

"HUMAN HEALTH AND THE ENVIRONMENT"
(EESA10 H3-Y L99)

Instructor: Dr. Silvija Stefanovic

Lecture: web-offering (no live lectures)
Office: EV366
Office hours: Fri. 11-12pm
(start May 17)

Email: silvija.stefanovic@utoronto.ca
Phone: 416-208-4873

TAs: Janessa Griffith (Lectures 1-6)
Brian Pentz (Lectures 7-12)

Office: NA
Office hours: NA
Emails:
janessa.griffith@mail.utoronto.ca
brian.pentz@mail.utoronto.ca

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 Quercus. You will require Adobe Reader to open the files (available free of charge at www.adobe.com).

Web-offering Lectures

This course is web-offering course (NO LIVE LECTURES). The videos will be posted weekly, normally on Wednesdays at noon. 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 2019 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.

Grading:

Discussion Board	10%
Mid-term Examination	45% (30% lecture material; 15% supplemental material and discussion board)
Final Examination	45% (30% lecture material; 15% supplemental material and discussion board)

Supplemental Material and Discussion Board

TAs will post supplemental media resources (e.g. videos, articles) on Quercus weekly for the students to review. These resources will be available to students after the regular lecture, at 2pm on Wednesdays. TAs will initiate and regularly monitor Discussion Board linked to the posted material. In order to incentivize your efforts on discussion board you will be divided into twelve groups as per your last name (see Quercus). Every week people in each group will be required to answer the questions on discussion board in order to get their mark.

You will be credited only for the week when it was mandatory for you to take part in the discussion. For example, people in group of Lecture 7 will not receive their mark if they miss answering during week of Lecture 7 and then answer during week of Lecture 8.

You can post only your opinion on the question asked during 3 days (until Saturday at 9pm) after the supplementary material is posted. 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 in order to get the mark) if you like before due date on Saturdays at 9pm. Please make sure you post the specific answer and not your notes in the response.

You will still be responsible to watch all the supplementary videos or reading material from lecture 1-12, as they will be testable for your midterm and final exam.

Midterm

The 1.5-hour mid-term examination will be held during the mid-term period, exact time, date and room TBA. The exam will consist of 90 multiple-choice and true-false choice (45 questions from the lectures, 15 questions from the textbook and 30 questions from the supplementary material and discussions). The midterm will be worth 45% of the final grade.

The midterm will draw from lectures 1-6 and includes lecture notes, associated readings in Maxwell's Text and supplemental material and discussions posted on Quercus (videos, articles). Information from the textbook not directly covered in class will not be tested on the exam. More details about the exams will follow.

Missed Midterm Policy

If you miss the midterm with 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. 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.

You must submit appropriate documentation within 5 business days after the day of the regular midterm. All collected documents will be submitted to DPES Chairs office for consideration. After approval, 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 (the same as above) you will write a cumulative final exam.

Final Exam

The 1.5-hour final examination is worth 45% of the final grade for the course. The exam will consist of 90 multiple-choice and true-false choice (45 questions from the lectures, 15 questions from the text book and 30 questions from the supplementary material and discussions). *The final exam is NOT cumulative.*

The final exam will draw from lectures 7-12 and includes lecture notes, associated readings in Maxwell's Text and supplemental material and discussions posted o Quercus (videos, articles). Information from the textbook not directly covered in class will not be tested on the exam. More details about the exams will follow.

Course email policy:

It is completely understandable that this course is offered as a web offering course and some of you may not be able to attend Dr. Stefanovic office hours. However, email is not the most effective way of teaching so if you have questions, please try to see instructor 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). TAs will not hold office hours but they will answer the questions pertaining to supplemental materials through Discussion Board.

Lecture topics:

1. Introduction, ground rules, expectations and course structure. Understanding the Health Effects of Environmental Hazards	May 8
2. Airborne Hazards and Human Health	May 15
3. Waterborne Hazards and Human Health	May 22
4. Chemical Hazards and Human Health	May 29
5. Heavy Metals and Human Health. Case study: CCA (Chromated Copper Arsenate) wood preservative	June 5
6. Radiation and Electromagnetic Hazards and Human Health	June 12
7. READING WEEK (no classes)	June 19
8. Biological Hazards and Human Health	June 26
9. Foodborne Hazards and Human Health	July 3
10. Toxicology science	July 10
11. Science of Risk Assessment, Precautionary Principle	July 17
12. Environmental Hazards to Specific Populations: Children and Women; Occupational Hazards; Growing Population and Overconsumption and Human Health, War and Human Health	July 24
13. Climate change, Ozone depletion, Species Loss and Ecosystem Disruption and Human Health; Final exam preparation	July 31

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)