ENVIRONMENTAL STUDIES

Departmental Facilities

The School of Environmental Studies occupies a suite of office and laboratory space in Queen's Biosciences Complex. All regular faculty members have office space in the School Biosciences Complex, and graduate students are provided carrel space in one of three common offices that can accommodate 30+ students each. Proximity to faculty members permits a high degree of interaction. The space held by the School also includes two administrative offices, offices for post-doctoral fellows and Adjunct Faculty, eight laboratories and a school lounge. Ancillary space includes a cold room, two equipment bays, and storage facilities at the Queen's University Biological Station. Some faculty members also hold specialized laboratory space in their home departments.

Financial Assistance

Stipends will be provided for PhD students at a minimum of $20,000 per year for 48 months. Stipends will be provided for MES students enrolled in either the research stream or the course stream at a minimum of $14,000 per year, pro-rated to the number of semesters spent in full time study each year. Financial support is guaranteed for only 6 semesters for research students and 5 semesters for course-based students. Resources for stipends are derived from School funds, Queen's Graduate Awards, research assistanships, teaching assistantships in the School's undergraduate courses, contributions from research grants and contracts, internal scholarships and awards, and/or external scholarships and awards. Where research grants permit, or when students earn a Scholarship or Fellowship from outside the School, some students may receive a higher stipend. The funding policy for each academic year is posted on the School's website.

Students are automatically considered for School funding, QGA Awards, and Research/Teaching Assistantships when accepted each year. Students are only accepted when a potential supervisor or advisor (MES only) has agreed to work with them. Students must take the initiative for Scholarships awarded by either Queen's University or some outside agency (e.g. NSERC, SSHRC), and the School will endeavour to keep all students informed of opportunities.

Fields in the Program

The School of Environmental Studies provides opportunities for advanced interdisciplinary graduate level studies and research in the field of environmental sustainability. The program will provide an appreciation of the breadth of environmental issues, and the ability to interact with professionals outside a single discipline. In this context, sustainability is the study of the natural world and human activities within it, seeking ways that the desirable features of these can be maintained or even enhanced locally, throughout the world, and over time. We think of sustainability in terms of a tripod of issues, environmental, economic, and social, all of which will be examined in detail individually and in their interconnectedness. Sustainability studies, therefore, are interdisciplinary and focused on many situations including resource and land management, industrial and agricultural sustainability, and development of nations.

Within the School, the different perspectives and foci are reflected in the experience of the various faculty members. Current research is related to the three elements of sustainability indicated above, including the natural sciences, health sciences, and social sciences and humanities. A variety of projects are relevant to water quality and quantity, as it relates to human and ecological health, provision of municipal and agricultural water supplies, social justice, and the detection and mitigation of water-related problems. Other projects focus on broad issues of human and ecosystem health within urban and agricultural settings in various locations around the world.

Thesis and project research will fall in these areas, but always within the wider context of sustainability, which will be upheld through interdisciplinary supervision (among departments, between Queen's and the Royal Military College, and in collaboration with outside agencies), course work and a broad-based seminar series.

Faculty

Director
Danby. R.

Graduate Coordinator
Smith, M.

Professor
Goebel, A., Hird, M., Hovorka, A.J. , Jamieson, H.E., Smith, M. (Mick), Winn, L.M.

Associate Professor
Brown, S., Danby, R., Whitelaw, G.S.

Assistant Professor
Harrison, A., Orihel, D., Tienhaara, K.

Emeritus Professor

Hodson, P.V., Liss, S.N.

Cross-Appointed Faculty
Aronson, K.J., Castleden, H., Chen, D., Cumming, B.F., Lougheed, S.C., Mabee, W.E., Massey, T.E., McDonald, D.A., Smol, J., Taylor, Upitis, R., M.E., Viswanathan, L., Vlachopoulus, N.[1],Walker, V.K., Wallace, M., Wang, Y.S., Webster, J., Zeeb, B.A.[2], Zeman, F.S.[2]

Adjunct Faculty
Andrew, J., Bramburger, A.[3], Clarke, D., de Solla, S.[4], Hall, G., Hickey, B.C.[5], Kirk, J.9[4], Langlois, V.[6], Madison, B., Majury, A.[7], McCarthy, D.P.[8], Moore, S., Ortiz, X.[9], Poland, J., Ridal, J.[5], Rutter, A., St. George, S.[3], Stewart, K.[10], vanLoon, GW., Varty, J., Welbourn, P.

