Drexel University School of Public Health
Certificate in Epidemiology and Biostatistics

PBHL 703
Design and Analysis of Epidemiologic Studies
3 credit hours

**Instructor:**
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**Quarter offered:** Spring 2011
**Course time:** March 28 – June 5, 2011

**COURSE DESCRIPTION**
This course is the third component of the epidemiology and biostatistics certificate series. This course will expand upon some of the information you learned in PBHL 701 and 702. We will explore a number of epidemiologic concepts and principles more in depth and see how epidemiology works in the real world.

**PRE-REQUISITE:**
Beyond the initial requirements for enrollment in the certificate program, the successful completion of PBHL 701 and 702 is required.

**COURSE OBJECTIVES:**
Upon completion of this course, students should:

1. Develop an understanding of infectious disease epidemiology and outbreak investigation.
2. Appreciate the importance of ethical considerations in epidemiologic research.
3. Interpret data/information from epidemiologic studies.
4. Effectively critique epidemiologic literature.
5. Conduct a thorough review of the literature and understanding the process of epidemiologic inquiry.
6. Understand the importance of, and how to conduct, public health surveillance.
7. Appreciate the use of surveys to gather epidemiologic data.
TEXTBOOKS
There are no required books for this course. You may draw on course materials from 701 and 702, and, where relevant, chapters or sections from the Gordis and Dawson & Trapp books used in 701 and 702. Readings for this course will be provided as web links or PDF files and you will receive lecture materials via slide presentations (as PDFs).

TEACHING METHODS
The main framework for presenting the course content is online lectures. Students access the online course materials at your own convenience; there are no set times when you are required to be online. There is a wealth of information covered here. As a guide, students are expected to devote at least $8 – 16$ hours to complete course requirements each week, depending on your technical abilities. I strongly encourage you to communicate and collaborate with your fellow students throughout the course, using the Communication features in Blackboard, the Discussion Board, and email.

In each week, the following content is included:

1) Weekly Brief: a short introduction of what we will study each week.

2) Lecture(s): PDF versions of PowerPoint slides.

3) Reading Materials: the reading materials have been chosen to provide you with an overview of some classic, as well as current, epidemiology articles. They may also help you as you complete your course assignments.

4) Assignment

COMMUNICATION WITH THE INSTRUCTOR
The instructor can be reached by email or via telephone. Email questions are encouraged. I will get back to you as soon as I can. I may respond to email questions by sending the response to the entire class. This way you can all benefit from inquires of other classmates. Of course, if the question is a personal one, then I will respond only to the questioner. My preferred e-mail for all communication is miapapas@gmail.com.
STUDENT ACTIVITIES AND EVALUATION

There are Self-Tests (homework) each week and three Graded Assignments in Weeks 3, 5 and 6. Graded Assignments are due exactly 7 days after the assigned date, except for the Week 6 assignment, this is due on June 5th at 11:59 pm. Graded assignments should be turned in via email to the Instructor, and incomplete assignments will result in points being deducted.

For the literature review assignment in Week 6 you must cite peer-reviewed original articles (published studies of original research that have been critically evaluated by colleagues prior to publication). You can use the referencing style of your choice. If you do not have a style preference, here are two suggestions:

*American Psychological Association:*
http://owl.english.purdue.edu/owl/resource/560/01/

*American Medical Association:*
http://healthlinks.washington.edu/hsl/styleguides/ama.html

Please pay attention to the dates of Graded Assignments, and let me know before these dates are reached if you have any specific circumstances, such as a serious illness/injury, etc., that would affect your ability to complete the assignment in a timely manner.

EVALUATION METHODS

Grade Points Definition

<table>
<thead>
<tr>
<th>Grade</th>
<th>Definition</th>
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<tbody>
<tr>
<td>A 4.0</td>
<td>The student has exceeded the required standards and expectations.</td>
</tr>
<tr>
<td>A- 3.7</td>
<td>The student has met the required standards and expectations slightly below the exceptional level.</td>
</tr>
<tr>
<td>B+ 3.3</td>
<td>The student has met the required standards and expectations slightly above the satisfactory level.</td>
</tr>
<tr>
<td>B 3.0</td>
<td>The student has met the required standards and expectations at a satisfactory level.</td>
</tr>
<tr>
<td>B- 2.7</td>
<td>The student has met the required standards and expectations slightly below the satisfactory level.</td>
</tr>
<tr>
<td>C+ 2.3</td>
<td>The student met the required standards and expectations slightly above the marginally acceptable level.</td>
</tr>
<tr>
<td>C 2.0</td>
<td>The student has met the required standards and expectations at the marginally acceptable level.</td>
</tr>
<tr>
<td>F 0</td>
<td>The student has failed to meet the required performance standards and expectations.</td>
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Numerical scores will be determined by the Graded Assignments and weighted as follows:

<table>
<thead>
<tr>
<th>Evaluation method</th>
<th>Proportion of final grade</th>
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</thead>
<tbody>
<tr>
<td>Graded Assignment I</td>
<td>30%</td>
</tr>
<tr>
<td>Graded Assignment II</td>
<td>30%</td>
</tr>
<tr>
<td>Graded Assignment III</td>
<td>40%</td>
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Week 1: March 28th – April 3rd
Week 2: April 4th – April 10th
Week 3: April 11th – April 17th
Week 4: April 18th – April 24th
Week 5: April 25th – May 1st
Week 6: May 2nd – May 8th
Week 7: May 9th – May 15th
Week 8: May 16th – May 22nd
Week 9: May 23rd – May 29th
Week 10: May 30th – June 5th