Course Description

This course involves the completion of an independent study project under the supervision of a faculty member. Students will typically complete a major paper (or series of papers) on an earth or environmental science topic of their choice. The goal of this course is for students to immerse themselves in a topic and to produce an appraisal of current knowledge of the field.

The specific ‘deliverables’ will vary depending on student interest, faculty guidance, and the nature of the topic itself. Students must therefore consult with their faculty supervisor to determine the most appropriate way to demonstrate a thorough understanding of the chosen field of knowledge.

Some suggested frameworks for deliverables are included in the Evaluation Scheme section below.

Ultimately, the course is meant to help you reinforce the following Learning Outcomes common to all the science programs in the School of Geography and Earth Sciences:

- Explain how knowledge of earth and environmental sciences informs our understandings of the natural world
- Communicate effectively
- Apply earth and environmental sciences skills and concepts in the field.

The Prerequisites for the course are: a) Registration in Level IV of an Honours program in the School of Geography and Earth Sciences; and b) permission of the Course Coordinator.

You must also complete the following online application:

https://ugadmin.formstack.com/forms/earthsc_4mi3_independent_study_application_copy

Course Structure and Supervision

This course will have very little structure to it, as it is intended to be an ‘independent study’. However, we will meet as a class at both the beginning and end of the term (see the Schedule of Activities below).
The beginning of term meeting will outline the structure and expectations for the course, and answer any questions. If required, assistance in finding a topic and a faculty supervisor will also be provided; **students are encouraged to actively seek a potential supervisor before registering in this course.** The class will then meet again at the end of term when students present the findings of their research through an oral presentation in a research colloquium.

Between these two dates, students will meet with their faculty supervisor on a schedule that is convenient to both parties. Some students and supervisors may want to meet weekly, while others may want to meet less often. Each student will be required to meet with the course coordinator once, in the middle of term, to insure that sufficient progress is being made, and that no problems with supervision have arisen.

**Recommended Readings**

There are several very useful guides on the market which can help you with identifying a topic, conducting literature searches, organizing your thoughts, structuring a paper, and properly citing the work of others. You are strongly encouraged to pick up one of these guides (or something similar) as soon as possible.


**Evaluation Scheme**

The nature of evaluation in this course will depend primarily on the chosen topic, and will be agreed to by the student and the faculty supervisor, and must be approved by the course coordinator. While the evaluation of each student in the course may be different, several suggested grading schemes are listed below.

**Grading Scheme 1:**

<table>
<thead>
<tr>
<th>Deliverables</th>
<th>Weighting Toward Final Grade</th>
<th>Due Dates (if applicable)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Term Paper</td>
<td>75%</td>
<td>TBD (by supervisor and student)</td>
</tr>
<tr>
<td>Research Colloquium Presentation</td>
<td>25%</td>
<td>Tuesday April 10</td>
</tr>
</tbody>
</table>

**Grading Scheme 2:**

<table>
<thead>
<tr>
<th>Deliverables</th>
<th>Weighting Toward Final Grade</th>
<th>Due Dates (if applicable)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Paper #1</td>
<td>37.5%</td>
<td>TBD (by supervisor and student)</td>
</tr>
<tr>
<td>Research Paper #2</td>
<td>37.5%</td>
<td>TBD (by supervisor and student)</td>
</tr>
<tr>
<td>Research Colloquium Presentation</td>
<td>25%</td>
<td>Tuesday April 10</td>
</tr>
</tbody>
</table>
Grading Scheme 3:

<table>
<thead>
<tr>
<th>Deliverables</th>
<th>Weighting Toward Final Grade</th>
<th>Due Dates (if applicable)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research Paper #1</td>
<td>25%</td>
<td>TBD (by supervisor and student)</td>
</tr>
<tr>
<td>Research Paper #2</td>
<td>25%</td>
<td>TBD (by supervisor and student)</td>
</tr>
<tr>
<td>Research Paper #3</td>
<td>25%</td>
<td>TBD (by supervisor and student)</td>
</tr>
<tr>
<td>Research Colloquium Presentation</td>
<td>25%</td>
<td>Tuesday April 10</td>
</tr>
</tbody>
</table>

Other grading schemes are also permissible providing they are agreed to by both the student and the supervisor (and approved by the course coordinator).

Please note, however, that the **Research Colloquium Presentation is a required element.** It cannot be substituted by other means of presentation (podcast, etc.). The presentation can be postponed, only for exceptional circumstances (sickness, etc.; please note that having an exam the day after does not qualify as a valid reason), to a later date, but it **must** then be completed by the end of the Final Exams period.

Other potential deliverables include (but are not limited to): posters, information pamphlets, video/documentary, etc.