1 Sabbatical leave.
2 Royal Military College.
3 University of Minnesota.
4 Environment Canada.
5 St. Lawrence River Institute.
6 Institute national de la recherche scientifique INRO – Centre Eau Terre Environment.
7 Public Health Ontario Labs.
8 University of Waterloo.
9 Ontario Ministry of the Environment and Climate Change.
10 Tongji University.

Programs of Study

Applicants are accepted under the general regulations of the School of Graduate Studies.

The programs offered conform to the regulations set out by the School of Graduate Studies.

- Environmental Studies - Doctor of Philosophy (https://queensu-ca-public.courseleaf.com/archive/2021-2022/graduate-studies/programs-study/environmental-studies/environmental-studies-phd/)
- Environmental Studies - Master of Environmental Studies (https://queensu-ca-public.courseleaf.com/archive/2021-2022/graduate-studies/programs-study/environmental-studies/environmental-studies-mes/)

Courses

Not all courses are offered every year. With the exception of ENSC 898, 899 and 999 all courses are 3.0 credit units.

ENSC 801 Methodological and Conceptual Basis for Environmental Studies
The course examines methodological and conceptual issues arising from Environmental Studies position as an inter-, multi- and/or trans-disciplinary practice. It will focus on the inherent difficulties in overcoming disciplinary fragmentation in approaches to studying complex issues in environmental sustainability that require integrated understandings of the inter-relations between social and natural systems. The course will promote methodological literacy beyond student's own area of expertise, develop critical and reflexive thinking about how environmental studies might approach issues of sustainability, and encourage and facilitate communication across disciplinary paradigms. The course precedes and compliments ENSC 802, familiarizing students with the historical origins, philosophical underpinnings and practical deployment of key approaches within the social and natural sciences and humanities. Three term-hours; Fall; H. Jamieson, M. (Mick) Smith. Course fee(s): field trip fee of $50.00
PREREQUISITE: permission of instructor

ENSC 802 Global Environmental Problems: Issues in Sustainability
This course focuses on real-world environmental problems analyzing their social, ethical, and biogeochemical origins, economic ramifications, and institutional frameworks for their mitigation and resolution in the context of environmental sustainability. This course would logically follow or run concurrently with ENSC 801, and will deepen and continue the themes through consideration of the intellectual history of theories and concepts relevant to environmental studies, with a focus on the concepts of “sustainability” and “sustainable development”. Three term-hours; Winter; M. Hird, S. Brown.
PREREQUISITE: permission of instructor

ENSC 816 Environmental Chemicals
The course will compare and contrast the behaviour of persistent, bioaccumulative and toxic compounds, such as methyl mercury and chlorinated aromatic compounds, with the behaviour of less persistent chemicals such as petroleum hydrocarbons and modern pesticides. Subjects of interest may include sediment diagenesis, long-range transport, methylation processes, and interactions between biomagnification and ecosystem structure and productivity. Three term-hours; Fall or Winter.
PREREQUISITE: Permission of instructor

ENSC 840 Directed Studies
This course provides an opportunity for students to independently study a selected topic under the supervision of one of more faculty members. This may take the form of a reading course with an assigned paper, but other possible formats would be considered. For detailed information, consult course coordinator. Three term-hours: Fall, Winter, Summer. Course coordinator: M. Smith.
PREREQUISITE: permission of course coordinator

ENSC 841 Special Topics
This course focuses on specific topics related to the environment and sustainability. Special topics are offered under the guidance of a faculty member in an area of the instructor's expertise. For detailed information, consult the course instructor. Three term-hours: Fall, Winter or Summer.
Course coordinator: M. Smith
Field trip fees may apply, normally less than $50.00
PREREQUISITE: permission of the instructor
EXCLUSION: varies depending on instructor

ENSC 842 Special Topics
This course focuses on specific topics related to the environment and sustainability. Special topics are offered under the guidance of a faculty member in an area of the instructor's expertise. For detailed information, consult the course instructor. Three term-hours: Fall, Winter or Summer.
Course coordinator: M. Smith.
Field trip fees may apply, normally less than $50.00
PREREQUISITE: permission of the instructor
EXCLUSION: varies depending on instructor

ENSC 897 Seminar in Environmental Studies
This half-credit course spans two semesters and requires students to attend a minimum of 20 seminars, chosen from among those offered by the School of Environmental Studies (at least 10) and other units in any faculty at Queen's. Within the School's annual seminar series, they must also present one seminar on their own project. Total contact hours: 21 hours, up to 2 semesters; Fall & Winter.
PREREQUISITE: permission of course coordinator

ENSC 898 Master's Project (Course-based)

ENSC 899 Master's Thesis

ENSC-999 Ph.D. Thesis Research