COURSE OUTLINE
Epidemiology and Biostatistics 4900E: Research Project and Seminar

Course Objectives
This applied research course will develop students 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 give their first oral presentation on Friday, October 14 after the departmental seminar. This 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). These presentations are graded by faculty, other members of the department, and peers. Final written reports are due March 14 by 5 pm. (NO EXTENSIONS). These will be graded by at least two faculty members from within the given department. Final oral presentations will occur in early April and will be graded by Dr. Klar.

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 (see schedule) of your fourth year you can approach faculty that you are interested in working with about potential projects in their research group. By the middle of the summer, you will be given access to an OWL site with descriptions of available projects to help you with your search. Keep checking the OWL site as new projects will be loaded throughout the summer. 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. Project pre-matching ends September 1. If you do find a supervisor prior to the beginning of the term, send an email confirming your match to the coordinator for your course (see above) with the details of your match. 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. Dr. Klar will make the final match.
**First Oral Presentation:** 8% of final grade The first oral presentation will occur early on in your project (October, 14). It 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 similar. Students should discuss details of content and form with their supervisor prior to preparing their presentations. Sessions will be held concurrently, and is open to Faculty and other department members. Project students must attend the entire session. Attendees will grade presentations.

**First Written Report:** 10% of final grade (along with performance evaluation) A written Introduction is due to Dr. Klar by December 15 (No extensions). This should be up to 3 pages long (double spaced), plus references. It should provide an introduction to your project, state your research questions, and summarize your proposed experimental approach. This Introduction and your progress to date will contribute to your December evaluation by your supervisor.

**Final Written Report:** 50% of Final Grade Final reports are due March 14 by 5 pm. (NO EXTENSIONS). Late reports will not be accepted. Reports are to 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 handed 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 cant rewrite your paper for you. After submission, your paper will be marked by at least two faculty other than your supervisor.

NOTE: We will have a lecture specifically on writing your report early in the winter semester, date to be determined.

**Second Oral Presentation:** 12% 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. Sessions will be held concurrently, grouped by field, attended by Faculty and other department members. Project students must attend the entire session.

**Final Performance Evaluation:** 20% 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.