

## ENV 4001H: GRADUATE SEMINARS IN ENVIRONMENT AND HEALTH

Winter 2022

### I. CONTACTS

**Instructor:** Prof. Miriam Diamond

**Office:** Earth Sciences, Rm. 3143

**Virtual Office Hours:** TBD

**Email:** Please use Quercus email

**Tutorial Assistant:** David Hall

**Contact:** Quercus email

**Online Student and Public Seminars:** Wednesdays, 4:00-7:00 PM  
(stay tuned for whether we transition to in-person)

### II. COURSE OVERVIEW

**Course Description:** There is a pressing need to study the complex relationships between the environment and human health, especially as we are increasingly challenged by environmental health issues. This course introduces students to a variety of issues related to environment and health. Our main goal is to work towards building evidence-based solutions by providing an academic environment of inquiry and dialogue where graduate students from various disciplines can exchange ideas, information and insights. Through participation in the affiliated public environment and health seminar series and student-led seminars, the goal of the course is to expose the students to the many ways that issues related to the environment and health are framed, examined, discussed and addressed. The course will stimulate students to reflect on this diverse discussion, to integrate their work into a broader context and perspective, and to seek evidence-based solutions. Students will have the opportunity to explore linkages between environmental factors and health issues as these intersect with environmental and health policy, toxicological impacts, psychosocial factors, economic factors and ethical and legal issues.

**Educational Objectives:** Upon course completion, students will be expected to:

- Develop an understanding of the complex, interdisciplinary nature of environment and health issues,
- Develop an understanding of the importance of cross-disciplinary dialogue to fully comprehend how human health and the environment are interconnected and to develop effective interventions,
- Acquire the skills necessary to research and critically assess scholarly information on topics related to environment and health and to communicate them in a manner that fosters interdisciplinary dialogue and engagement, and

- Build a knowledge of how evidence-based solutions can be developed and implemented.

### **III. HOW THE COURSE IS ORGANIZED**

**Course Delivery:** The course uses Quercus for the provision of course materials, submission and completion of assignments, and important communications between instructors and students. Seminars will be held using Zoom and/or in person. To access the Quercus-based course website, go to the UofT portal login page at <http://portal.utoronto.ca> and log in using your UTORid and password.

The course content changes from year-to-year, according to the expertise of invited speakers (see the course schedule at the end of the syllabus for topics and dates). Speakers are chosen to ensure a breadth of topics of importance are presented from a range of disciplinary and interdisciplinary-based perspectives, spanning the natural sciences, social sciences and humanities. These talks are also open to the public and take place every two weeks, once the seminar series begins.

Students will choose one of the scheduled topics of interest to facilitate an in-class seminar (students and instructors only), which typically takes place one week in advance of each respective public talk. These seminars provide students with the opportunity to more fully engage with various issues associated with the topical areas of focus in the public seminar series. As part of the student-led facilitation, students are expected to identify readings for the respective topics for the rest of the class (to be approved by course instructors prior to the electronic links being posted on the Quercus site). Students are encouraged to introduce or highlight related ideas, concepts, methodological/conceptual frameworks, etc. from their own disciplinary backgrounds to provide a forum of interdisciplinary exchange and discussion.

Depending on course enrollment, students may work in groups of 3-5 to organize and lead a seminar. While student-led seminars are typically held one week in advance of each respective public talk, they may need to take place in the week following a public presentation to accommodate speakers' schedules.

Please note that this is a seminar course. Students are expected to attend all seminars and actively participate in classes. Students are expected to be prepared for seminars by having read assigned readings and demonstrating thought has been given to their respective topics).

