LIFESCI 3Q03 — Global Human Health and Disease

Instructor
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Office location and hours
BSB 201A/D
Mondays and Thursdays 10-12 (drop in any time)
Tuesdays and Fridays 1-3 (please email in advance)

Class times
Tuesdays 9:30-10:20
Fridays 9:30-11:20

Course description
In this course, we’ll explore some of the most pressing issues in global health. We’ll begin by examining deadly disease outbreaks around the world. We’ll then shift our focus to vaccine-preventable diseases here at home and discuss some of the factors affecting vaccination rates. We’ll also take a look at how the overuse of antibiotics is threatening human health. Later in the semester, we'll explore the effects of conflict and climate change on human health. We’ll look at maternal and infant health and discuss some of the ethical issues around genetic screening. We’ll examine mental health around the world with a focus on depression and addiction. And we’ll discuss the role of technology in monitoring, preventing and treating disease.

Learning objectives
• To understand some of the greatest threats to human health around the world;
• To appreciate how scientific discoveries and policy changes have improved human health over time;
• And to consider how scientific communication and technology can shape human health.

Required reading
Instead of using a textbook, we’ll review multimedia news coverage that provides an up-close look or an in-depth analysis of these important issues. I’ll provide links in advance of each class on Avenue to Learn. Please bring a laptop or smartphone to class if you can.
Course evaluation

- Exam on infectious diseases: 20%
- Exam on maternal, infant and mental health: 20%
- Writing assignment 1: 20%
- Writing assignment 2: 20%
- Group presentation: 20%

Topic schedule (subject to change)

Jan 5: Introduction to the course and cholera
Jan 9: Ebola
Jan 12: HIV and Zika
Jan 16: Respiratory viruses
Jan 19: Vaccine-preventable diseases
Jan 23: Recap, writing assignment time
Jan 26: Antibiotics, writing assignment time
Jan 30: First writing assignment due, exam review
Feb 2: Exam review, climate change and human health
Feb 6: Exam on infectious diseases
Feb 9: Food and water security
Feb 13: Conflict and gun violence
Feb 27: Second writing assignment due, pregnancy and maternal health
March 2: Infant health and screening ethics
March 6: Mental health trends around the world
March 9: Addiction, stigma
March 13: Exam review
March 16: Exam on maternal, infant and mental health
March 20: Health monitoring
March 23: Technology for monitoring health
March 27: Group project work
March 30: Group project work
April 3: Group project presentations
April 6: Group project presentations

Student responsibilities

You’re expected to attend every lecture and participate fully in group projects and discussions. Exams will cover information presented during lectures and included in the required reading. I’ll provide copies of slides on Avenue to Learn and you’ll have some time during class to read and work on assignments.
Late assignments and missed exams
You’re expected to submit assignments on time and attend all scheduled exams. If you cannot, you must file a McMaster Student Absence Form. There will be a cumulative makeup exam for students who miss either exam.

Academic integrity
You’re expected to understand and adhere to the McMaster University Academic Integrity Policy and the Student Code of Conduct. All assignments will be checked for plagiarism.