

***"HUMAN HEALTH AND THE ENVIRONMENT"***  
***(EESA10 H3-Y)***

**Instructor:** Dr. Silvija Stefanovic

**Lectures:** Asynchronous; pre-recorded  
**Office hours on Bb Collaborate:** Thu. 3-4pm  
**Email:** [silvija.stefanovic@utoronto.ca](mailto:silvija.stefanovic@utoronto.ca)

**TAs:** Ariola Visha (Lectures 3-7)  
Bhargav Patel (Lectures 8-12)

**Email:** [a.visha@mail.utoronto.ca](mailto:a.visha@mail.utoronto.ca)  
**Email:** [br.patel@alum.utoronto.ca](mailto:br.patel@alum.utoronto.ca)

**The intent of the course:**

Because of pollution, our surroundings are becoming increasingly hazardous to our health. The past century has seen intense industrialization characterized by the widespread production and use of chemicals and the intentional and unintentional disposal of a wide range of waste materials. This course explores the relationship between the incidence of disease in human populations and environmental pollution. Emphasis will be placed on understanding where and what pollutants are produced, how they are taken up by humans and their long-term effects on health; the role of naturally-occurring carcinogens will also be examined. The course will include a view of risk assessment and toxicology using case studies. No prior knowledge of environmental or medical science is required.

**Suggested readings (not required for the exams):**

“Understanding Environmental Health: How We Live in the World” Nancy Irwin Maxwell, 2014, Jones & Bartlett Learning (available from the bookstore)

**Lectures (required for the exams):**

This course is Online Asynchronous, which means it has no requirement for attendance at a specific time for any activities (NO LIVE LECTURES). The lecture videos will be posted weekly, **every Monday at 9 am on Quercus** and will remain posted until the end of the semester.

The lectures you will watch online were pre-recorded with the students present in the classroom. You will be able to hear students’ questions and the instructor’s answers or any discussion that would normally happen in the live lecture set up. These videos are edited and technicalities such as dates, midterm marks discussion and other not relevant matters are removed. **However, some errors are possible so please disregard possible discrepancies found on the current course and this past course.**

The lecture slides will be posted in \*.pdf format on Quercus. You will require Adobe Reader to open the files (available free of charge at [www.adobe.com](http://www.adobe.com)).

**Grading**

Discussion	20%
Midterm Exam	40%
Final Exam	40%

### **Supplemental Material and Discussion Board** (required for the exams):

The discussions will start on Wed. Jan. 27<sup>th</sup> at 9 am. TAs will post supplemental media resources (e.g., videos and articles) on Quercus weekly for the students to review. TAs will also initiate and regularly monitor the Discussion Board linked to the posted material. The discussion will cover the same topic discussed in the lecture released 2 days before and it is strongly suggested you watch the lectures before you participate in your discussion assignment.

In order to incentivize your efforts on the discussion board, you will be divided into ten groups. Every week people in ONE particular group will be required to answer the questions on the discussion board to get their mark. **For the mark, you need to participate in discussion only ONCE for the whole term.**

**Please check Quercus to find out your group number.** Below are the lecture/week numbers and dates when each group should participate in discussions.

<b>Group #</b>	<b>Lecture #</b>	<b>Week #</b>	<b>Issue Date: Wednesday @ 9 am</b>	<b>Due Date: Saturdays @ 11:59 pm</b>
Group 1	Lecture 3	Week 3	January 27	January 30
Group 2	Lecture 4	Week 4	February 3	February 6
Group 3	Lecture 5	Week 5	February 10	February 13
Group 4	Lecture 6	Week 6	February 24	February 27
Group 5	Lecture 7	Week 7	March 3	March 6
Group 6	Lecture 8	Week 8	March 10	March 13
Group 7	Lecture 9	Week 9	March 17	March 20
Group 8	Lecture 10	Week 10	March 24	March 27
Group 9	Lecture 11	Week 11	March 31	April 3
Group 10	Lecture 12	Week 12	April 7	April 10

The discussion will be available to the assigned group on **Wednesday at 9 am**. You can post only your opinion on the question asked for 4 days (**until Saturday at 11:59 pm**) after the supplementary material is posted. Please make sure you post the specific answer and not your notes in the response. You have to submit your discussion first and then you will be able to see what other students wrote. You will not be able to delete or edit your comments once they are submitted but you can feel free to enter more NEW points (copying and pasting opinions of others or being repetitive will not be considered as a substantial contribution) if you like before the due date on Saturdays at 11:59 pm. **However, the only first submission will be marked.**

You will be credited only for the week when it was mandatory for you to take part in the discussion. For example, people in a group of Lecture 7 will not receive their mark if they miss answering during the week of Lecture 7 and then request the accommodation to answer during the week of Lecture 8. **The extension will be granted only if the proper documentation is provided within 3 business days after the assignment due date. Failing to follow these instructions will result in a mark of 0 for discussion.**

After the due date, everyone enrolled in the class will have an access to posted resources and discussion responses. All students are responsible to watch ALL supplementary videos or reading material from lecture 3-12, as they will be testable for your midterm and final exam.

