

ENV 492H/493H INTERDISCIPLINARY INDEPENDENT STUDIES PROJECT

A research project or selected topic in an area of environment not otherwise available in the Faculty of Arts & Science, meant to develop skills in independent study of interdisciplinary topics. Intended for students who have a particular interest in researching such a topic in depth. Available only to students enrolled in a Centre for Environment Specialist or Major program.

A written application co-signed by the student and supervisor must be submitted for approval by the Undergraduate Coordinator of the Centre normally by August 15th of the previous academic year, or one month prior to commencing the course. **See the “Application for Independent Research Course” in Appendix A, below.**

Prerequisite: A CGPA of 3.0, ENV222Y1/GGR222Y1/JGE221Y1, completion of at least 14 FCE, and enrolment in a Centre for Environment major or specialist program.

If you have questions about this course, please contact Undergraduate Student Advisor, David Powell at david.powell@utoronto.ca

1. Generic Course Requirements:

A) Course Work Effort:

Independent studies courses require significant and concerted effort throughout the term(s) in during which they are taken, as well as independent, self-directed work and study. **ENV 492H/493H** will involve one day per week during the academic term (about 130 hours) for course planning, research and writing (planning includes arranging a supervisor and developing and submitting an initial and a final course proposal).

B) Course Supervisor & Advisor:

A student must have a **supervisor** who is a faculty member within the Centre, or within the University faculty, who has expertise in some aspect of the environment. The role of the course supervisor, when there is no additional outside supervisor, is to provide ongoing guidance on the research project to the student, beginning with the development of the course proposal (the course supervisor must have expertise in the area that the student is researching). The course supervisor is responsible for actually marking all assignments. Sessional instructors are not allowed to be the course supervisor.

A student may also have an **advisor(s)** inside or outside the University (this may include a sessional instructor). The role of an advisor(s) is to provide ongoing guidance on the research project to the student, beginning with the development of the course proposal (the outside supervisor must have expertise in the area that the student is researching), and to provide some feedback to the course supervisor on the quality and comprehensiveness of the various assignments in the course. **The course supervisor is responsible for actually marking all assignments.**

C) Initial Course Proposal:

For each course, students are required to provide an initial course proposal to the course supervisor: outlining the purpose and goals of the project; describing suggested required research (primary and/or secondary) to be completed, including methodology; providing sources of information (including some initial specific references); listing the supervisor(s) and his/her (their) role(s); listing a schedule of

meeting times with the supervisor(s) (the expectation is that most of these meetings will be with the supervisor(s) who is providing ongoing guidance on the research project); and listing the suggested outputs/assignments for the course, with marks and deadlines for each. The initial proposal should be accompanied by an example(s) of the student's written work. The initial proposal should be submitted to the course supervisor at least two months before the beginning of the term in which the student begins the course. **See 4. below for an example of such an initial course proposal.**

D). Application:

The **Application for Independent Research Course** should be approved by the course supervisor, signed by both the supervisor and the student, and submitted to the Undergraduate Coordinator for approval before the beginning of the term in which the student begins the course. **See the Application in Appendix A below.**

E) Assignments:

An initial assignment, worth at least 20% of the overall mark, needs to be handed in and marked before the drop date for the course. The initial assignment could be an annotated bibliography, a detailed outline of the research paper, a draft of the final research paper, or some other appropriate assignment agreed to with the course supervisor.

There should be **at least three separate assignments, one of which is a required final research paper worth between 40% and 60% of the overall mark (see other possible assignments below)**. The final research paper should be between 20 - 30 pages for ENV 492H/493H, depending on the work effort involved for the other course assignments. The student and the ESP supervisor should agree on the length of the final research paper after discussing the work effort involved in the other assignments, and this should be indicated in the final course proposal.

Other acceptable assignments for the course, in addition to the final research paper, include: a detailed outline of the research paper, an annotated bibliography, an oral presentation to an appropriate audience for the research project topic, a draft of the final research paper, a media or multi-media assignment, or another appropriate assignment(s) agreed to by the course supervisor.