**Schedule of Activities**

<table>
<thead>
<tr>
<th>Date</th>
<th>Class Activity/Deadline</th>
</tr>
</thead>
<tbody>
<tr>
<td>Friday January 5</td>
<td>UH-B116 - Introduction to EARTH SC 4MI3</td>
</tr>
<tr>
<td>Friday January 19</td>
<td>Deadline to have supervisor and topic in place, and have agreed on a framework of deliverables</td>
</tr>
<tr>
<td>Week of March 5</td>
<td>Mid-Term Progress Interview (short interview with course coordinator to insure progress is being made)</td>
</tr>
<tr>
<td>Tuesday April 10 *</td>
<td>Research Colloquium (student presentations)</td>
</tr>
</tbody>
</table>

*Note: This is the day between the end of classes and the start of the Final Examination Period. This date is subject to change.

**This schedule is only a guideline and may be modified during the course of the class.**

**Communication and Emails Policy**

Appointments can be scheduled with the Course Coordinator for assistance. It is not appropriate to use email to ask detailed questions. As a general rule, you should not expect to receive answers to emails on weekends or late in the evening. Rather, emails will typically be responded to during regular working hours on weekdays, and as schedule allows.

As a courtesy, and to ensure your emails are properly answered, you must include your name and student ID number in the email signature, and the course code and number (EARTH SC 4MI3). Emails must be sent from McMaster email accounts or they will not be read or responded to. Emails should be written in a professional manner, spell-checked and proof-read before sending them. The subject line **must** state for which course the query is about. Online discussion terminology (e.g. hashtags) **must** be avoided.
Accommodations for Missed Work

If you miss the deadline of a deliverable, due to a medical or non-medical reason, it is your responsibility to report to your Faculty/Program office, with documentation, as relief from term work may not necessarily be granted. You must also contact your project supervisor (or the Course Coordinator, for the Research Colloquium) within 5 working days of the missed deadline. You will then learn what relief may be granted for the work you have missed, and relevant details such as revised deadlines, or time and location of a make-up evaluation.

Please note that the MSAF (McMaster Student Absence Form) may not be used for term work worth 25% or more, including the Research Colloquium.

Please note: students who not contact their project supervisor within the 5 working days period, may not be granted any relief.

Special Accommodations

Students with learning challenges may receive accommodations. Please contact Student Accessibility Services (SAS): http://sas.mcmaster.ca/

Students requiring accommodations for Religious, Indigenous, and Spiritual Observances (RISO) should contact their Faculty office as early as possible, preferably at the start of Term: http://multifaith.mcmaster.ca/riso

A2L (Avenue to Learn)

URL: http://avenue.mcmaster.ca

A2L is an online system which will be used in this class for communicating information relating to the course (e.g. organization of the Research Colloquium). To log in to A2L, use your MUGSI login and password. See the A2L home page above for more instructions if you need them. It is the student’s responsibility to check A2L regularly for updates.

Students should be aware that, when they access the electronic components of this course, private information such as first and last names, user names for the McMaster e-mail accounts, and program affiliation may become apparent to all other students in the same course. The available information is dependent on the technology used. Continuation in this course will be deemed consent to this disclosure. If you have any questions or concerns about such disclosure, please discuss this with the course instructor.

If you encounter any technical problems with this service, go to the following website for support: http://avenue.mcmaster.ca/help/. Please note that it is not the responsibility of the teaching staff of EARTH SC 4MI3 to assist you with A2L issues.
Academic Dishonesty

You are expected to exhibit honesty and use ethical behaviour in all aspects of the learning process. Academic credentials you earn are rooted in principles of honesty and academic integrity.

Academic dishonesty is to knowingly act or fail to act in a way that results or could result in unearned academic credit or advantage. This behaviour can result in serious consequences, e.g. the grade of zero on an assignment, loss of credit with a notation on the transcript (notation reads: “Grade of F assigned for academic dishonesty”), and/or suspension or expulsion from the university.

It is your responsibility to understand what constitutes academic dishonesty. For information on the various types of academic dishonesty please refer to the Academic Integrity Policy, located at http://www.mcmaster.ca/academicintegrity

The following illustrates only three forms of academic dishonesty:

1. Plagiarism, e.g. the submission of work that is not one’s own or for which other credit has been obtained.
2. Improper collaboration in group work.
3. Copying or using unauthorized aids in tests and examinations.

Acknowledgement of Course Policies

Your registration and continuous participation to the various learning activities of EARTH SC 4MI3 will be considered to be an implicit acknowledgement of the course policies outlined above, or of any other that may be announced during the Term. It is your responsibility to read this course outline, to familiarize yourself with the course policies and to act accordingly.

Lack of awareness of the course policies cannot be invoked at any point during this course for failure to meet them. It is your responsibility to ask for clarification on any policies that you do not understand. The Course Coordinator reserves the right to modify elements of the course and will notify students accordingly.

The instructor and university reserve the right to modify elements of the course during the term. The university may change the dates and deadlines for any or all courses in extreme circumstances. If either type of modification becomes necessary, reasonable notice and communication with the students will be given with explanation and the opportunity to comment on changes. It is the responsibility of the student to check their McMaster email and course websites weekly during the term and to note any change.