.Straker
<i>Department of History</i>	R.Greenfield
<i>Department of Philosophy</i>	J.Miller



## Philosophy

D.J.Bakhurst, C.Cline, J.M.Davies, P.Fairfield, K.Gordon-Solmon, S.Johnston, D.Knight, R.Kumar, W.Kymlicka, S.R.Leighton, D.Lahoux, A.Lister, A.Mercier, J.Miller, M.Moore, J.M.Mozersky, R.Murty, E.Paul, N.Salay, U.Schüklenk, S.Sismondo, M.C.R.Smith, M.Smith, C.A.Synowich

### Departmental Notes

*Subject Code* PHIL

*World Wide Web Address* <http://www.queensu.ca/philosophy/home>

*Head of Department* C.Synowich

*Departmental Office* Watson Hall, Room 312

*Departmental Telephone* 613-533-2182

*Chair of Undergraduate Studies* P.Fairfield

*Coordinator of Graduate Studies* D.J.Bakhurst

### Overview

Philosophy will help you develop critical reasoning, as well as effective written and oral communication skills. You will be able to read critically so that you can find hidden assumptions, identify core premises, and evaluate arguments. You will study a range of key ideas and look closely at the work of a number of central philosophers from Plato to the present.

Courses become more focused and go into more depth as you move through your upper years of the program. You will be able to choose from a range of types of courses: from historical to contemporary, and from broad, theoretical investigations to more specifically problem-based inquiries.

Our classes create many opportunities for discussion, whether in small break-out groups or in our senior seminars. Students taking our Major or Medial Plans will be well prepared for graduate work in Philosophy or in other professional programs.

### Advice to Students

Not all Philosophy courses are offered every year, so it is important to check the course offerings for the upcoming year on the department website at <http://www.queensu.ca/philosophy/students/undergrad-program>.

No more than 6.0 units in PHIL courses at the 100 level may be used toward the requirements of any PHIL Plan.

Upper-level courses in PHIL have prerequisites, including minimum GPA requirements. Please consult the course descriptions in the Faculty of Arts and Science Calendar <http://www.queensu.ca/artsci/students-at-queens/academic-calendar> or our website <http://www.queensu.ca/philosophy/students/undergraduate-program/400-level-courses>

For admission to all 500-level courses, students need the consent of a supervising faculty member of the Department and permission of the Undergraduate Chair based on the submission proposal.

### Philosophy Courses as Electives

The department provides several options for students who wish to take one or more courses in Philosophy as electives. Many of our electives have no PHIL prerequisites, but are open to students with second-year or third-year standing. Please consult the course offerings to find courses suitable for you.

### Timelines for Completing a Philosophy Plan

YEAR 1 6.0 units in PHIL at the 100-level (all Plans)

YEAR 2 PHIL 250/6.0 and PHIL 257/6.0 (Major and Medial Plans)

YEAR 3 PHIL 361/3.0 (Major Plans) and 3.0 units from: PHIL 328/3.0; PHIL 329/3.0; PHIL 330/3.0;

PHIL 335/3.0; PHIL 373/3.0; PHIL 374/3.0 (Major and Medial Plans)

YEAR 4 6.0 units in PHIL at the 400 or 500 level (Major and Medial Plans)

All other required 200-level and 300-level units may be taken in years 2, 3, and 4 (subject to prerequisites, if any), though students are urged to take courses at the level that matches their year. Students who, through late decision or change of Plan, cannot adhere to the recommended pattern, should seek advice from the Undergraduate Chair.

