PH700D: EH Research Methods
Fall Semester/12
3 Units

Class day/time: Thursday 1-3:40 pm  Instructor: Dr. Eunha Hoh
Class location: AH-2134  Office location: HT 06
Schedule number: 22267
Instructor office hours: Tues 3-4:00 pm, Thursday 4-5 pm and by appointments
Instructor contact information: ehoh@mail.sdsu.edu

Course Description: Can develop ability to write and present scientific research proposal/thesis in Environmental Health

Course Goals and Learning Objectives:

To provide a structured format for instruction and discussion of elements of research - focusing on the thesis proposal and research process at SDSU GSPH, Division of Environmental Health. Students may either be at the stage of developing a thesis proposal, at the stage of gathering data, or be writing the thesis.

Specifically this course will allow the student to
1. Be able to rapidly and efficiently search and retrieve print, database, and internet information in the area of environmental health.
   1.1 Have the appropriate computer skills to store, analyze, and present information from print, database, and world wide web sources.
2. Be able to interpret and discuss scientific findings and be able to complete a formal scientific research paper describing and interpreting results.
   2.1 Be able to analyze and critique experimental research designs in environmental health science
   2.2 Be able to design experimental research designs in environmental health science
   2.3 Be able to analyze and interpret scientific data
   2.4 Be able to conduct quantitative analysis
   2.5 Understand ethics involved in research design
3. Improve skills in scientific writing and in analysis and presentation of scientific data
4. Be able to present information in environmental health in a clear, orderly and focused manner, and to be able to answer questions during a presentation.

Prerequisites: Public Health 601, 602, and 603.
Exception: students who take these courses in the current semester or started a thesis project.

Text, Readings, Materials: Materials are posted on Blackboard during the semester. Students should check blackboard every week for new materials.
Course Requirements, Evaluation and Grading: Grading for the course will be based upon performance in the following assignments totaling 100% of the final course grade:

1. Student oral presentation ---------------------------- 20 points
2. Student contracts/writing work -------------------- 40 points
3. Class participation/short assignments--------------- 25 points
4. Attendance---------------------------------------- 15 points

Oral Presentations:
Learning to present information is an important part of graduate student training. The oral presentations will consist of the student making an approx. 20 minute presentation followed by approx. 10 minutes of questions. The level of the information presented should be targeted towards public health professionals who are not necessarily in the field of environmental health. The presentation will be graded 50% on clarity, 25% on technical content and 25% on preparedness. In addition, students will evaluate each presentation, and the evaluation will be reflected on grading.

Student Contracts/Writing Work:
Students have to sign the contract and submit it to the instructor by September 13. In the end of this semester, students should submit a writing work corresponding to their pledge. The writing should follow the format of thesis.

Short Assignments:
Short assignments will be announced in a class and in blackboard. Students should check the assignments and announcement in BB regularly (at least every week). Do not depend on e-mail messages from the instructor.

SAMPLE GRADING SCALE TYPICAL OF MANY GSPH GRADUATE COURSE SYLLABI:

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<th>Total Points</th>
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<td>96-100</td>
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<td>90-95</td>
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<td>87-89</td>
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<td>80-83</td>
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Course Syllabus Subject to Change

Every effort will be made to follow the syllabus content and schedule; however, if circumstances dictate there may be modifications necessary during the semester. If such is the case the professor will make every effort to notify students in a timely manner.

Course Calendar

Aug 30  Overview of the course syllabus and ethics.
         Introduction to thesis/structure of thesis

Sept 6  Scholarly searching of the scientific literature
         Health Science Librarian: Marilyn Hall
         Classroom: LA78

Sept 13  Structures of proposal/thesis/scientific research/IRB

   Submit sign contract form in class

Sept 20  Review of scientific articles for literature review section (exercise)

   Submit the proof of taking the tutorial of plagiarism (see the last page for instruction)

   Present literature search results using databases (10 minutes presentation)

Sept 27  Statement of hypothesis and specific aims/Experimental design

Oct 4   Elements of an introduction

   Submit the certificate of taking IRB tutorial

Oct 11  Experimental/Methods/Results: graphical tabular presentation of data/Excel

   Submit assignment of excel exercises

Oct 18  Citation software by Health Science Librarian: Marilyn Hall
         Classroom: LA76

Oct 25  Quantitative analysis/SPSS

Nov 1   Quantitative analysis/SPSS

   Submit bibliography of literature using citation software (Endnote)

Nov 8   Presentation of scientific data

Nov 15  Preparing for thesis/proposal presentation

Nov 22  Thanksgiving

Nov 29  Student Presentations
Dec 6          Student Presentations
Dec 13          Submission of writing work (part of proposal/thesis based on the contract form)

             Via Assignment folder

*Assignments will be announced in blackboard.

