Course Title: Epidemiology of Chronic Disease

Course Number: EPID 0652

Course Location: SPH Bldg,

Course Date & Time: Wednesdays 3:00 – 5:00PM

Course Instructor: George G Rhoads MD, MPH  Professor of Epidemiology

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Office Hours: By Appointment

Course Assistant: Alexa Hendrickson

Required Course Text: Harris, RE. Epidemiology of Chronic Disease. Global Persepectives, First Edition
Jones & Bartlett Learning 2013

Course Description: In this course students are introduced to the clinical presentation, epidemiology, known causes and prevention of a number of the most prominent chronic diseases. In addition the epidemiologic study designs used to study these diseases are reviewed in detail. Each student does one 20 minute presentation to the class summarizing the findings of a journal articles dealing with some aspect of the epidemiology or prevention of the disease under discussion that day. The term paper takes the form of a grant proposal that proposes one of these study designs to address a current issue for one of the diseases, and the last class session is given over to student review groups where each group reviews the strengths and weaknesses of grants written by students in other groups. Diseases covered in the course include coronary heart disease, hypertension, stroke, prominent types of cancer, pulmonary disease, arthritis, and selected neurologic, mental health and other conditions. Students are expected to do the textbook readings before class and provide evidence of having assimilated the information either thru contributions to structured on-line discussions or by handing in notes on the reading that they prepared before class.

Selected Department Competencies Addressed: Each Department identifies competencies for each degree offered. The competencies addressed in this course for the MPH for the Department of Epidemiology include:

- Critique epidemiologic literature, assess its strengths and weaknesses and determine if conclusion(s) are supported;
Formulate a specific hypothesis and determine an appropriate study design and analysis plan;
Use epidemiologic techniques to quantitatively assess patterns and changes in disease occurrence;

Course Objectives: By the completion of this course, students will be able to:

- Discuss the clinical manifestations, comparative impact, and available methods of prevention of the major chronic diseases affecting populations in the U.S. and around the globe.
- Evaluate the strengths and weaknesses of studies of different designs and choose designs that are appropriate for different scientific purposes and different budgetary constraints.
- Outline a proposal for a realistic study of a significant issue relating to the etiology, occurrence or prevention of a chronic disease including:
  - A clearly stated hypothesis
  - A scientific justification for the study
  - A description of a setting where it could be implemented
  - A clear description of the methods
  - The anticipated outcome measures, and
  - The estimated cost

Course Requirements and Grading:

Students are expected to complete the assigned readings PRIOR TO CLASS, which will include the assigned textbook reading and usually one journal article. Each week at the beginning of class students either post discussion entries to the CANVAS on-line platform or hand in a copy of the notes they have taken on the textbook reading. This requirement is intended to increase the likelihood that everyone will be prepared. For most class sessions a set of discussion questions will be used to facilitate discussion of the disease and the article. In addition during the semester each student will make a presentation on an epidemiological or prevention aspect of a disease under discussion based on 2-3 journal articles that go beyond or update the material in the textbook. On some days we will use the last hour of class to explore a generic issue in epidemiological research.

The major written work for the course will be the preparation of a grant proposal. Each student will focus on a hypothesis relating to a chronic disease which they choose in consultation with the instructor. We will use time during class during the semester to talk about the various aspects of proposal preparation. All of the proposals will be due and posted on December 7. Proposals will be discussed by student review groups one week later, December 14.
Grading will be weighted as follows:

Class participation (quality and quantity of contributions count; must be present to participate; includes submission of reading notes and on-line discussion postings) 20%

Student presentations of journal articles in class 20%

Grant proposal 50%

Written critique of one grant proposal for last class 10%

School of Public Health Honor Code: The School of Public Health Honor Code is found in the student bulletin (sph.rutgers.edu/academics/catalog/index.html). Each student bears a fundamental responsibility for maintaining academic integrity and intellectual honesty in his or her graduate work. For example, all students are expected to observe the generally accepted principles of scholarly work, to submit their own rather than another’s work, to refrain from falsifying data, and to refrain from receiving and/or giving aid on examinations or other assigned work requiring independent effort. In submitting written material, the writer takes full responsibility for the work as a whole and implies that, except as properly noted by use of quotation marks, footnotes, etc., both the ideas and the works used are his or her own. In addition to maintaining personal academic integrity, each student is expected to contribute to the academic integrity of the school community by not facilitating inappropriate use of her/his own work by others and by reporting acts of academic dishonesty by others to an appropriate school authority. It should be clearly understood that plagiarism, cheating, or other forms of academic dishonesty will not be tolerated and can lead to sanctions up to and including separation from the Rutgers School of Public Health.

Policy Concerning Use of Recording Devices and Other Electronic Communications Systems: When personally owned communication/recording devices are used by students to record lectures and/or classroom lessons, such use must be authorized by the faculty member or instructor who must give either oral or written permission prior to the start of the semester and identify restrictions, if any, on the use of mobile communications or recording devices.