**Prerequisites:** None

**Enrolment Restrictions:** Enrolment preference will be given to students who are enrolled in the Graduate Collaborative Specialization in Environment and Health, since ENV4001 serves as the core course for this specialization. Nevertheless, students from other graduate programmes who have an interest in environment and health issues, and who are willing to share a collaborative learning experience, are also invited to enrol. For a description of the Environment and Health Specialization, please see: <https://environment.utoronto.ca/graduate/collaborative-specializations/>

**Evaluation:** Students are required to attend all of the public environment and health seminars

scheduled between January and April, 2022. The evaluation break-down is as follows:

- Seminar participation (ongoing): 20%
- Literature review proposal and annotated bibliography (Due: Feb. 9, 2022): 15%
- Student seminar presentation & facilitation (Date: TBD): 20%
- Oral presentation of research paper (Date: April 6, 2022): 15%
- Literature review paper (Due: April 13, 2022): 30%

**Literature Review Proposal and Annotated Bibliography (Due: February 9, 2022):** You will identify a research question/hypothesis that will be the focus of your research/literature review paper that is due at the end of the course. You will prepare a proposal and annotated bibliography for this paper based on an initial literature review of your selected topic. Students are not restricted to topics addressed in the course but the topic must be related to environment and health. The proposal and annotated bibliography will be approximately 3-5 pages (1.5 spacing) and will include the following information:

- A brief background to the topic of focus,
  - Why is this topic important? Provide a summary, including a description of main concepts of topic, which is detailed enough to inform reader about topic to be explored. This should include a description of topic's significance in an environmental health context (with reference to sources of information/peer reviewed literature)
- A succinct statement of goal or research question;
- A description of the research strategy that you used in the literature search, as follows
  - Identification of the keywords or parameters used in the search
  - Description of any limits applied such as year of publication, language, sources, as well as the rationale for these limits
  - Identification of the search engine(s) used/databases explored (e.g. Scopus, Medline, Web of Science)
  - A description of how the search was refined and narrowed;
- A summary of the results of your search, including a description of the number of "hits" obtained and how this may have changed with the placement of additional search limits; and
- A list of the "top 10" articles or other scholarly sources chosen from the literature search as an initial starting point with a brief (1-3 sentence) summary of each article.

Commonly used conceptual frameworks in the public health sciences such as PIE (Population/Problem, Intervention/Issue, Evaluation/Effect) or PICO (Population, Intervention, Comparison, Outcome or an adapted version thereof that may be more fitting for your topic) may be adopted for your literature research strategy. You may also find that a concept map/table is helpful, too. Please refer to the module Writing Resources in the modules section of Quercus for guidance.

**Student Seminar Presentation & Facilitation:** You will choose a week in which you will lead a

presentation and discussions on the topic presented in the public seminar scheduled for the next week. These seminars provide an opportunity for the class to more fully explore the topics addressed by the invited speaker in the public seminar. At the beginning of term and in consultation with the course instructors, student facilitators will choose relevant articles of interest to be read by the rest of class prior to each student seminar. Articles must be peer-reviewed and accessible via our electronic library system. Full article citations and links to readings (which should not exceed ~30 pages in total) are to be posted the Quercus course website ~one week in advance of the student-led seminars.

For the week that you are presenting and facilitating, you are expected to:

- Background preparation: Choose quality and relevant articles for background reading (peer-reviewed), inform course instructor no later than one week in advance;
- In class presentation: Make a brief informal presentation at the beginning of the student-led seminars;
- Lead in-class discussion:
  - Suggest questions to stimulate and focus the discussion;
  - identify important concepts or issues related to the topic and reflect the position/approach of the disciplinary background of class participants;
  - Fully participate and help moderate in-class discussion,
  - Help to moderate break out groups that will be done as part of the public seminar talks (further details to be provided when the course begins).

**PLEASE NOTE: The first student-led seminar will take place on January 19, 2022,** focusing on the topic of the public seminar scheduled for the week thereafter. Given the short timeline for students to prepare for this, we will decide on topics for the student-led seminars in the first class on January 12, 2022.

