Course philosophy and purpose:

This course is designed as a capstone experience, which means that its purpose is to both unify and provide a broader context for knowledge about the field of environmental sciences gained throughout your undergraduate years.

This seminar course is intended to (1) augment the breadth of the students’ knowledge in the environmental geosciences, (2) provide information on current professional and research and development issues across the environmental science field and (3) stimulate professional interactions among students and outside professional scientists. The course also aims to introduce students to Phase I Environmental Site Assessment (ESA) procedure as part of their professional development.

Course goals and objectives: to provide the breadth of learning requirement for undergraduate students in Environmental Sciences by attending seminars given by distinguished invited outside speakers. Students also will gain exposure to ongoing issues and new developments in a broad range of subdisciplines of Geoscience.

The overarching goal of this course is to allow participants to develop their written and oral presentation skills. This will be achieved through engagement in professional seminar issues pertaining to geosciences and through the application of these practical skills.

Learning Outcomes: By the end of this seminar series, you will be able to:
1. Critically analyze and engage in environmental science issues relating to professional careers.
2. Carryout a Phase I Environmental Site Assessment
3. Design and deliver an effective and engaging seminar.
4. Develop written and oral communication skills.

Course Requirements: As a seminar, this class requires regular preparation and participation by all students. The instructor will serve as a convener and facilitator rather than lecturer. The course necessitates that students assume a more active, responsible role in learning than has been possible in previous classes.

Prerequisites: Participants must be in their final year of Environmental Science BSc Honours (must have completed at least 15 FCEs).
Class meetings: 6-8pm on Tuesdays BV355. Speakers and topics will vary from week to week (unforeseen changes to the schedule may occur and will be announced on the Portal). The current speakers list is provided later in the document (see Course Schedule). Note that I expect everyone to attend each seminar and be prepared to participate in discussion. Students also are required to sign the signup sheet in the front of the lecture hall at each lecture they attend.

Course expectations:

(1) Phase I ESA: Students are expected to perform a Phase I ESA of the land parcel located at the corner of Lawrence and Scarborough Golf Club Rd. The field investigation and the Phase I report preparation will be a group effort (groups of four-five - depending on the number of students in the course).

Suggested Readings:
Guidance documents for Phase I ESA investigations will be posted on the portal (ESA link) and through the course LibGuide (Library Resources link on the course portal for CSA Standards (Phase I ESA (Z768))

(2) Seminar summaries: Students must attend all seminar series and submit a one-to-two page summary of six guest seminars. Be sure to include your name, the name of the speaker, date and title of the talk. Summaries should focus on the contents of the presentations (summary/critique of the primary points identified in the seminar presentation and discussion). Note: the summaries must be submitted one week after the attended seminar lecture (during the following class). Late summaries will not be accepted except for documented illness, mandatory religious obligations, or other unavoidable circumstances.

(3) Student presentations: Student presentations are meant to give students practice speaking in front of an audience and to explore topics of their own choosing in detail. Students will research topics and organize presentations for our class. The topics may be any aspect of the environmental geoscience and must be approved by me in advance (see below for deadline). Unless cleared with me, you may not give a presentation similar to one you have delivered in another class.

Due dates will be established for topics, abstracts, outlines, and seminar dates. Failure to meet deadlines will also be taken into account in final grading. Submit your topic to me for approval as soon as possible and no later than Tuesday February 4th. At that time you will turn in (hard copy) a tentative title, a paragraph or two describing the topic, as well as several pertinent references (5-8 is sufficient). Your annotated bibliography will be due in class on Tuesday February 25th.

Students will submit a detailed outline (1 – 1.5 pages) of their presentation and also a brief abstract (one or two paragraphs; 250 words max.) describing their presentation. A draft of the abstract is due in class, the week prior to your seminar. Submit 3 printed copies (not electronic), which are double-spaced. I will review
both your outline and abstract and return them to you within a day or two. I will also ask two of your fellow students to review your abstract and outline (thus the need for three hard copies). You will revise your abstract (perhaps more than once, at my discretion) and submit the final draft of your abstract to me electronically by Noon on Monday before your presentation so I can distribute it to the class-members on the course Portal the day prior to your seminar (by 5:00 p.m. Monday for a Tuesday seminar). You do not need to distribute your outline.

You should strive for professionalism in all aspects of this class. Abstracts should be concise (<250 words), well written and free of grammatical and typographical errors. Be sure to tell complete story with your abstract. The abstract will also serve as an announcement and should include the time, date, and location of your seminar.

Each student will give a 20-minute presentation. Your seminar should cover several (3-4, or more) related papers in a given area. Tell a complete story about your chosen topic. You are encouraged to give seminar on a topic closely related to your area of interest. You should be thoroughly familiar with the literature on your topic. You should strive to organize your seminar into a cohesive presentation, and be selective about what you present. Be sure to target your audience and do not use the jargon of the field. Whereas everyone in the audience is educated, many will be unfamiliar with the topic. Explain concepts simply and clearly, and define all terms and acronyms. Be prepared to answer questions after your seminar. The seminar will be timed, and should be ±3 minutes of the allotted 20 minutes.

I expect that students will check and use their university email accounts (Bb Portal announcements will be emailed to your email account). If you are re-writing your abstract, or reviewing another’s, I will expect a prompt turn-around (less than 24 hours).

