This course focuses on current challenges in environmental science, ranging from resource management, invasive species, climate change, chemical contamination, to biological and health impacts. A variety of guest speakers who are leading experts from different backgrounds will introduce these topics, and speak to their recent progress on related research. 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. We will also be reading the popular science book "Death and Life of the Great Lakes" by Dan Egan. Each week, two students will lead a discussion of one chapter of the book, in which all students are expected to participate.

**Time and Place:** The course meets on Zoom from 3-4 every Tuesday and from 3-5 every Thursday. Specific guidance from the U of T Vice-Provost, Students regarding student technology requirements is available here: [https://www.viceprovoststudents.utoronto.ca/covid-19/tech-requirements-online-learning/](https://www.viceprovoststudents.utoronto.ca/covid-19/tech-requirements-online-learning/)

**Instructors:** Professor Njal Rollinson (Department of Ecology & Evolutionary Biology), room ES 3051, Earth Sciences Building, 25 Willcocks St, njal.rollinson@utoronto.ca
Professor Jennifer Murphy (Department of Chemistry), room LM 248, Lash Miller Building, 80 St. George Street, jen.murphy@utoronto.ca

**Office hours:** Professor Rollinson and Professor Murphy are both available to meet on Zoom or over the phone 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. The schedule for the presentations and book chapter discussions is posted separately in Quercus.

**Evaluations:**

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

**Presentations of guest speaker topic background information:** Your presentations will be done in pairs, and your team 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 in student pairs, will be approximately 30 minutes in duration (approximately 15 mins for each student), and will be supported by a Power Point slideshow. A short discussion/question session will follow afterwards.
**Student-led book chapter discussion:** Each week, the class will read one chapter of *Death and Life of the Great Lakes*. A pair of students will then lead a discussion on the salient points of the chapter, extracting relevant information, helping other students to flesh out and articulate the concepts explored. Participation of all students in the discussion is expected. Additional resources that can be used to support the discussion can be found online, including at this site with extensive articles and radio segments: https://www.sciencefriday.com/spotlights/book-club-death-life-great-lakes/

**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 5000 words, you will be tasked with answering a broad question, which we will provide. Your paper must draw on material from at least five different topics/lectures covered in class.

**Late work policy:** Final papers are due on April 9, 2021. 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.

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

**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:

- 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 require consideration for missed academic work for any reason (e.g., COVID, other illness or injury, family situation) should report their absence through the online absence declaration. The declaration is available on ACORN under the Profile and Settings menu. Students should also advise Professor Murphy of their absence.