HCR 500: Introduction to Epidemiology
Fall 2013
3146 William S White Building
Lecture: Wednesdays, 4-6:45
Recitation: Wednesdays, 7-8:15

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Office hours: Thursdays 2:30-3:30 pm or by appointment

Course Texts:

Additional Epidemiologic Resources:
https://cphp.sph.unc.edu/trainingpackages/index.htm
http://www.epidemiolog.net

Course Description: This is a comprehensive course in the basic concepts, principles, and methods of epidemiologic research, and its foundational role in the field of public health. This course examines study design, quantitative measures, statistical analysis, data quality, bias, causal inference, and the application of these concepts as shown in the literature.

Course Learning Objectives:
- Understand fundamental measures of disease occurrence in populations, including incidence, prevalence, relative risk, absolute risk and incidence rates
- Understand concepts of disease variation in time, person, and place to outbreak investigations
- Understand the strengths and limitations of various epidemiologic methods to address the associations between risk factors and diseases
- Understand sources of bias in public health studies, and methods to minimize bias
- To understand the process of study planning, data collection, data analysis, interpretations, and application of study findings to public health
- To critically evaluate epidemiologic literature across substantive health interests, and determine the ability of a study to identify causal relationships

Course Format: The class will include lectures and recitations. Lectures will consist of instructor led presentations. Recitations will consist of small group work in which each group does an in-depth case study, with specific questions to be addressed for each study.
A key aspect of this course is the Blackboard website. The course materials will only be available on the website. All your written work must be submitted to me on the website. Course updates, including directions for assignments, announcements, and reminders will be announced either in class or via Blackboard. It is your responsibility to consult with your classmates if you miss class to collect any and all missed instruction. It is also your responsibility to check the course Blackboard site for course materials.

Course grades will be based on the following weighting:

- Two Exams: 30%
- Class Participation: 20%
- Homework: 25%
- Final Paper: 25%

Exams (30%): The first exam will be a take home exam. The second exam will be an in class open book-open note exam. Both will be equally weighted. Each exam will include multiple-choice, true-false, and problem solving (calculations required) questions.

Class Participation (20%) and Peer Evaluation (10%): Participation during the recitation sections is expected. All class participants are expected to be prepared prior to arrival in class, and should be engaged in the conversation during the recitation session. Students are expected to have read the articles before class, and prepared responses to the case study questions prior to arrival in class. While the instructor will lead these sessions, the groups within are responsible for functioning largely independently, using the textbook and the experience and knowledge of team members as the primary resource to engage in each exercise. The best professional teams use the resources of consultants, the literature, and their team to arrive at their own solutions.

Homework (25%): Homework assignments will be given throughout the course to support the application of concepts discussed during lecture. Assignments will be posted via Blackboard, and due at the end of the class period on the assignment due date.

Final Paper (25%): All students will have access to the same two journal articles based on current epidemiologic research. Each student is expected to critique the epidemiologic studies presented in the articles. Students will use a written set of criteria to critique the studies, and must work independently.

**Academic Integrity**

Academic honesty is expected; violations will be met with UM-Flint policy on academic misconduct. The following statements are provided in the UM-Flint Catalog (p. 38) and repeated here to reinforce the importance of maintaining academic integrity.

Academic Integrity: Intellectual integrity is the most fundamental value of an academic community. Students and faculty alike are expected to uphold the highest standards of honesty and integrity in their scholarship. No departure from the highest standards of intellectual integrity, whether by cheating, plagiarism, fabrication, falsification, or aiding and abetting dishonesty by another person, can be tolerated in a community of scholars. Such transgressions
may result in action ranging from reduced grade or failure of a course, to expulsion from the University or revocation of degree.

Plagiarism: taking credit for someone else’s work or ideas, submitting a piece of work (for example, an essay, research paper, assignment, laboratory report) which in part or in whole is not entirely the student’s own work without fully and accurately attributing those same portions to their correct source. Please note that any form of cheating will not be tolerated in this course and those students caught being dishonest will have face academic standards actions according to the University policies and procedures.

Class Writings
All written materials may be submitted as a single MS-Word document (no zipped or multiple files) double-spaced with 12 point Times New Roman or Arial font, and 1” margins on all sides. All materials written in this class need to be grammatically correct-proofed and spell-checked-and reflect scholarly writing found in peer-reviewed journals, such as the American Journal of Public Health, Health Education & Behavior, and Social Science & Medicine. Please look at peer-reviewed journals, whether these or others, for examples of scholarly writing. In addition, written materials should reflect terminology relevant to the course, and should avoid colloquial language. The file name should have your last name and then a phrase that describes what it is (e.g. "Lawrence paper").

Citations
Please be sure that you reference and cite all materials used in your assignments when necessary. All papers are written using APA (American Psychological Association) Style. Please become familiar with citing references using this style.
Tentative Course Schedule (subject to change- CHECK BLACKBOARD AT LEAST 2 DAYS PRIOR TO CLASS FOR CHANGES). Readings are available on Blackboard.

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