

**Environmental Science (EES) D09H/D10Y**  
**RESEARCH PROJECT IN ENVIRONMENTAL SCIENCE**

<b>Course Coordinator</b>	Prof. Myrna Simpson
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<b>Office hours</b>	By appointment (please email to make an appointment) – regular office hours will be posted in the fall and winter

**Course Description:** The design, implementation, and reporting of a substantial research project involving laboratory and/or fieldwork. Existing faculty research allows a broad range of possible topics. The course should be undertaken after the end of the 3rd Year, subject to faculty availability. Faculty permission and supervision is required; open only to those students who have either completed or are undertaking specialist courses in the area of intended study. Students having a B+ or higher standing may be eligible for summer financial support from research projects. Permission of the co-ordinator must be obtained.

**Prerequisite:** EESC15H (Research in Environmental Science)

**Course Objectives:** these courses are designed to familiarize final year undergraduates with scientific research through the execution of under the supervision of an Environmental Science faculty member. **EES D10Y** is a full credit course to run throughout the two academic terms (usually fall and winter). **EES D09H** is a half credit course and student can enrol in either the fall (F) or winter (S) terms. The time required for both is to allow not only the necessary data collection and analysis to be completed, but also to allow for possible changes in research direction, time for synthesizing results and ideas and the time necessary to produce a high quality project report. Students must ensure that they are registered in the correct section of EESD09 or D10 as this will impact the timing of your paper submission (see below).

**Grade Breakdown:**

Final Research Report (Written)      **80 %** Graded by Faculty Advisor & Co-ordinator

Final Research Report (Oral)      **20 %** Graded by Faculty Advisor & Co-ordinator

**Deadlines:**

Final Research Report (Written):      **Fall Term EESD09F:** Thursday, December 1<sup>st</sup>, 2011  
**Winter Term EESD09S:** Monday, April 9<sup>th</sup>, 2012  
**EESD10Y:** Monday, April 9<sup>th</sup>, 2012

Final Research Report (Oral):      **Due date to be announced** (typically scheduled during the last week of classes each semester)

**Course expectations:** students are expected to submit well written, cited and organized documents. The grading scheme for the oral and written grades are provided on the proceeding pages. The expectations will also be reviewed with students during the beginning of the course.

**Late assignments:** Late submissions cannot be accepted as per University policy – all course work must be submitted on the last day of class (dates given above). Failure to submit work on the course deadlines will result in a grade of zero.

**Plagiarism:** Plagiarism will not be tolerated. Students are expected to submit **individual work** for grading. It is a serious academic offense to plagiarize and those who do will be subjected to University procedures.

## ORAL PRESENTATION EVALUATION FORM

EESD09/D10 students will present their research results to Environmental Science faculty and other EESD09/D10 students using a seminar style presentation. Students will be graded using the following criteria:

- Organization and flow** /15
- the material was presented in a logical and organized fashion
  - the presentation flowed well with each consecutive slide and the presentation was easy to follow
- Time Management** /5
- the presentation was consistent with the allotted time for the speaker
- Vocal (Pace, Projection, Articulation, and Orientation)** /10
- the presenter did not speak too quickly nor too slowly
  - the presenter was easy to hear and articulated the material well
  - the presenter did not just read from the slides but added extra information and was engaging to the audience
  - the presenter engaged the audience and made good eye contact with the audience
- Visual presentation** /10
- the slides were constructed well and contained the appropriate amount of text
  - figures and tables were legible
  - the format of the slides enhanced the overall quality of the presentation
  - spelling and grammatical errors were minimized
- Questions & Answers** /10
- questions about the presentation from the audience were answered appropriately and confidently
  - students were able to provide adequate answers to questions from the audience

**TOTAL GRADE: /50**

## WRITTEN RESEARCH REPORT EVALUATION FORM

EESD09/D10 research reports will be evaluated using the following criteria:

<b>Rigor and Logic</b>	<b>/35</b>
<ul style="list-style-type: none"><li>- the topic has been explored rigorously and the material is presented in a logical fashion</li><li>- the rationale for the discussion is logical and a thorough review of the literature has been performed (this includes appropriate citation of the literature throughout the paper)</li><li>- the literature review has been presented in a logical format and presents the rationale for the research conducted over the course</li><li>- research questions and hypotheses are given and the appropriate methods and data analysis are used to explore the questions and hypotheses</li></ul>	
<b>Clarity and Completeness</b>	<b>/30</b>
<ul style="list-style-type: none"><li>- the writing is clear and easy to follow</li><li>- sentences and paragraphs are complete and do not have missing information</li><li>- vague and general statements are minimized and writing is clear and concise</li></ul>	
<b>Synthesis</b>	<b>/10</b>
<ul style="list-style-type: none"><li>- students should critically evaluate the literature</li><li>- the student has provided their own input (ie: synthesis of the literature) rather than regurgitate what was found in the literature</li><li>- the new information emerging from their work is put into context with that of the literature (usually in the discussion section of the paper)</li></ul>	
<b>Organization</b>	<b>/15</b>
<ul style="list-style-type: none"><li>- the paper is well organized and the information presented flows well</li><li>- headings and subheadings are used to help guide the reader</li></ul>	
<b>Presentation</b>	<b>/10</b>
<ul style="list-style-type: none"><li>- grammatical and spelling errors are minimized</li><li>- the reference format is the same throughout the manuscript</li><li>- acronyms and specialized terms are defined on first use</li></ul>	
<b>TOTAL GRADE:</b>	<b>/100</b>