

"HUMAN HEALTH AND THE ENVIRONMENT"
(EESA10 H3-Y L60)

Instructor: Dr. Silvija Stefanovic

Lecture: web offering (no live lectures)

Office: EV366

Office hours: Wed. 3-5pm

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TAs: Jessie Furze

Brian Pentz

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Office: EV302

Office hours: on Blackboard soon

Email: on Blackboard soon

Student Facilitator: Lianne Pusung

Email: on Blackboard soon

Discussion sessions: on Blackboard

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 the 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.

Text:

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

Lecture notes:

The lecture slides will be posted in *.pdf format on the Blackboard. You will require Adobe Reader to open the files (available free of charge at www.adobe.com).

Weboption Lectures

This course is web offering course (NO LIVE LECTURES). The videos will be posted weekly. You can access the online videos by logging in at: <https://lecturecast.uts.utoronto.ca/login.php>. using your UTSC ID or UTOR ID and password. All lectures will remain posted until the end of the semester.

Very Important note:

The lectures you will watch online are recorded during the 2016 Winter term so PLEASE DISREGARD ANY DISCREPANCIES (possibly some technicalities such as dates, wrong TA' names, midterm marks discussion etc.) found on the current course and this past course.

Course email policy:

It is completely understandable that this course is offered as a web option course and some of you may not be able to attend Dr. Stefanovic or TA's office hours. However email is not the most effective way of teaching so if you have questions, please try to see instructors during office hours – this time is for you so please do not hesitate to use it. Dr. Stefanovic will be responsible for answering questions related to the lectures (midterm and final exam) while teaching assistants will be available for answering questions pertaining to the term assignments.

Grading:

Assignments (2):	30 % (15% each)
Mid-term Examination:	30%
Final Examination:	40%

Assignments:

There are no mandatory tutorials in this course. TAs will hold office hours and answer your emails to help with assignments. See Blackboard to find out the name of your TA, her/his office hours and contact email. I suggest that you attend your TA's office hours (*always the same TA*) regularly since she/he will mark your assignments. If you have a conflict you can see another TA but you have to submit the assignment to your, designated, TA.

You will have two assignments during the term, worth 30% of the final grade (15% each). You will be able to access the problem sheets on Blackboard at the times detailed below. More details on the assignments will be circulated during the term.

<i>Topic</i>	<i>On the Blackboard</i>	<i>Submission Due</i>
Assignment #1 (Related to Lecture 1-5)	May 16 th	May 30 th , 5pm
Assignment #2 (Related to Lecture 6-12)	July 4 th	July 18 th , 5pm

You should use a word processor for your written responses. The document must bear a student's name and number, date and TAs name.

In-reached program opportunity:

Student Facilitator will organize *voluntary* small-group discussions on Blackboard that will help students with challenging concepts and ideas presented in the course. They will find and provide students in the course with supplemental new media resources (e.g. videos, articles) and post these materials on Blackboard.

Midterm

The 1-hour mid-term examination will be held during the mid-term period, exact time, date and room TBA. The exam will consist of multiple-choice and true-false choice and will be worth 30% of the final grade.

The midterm will draw from lectures 1-5 and assignments and includes lecture notes, assigned textbook or other readings and *any* material presented in the classroom. Information from the textbook and other resources not directly covered in class will not be tested on exams. More details about the exams will follow.

Final Exam

The 1 hour final examination is worth 40% of the final grade for the course. It will be a combination of multiple choice and true-false choices. *The final exam is NOT cumulative.*

The final exam will draw from lectures 6-12 and assignments and includes lecture notes, assigned textbook or other readings and any material presented in the classroom. Information from the textbook and other resources not directly covered in class will not be tested on exams. More details about the exams will follow.

Other Course policies

Late assignments will not be accepted and assigned a grade of zero. *Extensions will be granted ONLY with medical note or under exceptional circumstances. Your TA must be informed about that immediately.*

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

Lecture topics:

	Week of
1. Introduction, ground rules, expectations and course structure. Understanding the Health Effects of Environmental Hazards	May 2 nd
2. Airborne Hazards and Human Health	May 9 th
3. Assignment #1 Tutorial; Waterborne Hazards and Human Health	May 16 st
4. VICTORIA DAY - University Closed	May 23 rd
5. Chemical Hazards and Human Health	May 30 th
6. Heavy Metals and Human Health. Case study: CCA (Chromated Copper Arsenate) wood preservative	June 6 th
7. Radiation and Electromagnetic Hazards and Human Health	June 13 th
8. Biological Hazards and Human Health	June 20 th
9. Foodborne Hazards and Human Health	June 27 th
10. Assignment #2 Tutorial; Toxicology science	July 4 th
11. Science of Risk Assessment, Precautionary Principle	July 11 th
12. Environmental Hazards to Specific Populations: Children and Women; Occupational Hazards; Growing Population and Overconsumption and Human Health, War and Human Health	July 18 th
13. Climate change, Ozone depletion, Species Loss and Ecosystem Disruption and Human Health; Final exam preparation	July 25 th
14. CIVIC HOLIDAY- University Closed	Aug. 1 st

Associated Readings in Maxwell's Text:

Lec. 1- Chapter 1

Lec. 2- Chapter 4 (pg. 128-143), Chapter 5 (pg. 211-213), Chapter 7 (pg. 328-335)

Lec. 3- Chapter 7 (pg. 303-309)

Lec. 4- Chapter 5 (196-205)

Lec. 5- Chapter 4 (pg. 139-143), Chapter 5 (pg. 207-210)

Lec. 6- Chapter 3 (pg. 106-114), Chapter 2 (pg. 20-23), Chapter 7 (pg. 335-337)

Lec. 7- Chapter 3 (pg. 72-104)

Lec. 8- Chapter 6 (pg. 239-250, 268-270)

Lec. 9- Chapter 2 (pg. 18-37)

Lec. 10- Chapter 2 (pg. 52-66)

Lec. 11- Chapter 5 (214-216), Chapter 7 (337-339)

Lec. 12- Chapter 4 (pg.143-156), Chapter 5 (205-206)