GPH-GU 2230 001: Global Non-Communicable Disease Epidemiology and Control

Class Schedule: Tuesdays 4:55-6:35
Class Location: Bobst LL-139
Semester and Year: Spring 2017

Professor: Richard B. Hayes, DDS, PhD
Phone: 212-263-2722
Email: richard.b.hayes@nyumc.org

Office: 650 First Ave, Room 506
Office Hours: By Appointment
Course Assistant: NA
Course Assistant Email: NA

COURSE DESCRIPTION:
This course will focus on the considerable and increasing burden of disease due to chronic diseases, mental health, substance use (alcohol, tobacco, other drugs), risk factors (obesity, lack of physical activity), and injuries within the developing world. It will present methods for measuring the burden of non-communicable disease, review approaches to program and service development, to modify risk factors, present lessons learned from successful developing country programs, and discuss implications for health services development and international development policies.

COURSE LEARNING OBJECTIVES AND RELATED COMPETENCIES AND COMPONENTS:

<table>
<thead>
<tr>
<th>Learning Objective</th>
<th>Competency</th>
<th>Course component (lesson #, assignment, etc.)</th>
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</thead>
<tbody>
<tr>
<td>1. Understand the global burden of the most common non-communicable chronic diseases.</td>
<td>Understand common measures of disease used to characterize the global burden of disease</td>
<td>Lesson 1, 2</td>
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<td>2. Understand the impact of environmental exposures in air and water on the global burden of non-communicable chronic diseases</td>
<td>Be able to identify environmental exposures related to the global burden of disease, by disease type</td>
<td>Lessons 5, 6, 10</td>
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<td>3. Understand the impact of personal behaviors and genetics on the global burden of non-communicable diseases</td>
<td>Be able to identify personal behaviors related to the global burden of disease, by disease type</td>
<td>Lessons 3, 4, 7, 8, 9</td>
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<td>4. Understand approaches to the surveillance and prevention of the most common chronic diseases</td>
<td>Be able to identify strategies for disease monitoring and prevention, globally</td>
<td>Lessons 1-11</td>
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PRE-REQUISITES: none.

COURSE REQUIREMENTS AND EXPECTATIONS:
This course has the following components:

1) Lectures and Readings:

- Students are expected to attend all lectures. If you cannot attend a certain lecture, it is your responsibility to notify the Instructor beforehand, or, in the case of an emergency, immediately upon return. All other absences will be considered unexcused.
- If readings are assigned, they will be available to students via CLASSES. Complete reading assignments prior to class.

3) Oral Presentations, April 25 and May 2:

- Student in groups of 2-3 will give a 15 minute presentation on a significant non-communicable disease global health problem.
- Students should produce a Powerpoint presentation summarizing this work.

4) Exams:

- The mid-term exam (March 7) focuses on the first 6 lectures and reading material. The final EXAM (May 16) focuses on last 5 lectures and reading material.

GRADING RUBRIC:

<table>
<thead>
<tr>
<th>Item:</th>
<th>Percentage or Points:</th>
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<tbody>
<tr>
<td>Class participation</td>
<td>15%</td>
</tr>
<tr>
<td>Oral presentation</td>
<td>25%</td>
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<tr>
<td>Mid-term exam</td>
<td>30%</td>
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<tr>
<td>Final exam</td>
<td>30%</td>
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</tbody>
</table>
GRADING SCALE:

A:  93-100  
A-:  90-92  
B+:  87-89  
B:   83-86  
B-:  80-82  
C+:  77-79  
C:   73-76  
D+:  67-69  
D:   60-66  
F:   <60

NYU CLASSES:
NYU Classes will be used extensively throughout the semester for assignments, announcements, and communication. NYU Classes is accessible through at https://home.nyu.edu/academics

TECHNOLOGY POLICY:
• Mobile device (e.g., smart phones, pagers, etc.) ringers will be turned off or placed on vibrate prior to class.
• Laptops and tablets can be used in the classroom to take notes, make calculations, and download/read course materials.

