

Course Outline

GEOG/ENVIR SC 4HH3

Environment and Health

School of Geography and Earth Sciences
McMaster University
Winter 2017

Class times: Monday, Wednesdays (11:30 to 12:20) and Friday (1:30 to 2:20)
Class location: BSB 119
Instructor: Niko Yiannakoulias
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Office hours: Wednesday 9am to 10am
Teaching assistants: Shelby Sturrock (sturrosl@mcmaster.ca) and Basant Mostafa (mostafab@mcmaster.ca)

1. Course objectives

In this class students will:

- Enhance their understanding about the history, impact and science of environment and human health
- Learn about the methods used in environmental health research and practice
- Learn about communication in environment and health by writing reports and making an excellent presentation

2. Course readings

Readings are available in a custom course ware pack available from the bookstore.

3. Course assessment

- Assignment 1 (General health risk assessment report) (20%)
- Seminar presentation (25%)
- Assignment 2 (Site specific health risk assessment report) (30%)
- Final exam (25%)

3.1 General risk assessment report (20%)

This is a 1000-1500 word report on an environmental hazard. The purpose of the report is to find and then summarize literature on an environmental hazard of your choice. The literature must be based on a search of peer reviewed journal articles and official government reports (from Health Canada, the CDC and other major agencies). In this report you are to describe the 1) source and properties of a hazard 2) the route of exposure and concentration of exposure thought to be harmful to humans and 3) the suspected relationship between exposure to hazard and a *specific* health outcome.

3.2 Seminar presentation (25%)

Each student will deliver a short (3 minute), engaging and thoughtful presentation. There will be 10 presentations each seminar, all within a thematic area. You will be graded on presentation style and substance. Because the presentation is short, you should rehearse your presentation ahead of time.

In addition to preparing a presentation, each student must create **one** powerpoint slide, as well as a **one** page summary of their argument to hand into the TAs for grading. Both of these **must be emailed to your TAs at least 24 hours prior** to the seminar. If handed in late, the student will receive a mark penalty, and will not be allowed to use the slide for their presentation.

3.3 Site specific health risk assessment report (30%)

The second assignment is comprised two sections. The first section is the first assignment (revised based on comments). The second section is an assessment of the risks of a specific hazard (the same one identified and described in assignment 1) in a specific community. The community must be a neighbourhood in a Canadian city. In this report, you must 1) compare the level of exposure to hazard in this neighbourhood to other neighbourhoods in the city 2) identify the most vulnerable population in the neighbourhood and 3) assess the risk of the specific health outcome to this most vulnerable population given the likely to hazard. Because the two assignments are linked, students are advised to plan the project early on.

The final report **must be less than 2500** words in total length. The final report should also include a map of the study area and a final risk assessment table. Students are encouraged to also include useful graphical elements (**up to** three graphs and/or tables) in their report, ideally all of which are created by the student.

The report must be properly sourced. Any report missing sources or improperly referencing sources will lose marks. The report must also look professional.

3.4 Final exam (25%)

There is a final exam in this course. Details will be discussed in class prior to the end of term. Material from lectures, seminars and assigned readings will be covered on the exam.

4. Avenue 2 Learn

In this course we will be using Avenue 2 Learn. Students should be aware that when they access the electronic components of this course, private information such as first and last names, user names associated with McMaster e-mail accounts, and program affiliation may become apparent to all other students in the same course. The available information is dependent on the technology used. ***Continuation in this course will be deemed consent to this disclosure.*** If you have any questions or concerns about such disclosure, please discuss this with the course instructor.

Questions related to course content (for example, about lectures and reading material) should be posted online. All students registered in this course should have access to the online system. Speak to the instructor if you have difficulties with access.

