ENV337H1S – Human Interactions with the Environment
Winter 2025

Last Updated: Jan 6, 2025

Lecture:	Wednesday 10am – noon
Location:	ES (Earth Sciences Building, enter through 5 Bancroft Ave.)
Tutorials:	Wednesdays: 9-10am or 10 – 11am in AB (Astronomy & Astrophysics Building, 50 St. George St.)
	Specific room information can be located in your timetable.
	Four tutorials are scheduled through the term: Jan 27, Feb 24, Mar 10, Mar 24

Instructor:	Karen Ing; karen.ing@utoronto.ca
Office Hours:	by appointment, and usually available after lectures

Teaching Assistant: Ariel Tastasa (ariel.tastasa@mail.utoronto.ca)

Required Text:
There is no required hardcopy textbook for ENV337H. Resources will be drawn from a variety of open sources, and links to any relevant readings will be posted prior to each associated lecture. You may have to sign into the UofT library system to gain full access to some of the readings.

Marking Scheme

Assignment #1 – Population & Sustainability	Feb 2	20%
Assignment #2 – Solutions – Group Assignment		
Proposal	Mar 2	5%
Presentation	Apr 2	5%
Final Report	Apr 4	15%
Participation:		
- tutorial, group work, peer evaluations		5%
Midterm	Feb 12	20%
Final Exam	Apr exam period	30%

Introduction and Learning Objectives:
The impact of 7 billion people on the planet is enormous and challenges future generations. The interconnected systems of the planet means that as humans interact with their surrounding environments, they too will be influenced and impacted in turn. What are these impacts today and in future? What solutions and tools are available? What can we learn from environmental and cultural history? Using an integrated and interdisciplinary systems approach, we explore problems and solutions to the earth's limits to growth.

The course introduces students to Earth Systems interactions, and their limits to growth of human systems using an analytical perspective and, most importantly, how to critically analyze, quantify and solve problems arising from meeting these limits to growth.

Our learning objectives are to:

1. Familiarize you with Earth Systems, environmental processes, and ecological issues arising from human activities.
2. Understand the interconnectedness of these systems to each other and to human well being.
3. Learn to integrate disparate issues with roots in natural sciences and social sciences, and to develop solutions to these issues.
4. Improve your critical thinking, analytical abilities and problem solving skills.
5. Improve your ability to conduct research, assemble information, and communicate the results of your research.

Lecture Topics and Tutorial Schedule

Date	Lecture Topic and Readings	Tutorials
Jan 8	Introduction – Anthropocene	
Jan 15	Population & Measurements of Sustainability	
Jan 22	Planetary Boundaries & Drivers of Environmental Change	
Jan 29	Environmental Systems & Biogeochemical cycles	Jan 27 – Tut #1
Feb 5	Agriculture I	
Feb 12	**Midterm**	
Feb 19	Reading Week	
Feb 26	Agriculture II	Feb 24 – Tut #2
Mar 5	Water I - freshwater	
Mar 12	Water II - freshwater	Mar 10 – Tut #3
Mar 19	Water III - Oceans	
Mar 26	Urban Ecology	Mar 24 – Tut #4
Apr 2	Student Presentations	

Important Dates
Jan 6 – start of term
Jan 19 - last day to enroll in S courses
Feb 17 – Family Day
Feb 17-21 – Reading Week
Mar 10 - last day to drop S courses
Apr 4 – classes end
Apr 9-30 – exam period

Tutorials

There are four tutorials scheduled throughout the term: Jan 27, Feb 24, Mar 10, Mar 24. The tutorials are intended as a forum for students to discuss and get guidance towards their culminating group assignment on Solutions for the Future.

COURSE POLICIES

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.

Technology Requirements

Lectures and tutorials will be in-person, but we may be using Zoom on occasion for online teaching & learning in this course.

This course requires the use of computers, and of course sometimes things can go wrong when using them. You are responsible for ensuring that you maintain regular backup copies of your files, use antivirus software (if using your own computer), and schedule enough time when completing an assignment to allow for delays due to technical difficulties. Computer viruses, crashed hard drives, broken printers, lost or corrupted files, incompatible file formats, and similar mishaps are common issues when using technology, and are not acceptable grounds for a deadline extension.

Lectures/Copyright
Course materials and videos belong to your instructor, the University, and/or other sources depending on the specific facts of each situation, and are protected by copyright. Do not download, copy, or share any course or student materials or videos without the explicit permission of the instructor.

