

**NRSC 221 / GEOG 221 Environment and Health
Fall 2017**

(3 credits: Monday 11:30-13:00 and Friday 8:30-10:00)

Instructors: Dr. Nancy Ross, Department of Geography
Associate Vice Principal (Research and Innovation)
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Dr. Ian B. Strachan, Department of Natural Resource Sciences
Associate Dean (Graduate Education)
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Teaching Assistant: Gail MacInnis, Department of Natural Resource Sciences
Office hours: TBA

Course Prerequisite: none

Content and learning outcomes:

Environments, both physical and social, are fundamentally implicated in the health of human populations. These environments are constantly in flux but the rapidity of change of two of these – the global climate and the urbanization of populations warrant special attention. A changing climate will likely bring increased frequency and duration of temperature extremes, exacerbated by the physical properties of urban environments (e.g., the urban heat island effect) and the concentration of atmospheric pollutants in urban landscapes. The diversity of populations concentrated within cities means that some groups are better equipped than others to ward off the health effects of environmental exposures. This course introduces physical and social environments as factors in the production of human health, with emphasis on the physical properties of the atmospheric environment as they interact with diverse human populations in urban settings. Students completing this course should have gained an appreciation of the merit of interdisciplinary approaches in understanding and remedying contemporary human health issues that have environmental etiologies.

Method: Two 1.5 hour lectures per week; assignments; examinations.

Course Requirements:

All lecture materials, assignments and readings (except the book) will be available through MyCourses. Students are expected to regularly check the course page for updates and information that is essential for your success in this class.

Assignments:

There will be three assignments to be completed individually which will provide you with the opportunity to fine tune and demonstrate your understanding of concepts described during the lectures. The assignments are designed around the major course themes. The MyCourses page will have links to the assignments where you can download the necessary materials.

Required book (available through the bookstore or online retail stores):

- 1) Klinenberg E (2003). Heatwave: Social Autopsy of Disaster in Chicago. Chicago: U. of Chicago Press. Read this leisurely throughout the first half of the course like you would a good novel.

Other Readings: available through MyCourses

We will explore the interrelated concept of Environment and Health through the examination of several topics within which we will link the physical and social environments.

Selected Topics to be covered:

- Hurricanes viewed through natural and social frames
- Environmental burden of disease
- Air pollution
- Ultraviolet radiation and sun exposure
- Urbanization
- Urban heat islands
- Environmental stressors (odour and noise)

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| <u>Evaluation:</u> | 40% | Three assignments: Assignment 1: Air pollution; worth 10%; due before Thanksgiving (date TBA) Assignment 2: Built environment; worth 18%; due in November (date TBA) Assignment 3: Natural and social frames; worth 12%; due last day of class |
| | 25% | Mid-term Examination Monday October 23, 2017 (in class) |
| | 35% | Final Examination (December exam schedule date TBA) |

Policy on lateness:

Assignments are due at the beginning of class on the date specified on the assignment when handed out. In fairness to those who complete assignments on time, a penalty of 10% per day will be imposed. No assignments will be accepted for grading once any graded assignments have been returned. However, circumstances occasionally arise which will be taken into consideration. If you are having academic/personal difficulty – come and discuss your situation with the course instructors in advance of the due date!

Sickness/illness during the term: Please visit Student Services (CC1-124) at Macdonald Campus if you are suffering from any mental or physical health-related issues during the term. If you need to seek accommodation for in-course assignments, for medical or other emergencies, please bring medical documentation to the Student Affairs Office (106 Laird Hall).

McGILL UNIVERSITY VALUES ACADEMIC INTEGRITY. THEREFORE ALL STUDENTS MUST UNDERSTAND THE MEANING AND CONSEQUENCES OF CHEATING, PLAGIARISM AND OTHER ACADEMIC OFFENCES UNDER THE CODE OF STUDENT CONDUCT AND DISCIPLINARY PROCEDURES (see www.mcgill.ca/students/srr/honest/ for more information).

In accord with McGill University's Charter of Students' Rights, students in this course have the right to submit in English or in French any written work that is to be graded.

In the event of extraordinary circumstances beyond the University's control, the content and/or evaluation scheme in this course is subject to change.