**Oral Presentation of Literature Review Topic (Date: April 6, 2022):** For the last class, you will each present a 3-minute synopsis of the topic of the topic of your literature review paper topic and its importance (akin to a 3MT presentation). You can use one PowerPoint slide. The presentation will be followed by 1-2 questions from the students and the course instructors. Students should adopt the same professionalism and discipline that they would follow if they were making a presentation at a scholarly conference. Each student will be evaluated on the following criteria:

- Timing – how well the student adhered to the limitations set for the presentation
- Clarity and organization of content presented (aimed at a non-specialist audience)
- Quality of the slide
- Quality of the responses to questions
- Speaker's demeanour – i.e., clarity of articulation, professionalism, confidence with material

**Literature Review Paper (Date: April 13, 2022):** The research paper will focus on an environment and health-related question or issue that relates to the student's area of research and/or academic interests. Papers should be 4,000-5,000 words (not including references) and include the following:

- **Introduction** to the topic, including a description of its importance in an environment and health context. You need to expand on the background and literature cited beyond that included in the initial proposal. The introduction must include a clear statement of the paper's purpose, goal, and/or research question(s). This may be the same as that used in the proposal. However, in most cases, you will have refined your understanding of the topic and hence the purpose/goal/research question(s) during the information gathering and analysis phase.
- **Methods**: Similar to that expected in the public health sciences, papers should include a method section that details the methods used to identify scholarly, literature sources for review, including a description of the keywords and databases which were used (e.g. Medline) and the inclusion/exclusion criteria employed to choose articles. The methods should be kept very brief and are expected to be more refined relative to those documented in the proposals submitted earlier in the course.
- **Discussion**: This section, which will comprise the bulk of the paper, involves an in-depth examination, analysis and discussion of current (peer-reviewed) literature on the topic. You need to not only assess the available evidence, but also the current state of knowledge and scientific rigor on the chosen topic in a systematic, objective manner. This discussion may include identified gaps and strengths/limitations in knowledge, strengths/limitations in policy/regulations, an identification of needs in terms of future research and political action, etc., as they relate to the specific topic areas. Be careful of the implications of calling for more research!
- **References Cited**: Students must list the references cited in the paper in a separate section at the end, using a recognized format (see below for further details). This should **ONLY** include those references cited in the paper.

Papers are to be submitted electronically as a Microsoft Word (.doc and .docx) file or as a PDF via the course's website on Quercus on (or before) the due date (Deadline: 11:59 PM).

Papers will be uploaded to the University's Plagiarism Detection Tool upon submission to the course's website on Quercus for a review of textual similarity and detection of possible plagiarism. In doing so, students will allow their essays to be included as source documents in the tool's reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the University's use of this tool are described on the Centre for Teaching Support & Innovation web site (<https://uoft.me/pdt-faq>). Please see the course instructor if you object to using the Plagiarism Detection Tool to establish appropriate alternative arrangements for submission of your written assignments prior to the submission deadline.

## **V. COURSE POLICIES**

It is recommended that students pay attention to the announcements posted on the course's website on Quercus, as this will be the primary way the instructor will communicate important messages, including ones of an urgent matter should unexpected events occur.

*Late Penalties and Deadline Extensions:* Late papers will be reduced by 3% of the assignment grade per day (including weekends). Extenuating circumstances may arise that impact your ability to complete an assignment on time. Please discuss these issues with your instructor to make alternative arrangements for submission. Students are expected to discuss these issues with your instructor **before or on the assignment due date** to make alternative arrangements for submission. Students who are absent from class for any reason (e.g., COVID, other illness or injury, family situation) and who require consideration for missed academic work should report their absence through the online Absence Declaration Tool on ACORN (in the Profile and Settings menu). The decision to waive the penalty for late assignments for students that contact the instructor AFTER the deadline will be made at the instructor's discretion.

**Online conduct and expectations:** Students will be expected to have their cameras on during seminars. Microphones should be turned off unless you are presenting, or it is your turn to speak during seminars (we will rely on using the available icons to indicate when we want to ask a question or add to discussion). The public talks will not be recorded for later viewing, so students will be expected to attend in real time.

