

# Course Outline

## GEOG/ENVIR SC 4HH3

### *Environment and Health*

School of Geography and Earth Sciences  
McMaster University  
*Fall 2018*

Class times: Thursday and Friday, 2:30 to 3:30 pm  
Tutorials: Once per week (one hour)  
Class location: BSB 106  
Instructor: Niko Yiannakoulias  
Office: GSB 204  
Phone: X20117  
Email: [yiannan@mcmaster.ca](mailto:yiannan@mcmaster.ca)  
Office hours: Wednesday at 9am  
Teaching assistants: Cathy Slavik, Connor Darlington

#### **1. Course objectives**

In this class students will:

- Enhance their understanding about scientific and social dimensions of environment and human health
- Learn about the methods used in environmental health research and practice
- Learn about the interpretation and communication of environmental health information

#### **2. Tutorials**

Most weeks there are also one-hour mandatory tutorials (see schedule below). You are required to attend tutorials. You are also expected to do some work in preparation for some tutorials--in most cases this is a very short reading, or watching a YouTube video.

#### **3. Course assessment**

- Assignment 1 (General health risk assessment report) (due October 5th, **20%**)
- Assignment 2 (Site specific health risk assessment report) (due November 23rd, **35%**)
- Tutorial exercises (total **20%** from 9 tutorials)
- Final exam (**25%**)

##### **3.1 General health risk assessment report (due October 5th, 20%)**

This is a ~ **1000** word report that assesses the general risk of a potential hazard to human health. The purpose of the assignment is to reinforce research skills, as well as help students write a clear and well organized report. Research should be based on peer reviewed journal articles and official government reports (from Health Canada, the CDC and other major agencies). *Students will be able to pick a topic from a proposed topic list, or choose their own topic if approved by the instructor and their TA.*

**Blackout period: students must ask assignment-related questions of TAs or the instructor prior to the week of October 1 - October 5th. We will not answer any assignment related questions during the week the assignment is handed in**

3.2 Site specific health risk assessment report (due November 23rd, 35%)

This is a site-specific assessment of the risks of a specific hazard in a specific community. *Students will be able to pick a topic from a proposed topic list, or choose their own topic if approved by the instructor and their TA.* Your job in this assignment is to assess the risks to a community in a way that is rigorous, accurate and informative. The community must be a specific neighbourhood in a Canadian city. This assignment must include 1) a relevant description of the neighbourhood, 2) an estimate of the relative risk of the health outcome associated with exposure to hazard based on peer-reviewed literature 3) an assessment of exposure to hazard in the neighbourhood and 4) a conclusion about the health risks attributable to exposure to hazard in the neighbourhood.

The final report should be ~ **2000** words in total length (excluding references). The final report should also include a map of the neighbourhood 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. Research must be based on peer reviewed journal articles and official government reports (from Health Canada, the CDC and other major agencies).

**Blackout period: students must ask assignment-related questions of TAs or the instructor prior to the week of November 19 - November 23rd. We will not answer any assignment related questions during the week the assignment is handed in.**

### 3.3 Tutorial exercises (20%)

All tutorials involve an exercise, quiz, discussion or other in-class activity. The purpose is to reinforce content, cover some course content in more detail, and cover some ideas we can't get to in lectures. For some tutorials you may be required to do short readings or other work in preparation ahead of time.

There are no required readings for preparing students for the final exam, or to support lectures. However, students are expected to do a little preparation before most tutorials. This will involve a very short reading or watching a short video. None of this preparation should take more than a 15 minutes of your time. This work is important to prepare you for the tutorials, and all students are asked to complete these tasks prior to class. The following table outlines the required work ahead of the tutorials.

Tutorial grading is based on the work done in the tutorial session, including handed in material and participation in the tutorial discussion.

<b>Tutorial date</b>	<b>Link to material to read/view prior to class (links are also available on Avenue to Learn)</b>
<b>Tutorial #1</b>	None
<b>Tutorial #2</b>	YouTube video on the economics of smoking from the UK Centre for Tobacco & Alcohol Studies <a href="https://www.youtube.com/watch?v=OpVpOMFL7fA">https://www.youtube.com/watch?v=OpVpOMFL7fA</a>
<b>Tutorial #3</b>	BBC article <a href="https://docs.google.com/document/d/1KMxVgeVfZIJ36dXm6IzF6jxX7XqchtR2cQFbHRZyW-g/edit?usp=sharing">https://docs.google.com/document/d/1KMxVgeVfZIJ36dXm6IzF6jxX7Xqc htR2cQFbHRZyW-g/edit?usp=sharing</a>
<b>Tutorial #4</b>	YouTube episode of Healthcare Triage <a href="https://www.youtube.com/watch?v=bJKkFJyDIYI">https://www.youtube.com/watch?v=bJKkFJyDIYI</a>
<b>Tutorial #5</b>	Article from The Conversation <a href="https://theconversation.com/the-10-stuff-ups-we-all-make-when-interpreting-research-30816">https://theconversation.com/the-10-stuff-ups-we-all-make-when- interpreting-research-30816</a>
<b>Tutorial #6</b>	None
<b>Tutorial #7</b>	NPR video on measuring air pollution <a href="https://www.youtube.com/watch?v=jsRAnf7BP1k">https://www.youtube.com/watch?v=jsRAnf7BP1k</a>
<b>Tutorial #8</b>	YouTube TEDx lecture <a href="https://www.youtube.com/watch?v=eJXIG8_bRbo">https://www.youtube.com/watch?v=eJXIG8_bRbo</a>
<b>Tutorial #9</b>	Hamilton Spectator article <a href="https://docs.google.com/document/d/1p-QOsfoXFY-Y9I5Du62sQuSPPV_Y0vX8fo9DA9E8js/edit?usp=sharing">https://docs.google.com/document/d/1p-QOsfoXFY- Y9I5Du62sQuSPPV_Y0vX8fo9DA9E8js/edit?usp=sharing</a>

