

COURSE OUTLINE

Epidemiology and Biostatistics 4900E: Research Project and Seminar

Course Objectives

Students in this applied research course will develop skills in identifying and clarifying a research question, carrying out a methodologically critical review of literature, identifying data sources, conducting appropriate statistical analyses, interpreting results, and presenting findings orally, in posters, and in written technical reports or journal manuscripts.

Target Audience

This course is designed for undergraduate honors students in the Department of Epidemiology and Biostatistics. Meetings will take place (as needed) following the Friday seminars.

Students are required to attend and actively participate in 80% of seminars in each of the Fall and Winter semesters.

Course Assessment

Students will submit their first written report October 16. This report is intended to give students the opportunity to introduce the background and rationale for their project and outline the methods that they will use to answer their research question(s). An oral presentation will be given at the end of the Fall semester. Final oral presentations will occur in April while the final written reports are due at the end of the Winter semester. Two assignments will also be completed - one in the fall and one in the winter semester.

All presentations and written reports will be graded by the course coordinator.

Choosing your project and supervisor:

The research projects undertaken by honors students can take very different forms, depending on the supervisor and type of research. The guiding principle is that students must perform a project designed to address a specific research question or questions. Discuss this with your supervisor. Prior to the beginning of the Fall term of your fourth year you may approach faculty that you are interested in working with about potential projects in their research group. Keep in mind that it is not required that you find a supervisor prior to the beginning of the term and projects will still be available. If you do find a supervisor prior to the beginning of the term, send an email to the coordinator for your course. Copy your supervisor on this email. After this a more organized interview process will be instituted to ensure that all students have a supervisor. For those students who did not arrange for a supervisor prior to September, the second week of the term will be dedicated to interviews to help you find a match. Expect to interview with no more than 4 potential supervisors, after which you will submit your ranked preferences. Faculty will do the same. The final match will be made by the course coordinator.

First Written Report: 10% of Final Grade

The first written report should be no more than 3 pages long (double spaced), plus references. It should provide an introduction to your project, state your research questions, and summarize your proposed study design.

First Oral Presentation: 10% of Final Grade

Presentations should be no longer than 10 min, followed by 5 min for questions. Presentations that go over this time will be cut off. Students should present the research question(s) that their proposal will address, background information and preliminary results, and outline the methods that will be used. Slides should be prepared in PowerPoint or a similar presentation software. Students should discuss details of content and form with their supervisor prior to preparing their presentations. Presentations are open to third year students and project supervisors. Project students must attend the entire session and will be graded both on their presentation and their role as question askers.

Assignments: 10% of Final Grade

Details to be provided.

Second (Final) Oral Presentation: 20% of Final Grade

The final oral presentation will occur early April. It should be no longer than 15 min, followed by up to 10 min for questions. Presentations that go over this time will be cut off. Students should present an introduction to their project, rationale, research question(s), and results from the year. Slides should be prepared in PowerPoint or similar. Students should discuss details of content and form with their supervisor prior to preparing their presentations. Third year students and project supervisors are encouraged to attend. Project students must attend the entire session and will be graded both on their presentation and their role as question askers.

Final Written Report: 30% of Final Grade

Final reports are due Friday, April 24 by 5 pm. (NO EXTENSIONS). Late reports will not be accepted. Reports are to be written in the style of a research paper with an Abstract, Introduction, Methods, Results, and Discussion sections. Figures and legends should be prepared as if for publication and appended to the end. References should be handled appropriately. Specifics of content and style should be discussed with your supervisor. Reports should be no more than 20 pages not including abstract, figures, and references. Reports should also be double-spaced using 12 point font and one inch margins. You are expected to get your report to your supervisor TWO WEEKS prior to the deadline for feedback. Your supervisor can give you general feedback and guidance at this time, but can't rewrite your paper for you.

Final Performance Evaluation: 20% of Final Grade

At the end of the course, your supervisor will evaluate your overall performance. This will be based on your commitment, effort, initiative, overall understanding of the project and intellectual contribution and performance.