2. Primary Research:

Primary research is an option in ENV 492H/493H. **If the independent studies course is a substitute for ENV 421H, then primary research is a requirement (see course outline for ENV 421H)**. Primary research is defined as research done to obtain data not available from academic sources such as books or journals. In the social sciences, it is usually done by such means as interviews, surveys or review of documents generated by the actors being studied. In the life of physical sciences, it involves original scientific research by the student.

3. Assignment Marking Criteria:

The following are the marking criteria used by the Centre for Environment for its course assignments. These may be modified somewhat to reflect the nature of the assignment. **Evaluation criteria that are significantly different than those below, must be approved by the Undergraduate Coordinator.**

GENERAL CRITERIA FOR EVALUATION OF WRITTEN ASSIGNMENTS

The primary criteria used in evaluating written work will be:

1) Mechanics:

- Your work must be completely free of grammatical errors, spelling errors or major factual errors.
- References can be in any style but the same format must be used consistently and they must be accurate.

2) Writing style:

- Your papers should be written in a clear and unambiguous style that assists, rather than impedes, communication with the reader.
- The reader is able to understand the information presented.
- The tone used is professional and not informal.

3) Organization and Structure:

- Your written work should have a clear focus/statement of purpose, and a structure that logically flows from that focus, which can be either a research question or thesis statement, clearly stated in the introduction.
- The structure of the paper should assist the understanding of the reader by providing a readily understandable presentation of background information, research findings, analysis and conclusions.
- The structure should avoid repetition, duplication or tangential meanderings.
- The organization is logical, concise, accessible and the ideas flow well from the statement of purpose.
- The conclusion provides an answer to your question or summarizes your argument.
- Headings provide direction but do not interrupt the flow of discussion.
- Ideas and sections are linked together.

Information/Description:

- You make effective use of the information and data collected throughout your discussion.
- You effectively present your research findings, which should represent diverse sources and perspectives.

4) Research and Analysis:

- You integrate evidence from diverse sources, identify themes or patterns, and draw meaningful conclusions based on your evidence.
- Your analysis should display understanding of the topic and, based on that understanding, originality of thought.
- Your conclusion displays originality of thought.

5) Overall effectiveness:

- The paper, as a whole, meets the assignment goals.
- This paper demonstrates creativity and originality!

GENERAL CRITERIA FOR EVALUATION OF ORAL PRESENTATIONS

The primary criteria used in evaluating your presentations will be:

Presentation style:

- the listener is able to understand the information presented
- presenters have clear voices and gesture appropriately (a practice presentation is highly recommended!)
- you make eye contact with the entire audience
- you demonstrate the ability to respond to questions and contribute to and stimulate unstructured communication
- there is a smooth transition between speakers for group presentations
- unusual terms are defined adequately
- you engage your audience with your presentation

Visual aids and Handouts

- overheads and handouts are free of grammatical and spelling errors
- material used is appropriately referenced
- you appropriately balance “too much” and “not enough” information on your visual aids
- you make effective use of handouts to provide detailed supplementary information
- visual aids are clearly visible to the entire audience (hint: use “landscape” page set up and 20 point font)
- you provide the audience with a handout that contains all of the sources used in the preparation and delivery of the presentation.
- All sources are presented in one of the standard academic reference formats.

Organization and Structure

- you achieve success in communicating key concepts without overwhelming the audience with too much detail
- you identify the focus of your presentation and the presentation flows logically from that focus
- the presentation avoids repetition and tangential meanderings
- you finish the presentation within your time limit and leave time for questions
- you made good use of your time without rushing at the end
- the pace of the presentation is neither too fast nor too slow

Analysis

- Your analysis displays understanding of the topic
- You integrate evidence from diverse sources, identify themes or patterns, and draw meaningful conclusions based on your evidence.

Overall effectiveness:

- The presentation, as a whole, meets the assignment goals.
- this presentation demonstrates creativity and originality!