### 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.

### 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 email 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 unless otherwise stated.
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 late assignments up to 3 days late that are worth less than 25% of mark:***  
(definition of days late includes weekend days)
  - Use the McMaster student absence form (MSAF) on-line, self-reporting tool. Undergraduate students may report absences lasting up to 3 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 three days or assignments/exams worth 25% or more of final mark:***
  - Students who hand in an assignment more than 3 days late, or for an assignment/exam worth 25% or more of their final grade late cannot use the on-line, 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**

You are expected to exhibit honesty and use ethical behaviour in all aspects of the learning process. Academic credentials you earn are rooted in principles of honesty and academic integrity. Academic dishonesty is to knowingly act or fail to act in a way that results or could result in unearned academic credit or advantage. This behaviour can result in serious consequences, e.g. the grade of zero on an assignment, loss of credit with a notation on the transcript (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 types of academic dishonesty please refer to the Academic Integrity Policy, located at [www.mcmaster.ca/academicintegrity](http://www.mcmaster.ca/academicintegrity).

The following illustrates only three forms of academic dishonesty:

- Plagiarism, e.g. the submission of work that is not one’s own or for which other credit has been obtained.
- Improper collaboration in group work.
- Copying or using unauthorized aids in tests and examinations.

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

In addition, any content that is not written by a student (whether plagiarized or attributed in quotes) will be ignored in the content of any assignment. So in addition to the above measures, all content not written by the student will not be marked/graded, and therefore will not contribute to the content of an assignment.

## **8. Academic accommodation of students with disabilities**

Students with disabilities who require academic accommodation must contact Student Accessibility Services (SAS) to make arrangements with a Program Coordinator. Student Accessibility Services can be contacted by phone 905-525-9140 ext. 28652 or e-mail [sas@mcmaster.ca](mailto:sas@mcmaster.ca). For further information, consult McMaster University’s Academic Accommodation of Students with Disabilities policy

## **9. Academic accommodation for religious, indigenous or spiritual observances**

Students requiring academic accommodation based on religious, indigenous or spiritual observances should follow the procedures set out in the RISO policy. Students requiring a RISO accommodation should submit their request to their Faculty Office normally within 10 working days of the beginning of term in which they anticipate a need for accommodation or to the Registrar's Office prior to their examinations. Students should also contact their instructors as soon as possible to make alternative arrangements for classes, assignments, and tests.

## **10. Extreme circumstances**

The University reserves the right to change the dates and deadlines for any or all courses in extreme circumstances (e.g., severe weather, labour disruptions, etc.). Changes will be communicated through regular McMaster communication channels, such as McMaster Daily News, A2L and/or McMaster email

## **11. Appealing Marks**

If you wish to appeal an assignment mark, the appeal must be issued to the instructor within *seven* days (inclusive) of the assignment hand-back.

**Re-marking** of assignments due to addition errors will be considered without an official re-grade of the assignment. For such re-marking, simply hand in the assignment to the drop box with a note indicating the addition error.

If students want material in their assignment **re-graded**, they must submit their appeal in written form along with the original marked version of the assignment/exam into the course drop box. It is at the discretion of the instructor to have any assignment re-graded. If the assignment is re-graded, it will be re-graded in its entirety. Marks may go up or down after re-grading. To be eligible for a re-grade, students must also ensure that they have not discussed any details of their specific assignment with the TAs or instructor between when the assignment was handed back, and the time when it is handed in for a re-grade. This is to ensure the integrity of the re-grading process. If a student wants feedback on grading, they are welcome to seek it, but doing so will automatically exclude them from having their assignment re-graded.

## **12. 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.

### 13. Course schedule

Date	Lecture content	Tutorials
September 6	Introduction, history and theory	<b>No tutorial</b>
September 7		
September 13		
September 14	HEO model	<b>September 10 - 14</b> Tutorial #1
September 20		<b>September 17 - 21</b> Tutorial #2
September 21	Health, disease and illness	<b>September 24 - 28</b> Tutorial #3
September 27		
September 28	Study design	<b>October 1 - 5</b> No Tutorial
October 4		
October 5		
<b>Assignment #1 due date</b>		
October 18	Quantifying risk	<b>October 15 - 19</b> Tutorial #4
October 19		
October 25		
October 26		
November 1		
November 2	Pathology, toxicology and exposure	<b>October 22 - 26</b> Tutorial #5
November 8		
November 9		
November 15		
November 16		
November 22		
November 23	Risk analysis	<b>October 29 - November 2</b> Tutorial #6
<b>Assignment #2 due date</b>		
November 29		
November 30		<b>November 5 - November 9</b> Tutorial #7
		<b>November 12 - November 16</b> Tutorial #8
		<b>November 19 - November 23</b> No tutorial
		<b>November 26 - November 30</b> Tutorial #9