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Office Hours: Wednesday 1:30-4pm, PSFA 150

Course Description
The course provides an introduction to the design, conduct, application, and interpretation of cohort studies. Emphasis is placed on an in-depth understanding of the fundamental investigation of epidemiologic research questions using a cohort study design, an appreciation for the importance of time-varying exposures and outcomes, and an informed interpretation of statistical data arising from such studies. This class does not address statistical analysis and modeling of cohort study designs. If you are interested in this topic, please investigate PH 827: Analysis of Cohort Studies.

Course Objectives
Upon completion of the course, the students are expected to be able to:

a. Identify the design features of cohort studies including the biases and challenges associated with cohort study designs.

b. Understand the history of cohort study designs, and recognize significant historical and ongoing cohort studies and their contribution to our understanding of public health.

c. Demonstrate a good knowledge of the fundamental role of time in cohort epidemiologic studies and the time-dependent relationship between exposures and outcomes.

d. Critically assess reports or published papers based on cohort studies. Evaluate and interpret data from published cohort studies.
e. Write an invited commentary or editorial for a peer-reviewed epidemiology journal concerning a large cohort study.

f. Write a modified grant proposal using a cohort study approach with full awareness and understanding of the methodological issues in the use of such a study design.

Format:
The format of learning includes the following:
1. Class discussion/seminar one day each week
2. Throughout the semester each student will be responsible for reading, presenting and discussing with the class 8 assigned peer-reviewed journal articles.
3. Students will also find, read, and present two additional articles to the class in two of the following content areas: methodological issues, bias or confounding, ethical issues, analytical issues
4. Two homework assignments
5. Final Research Project

Homework Assignments:
Homework Assignment #1 (60 points). Due February 26, 2014
Investigate the history of a large cohort study (Framingham Heart Study, Nurses’ Health Study, Women’s Health Initiative, Rancho Bernardo Cohort, Whitehall Study, Women’s Health Study etc.) including when and where the original cohort was established, the original Principal Investigators and their expertise, how the cohort has evolved over time (i.e. have additional persons been added to the cohort?), the original research questions, the evolution of research topics in the cohort, and a critique of one article published within the past two years from the cohort. Students will present their findings to the class using a Power Point slide show format. Students will be graded both on the content of their work and their ability to engage the class in a discussion of their topic.

Homework Assignment #2 (20 points). Due April 23, 2014
Write a one page commentary on the results of a cohort study recently published in a peer-reviewed journal, and discuss your interpretations/thoughts with the class.

Final Research Project (150 points)
The final project will be a grant proposal written by a group of students using a cohort study design. Students will select a current RFP/RFA to respond to for this assignment. Groups will both write and present their proposals using the PH398 grant proposal format. Students will be graded both on the content of their work and their ability to engage the class in a discussion of their project. All students in the group will receive the same grade/score on this assignment.
**Useful Textbooks:**


**Blackboard:**
This class will read multiple peer-reviewed research articles for each class period as described on the class schedule. The articles are available to you on Blackboard. It is expected that all reading assignments will be completed prior to the class where they are assigned.

**Academic Ethics:** SDSU has a strict code of ethical conduct which students are expected to follow. Please see the following link: [http://csrr.sdsu.edu/conduct1.html](http://csrr.sdsu.edu/conduct1.html)

**Grading:**
1. Read, present and discuss 8 assigned journal articles (5 points each)  40 points
2. Find, read and present 2 peer-reviewed articles (15 points each)  30 points
3. Homework Assignment #1  60 points
4. Homework Assignment #2  20 points
5. Final Research Project (grant proposal)  150 points
TOTAL  300 points

**Grades**

**Grading Standards and interpretation:**
A  = 93-100% (Superior)
A-  = 90-92%
B+  = 88-89%
B  = 83-87% (Adequate)
B-  = 80-82%
C  = 60-79% (Less than adequate)
F  = <60% (Failure)