Please note UofT's policy regarding online conduct and supporting a positive learning environment: *"The University of Toronto is committed to equity, human rights and respect for diversity. All members of the learning environment in this course should strive to create an atmosphere of mutual respect where all members of our community can express themselves, engage with each other, and respect one another's differences. UofT does not condone discrimination or harassment against any persons or communities."*

## **VI. INSTITUTIONAL POLICIES AND SUPPORT**

**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 (<https://governingcouncil.utoronto.ca/secretariat/policies/code-behaviour-academic-matters-july-1-2019>) 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:*

1. Using someone else's ideas or words without appropriate acknowledgement (including the use of phrases verbatim without quotation marks, even if you provide the appropriate reference in brackets or as a footnote).
2. Submitting your own work in more than one course without the permission of the instructor.
3. Making up sources or facts.
4. Obtaining or providing unauthorized assistance on any assignment.

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 <https://www.academicintegrity.utoronto.ca/>).

**Accessibility Needs:** Students with diverse learning styles and needs are welcome in this course. The University of Toronto is committed to accessibility: if you require accommodations for a disability, or have any other accessibility concerns about the course, please register with Accessibility Services as soon as possible (<https://studentlife.utoronto.ca/task/register-with-accessibility-services/>).

Contact information: Accessibility Services Reception: 416-978-8060; Email: [accessibility.services@utoronto.ca](mailto:accessibility.services@utoronto.ca)

**Additional Services and Support:** The School of Graduate Studies has a range of resources and supports for graduate students (see: <https://www.sgs.utoronto.ca/gradhub/resources-supports/>) Some of the following may be of particular interest:

- General student services and resources at [Student Life](#)
- Health and wellness services at <https://studentlife.utoronto.ca/department/health-wellness/>
- Full library service through [University of Toronto Libraries](#)
- Resources on conducting online research through [University Libraries Research](#)
- Graduate writing groups at <https://studentlife.utoronto.ca/program/graduate-writing-groups/>

### Seminar Schedule 2022 (Subject to Change)

Dates	Speakers and Affiliations	Seminar Title	Abstract
12-Jan	All class participants!	<i>Welcome to ENV 4001!</i>	We will assign topics and dates for student-led presentations and seminars
19-Jan	Student seminar	<i>Topic: See seminar Scheduled for Jan. 26</i>	
26-Jan	Samantha Green, Dalla Lana School of Public Health and physician at St. Michael's Hospital Sumac Creek Health Centre in Regent Park	<i>General topic: climate change and health</i>	



2-Feb	Student seminar	<i>Topic: See seminar Scheduled for Feb. 9</i>	
9-Feb	Public Seminar: Meredith Franklin, Associate Professor, School of the Environment & Dept of Statistics, UoT		
16-Feb	Student seminar	<i>Topic: See seminar Scheduled for March 2</i>	
<b>Feb. 23</b>	<b>Reading Week</b>		
2-Mar	Sally Radisic, COVID-19 Mobile Vaccine Program, Healthy and Safe Communities Dept, City of Hamilton and Dalla Lana School of Public Health, UoT	<i>Experiences of COVID vaccination response at the city level</i>	

9-Mar	Student seminar	<i>Topic: See seminar scheduled for March 16</i>	
16-Mar	Dr. Joseph Okeme, Yale School of Public Health, Yale University	<i>Understanding the contribution of environmental risk factors to human health by characterizing the external and internal exposome</i>	
23-Mar	Student seminar	<i>Topic: See seminar scheduled for March 30 (Climate Change and Health)</i>	
30-Mar	Dr. Christine Oliver, Heidi Singer and Paul Bozek, Dalla Lana School of Public Health, UoT	<i>Lessons learned from 9/11</i>	This will be a panel discussion on lessons learned from 9/11 on the 20 <sup>th</sup> anniversary of the terrorist attacks.
6-Apr	Student Presentations		