

**ENV 452 – Environmental Science Seminar: Current Topics in Environmental Science**  
**University of Toronto, School of the Environment**  
**Spring Term 2022**

This course focuses on current challenges in environmental science, ranging from environmental pollution, environmental chemistry, toxicology, to biological and health impacts. A variety of guest speakers who are leading experts from different backgrounds will speak to their recent progress on these topics. Students will be tasked with broadly introducing the topics on which the experts will speak in advance of their lectures, to familiarize the class with the topic. The course will also include a parallel, stand-alone, module on chemical contaminants. Students will be assigned research articles and essays by leading experts in the field, as well as articles appearing in the news media. Students will then lead a discussion on the article/essay of the week, which all the students in the class will have read. A final essay will involve writing a review paper to introduce the environmental fates, toxicology and related policy regulations of a selected class of chemical contaminants.

**Time and Place:** The course meets in ES1016 from 3:00 – 4:00 pm every Tuesday, and from 3:00 – 5:00 pm every Thursday.

**Instructors:** Professor Hui Peng (Department of Chemistry and School of the Environment), room LM 321A, Lash Miller Building, 80 St. George Street, [hui.peng@utoronto.ca](mailto:hui.peng@utoronto.ca)

**Office hours:** Professor Peng will be available by appointment.

**Website:** We will communicate with you using the course Quercus site. You are responsible for consulting it regularly for updates and to access readings.

**Evaluations:**

Student-led discussions	25 %
Student-led presentations of speaker topic previews	25 %
Final essay	35 %
Participation (in class)	15 %

**Presentations of guest speaker topic background information:** Your presentations will be expected to provide background information to students in the class, to better understand the talks given by the guest speakers on the upcoming Thursday. The instructors can provide guidance about the scope of the topic and you can use websites, peer-reviewed research, and stories in the popular media as resources. The oral presentation will be delivered in class, will be approximately 30 minutes in duration, and will be supported by a Power Point slideshow. A short discussion/question session will follow afterwards.

**Student-led Discussion:** In pairs or not, your team will be responsible for collecting information from journal publications or media articles and organize the collected information for your classmates. All other members of the class will read the readings you collect and assign. Your team will then lead a discussion on the salient points of the readings, extracting relevant information, helping other students

to flesh out and articulate the concepts explored. A short oral presentation is recommended. Identifying critical points for discussion is requested.

**Final Paper:** Careful notes should be taken throughout the term, as what you have learned in the class will provide the basis of your opinion essay. In approximately 2000 words, you will be tasked with reviewing recent research progresses on a certain class of pollutants, and related toxicity/health effects; or any topics related to speakers' talks.

**Late work policy:** Initial and revised final papers are due on Mar 13 and Apr 23, 2022. Work handed in late will be penalized at 10% per day, including the weekend for up to 7 days, after which it will not be accepted. Late work can be submitted to Professor Peng.

\*Note that the "Discussion" is decoupled from the "Lecture". A Discussion (based on readings) and a guest lecture may occur on the same day, but the topics are unrelated.

Date	Week	Lecture (Student or Guest)	Student-Led Discussion
Jan-11	1	Introduction	
Jan-13	1	Introduction to environmental chemistry and toxicology	Student choice of topics
Jan-18	2	<i>Peng-led presentation</i>	
Jan-20	2	Li Li	<i>Student-led discussions</i>
Jan-25	3	<i>Student-led presentation</i>	
Jan-27	3	Runzeng Liu	<i>Student-led discussions</i>
Feb-01	4	<i>Student-led presentation</i>	
Feb-03	4	Arlene Blum	<i>Student-led discussions</i>
Feb-08	5	<i>Student-led presentation</i>	
Feb-10	5	Hui Peng	Hui Peng
Feb-15	6	<i>Student-led presentation</i>	
Feb-17	6	Joe Doering	<b><u>Journal article writing and review</u></b>
Feb-22	7	READING WEEK	
Feb-24	7	READING WEEK	
Mar-01	8	<i>Student-led presentation</i>	<i>Student-led discussions</i>

Mar-03	8	Elyse Caron-Beaudoin	
Mar-08	9	<i>Student-led presentation</i>	
Mar-10	9	Ivy Yang	<i>Student-led presentation</i>
Mar-15	10	<i>Student-led presentation</i>	
Mar-17	10	Chunjiang An	<i>Student-led presentation</i>
Mar-22	11	<i>Student-led discussions</i>	
Mar-24	11	<i>Student-led presentation</i>	<i>Student-led discussions</i>
Mar-29	12	Roxana Suehring	
Mar-31	12	<i>Student-led presentation</i>	<b><u>Lecture</u></b>
Apr-05	13	Hui Peng (SARS-COV2)	
Apr-07	13	Journal article writing and review	

**Academic Integrity:** While discussions among classmates are encouraged, any material that you submit or present MUST represent your own independent work and comprehension. Academic integrity is fundamental to learning and scholarship at the University of Toronto. Participating honestly, respectfully, responsibly, and fairly in this academic community ensures that the U of T degree that you earn will be valued as a true indication of your individual academic achievement, and will continue to receive the respect and recognition it deserves.

Familiarize yourself with the University of Toronto's *Code of Behaviour on Academic Matters* (<http://www.governingcouncil.utoronto.ca/policies/behaveac.htm>). It is the rule book for academic behaviour at the U of T, and you are expected to know the rules. Potential offences include, but are not limited to:

In papers and assignments:

- Using someone else's ideas or words without appropriate acknowledgement.
- Copying material word-for-word from a source (including lecture and study group notes) and not placing the words within quotation marks.
- Submitting your own work in more than one course without the permission of the instructor.
- Making up sources or facts.
- Including references to sources that you did not use.
- Obtaining or providing unauthorized assistance on any assignment including:
  - working in groups on assignments that are supposed to be individual work;
  - having someone rewrite or add material to your work while "editing".

- Lending your work to a classmate who submits it as his/her own without your permission.

Misrepresentation:

- Falsifying or altering any documentation required by the University, including doctor's notes.
- Falsifying institutional documents or grades.

The University of Toronto treats cases of academic misconduct very seriously. All suspected cases of academic dishonesty will be investigated following the procedures outlined in the *Code*. The consequences for academic misconduct can be severe, including a failure in the course and a notation on your transcript. If you have any questions about what is or is not permitted in this course, please do not hesitate to contact me. If you have questions about appropriate research and citation methods, seek out additional information from me, or from other available campus resources like the [U of T Writing Website](#). If you are experiencing personal challenges that are having an impact on your academic work, please speak to me or seek the advice of your college registrar.

**Accommodations:** Students with diverse learning styles and needs are welcome in this course. In particular, if you have a disability or health consideration that may require accommodations, please feel free to approach the instructor and/or Accessibility Services at (416) 978 8060; <http://accessibility.utoronto.ca>

**Absences:** Students who miss classes, for legitimate reasons or otherwise, are responsible for making up the missed material. Students who miss a presentation or report deadline should contact Professor Wunch as soon as possible, and no later than one week after returning to class. A legitimate reason for an absence or missed deadline due to medical, personal, or family reasons should be documented by one of the following: 1) U of T Student Medical Certificate; 2) Student Health or Disability Related Certificate; 3) College Registrar's Letter; or 4) Accessibility Services Letter.