### **Online Midterm:**

The 2-hours midterm exam will be held during the mid-term period, time and date TBA. The midterm will be online. The exam will consist of 80 Fill in the Blanks, Matching, MCQs, Multiple Dropdowns and True/False questions (60 questions from the lecture material and 20 questions from the supplemental material). The midterm will be worth 40% of the final grade.

The midterm will draw from lectures 1-6 and includes lecture notes and supplemental material posted on Quercus (videos, articles). The suggested readings are not for the exam. More details about the exams will follow.

**The midterm questions and answers will not be available for students to review after the exam.**

The midterm is closed book. In order to uphold the integrity of this course during this time, we will request that you each complete a Midterm Exam Take-Home Honour Pledge Question. The completion of the pledge is mandatory and not completing will be considered as an Academic Integrity Violation issue and students' names will be sent to the Departmental Chair (DPES) for assessment. More details about the pledge submission will follow.

### **Missed Midterm Policy**

If you miss the midterm for a verifiable reason (i.e. you have a Doctor's note or have made provisions for a VERY good reason with the professor PRIOR to the mid-term), please submit the proof for your absence **via email to Dr. Stefanovic**. If the reason is medical, an official UTSC medical note must be completed by a doctor who examined you while you were ill/injured. The medical note can be downloaded at

[http://www.utoronto.ca/~registrar/resources/pdf\\_general/UTSCmedicalcertificate.pdf](http://www.utoronto.ca/~registrar/resources/pdf_general/UTSCmedicalcertificate.pdf).

You must submit appropriate documentation **within 3 business days** after the day of the regular midterm. All collected documents will be submitted to the DPES Chairs office for consideration. After checking the validity of your documentation, the day and time of the makeup midterm will be announced on Quercus. If you simply "miss" the mid-term, you will receive a mark of zero for it.

If you miss the makeup midterm with a verifiable reason after you submit the proof for your absence again (**new document with the new date**) the weight of the midterm will be transferred to the final exam (in this case your final will worth 80%).

### **Online Final Exam:**

The 2-hours final examination is worth 40% of the final grade for the course. The exam will consist of 80 Fill in the Blanks, Matching, MCQs, Multiple Dropdowns and True/False questions (60 questions from the lecture material and 20 questions from the supplemental material). **The final exam is NOT cumulative.**

The final exam will draw from lectures 7-12 and includes lecture notes and supplemental material posted on Quercus (videos, articles). The suggested readings are not for the exam. More details about the exams will follow.

The final exam is closed book. In order to uphold the integrity of this course during this time, we will request that you each complete a Final Exam Take-Home Honour Pledge Question. The completion of the pledge is mandatory and not completing will be considered as an Academic Integrity Violation issue and students' names will be sent to the Departmental Chair (DPES) for assessment. More details about the pledge submission will follow.

### **Accessibility Statement:**

Students with diverse learning styles and needs are welcome in this course. In particular, if you have a disability/health consideration that may require accommodations, 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 are available by appointment to assess specific needs, provide referrals and arrange appropriate accommodations at (416) 287-7560 or [ability@utsc.utoronto.ca](mailto:ability@utsc.utoronto.ca).

### **Other Course Policies:**

Plagiarism will not be tolerated. Each student is expected to submit **individual work** for grading. It is an academic offence to plagiarize and those who do will be subjected to University procedures (see the University calendar).

**Lecture topics and dates when the videos will be available on Quercus:**

<b>Lecture/Week 1.</b> Introduction, ground rules, expectations and course structure. Understanding the Health Effects of Environmental Hazards	Jan. 11 <sup>th</sup>
<b>Lecture/Week 2.</b> Airborne Hazards and Human Health	Jan. 18 <sup>th</sup>
<b>Lecture/Week 3.</b> Waterborne Hazards and Human Health	Jan. 25 <sup>th</sup>
<b>Lecture/Week 4.</b> Chemical Hazards and Human Health	Feb 1 <sup>st</sup>
<b>Lecture/Week 5.</b> Heavy Metals and Human Health; Case study: CCA (Chromated Copper Arsenate) wood preservative	Feb. 8 <sup>th</sup>

**READING WEEK**

**Feb. 15<sup>th</sup>**

<b>Lecture/Week 6.</b> Radiation and Electromagnetic Hazards and Human Health	Feb. 22 <sup>th</sup>
<b>Lecture/Week 7.</b> Biological Hazards and Human Health	Mar. 1 <sup>st</sup>
<b>Lecture/Week 8.</b> Foodborne Hazards and Human Health	Mar. 8 <sup>th</sup>
<b>Lecture/Week 9.</b> Toxicology - The science of Poisons	Mar. 15 <sup>th</sup>
<b>Lecture/Week 10.</b> The Science of Risk Assessment; Precautionary Principle;	Mar. 22 <sup>nd</sup>
<b>Lecture/Week 11.</b> Environmental Hazards to Specific Populations: Children and Women; Occupational Hazards; Growing Population and Overconsumption and Human Health; War and Human Health;	Mar. 29 <sup>th</sup>
<b>Lecture/Week 12.</b> Climate change; Ozone depletion; Species Loss and Ecosystem Disruption and Human Health; Course Review	April 5 <sup>th</sup>