

# ENVIRONMENTAL SCIENCE (ENSC)

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**