Indiana University
School of Public and Environmental Affairs

H322: Principles of Epidemiology
Section 29309
Fall, 2012

COURSE SYLLABUS

Instructor: Dawne DiOrio Rekas, M.P.A.
Class: T/R, 6:00 – 7:15 p.m.
Room: PY (Psychology) 109
Email: drekas@indiana.edu
Office Hours: By appointment, SPEA Room 412
Teaching Assistant: TBA
Administrative Assistant: Jennifer Mitchner, jmitchne@indiana.edu, Room 460 SPEA 855-7980

Course Overview

The field of epidemiology, its history, methods and contributions to public health is introduced for undergraduate students in health studies. The discipline’s applications in health services, health research, public health prevention and control of illness, and community and clinical interventions are examined.

The overall purpose of this course is to introduce public health students to epidemiology so that they may understand how epidemiology contributes to: (1) assessing the public health importance of diseases; (2) identifying factors that cause diseases; (3) describing the natural history of diseases; and (4) evaluating procedures for studying, preventing and controlling diseases. After completing this course, students should be able to understand the basic concepts, methods, and nomenclature of epidemiology, and the application of these concepts and methods to current public health problems. This course introduces the undergraduate student to the basic principles and methods used in epidemiology.

Course Goals and Objectives

Students will gain an understanding of the fundamental concepts of epidemiology and its role in public health investigations; as well as an understanding and interpretation of public health data for community health monitoring. Measures of health status, descriptive and analytical epidemiology, and terminology are introduced. Students will practice applying principles learned to critically analyze conclusions communicated by professional and popular media sources concerning health problems.
This course does not require prior knowledge of human diseases or their causal factors, and will briefly introduce etiologic relationships in areas of infectious and chronic diseases as illustrations to common public health problems in community settings. However, students will be expected to develop a working familiarity with several etiologic relationships in human disease or health conditions. Issues of human subjects’ protection, and applications of epidemiologic methods to needs assessment, program planning and evaluation and analysis in applied settings are introduced.

Course content will support the Undergraduate Public Health Learning Outcomes (http://www.asph.org/document.cfm?page=1083#Undergraduate) identified by the Association of Schools of Public Health by addressing the following competencies:

1.2 Describe risk factors and modes of transmission for infectious and chronic diseases and how these diseases affect both personal and population health
1.5 Discuss the role of gender, race, ethnicity, and other evolving demographics in affecting population health
2.1 Describe how the methods of epidemiology and surveillance are used to safeguard the population’s health
2.8 Assess the source and quality of health information and data, as related to individual and community health

**Required Texts and Reading Material:**

2. Oncourse website: Selected materials for exercises, guidelines and discussion will be made available to the class through Oncourse website.

Students will also need a calculator (non-scientific) for assignments and in-class participation.

**Student Evaluation:**

Students will be asked to demonstrate understanding of epidemiologic theory, methods and their applications through the following:

<table>
<thead>
<tr>
<th>Activity</th>
<th>Contribution to final grade</th>
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<tbody>
<tr>
<td>Class participation</td>
<td>15%</td>
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<tr>
<td>Three Tests @ 15% each</td>
<td>45%</td>
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<tr>
<td>Homework</td>
<td>15%</td>
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<tr>
<td>Quiz</td>
<td>5%</td>
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<tr>
<td>Disease Research Paper and Presentation</td>
<td>20%</td>
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Students will be responsible for learning selected vocabulary from the text and Glossary of Epidemiologic Terms to be provided, and available on the textbook website for student assistance. (http://publichealth.jbpub.com/essential/friis/epidemiology/index.cfm) There will also be several homework and miscellaneous assignments from the text or outside material.

**Assignments/exercises:** Students are expected to read text assignments before class and take an active role in discussions and group activities. Exercises are available on the class OnCourse web site, or in the text. Late assignments are not accepted.

**Tests:** Two tests will be given on the dates noted in the schedule. These will be of the short answer, multiple choice, short answer nature. It will not be possible to take exams either earlier or later than the assigned date unless due to religious observation per IU policy. All or parts of the exam may be administered over Oncourse.

**Disease Research Paper:** In lieu of a final exam, a research paper not to exceed 5 pages double-spaced will be due the last week of class on a disease of the student’s choosing and with instructor permission listed on the CDC web site under Diseases and Conditions. (http://cdc.gov/DiseasesConditions/) Further instructions on this assignment will be given in class. A brief summary may be presented by students in oral form in addition to the written paper in order that all students may benefit from each others’ work.