Use of AI
In this course, you may use generative artificial intelligence (AI) tools such as ChatGPT as learning aids and to help complete assignments. Generative AI may produce content which is incorrect or misleading, or inconsistent with the expectations of this course. These tools may even provide citations to sources that don't exist—and submitting work with false citations is an academic offense.

Generative AI is not required to complete any aspect of this course, and we caution you to not rely entirely on these tools to complete your coursework. Instead, we recommend treating generative AI as a supplementary tool only for exploration or drafting content. Ultimately, you (and not any AI tool) are responsible for your own learning in this course, and for all the work

you submit for credit. It is your responsibility to critically evaluate the content generated, and to regularly assess your own learning independent of generative AI tools. Overreliance on generative AI may give you a false sense of how much you've actually learned, which can lead to poor performance on the midterm test or final exam, in later courses, or in future work or studies after graduation.

Submission of assignments:
We will be using a plagiarism detection program within the online assignment function in Quercus for submission of the written assignments in this course. Normally, students will be required to submit their course essays to the University's plagiarism detection tool website for a review of textual similarity and detection of possible plagiarism. In doing so, students will allow their material to be included as source documents in the University's plagiarism detection tool reference database, where they will be used solely for the purpose of detecting plagiarism. The terms that apply to the University's use of the University's plagiarism detection tool service are described on the Centre for Teaching Support & Innovation web site (https://uoft.me/pdt-faq).

If a student does not wish to submit to the online plagiarism tool, the student MUST advise the TA immediately as alternate arrangements for screening the assignment must be arranged.

To avoid late penalties, assignments must be submitted to the Quercus Assignment function before **midnight on the posted due date.**

When submitting your assignment on Quercus, the file should be saved in a single file, with an extension of .docx, or .pdf.

It is the students' responsibility to ensure a readable version of the correct final draft of their assignment is uploaded by the due date. Errors in draft submissions or unsuccessful uploads are not acceptable grounds for deadline extension and late penalties will be accrued until a correct version is uploaded.

Late penalties
The late penalty on all assignments will be 5% of the assignment grade per day late, including weekends and will only be waived with the Absence Declaration Tool on ACORN.

Note students may submit **one absence declaration per academic term**. If additional absences occur within the term, students may need to contact their College Registrar or submit a UofT Verification of Illness Form. More detailed information on the absence declaration guidelines and eligibility can be found at:

https://www.artsci.utoronto.ca/current/academics/student-absences

Please note the declaration must cover the period of time you missed, e.g. the week before the assignment/essay is due, etc.

Assignments will NOT be accepted one week past the due date even if accompanied by an absence declaration form unless prior approval has been obtained from your TA or the course instructor.

Graded Material
Any disputes or questions on graded material must be brought to the attention of the TA or instructor within 1 weeks of return or posting, otherwise will be considered final.

Tests
For students who miss the midterm on February 12th, 2025, the instructor must be notified within 48 hours and a completed Absence Declaration on ACORN must be presented within a week before any special consideration (such as a deferred test) will be considered.

The final exam will be administered and scheduled by the Faculty during the final exam period between April 9-30. Students will need to contact their college registrars if they need to make alternate arrangements.

Academic Integrity

The following is taken from the Faculty of Arts and Science Academic Integrity website (http://www.artsci.utoronto.ca/osai/students):

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.

On tests and exams:
- Using or possessing any unauthorized aid, including a cell phone.
- Looking at someone else's answers
- Letting someone else look at your answers.
- Misrepresenting your identity.
- Submitting an altered test for re-grading.

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.

See also the handout "How Not to Plagiarize," Margaret Proctor, 2009, available online at
http://www.writing.utoronto.ca/advice/using-sources/how-not-to-plagiarize

ACCESSIBILITY NEEDS
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 contact Accessibility Services as soon as possible.

disability.services@utoronto.ca *or* *http://studentlife.utoronto.ca/accessibility* .

ADDITIONAL SERVICES and SUPPORT
The following are some important links to help you with academic and/or technical service and support

- General student services and resources at Student Life
- Full library service through University of Toronto Libraries
- Resources on conducting online research through University Libraries Research
- Resources on academic support from the Academic Success Centre
- Learner support at the Writing Centre
- Information for Technical Support/Quercus Support