5. Classroom civics

1. Attendance in this course is considered mandatory. If you miss a lecture, it is your responsibility to get notes / details about missed material from your classmates.
2. Electronic submissions of assignments, papers, etc. are not accepted.
3. The instructor puts notes on Avenue to Learn at his discretion, and has the right to stop posting notes at any time throughout the term.
4. Students are **not permitted** to use an audio and/or video recording device to record lectures. Students who do so will be reported to the academic integrity office

6. Policy on late/missed assignments

- *All late assignments receive a 15%/day late penalty.*
- *For absences lasting up to 5 days or assignments up to 5 days late that are worth less than 25% of mark:* (definition of days late includes Saturdays but not Sundays)
 - Use the McMaster student absence form (MSAF) on-line, self-reporting tool. Undergraduate students may report absences lasting up to 5 days and may also request relief for missed academic work provided the work is worth less than 25% of grade. The submission of medical or other types of supporting documentation is normally not required. Students may use this tool to submit a maximum of one request for relief of missed academic work per term. Students **must immediately (within 5 days) follow up with me via email** regarding the nature of the relief. Failure to do so will negate the opportunity for relief. Using the MSAF system does not guarantee relief for missed or late work.
- *For absences from classes lasting more than five days or assignments/exams worth 25% or more of final mark:*
 - Students who are absent more than five days cannot use the on-line, self-reporting tool to request relief. Assignments or exams worth 25% or more of the final mark cannot use the self reporting tool to request relief. On these occasions, students **MUST** report to their Faculty Office to discuss their situation and will be required to provide **appropriate** supporting documentation.

7. Policy regarding academic dishonesty

Academic dishonesty consists of misrepresentation by deception or by other fraudulent means and can result in serious consequences, e.g., the grade of zero on an assignment, loss of credit with a notation on the transcript (where notation reads “Grade of F assigned for academic dishonesty”), and/or suspension or expulsion from the University.

It is your responsibility to understand what constitutes academic dishonesty. For information on the various kinds of academic dishonesty, please refer to the Academic Integrity Policy, specifically Appendix 3, located at: <http://www.mcmaster.ca/univsec/policy/AcademicIntegrity.pdf>

The following illustrates only three forms of academic dishonesty:

1. Plagiarism, e.g., the submission of work that is not one’s own or for which other credit has been obtained
2. Improper collaboration in group work.

3. Copying or using unauthorized aids in tests and examinations.

Instructors in this course will be using software designed to identify instances of plagiarism.

8. Appealing Marks

If you wish to appeal an assignment mark, the appeal must be issued to the instructor within *seven* days (inclusive) after the assignment was handed back in class. **Assignments may be remarked in their entirety at the complete discretion of the instructor.** Students must submit their appeal in written form along with the original marked version of the assignment/exam into the course drop box. Marks may go up or down after re-grading.

9. Changes to the course outline

The instructor and university reserve the right to modify elements of the course during the term. The university may change the dates and deadlines for any or all courses in extreme circumstances. If either type of modification becomes necessary, reasonable notice and communication with the students will be given with explanation and the opportunity to comment on changes. It is the responsibility of the student to check their McMaster email and course websites weekly during the term and to note any changes.

10. Term Calendar

Date	Lecture	Readings
January 4	Introduction	
January 6	History, theory and basic concepts	
January 9		
January 11		
January 13		
January 16		
January 18	Study design	Morgenstern
January 20	Seminar 1	
January 23	Study design	Buck and Aron
January 25		
January 27	Seminar 2	
January 30	In class tutorial on assignments	
February 1	Study design	
February 3	Seminar 3	
February 6	Quantifying risk	
February 8		
February 10	Seminar 4	
February 13	Quantifying risk	
February 15		
February 17	Assignment #1 is due February 17th in class Seminar 5	
February 27	Quantifying risk	Klassen and Watkins
March 1		
March 3	Seminar 6	
March 6	Pathology and toxicology	
March 8		
March 10	Seminar 7	
March 13	Pathology and toxicology	
March 15		
March 17	Seminar 8	Sexton, Callahan and Bryan
March 20	Exposure	
March 22		
March 24	Seminar 9	
March 27	Exposure	
March 29		
March 31	Seminar 10 Assignment #2 is due March 31st in class	Wing
April 3	Health risk analysis	
April 5	Health risk analysis	