## Physics, Engineering Physics and Astronomy

J.Bramante, A.Braun, T.Carrington, M.Chen, L.Clapham, K.Clark, S.Courteau, M.M.Dignam, P.Di Stefano, J.M.Fraser, J.Gao, G.Gerbier, G.Giroux, R.J.Gooding, D.A.Hanes, S.Hughes, J.A.Irwin, R.G.Knobel, T.Krause, K.W.Lake, H.P.Loock, R.Martin, A.B.McLean, J.Morelli, K.S.Narayanan, A.J.Noble, J.M.Nunzi, B. Shastri, K.Spekkens, J.Stotz, A.Topper, G. van Anders, A.Vincent, G.Wade, L.Widrow, A.Wright

### Departmental Notes

*Subject Code for Astronomy* ASTR

*Subject Code for Physics* PHYS

*World Wide Web Address* <http://www.queensu.ca/physics/home>

*Head of Department* M.M.Dignam

*Associate Head of Department* J.M. Fraser

*Departmental Office* Stirling Hall, Room 205

*Departmental Telephone* 613-533-2707

*E-Mail Address* [4mjb5@queensu.ca](mailto:4mjb5@queensu.ca)

*Chair of Undergraduate Studies* J.M. Fraser

*Astronomy Advisor* S.Courteau

*Chair for Engineering Physics* R.G.Knobel

*Department Manager* P.Hauschildt

### Overview

Through studying Physics at Queen's, you will be trained in observation and experimentation, in mathematics and model building, and will develop the confidence to tackle new and intellectually demanding problems, placing you at the leading edge of research and development in science and technology. This program deals with the properties of matter and energy, from everyday concepts such as force, heat and electricity to abstract ideas of relativity and quantum mechanics. The Department of Physics, Engineering Physics and Astronomy also offers a Specialization Plan in Astrophysics, and jointly with the Department of Mathematics and Statistics, a Specialization Plan in Mathematical Physics.

### Advice to Students

#### Astronomy

Astronomy courses at Queen's are offered by the Department of Physics, Engineering Physics and Astronomy, which has a research group active in astronomy and theoretical astrophysics. Students intending to specialize in astronomy or astrophysics at the graduate level should consider the Astrophysics Specialization Plan. Students wishing to include a course in astronomy as an elective should refer to ASTR 101/3.0, ASTR 102/3.0 and PHYS 216/3.0.

#### First Courses in Physics

PHYS 104/6.0 and PHYS 106/6.0 are intended for students in the physical and mathematical sciences. Both are calculus-based courses. PHYS 104/6.0 presents the material at a more fundamental level appropriate for students who are seeking a deeper appreciation of physics and who may be considering a Physics Plan. PHYS 106/6.0 is appropriate for students considering pursuing Plans in other science subjects. A grade of at least C+ in either of these courses is recommended for entry into PHYS 206/3.0, PHYS 239/3.0, and PHYS 242/3.0, which are required courses for most Physics Plans.

PHYS 117/6.0 is designed for students in the biological and life sciences. 4U physics is recommended but not required; neither is a previous or concurrent calculus course although some 4U or equivalent mathematics is required.

ASTR 101/3.0, ASTR 102/3.0, PHYS P20/3.0, PHYS 260/3.0 and PHYS 216/3.0 are attractive electives for students in other disciplines. PHYS P10/3.0 is intended for students interested in teaching physics. PHYS P10/3.0, PHYS P20/3.0, ASTR 101/3.0 and ASTR 102/3.0 can count toward a Minor(Arts)/General(Arts) in Physics; but are only electives in other Physics Plans.

Students with A standing in both PHYS 117/6.0 and first-year calculus may be admitted to a Physics Plan (with PHYS 117/6.0 then satisfying the first-year physics core requirement) but only after consultation with, and approval from, the Department.

**Ancillary Fees**

Please note that in some courses you may be asked to purchase a lab or course manual containing material(s) specific to the lab/course content. Prices generally range from \$15 to \$25 per manual and are sold through Physics Stores.

PHYS P10 Fundamental Concepts in Physics for Teachers: Students may incur transportation costs to visit local schools, which are expected to be no more than \$50.