**Course Policies**

**Mutual Tolerance and Respect**

Public health deals with controversial issues from multiple perspectives, and consideration of these issues may cause disagreements and/or evoke strong personal feelings, depending on our individual experience, histories, identities and world views. Therefore, in all interactions and communications, course participants are expected to exhibit mutual respect and tolerance for one another and for any course guests and members of the community with whom we come into contact. If you feel you have been offended by any content or interactions, you are encouraged to discuss this with the instructor or another faculty member.

**Attendance, Preparedness and Participation**

Students are expected to attend class, and to actively participate in discussions and exercises on a regular and consistent basis, and to be responsive and respectful team members. Some course assignments may require working as part of a team. To receive a satisfactory grade, all members must contribute substantively to the work of the group throughout the semester. Much of public health work is done in teams and groups, often to which one is assigned rather than volunteered. Thus, the group work built into the course reflects reality and provides an opportunity to develop teamwork skills related to leadership, collaboration, problem-solving, cooperation, and responsibility.
Academic Honesty

Academic and personal misconduct by students in this class are defined and dealt with according to the procedures in the CODE OF STUDENT ETHICS. Such misconduct, regardless of degree, will not be tolerated and will be referred to the University Office of Student Ethics for possible sanction.

Writing Standards

It is expected that students will spend sufficient time reviewing and editing all written documents before submitting them for review and/or grading. All written assignments are required to be free from grammatical and spelling errors. In addition, all written documents should be well-constructed in thought and flow. The instructor reserves the right to: 1) return without the benefit of review any document that is submitted for review and/or grading that violates these standards, and/or 2) reduce the grade of such assignments based upon the frequency and severity of the errors. All documents must be consistent with the Publication Manual of the American Psychological Association.

Cell phones: Cell phones are to be off before you come to class. If you have an emergency situation and need to be contacted, set your phone on vibrate so as not to disrupt the class and leave the classroom to take the call. Texting is not permitted in class.

Oncourse: Oncourse will be used in this course as a communication tool among the students and the instructors in this class. Important information about the course will be posted on Oncourse, including grades. Using Oncourse is a requirement for this course so be sure you have logged on Oncourse during the first week in this course and make it a habit to check your messages and grades at least once a week, if not, more often.

One Week Rule: It is your responsibility to check your grades on Oncourse within a week of posting. You have one week from the date in which a grade is posted on Oncourse to discuss any concerns you may have with the instructor. After that time has passed, the grade will remain as posted on Oncourse.

Laptops: Laptops are not allowed in this course, so please do not bring one to class. If you require the use of a laptop for special purposes related to your learning in this class, please bring the proper documentation from the Disability Services for Students Office to the instructor by the second week of class.

Professionalism Policy: College courses can serve as your first introduction to a professional environment, therefore, it is expected you to display professional behavior in class; please come to learn. With the exception of emergencies, professional behavior will include, but is not limited to:
* Arriving for class on time
* Respecting the learning environment (including professor and classmates) by eliminating
  the use of electronic devices which are not enhancing your learning of program planning (i.e.,
  cell phones, surfing the web, text messaging)
* Not working on material for another course
* Not chatting with classmates, reading the newspaper, texting, doing crossword puzzles,
  etc.

Use of Wikipedia: Students are prohibited from using Wikipedia as their primary research
source. Please consult the following online resource for further explanation and guidance.
http://www.english.ucsb.edu/faculty/ayliu/courses/wikipedia-policy.html

Extra Credit: There will be no extra credit assignments given or granted for any reason. Students
are expected to do the best work possible on all course assignments.

Grading Scale:

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<th>Percentage</th>
<th>Grade</th>
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<tr>
<td>97-100%</td>
<td>A+</td>
</tr>
<tr>
<td>93-96%</td>
<td>A</td>
</tr>
<tr>
<td>90-92%</td>
<td>A-</td>
</tr>
<tr>
<td>87-89%</td>
<td>B+</td>
</tr>
<tr>
<td>83-86%</td>
<td>B</td>
</tr>
<tr>
<td>80-82%</td>
<td>B-</td>
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<tr>
<td>77-79%</td>
<td>C+</td>
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<tr>
<td>73-76%</td>
<td>C</td>
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<tr>
<td>70-72%</td>
<td>C-</td>
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<tr>
<td>67-69%</td>
<td>D+</td>
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<td>63-66%</td>
<td>D</td>
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<tr>
<td>60--62%</td>
<td>D-</td>
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<tr>
<td>&lt;60%</td>
<td>F</td>
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All portions of this syllabus are tentative and subject to change at any time by providing students
with proper advanced warning.