

**ENVS\*1030 Introduction to Environmental Sciences**

Fall 2018

Section(s): C01

School of Environmental Sciences Credit Weight: 1.00

Version 1.00 - September 06, 2018

# Course Details

## Calendar Description

This course introduces students to what it means to think critically from an environmental sciences perspective. It covers an introduction to: philosophy of science, philosophy of the environment, the evaluation of scientific evidence, and scientific arguments. The course focuses on how we understand and recognize environmental problems, how we decide what to do about them, and what role science can and should play in these discussions.

### Restriction(s):

* 1. **Course Description**

ENVS\*1100 Registration in the BSC(Env) program or BBRM.EM

This course introduces students to what it means to think critically from an environmental sciences perspective. It covers an introduction to: philosophy of science, philosophy of the environment, the evaluation of scientific evidence, and scientific arguments. The course focuses on how we understand and recognize environmental problems, how we decide what to do about them, and what role science can and should play in these discussions.

## Timetable

Monday, Wednesdays and Fridays, 1:30pm-2:20pm, RICH 2520

## Final Exam

Exam time and location is subject to change. Please see WebAdvisor for the latest information.

# Instructional Support

## Instructor(s)

### Shelley Hunt Email: Telephone: Office:

shunt@uoguelph.ca

+1-519-824-4120 x53065

ALEX 220 and Arboretum Centre 103

### Office Hours:

By appointment

## Instructional Support Team

### Lab Co-ordinator: Email:

**Telephone: Office:**

Alyson Brown alysonb@uoguelph.ca

+1-519-824-4120 x53393

ALEX (AXEL) 221

## Teaching Assistant(s)

### Teaching Assistant: Email:

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Robyn Akre rakre@uoguelph.ca

Sam Jacobson sjacobso@uoguelph.ca

Mary Beckmann beckmanm@uoguelph.ca

Katherine Keary kkeary@uoguelph.ca

# Learning Resources

## Required Resource(s)

### Schick Jr., T. & L. Vaughn. 2011. How to Think About Weird Things: Critical Thinking for a New Age, 6th or 7th Edition. McGraw Hill. (Textbook)

**OUP Course Package (includes): (Other)**

* + - Weston, A. & B. Stoyles. *Creativity for Critical Thinkers*. Oxford University Press.
		- Williston, B. *Environmental Ethics for Canadians*. 2nd Oxford University Press.
		- Ruxton, G.D. & N. Colegrave. *Experimental Design for the Life Sciences*. 3rd Oxford University Press.

# Learning Outcomes

In this course, students will ***begin to develop*** their understanding of the following broader aspects of environmental sciences.

## Course Learning Outcomes

By the end of this course, you should be able to:

* + 1. understand what it means to think critically from an environmental perspective
		2. understand what science is and is not
		3. understand the nature of scientific evidence
		4. understand what role science does or ought to play in the development of policy
		5. evaluate whether environmental issues are ethical issues
		6. understand how to engage critically and in a scholarly manner, in public arguments about the environment
		7. understand experimental design and the practice of science

## University’s Learning Objectives

In the process we will address a number of the University’s Learning Objectives (see the Undergraduate Calendar), especially **Critical and Creative Thinking, Literacy**, and ***Communicating.***

# Teaching and Learning Activities

## Lecture

### 10 September - 21 September

**Topic(s):**

**24 September - 5 October Topic(s):**

**10 October - 19 October Topic(s):**

**22 October - 2 November Topic(s):**

**5 November - 23 November Topic(s):**

**26 November - 30 November Topic(s):**

* 1. **Lab**

**Week of 10 September Topic(s):**

**Week of 17 September Topic(s):**

**Week of 24 September Topic(s):**

**Week of 1 October Topic(s):**

**Week of 8 October Topic(s):**

**Week of 15 October Topic(s):**

**Week of 22 October Topic(s):**

**Week of 29 October**

Experiment design How science is done Philosophy of science Environmental ethics

Case studies and guest lectures Course wrap-up

No lab

Experiment design (Assignment introduction) Experiment design presentation

Experiment set-up No lab

No lab

Mock Hearing Assignment Introduction & Poster Workshop

### Topic(s):

**Week of 5 November Topic(s):**

**Week of 12 November Topic(s):**

**Week of 19 November Topic(s):**

No lab

Experiment Completion Mock Hearings

Experiment Poster Presentations

## Lab Schedule and Location

Lab section 1: Thursdays 8:30 to 11:20 AM MINS 128

Lab section 2: Tuesdays 2:30 to 5:20 PM ANNU 306

Lab section 3: Tuesdays 8:30 to 11:20 AM MINS 128

Lab section 4: Tuesdays 11:30 AM to 2:20 PM MCKN 309

Lab section 5: Thursdays 2:30 to 5:20 PM MCKN 307

Lab section 6: Tuesdays 2:30 to 5:20 PM ANNU 002

Lab section 7: Mondays 2:30 to 5:20 PM ANNU 002

# Assessments

## Marking Schemes & Distributions

|  |  |
| --- | --- |
| Name | Scheme A (%) |
| Experimental Design Presentation | 5 |
| Essay #1 | 10 |
| Midterm exam | 20 |
| Essay #2 | 10 |
| Mock Hearing presentation | 10 |
| Poster paper | 15 |
| Peer review | 5 |
| Final exam | 25 |
| Total | 100 |