Evaluation criteria for the presentation will focus on its thoroughness, scholarliness, and the degree to which it provides new learning not covered in previous coursework. I'll distribute evaluation forms for each presentation, and I'll collect the forms after our discussions, but I won't grade them. I'll just check off the paper reviews, and I'll use the talk reviews to compile rankings of student presentations. I'll keep your reviews confidential. At the end of the term, I'll notify the highest-rated speaker that he/she has received our EESD19 best-presentation award.

Suggested guidelines for the Seminar Format:
- Give an introduction and background information on your topic.
- Clearly state your objectives.
- Describe the relevant approaches or methodologies. Be sure you fully understand the methods. Give reasons why some methods are used over other approaches.
- Present any data you have found in your research.
- Describe what remains to be done, and what you think you would do if you had the opportunity.
Explain the significance of your findings (or potential future findings).

Suggested Reading:

(4) Class participation and discussions: Attendance at each seminar is mandatory for all students enrolled. It is expected that students will actively participate by asking questions of the speaker. The effort by students to meet these expectations will be considered in the determination of your final grade.

Grading: Your final grade will be determined by several factors: the Phase I ESA report, the seminar summaries, the quality and content of your seminar, your participation in the class as a whole, and your ability to meet scheduled deadlines. There are no tests or exams for this course.

Phase I ESA 20%
Written one-two page summary/critique of guest seminars (6 required) 30%
Annotated bibliography 5%
Student seminar 25%
Class participation and seminar discussions 20%

Course Schedule
Week 1: Jan 07 Introduction
Week 2: Jan 14 Mr. Sean Salvatori, Dillon Consulting Limited
Week 3: Jan 21 Mr. Dave Eden, Kinross
Week 4: Jan 28 Dr. Jennifer McKelvie, Nuclear Waste Management Organization (NWMO)
Week 5: Feb 04 Mr. Joey Harrington, Stantec
Week 6: Feb 11 Dr. Nicole Januszczak, De Beers Canada
    *Feb 18* NO CLASS - READING WEEK
Week 7: Feb 25 Ms. Theresa Repso-Subang, Golder Associates
Week 8: Mar 04 Dr. David Puttock, Silv-Econ Ltd.
Week 9: Mar 11 Student Presentations
Week 10: Mar 18 Student Presentations
Week 11: Mar 25 Student Presentations
Week 12: Apr 01 Student Presentations

Plagiarism: Assignments are checked for plagiarism. Please consult the University Calendar for a discussion and outline of the policy on plagiarism and academic integrity (also see proceeding section below). The sanctions can be severe. If, after reviewing the University policy, you are uncertain about what constitutes plagiarism, talk to your course instructor.
Academic Integrity: Academic integrity is essential to the pursuit of learning and scholarship in a university, and to ensuring that a degree from the University of Toronto is a strong signal of each student’s individual academic achievement. As a result, the University treats cases of cheating and plagiarism very seriously. The University of Toronto’s Code of Behaviour on Academic Matters (http://www.governingcouncil.utoronto.ca/policies/behaveac.htm) outlines the behaviours that constitute academic dishonesty and the processes for addressing academic offences. Potential offences include, but are not limited to:

In papers and assignments:

- Using someone else’s ideas or words without appropriate acknowledgement.
- Submitting your own work in more than one course without the permission of the instructor.
- Making up sources or facts.
- Obtaining or providing unauthorized assistance on any assignment.

In academic work:

- Falsifying institutional documents or grades.
- Falsifying or altering any documentation required by the University, including (but not limited to) doctor’s notes.

All suspected cases of academic dishonesty will be investigated following procedures outlined in the Code of Behaviour on Academic Matters. If you have questions or concerns about what constitutes appropriate academic behaviour or appropriate research and citation methods, you are expected to seek out additional information on academic integrity from your instructor or from other institutional resources (see http://www.utoronto.ca/academicintegrity/).

Please consult the University Calendar for information about grade distribution and academic conduct.

Handing In Assignments: You are responsible for making sure that I receive your work. Students who mail assignments in, place work on the floor outside an office, or slip assignments under a door, do so at their own risk.

Lost or misplaced assignments: It is your responsibility to keep a photocopy of your work, and to make more than one disk copy of your work. Excuses are not accepted in the case of lost or misplaced work.

Absences: If you need to miss a practical or term test for any legitimate reason, you must submit appropriate documentation within three business days of your absence. If the reason for your absence is medical, an official UTSC medical note must be completed by a doctor who examined you while you were ill/injured (i.e. not after the fact). The medical note can be downloaded at:
Missed term work: If a legitimate reason prevents you from submitting a piece of term work by its posted deadline, you must submit appropriate documentation within three business days of your absence. If the reason is medical, an official UTSC medical note must completed by a doctor who examined you while you were ill/injured (i.e. not after the fact). The medical note can be downloaded at: http://www.utsc.utoronto.ca/~registrar/resources/pdf_general/UTSCmedicalcertificate.pdf. Note that conditions ranked as mild or negligible will not be considered a valid excuse.

Accessibility: Students with diverse learning styles and needs are welcome in this course. In particular, if you have a disability/health consideration that may require accommodation, please feel free to approach me and/or the AccessAbility Services Office as soon as possible. I will work with you and AccessAbility Services to ensure you can achieve your learning goals in this course. Enquiries are confidential. The UTSC AccessAbility Services staff (located in S302) are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations (416) 287-7560 or ability@utsc.utoronto.ca.

Students are encouraged to review the Calendar for information regarding all services available on campus.