4. Example Initial Course Proposal: (adapted from an actual full-year research project course proposal)

Date: August 7, 2009

Memo: to Undergraduate Coordinator

From: *student name*

Re: Independent Research Proposal for ENV 492H.

Purpose and Goals of the Research Project

- these are briefly described

Primary and Secondary Research To Be Carried Out

- these are briefly described

Research Methods to be Used

- these are briefly described

Sources of Information

- some specific references (primary and secondary)

Supervisor(s)

- listed with his/her (their) role(s)

Course Assignment Breakdown (could include additional assignments such as an annotated bibliography or oral presentation):

1. Outline of research paper 20%
2. Primary research findings and analysis 20%
3. Final research paper 60%

Assignment Descriptions:

1. Outline of Research Paper

- will include description of the paper (subject/research question)
- will describe what theoretical literature will be reviewed
- will describe approaches to primary research
- will describe research methods

length: 5 pages

worth: 20% due: mid-October, 2010

2. Primary Research

- will consist of primary research findings and analysis
- will be presented in memo format to ESP supervisor

length: 5 - 10 pages

worth: 20% due: mid-November, 2010

3. Final Research Paper

- will be in report format

length: 40 - 60 pages

worth: 60% due: end of fall term, 2010

APPENDIX A
PLEASE FILL OUT AND SUBMIT THE FIRST TWO PAGES OF
APPENDIX A, ALONG WITH THE RESEARCH PROJECT SUMMARY

Centre for Environment
Application for Independent Research Course

Course: _____ Date: _____

Academic Session (e.g. academic year 2010 - 11): _____

Student Information	
Name:	Student Number:
Email:	Phone:
Reason for Course (e.g. self interest, course substitution, etc.):	
Program(s) of Study:	

Supervisor Information (1)	
Name:	Dept/Association:
Email:	Phone:

Supervisor Information (2)	
Name:	Dept/Association:
Email:	Phone:

Research Project Description: please provide a short summary on a separate page (i.e. purpose and goals; primary and/or secondary research to be done; research methods used; sources of information; brief assignment descriptions) – **refer to the example in 4. above for completing this section!**

Student Signature: _____ Date: _____

Supervisor Signature: _____ Date: _____

Centre Approval: _____ Date: _____

Grade Assigned: _____ Date: _____

**Centre for Environment
Independent Research Course Instructions and Evaluation Criteria**

The purpose of this document is to clarify the responsibilities of a supervisor for a student undertaking an independent research course with the Centre for Environment (ENV).

Upon agreeing to supervise this students' independent research topic, the supervisor is expected to meet with the student on a fairly regular basis to provide guidance as required. A grade for the student should be submitted to our office within a week of the last day of class in the term for which the student is registered (please refer to a current Arts & Science calendar for the exact dates).

You are also required to file with the Centre the marking scheme below which details the method of evaluation you plan to use to evaluate the student's performance. This marking scheme should be discussed and signed by yourself and the student and filed with our office before the student will be officially registered in the course. After this point, any changes to the marking scheme must be agreed upon by both parties and a revised copy filed with our office.

Possible methods of evaluations include: proposals, drafts, activity logs/reports, final paper, poster/presentation, participation/effort/initiative, etc. In a senior independent project the final paper traditionally constitutes the majority of the final mark.

If you have any questions or concerns please do not hesitate to contact David Powell, the Undergraduate Adviser for the Centre for Environment at 946-8100 or david.powell@utoronto.ca.

Assignments:

- | | | |
|----|------|---|
| 1. | due: | % |
| 2. | due: | % |
| 3. | due: | % |
| 4. | due: | % |

Student's Signature _____ Date:

Supervisor's Signature _____ Date:

Please note that all course marks are tentative until approved by the Centre's Undergraduate Coordinator.

CENTRE FOR ENVIRONMENT ASSIGNMENT EVALUATION CRITERIA

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Overall effectiveness:

- The presentation, as a whole, meets the assignment goals.
- this presentation demonstrates creativity and originality!