G.G.Amyot, C.Conaghan, W.Cox, Z.Csergo, C.Farrelly, E.Goodyear-Grant, J.A.Grant, D.Haglund, O.Haklai, K.Hanniman, J.Hiebert, A.Lister, M.Little, E.MacDonald, S.Martel, J.McGarry, M.Moore, K.R.Nossal, J.Rose, S.Soederberg, S.von Hlatky

### Departmental Notes

*Subject Code* POLS

*World Wide Web Address* <http://www.queensu.ca/politics/home>

*Head of Department* Z.Csergo

*Departmental Office* Mackintosh-Corry Hall, Room C321

*Departmental Telephone* 613-533-6230

*E-Mail Address* [ugpols@queensu.ca](mailto:ugpols@queensu.ca)

*Chair of Undergraduate Studies* A.Grant

*Undergraduate Assistant* C.MacIntosh

*Chair of Graduate Studies* A.Lister

*Graduate Assistant* K. Fennell

*Administrative Assistant* Michelle Knapp-Hermer

### Overview

The Department of Political Studies at Queen's offers a full curriculum in all areas of political sciences, designed to take you on different and exciting intellectual journeys. You might explore the foundations of early democratic thought, examine integration in the European Union, study how states make the transition to democracy, or explore the impact of welfare reforms on single mothers. You will develop critical thinking and writing skills, which are not only useful for a variety of pursuits after graduation, but crucial for citizenship in a democracy.

### Departmental Policies

#### Prerequisites

Upper-level courses in Political Studies have prerequisites, including minimum GPA requirements. Please consult the course descriptions in the Faculty of Arts and Science *Calendar* for more details.

#### Studying in French

With prior permission of the instructor, assignments and examinations may be submitted in French.

### Advice to Students

#### Lecture and Seminar Courses

300-level courses are lecture courses. Most 400-level courses are seminars, but some are lecture courses. For further details, please consult the departmental homepage.

### Special Study Opportunities

#### Third Year Abroad

Political Studies students are encouraged to consider taking part in an exchange program in their third year. Students should note that 400-level POLS courses have a minimum GPA in previous POLS courses as a prerequisite. Since courses taken on an exchange program do not contribute towards GPA calculations, students should ensure that their grades are sufficient to satisfy the 400-level prerequisite before embarking on an exchange program. Those students in Medial or Major Plans must take POLS 384/3.0 in their second or fourth year at Queen's.

#### Third Year Abroad at the Bader International Study Centre (BISC)

Political Studies students who wish to spend one or two terms at the Bader International Study Centre at Herstmonceux Castle in Britain should consult with the Department. Students may receive credit for courses in other subjects and may defer POLS 384/3.0 to their final year.

#### Documents Library

An extensive collection of government documents, which is strongest in Canadian federal, provincial and local government. The international collection of publications of the United Nations and several international agencies is also strong. The Library also has an archive of data, including census data, survey material, etc. The Library is housed in the Stauffer Library (Basement Level).

J. Atkinson, C. Bowie, M. Castelhana, M. Chivers, W. Craig, H.C. Dringenberg, L. Fabrigar, L. Flores, G.C. Fekken, S.A. Fitneva, R. Flanagan, J. Gallivan, K. Harkness, R.R. Holden, T. Hollenstein, D. Hauser, J. Jacobson, L.-J. Ji, E. Kelley, V.A. Kuhlmeier, T. MacDonald, J. Menard, K.G. Munhall, M. Norris, M.C. Olmstead, J. Poppenk, C.F. Pukall, M. Sabbagh, T. Salamons, J. Stewart, D. Tripp, N. Troje, S. van Anders, D. Wilson

### Departmental Notes

*Subject Code* PSYC

*World Wide Web Address* <http://www.queensu.ca/psychology/>

*Head of Department* W. Craig

*Departmental Office* Humphrey Hall, Room 232

*Departmental Telephone* 613-533-2874

*Undergraduate Office* Humphrey Hall, Room 225

*Undergraduate Telephone* 613-533-2493

*Undergraduate E-Mail Address* [ug.psyc@queensu.ca](mailto:ug.psyc@queensu.ca)

*Chair of Undergraduate Studies* M. Norris

*Coordinator of Graduate Studies* H.C. Dringenberg/T. MacDonald

### Overview

Psychology can be divided broadly into two branches: natural science and social science. In the natural science branch, you will learn about basic processes of cognition and behavioural neuroscience, including the effects of brain damage or drug-induced changes on behavior, how various neurochemicals affect normal and abnormal behavior, mechanisms of memory, motor control, and how we solve problems. The social science branch of psychology focuses on child development, personality differences, how people act in groups or organizations, health-related behaviours, and various aspects of normal and abnormal behavior. Three plans are available that will lead to a B.Sc.(Hons.) degree: the Major (Science) in Psychology and two interdisciplinary Plans, the Biology-Psychology Specialization and the Cognitive Science Specialization (see the Computing portion of this *Calendar*). Three Plans are available that lead to a B.A.(Hons.): the Major (Arts), Media (Arts), and Minor/General (Arts). Students in all Honours plan are required to complete courses in both the social and natural science branches for breadth, as well as core courses in statistics and research design.

