

University of Louisiana at Lafayette
College of Education
Class Syllabus

Course: HLTH 450

Semester: Fall 2006

Schedule: MW 1:30 – 2:45pm

Location: Bour 157B

Instructor: Praphul Joshi, Phd, MPH

Office: Bourgeois 109A

Telephone: (337) 482-6463

Office Hours:

Mon – Thu 9 – 11 am

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By appointment only

Course Description:

HLTH 450G: Special Topics in Health: Study of Diseases

This course is designed to introduce students to epidemiology, a basic science of public health. After successful completion of the course, students should grasp the fundamental concepts of epidemiologic nomenclature, methods, and study design.

Required Text: There is no prescribed textbook for this course. Optional textbooks, which will be helpful, are listed below. These books are not required; they are listed only as a convenience if you wish to read a different perspective on a particular issue
 Gordis L. *Epidemiology*. 2nd ed. New York: W. B. Saunders Company;2000. ISBN 0-7216-8338-X

Hennekens CH, Buring JE. *Epidemiology in Medicine*. Boston: Little, Brown and Company;1987. ISBN 0-3163-5636-0

Mausner JS, Kramer S. *Epidemiology – An Introductory Text*. Philadelphia: W. B. Saunders Company;1985. ISBN 0-7216-6181-5

Instructors may cite various articles, textbooks, or websites as references for students with special interest in an area. These additional readings are optional.

Conceptual Framework: The Responsive Professional

The conceptual framework of the UL Lafayette College of Education is designed to expand upon the institution's commitment to be a responsive university. Teacher candidates are expected to demonstrate knowledge, skills, and dispositions associated with the four elements of a ***Responsive Professional***. Responsive Professionals demonstrate expertise in knowledge and practice. They are reflective practitioners who respect diversity and demonstrate a commitment to professionalism.

Course Objectives and Corresponding Unit Outcomes

Main Objectives:

1. Define and understand the basic concepts of epidemiology and public health surveillance systems

2. Identify the role of health promotion professionals in management and control of Infectious Diseases
3. Identify the role of health promotion professionals in management and control of Chronic Diseases

Unit Outcomes:

1. Define epidemiology and discuss the epidemiologic models of disease distribution.
2. Discuss the concepts of person, place, and time as they relate to the distribution of disease or injury in a population. Describe case report and case series studies.
3. Define and calculate epidemiologic measures taught in the course, e.g., incidence, prevalence, relative risk, attributable risk, population attributable risk, odds ratio, etc.
4. Describe the concept of demographic transition and construct a population pyramid.
5. Define and give an example of primary, secondary, and tertiary prevention.
6. Discuss the attributes of an appropriate screening program.
7. Define and calculate sensitivity, specificity, and predictive value of a screening test.
8. Describe the relationship between prevalence and predictive value.
9. Compare and contrast population versus high-risk strategies of disease prevention.
10. Describe types and uses of public health surveillance, including active and passive systems.
11. Describe a cross-sectional study, an ecologic study, a case-control study, a nested case-control study, a cohort study, and a clinical trial.
12. Describe the relative merits and pitfalls of each type of study and recommend a study design given a public health question.
13. Determine the study design of a hypothetical example or a study published in the literature.
14. Formulate clear case definitions and precise exposure measures in epidemiologic studies.
15. Describe the criteria for causality in epidemiology.
16. Define and give an example of bias, confounding, and interaction.
17. Describe the steps in an outbreak investigation.

Course Requirements:

E-mail account- Students are required to set up an email account for this class. It will take the help desk 24 hours to activate your account, so please keep this in mind. **Always provide your NAME, CLASS, and SECTION # in the subject of your emails to the instructor. Emails without this information will be deleted!**

1. **Exams** – 2 exams worth 100 points each. Content for exams will come from, but is not limited to, readings (websites), articles, assignments, and PowerPoint notes from topic areas covered. You will have 1 ½ hours to complete the exam.

Attendance for each part of semester accounts for 15 points in the exam (So, in reality you will have to answer only for 85 points in each exam!).

- 2. Class Assignments** – 5 worth 20 points each for a total of 100 points. The students will either submit assignments through Moodle or as an email attachment. Assignments can be found in the *Assignments* link. Follow directions on each assignment.

Assignment submission directions – Complete the assignment using MS Word or RTF (rich text format). Save the file on your hard drive, disk or CD, saving the file as: **last** name, first name, assignment number. When you submit the file, in the title box, use the title: last name, first name, assignment number.

Example: **Doe, Jane, Assignment 1**

Follow all directions for maximum points.

Review the grading rubric.

**Every assignment is due by 6am on the due date (see calendar).
No late assignments accepted.**

- 3. Class Project/presentations** – worth 100 points. This project involves a written paper on the assigned topic (75 points), and a class presentation (25). Topics are assigned on the first day of class. Written paper will be critique of a published article on the assigned topic. Each student will give a class presentation about their assigned topic, and will be followed by group discussion.

**Every assignment is due by 6am on the due date (see calendar).
Not accepted late.**

- 4. Announcements & Emails** – **YOU** are responsible for visiting the course Blackboard site and checking the *Announcements* and your email daily for any posted information or any emailed information pertaining to the course.
- 5. Posting of Grades** - Grades will be posted in your Moodle course site within three days after an assignment or project is due, barring any unforeseen circumstances. If you do not have a grade posted for an assignment or project you have submitted or you have a grade of “0” and you believe you did the assignment on time, it is your responsibility to contact me by email. You must have adequate proof of date submitted.
- 6. Due Dates - All assignments and projects are due on the due date by 6AM!!**
Assignments and projects will NOT be accepted late. This is a reminder that it is your responsibility to submit your assignments and projects on time – that includes posting them on time. It is your responsibility to find a computer that works to do this. You are given the course calendar with due dates posted for assignments and projects on the first day of class.