COURSE OUTLINE:

<table>
<thead>
<tr>
<th>Date</th>
<th>Topics</th>
<th>Readings/Materials Due</th>
<th>Assignments Due</th>
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<tbody>
<tr>
<td>Jan 31</td>
<td>2. Global Challenges in Cancer Prevention</td>
<td>Bray F et al., JNCI 2015</td>
<td></td>
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<td>Feb 7</td>
<td>3. Infectious agents and chronic disease</td>
<td>Agalliu I et al. JAMA Oncol., 2016</td>
<td></td>
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<td>Feb 21</td>
<td>5. Environmental air pollution and chronic disease</td>
<td>Thurston GD et al., Env Health Persp, 2016</td>
<td></td>
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<td>Mar 7</td>
<td>MIDTERM</td>
<td></td>
<td>Exam</td>
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<td>Mar 14</td>
<td>NO CLASS, Spring Break</td>
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<td>Mar 28</td>
<td>8. Genetics and the Global Burden of NCDs</td>
<td>To be assigned</td>
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<td>Apr 4</td>
<td>9. Global Mental Health</td>
<td>To be assigned</td>
<td></td>
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Apr 11 | 10. Microbiome and Chronic Disease | Fan X et al., Gut, 2016.
Apr 18 | 11. Global Challenges in Health Care for NCDs | To be assigned
Apr 25 | Student Presentations | Presentations
May 2 | Student Presentations | Presentations
May 9 | Reading Day | 
May 16 | FINAL EXAM | Exam

READING/VIEWING LIST:

STATEMENT OF ACADEMIC INTEGRITY:
The NYU College of Global Public Health values both open inquiry and academic integrity. Students in the program are expected to follow standards of excellence set forth by New York University. Such standards include respect, honesty and responsibility. The CGPH does not tolerate violations to academic integrity including:

- Plagiarism
- Cheating on an exam
- Submitting your own work toward requirements in more than one course without prior approval from the instructor
- Collaborating with other students for work expected to be completed individually
- Giving your work to another student to submit as his/her own
- Collaborating with other students for work expected to be completed individually
- Purchasing or using papers or work online or from a commercial firm and presenting it as your own work

Students are expected to familiarize themselves with the CGPH and University’s policy on academic integrity as they will be expected to adhere to such policies at all times – as a student and an alumni of New York University.

Plagiarism

Plagiarism, whether intended or not, is not tolerated in the CGPH. Plagiarism involves presenting ideas and/or words without acknowledging the source and includes any of the following acts:

- Using a phrase, sentence, or passage from another writer’s work without using quotation marks
- Paraphrasing a passage from another writer’s work without attribution
- Presenting facts, ideas, or written text gathered or downloaded from the Internet as your own
- Submitting another student’s work with your name on it
- Submitting your own work toward requirements in more than one course without prior approval from the instructor
- Purchasing a paper or "research" from a term paper mill.
Students in the CGPH and CGPH courses are responsible for understanding what constitutes plagiarism. Students are encouraged to discuss specific questions with faculty instructors and to utilize the many resources available at New York University.

**Disciplinary Sanctions**

When a professor suspects cheating, plagiarism, and/or other forms of academic dishonesty, appropriate disciplinary action is as follows:

- The Professor will meet with the student to discuss, and present evidence for the particular violation, giving the student opportunity to refute or deny the charge(s).
- If the Professor confirms that violation(s), he/she, in consultation with the Program Director may take any of the following actions:
  - Allow the student to redo the assignment
  - Lower the grade for the work in question
  - Assign a grade of F for the work in question
  - Assign a grade of F for the course
  - Recommend dismissal

Once an action(s) is taken, the Professor will inform the Program Director and inform the student in writing, instructing the student to schedule an appointment with the Associate Dean for Academic Affairs, as a final step. The student has the right to appeal the action taken in accordance with the CGPH Student Complaint Procedure.

**STUDENTS WITH DISABILITIES:**

Students with disabilities should contact the Moses Center for Students with Disabilities regarding the resources available to them, and to determine what classroom accommodations should be made available. More information about the Moses Center can be found here. Information about the center can be found here: [https://www.nyu.edu/life/safety-health-wellness/students-with-disabilities.html](https://www.nyu.edu/life/safety-health-wellness/students-with-disabilities.html). Students requesting accommodation must obtain a letter from the Moses Center to provide to me as early in the semester as possible.