### Departmental Policies

#### PSYC 100 Requirement

PSYC 100/6.0 is a prerequisite for all other psychology courses. It can only be waived if a student has completed a similar advanced high school (AP, IB) or college level introductory psychology course. PSYC 100/6.0 must be taken at Queen's for admission into an Honours psychology Plan.

#### Online Course Examination Requirement

All online courses in Psychology shall have a proctored final examination; student cannot pass an online course without passing the final examination.

#### Examination Absence

If a student has received instructor permission to defer an examination, they must register with the Undergraduate Office and be available to write the examination on the Department's deferred examination day. Procedures for requesting a deferred examination and the deferred examination schedule can be found on the Psychology undergraduate website.

### Special Study Opportunities

#### Advanced Topics Courses

Information on the topics for Advanced and Special Topics courses are posted at <http://www.queensu.ca/psychology/undergraduate/current-students/course-information>

Graduate Courses

Requests for permission to register in certain graduate courses from especially well-qualified fourth-year honours students will be considered where space permits. Students desiring such consideration or more information should consult with the Undergraduate office in Psychology.

R.Ascough, E.Goldberg, F.Jahanbakhsh, J.Miller, W.Morrow, S. Mosurinjohn, T.Trothen, P.Dickey Young

**Departmental Notes**

*Subject Code* RELS

*World Wide Web Address* <http://www.queensu.ca/religion/>

*Acting Director* P. Dickey Young

*Chair of Undergraduate Studies* W. Morrow

*Departmental Office* Theological Hall, Room 212

*Departmental Telephone* 613-533-2106

*E-Mail Address* school.of.religion@queensu.ca

*Fax* 613-533-6879

*Departmental Assistant* TBA

**Overview**

Religion plays a major role in shaping and influencing various cultures and historical and political movements around the world. Thus, understanding religious traditions and their impact on diverse modern issues is vital preparation for building a career in the global marketplace. Studying religion involves examining the history of religious traditions, comparing the ideas and values of different religious systems, and understanding the place and function of religion in society. Students of Religious Studies investigate why people are religious, where religion comes from, and how it should be defined and understood.



T.Abrams, M.L.Adams, S.W.Baron, R.Beamish, A.Burfoot,, A.Goebel, M.Hand, V.Jefremovas, F.M.Kay, C.Levine-Rasky, D.Lyon, N.Möllers, D.Murakami-Wood, N. Myers, S.Sismondo, S.Soederberg, S.Srivastava, V.Sytsma, M.Taylor

### **Departmental Notes**

*Subject Code* SOCY

*World Wide Web Address* <http://www.queensu.ca/sociology/home>

*Head of Department* A. Burfoot

*Departmental Office* Mackintosh-Corry Hall, Room D431

*Departmental Telephone* 613-533-2162

*Departmental Fax* 613-533-2871

*Administrative Assistant* W.Schuler

*E-Mail Address* schulerw@queensu.ca

*Chair of Undergraduate Studies* F. Kay

*Undergraduate Telephone* 613-533-2166

*Coordinator of Graduate Studies* M. Hand

### **Overview**

In Queen's Sociology Department, you will consider theories about how societies are organized and experienced, use social research methods to critically investigate what is happening, and explore areas such as crime, law and deviance, communications and media, gender and race, culture and consumption. We place a major emphasis on how to study a broad range of social processes, throughout the life course, from global systems to personal life.

**Program Notes**

*Subject Code* STSC

Coordinator for Stage and Screen Studies B.Allan

*E-Mail Address* allanb@queensu.ca