7. Code of Conduct

I do not tolerate expressions of bigotry, hatred, harassment; stalking or other abusive behavior. Your right to speak freely must be exercised with courtesy and self-restraint. I expect you to be well mannered and respectful of the rights of others. The etiquette and laws of the "real world" apply, and I have the right to remove you just as in the "real world" if you fail to comply with the rules.

Because I encourage discussion and exchange of ideas, I do not allow threatening, defamatory, abusive, tasteless or indecorous statements. For the same reason, I do not allow vulgar material in discussions.

PASS-PORT Artifacts

N/A

Field Experiences

N/A

Technology Integration

The course will use Moodle system, and a lot of emphasis will be given on electronic communication and web-based research.

Evaluation

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|---|------------------|
| Learning Assignments (5 – 20 points each) | 100points |
| Class Project | 100points |
| Exam 1 | 100points |
| Exam 2 | 100points |
| Total | 400points |

90-100% = A

80-89% = B

70-79% = C

60-69% = D

Below 60% = F

Resources

Professional Associations

Louisiana Association of Health, Physical Education, Recreation, and Dance (LAHPERD)

American Association of Health, Physical Education, Recreation, and Dance (AAHPERD)

Professional Journals

Journal of the American Medical Association

British Medical Journal

American Journal of Epidemiology

Emerging Themes in Epidemiology

Related Materials and Resources

US Department of Health & Human Services: Global Health:

<http://www.globalhealth.gov/>

The National Women's Health Information Center: <http://www.4woman.gov/>

National Institutes of Health: <http://www.nih.gov/>

Population Reference Bureau: <http://www.prb.org/>

Medical Advice: http://www.healthandenergy.com/medical_advice.htm

Environmental Issues: http://internet.ggu.edu/university_library/environ.html

References

Office of Global Health Affairs: <http://www.globalhealth.gov/>

Center for Disease Control: http://www.cdc.gov/nchstp/dstd/disease_info.htm

American Cancer Society: www.cancer.org

National Cancer Institute: www.nci.nih.gov

World Health Organization: <http://www.who.int/en/>

Course Policies and Procedures**Emergency Evacuation Procedures**

A map of this floor is posted near the elevator marking the evacuation route and the Designated Route Area. This is an area where emergency service personnel will go first to look for individuals who need assistance in exiting the building. Students who may need assistance should identify themselves to the teaching faculty.

Attendance Policy

Attendance is mandatory for all classes, and will account for 20 points (5% of the grade). (Fifteen points in each exam accounts for attendance towards each half of semester!)

Academic Honesty

The College of Education adheres to the policy on academic honesty as outlined on page 427 in the Undergraduate Bulletin (2003-2005).

Students Requiring Special Accommodations

Students requiring special accommodations must register with the Office of Services for Students with Disabilities and provide official documentation to the instructor in a timely manner.

Tentative Schedule

Calendar

| Date | Topics/Activities/Assignments/Due Dates |
|----------------------|--|
| Monday Aug 21 | Formal Class, Introduction to Blackboard, Syllabus, and Calendar Review, Etc. Class Project topic assigned. |
| Wednesday Aug 23 | Introduction to Epidemiology, discuss the epidemiologic models of disease distribution. |
| Monday Aug 28 | Concepts of person, place, and time as they relate to the distribution of disease or injury in a population. |
| Wednesday Aug 30 | Demographic transition and population pyramid Primary, secondary, and tertiary levels of prevention |
| Monday Sept 4 | LABOR DAY |
| Wednesday Sept 6 | Epidemiologic Measures (Comp Lab) |
| Monday Sept 11 | Secondary Data Sources (Comp Lab) |
| Wednesday Sept 13 | Secondary Data Sources (Comp Lab) |
| Monday Sept 18 | Attributes of an appropriate screening program |
| Wednesday Sept 20 | Attributes of an appropriate screening program |
| Monday Sept 25 | Study Designs (Comp Lab) |
| Wednesday Sept 27 | Study Designs |
| Monday Oct 2 | Steps in an outbreak investigation. |
| Wednesday Oct 4 | Criteria for causality |
| Monday Oct 9 | Bias, confounding, and interaction |
| Wednesday Oct 11 | Exam 1 |
| Monday Oct 16 | Epidemiology of Infectious Diseases Sources for infectious diseases |
| Wednesday Oct 18 | Investigation for infectious diseases |
| Monday Oct 23 | Historical perspective of infectious diseases epidemiology |
| Wednesday Oct 25 | HIV and AIDS and other STIs |
| Monday Oct 30 | Epidemiology of Chronic Diseases |

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|---------------------|---------------------------|
| Wednesday Nov 1 | Heart diseases and stroke |
| Monday Nov 6 | Cancer Epidemiology |
| Wednesday Nov 8 | Cancer Epidemiology |
| Monday Nov 13 | Diabetes |
| Wednesday Nov 15 | Class Presentations |
| Monday Nov 27 | Class Presentations |
| Wednesday Nov 29 | Exam 2 |