* 1. **Assessment Details**

**Experimental Design Presentation (5%) Date:** Mon, Sep 24 - Fri, Sep 28, In Lab Due week of Sept. 24th

**Essay #1 (10%) Date:** Thu, Oct 4

### Midterm exam (20%)

**Date:** Fri, Oct 19, In Class

**Essay #2 (10%) Date:** Thu, Nov 8

### Mock Hearing presentation (10%)

**Date:** Mon, Nov 12 - Fri, Nov 16, In Lab Due week of November 12th

### Poster paper (15%)

**Date:** Mon, Nov 19 - Fri, Nov 23, In Lab Due week of November 19st

**Peer review of posters (5%) Date:** Tue, Nov 27

**Final exam (25%) Date:** Mon, Dec 10 7pm - 9pm

# Course Statements

## Grading Policies

Written assignments will be submitted via the dropbox on Courselink, before midnight on the due date. Oral presentations and poster assignments will be due during the appropriate lab period or otherwise as assigned. All late assignments will receive a 10% deduction for each day, or part thereof, that they are late. See Dr. Hunt if you wish to request an extension.

## Course Policy on Group Work

You are authorized to work as a group only for the lab assignments (the debate/hearing and the plant growth experiment/poster assignment).

# University Statements

## Email Communication

As per university regulations, all students are required to check their e-mail account regularly: e- mail is the official route of communication between the University and its students.

## When You Cannot Meet a Course Requirement

When you find yourself unable to meet an in-course requirement because of illness or compassionate reasons please advise the course instructor (or designated person, such as a teaching assistant) in writing, with your name, id#, and e-mail contact. The regulations and procedures for [Academic Consideration](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-ac.shtml) are detailed in the Undergraduate Calendar.

## Drop Date

Courses that are one semester long must be dropped by the end of the fortieth class day; two- semester courses must be dropped by the last day of the add period in the second semester. The regulations and procedures for [Dropping Courses](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-drop.shtml) are available in the Undergraduate Calendar.

## Copies of Out-of-class Assignments

Keep paper and/or other reliable back-up copies of all out-of-class assignments: you may be asked to resubmit work at any time.

## Accessibility

The University promotes the full participation of students who experience disabilities in their academic programs. To that end, the provision of academic accommodation is a shared responsibility between the University and the student.

When accommodations are needed, the student is required to first register with Student Accessibility Services (SAS). Documentation to substantiate the existence of a disability is required, however, interim accommodations may be possible while that process is underway.

Accommodations are available for both permanent and temporary disabilities. It should be noted that common illnesses such as a cold or the flu do not constitute a disability.

Use of the SAS Exam Centre requires students to book their exams at least 7 days in advance, and not later than the 40th Class Day.

More information: [www.uoguelph.ca/sas](http://www.uoguelph.ca/sas)

## Academic Misconduct

The University of Guelph is committed to upholding the highest standards of academic integrity and it is the responsibility of all members of the University community – faculty, staff, and students – to be aware of what constitutes academic misconduct and to do as much as possible to prevent academic offences from occurring. University of Guelph students have the responsibility of abiding by the University's policy on academic misconduct regardless of their location of study; faculty, staff and students have the responsibility of supporting an environment that discourages misconduct. Students need to remain aware that instructors have access to and the right to use electronic and other means of detection.

Please note: Whether or not a student intended to commit academic misconduct is not relevant for a finding of guilt. Hurried or careless submission of assignments does not excuse students from responsibility for verifying the academic integrity of their work before submitting it.

Students who are in any doubt as to whether an action on their part could be construed as an academic offence should consult with a faculty member or faculty advisor.

The [Academic Misconduct Policy](https://www.uoguelph.ca/registrar/calendars/undergraduate/current/c08/c08-amisconduct.shtml) is detailed in the Undergraduate Calendar.

## Recording of Materials

Presentations which are made in relation to course work—including lectures—cannot be recorded or copied without the permission of the presenter, whether the instructor, a classmate or guest lecturer. Material recorded with permission is restricted to use for that course unless further permission is granted.

## Resources

The [Academic Calendars](https://www.uoguelph.ca/registrar/calendars/) are the source of information about the University of Guelph’s procedures, policies and regulations which apply to undergraduate, graduate and diploma programs.