Course policies

  Missing class. If you miss a class, it is your responsibility to contact the instructor to discuss
alternatives to exercise you miss, and to obtain lecture notes, handouts, other materials or instructions
from the course Blackboard site.

  Religious holidays The University Policy File includes the following statement on absence for
Religious Observances: By the end of the second week of classes, students should notify the instructors of
affected courses of planned absences for religious observances.

  Assignments. Assignments must be submitted no later than the specified due date.
Assignments will not be accepted past the due date. If you are unable to attend class the day an
assignment is due, email it to me.

  Academic misconduct by a student shall include, but not be limited to: disrupting classes; giving
or receiving unauthorized aid on examinations, reports or other assignments; knowingly misrepresenting
the source of any academic work; falsifying research results; plagiarizing another’s work; violating
regulations or ethical codes for the treatment of human subjects; or otherwise acting dishonestly. If an
instance of academic misconduct is suspected, the student will be informed of the infraction and the
penalty to be imposed. If appropriate, the matter will be referred to the Department Chair and Dean of the
College for mediation. Potential sanctions include a warning, an admonition, censure, reduction of grade
(including a grade of F for the course), disciplinary probation, suspension, or expulsion.

  Computers. Every student must have access to the internet and a computer in order to obtain
communications from the professor, download reading material and conduct document searches of on-
line publications.

*Bring hardcopies of journal papers assigned for review to class.
*No cell phone/MP3/internet/computer use during class.
*If a class must be cancelled without prior notification, it will be posted on Blackboard, the day of
the class, no later than noon.

San Diego State University is dedicated to a safe, supportive and nondiscriminatory environment. It is
the responsibility of all students to familiarize themselves with University policies regarding
nondiscrimination, misconduct and academic honesty.

Statement on Nondiscrimination Policy

San Diego State University complies with the requirements of Title VI and Title VII of the Civil Rights
Act of 1964, as well as other applicable federal and state laws prohibiting discrimination. No person
shall, on the basis of race, color, or national origin be excluded from participation in, be denied the
benefits of, or be otherwise subjected to discrimination in any program of the California State University

SDSU does not discriminate on the basis of disability in admission or access to, or treatment or
employment in, its programs and activities. Students should direct inquiries concerning San Diego State
University’s compliance with all relevant disability laws to the Director of Student Disability Services
(SDS), Calpulli Center, Room 3101, San Diego State University, San Diego, CA 92128 or call 619-594-
6473 (TDD: 619-594-2929).
SDSU does not discriminate on the basis of sex, gender, or sexual orientation in the educational programs or activities it conducts.

More detail on SDSU’s Nondiscrimination Policy can be found in the SDSU General Catalog, University Policies.

**Student Conduct and Grievances**

SDSU is committed to maintaining a safe and healthy living and learning environment for students, faculty and staff. Sections 41301, Standards for Student Conduct, and Sections 41302-41304 of the University Policies regarding student conduct should be reviewed.

If a student believes that a professor’s treatment is grossly unfair or that a professor’s behavior is clearly unprofessional, the student may bring the complaint to the proper university authorities and official reviewing bodies. See University policies on Student Grievances.

**Statement on Plagiarism and Academic Dishonesty**

Academic dishonesty includes cheating, plagiarism or other forms of academic dishonesty that are intended to gain unfair academic advantage. See section 41301 of the University policies. Plagiarism is an important element of this policy. Plagiarism is defined as ‘formal work publicly misrepresented as original; it is any activity wherein one person knowingly, directly and for lucre, status, recognition, or any public gain resorts to the published or unpublished work of another in order to represent it as one’s own’. Any work, in whole or in part, taken from the Internet or other computer-based source without referencing the source is considered plagiarism.

All students in this class are required to complete the online information literacy tutorial, "Plagiarism: The Crime of Intellectual Kidnapping," a 30-minute tutorial that teaches students about plagiarism, paraphrasing, and citing sources. Students are to take this tutorial outside of class time and take the quiz that follows it. Take the quiz multiple time until getting 100% score. And then submit the printed score as proof of completion by September 13th (hardbopy or PDF via Assignment in BB). The tutorial is at http://infotutor.sdsu.edu/plagiarism/index.cfm?p=graphic

Students agree that by taking this course all required papers may be subject to submission for textual similarity review to Turnitin.com for the detection of plagiarism. All submitted papers will be included as source documents in the Turnitin.com reference database solely for the purpose of detecting plagiarism of such papers. You may submit your papers in such a way that no identifying information about you is included. Another option is that you may request, in writing, that your papers not be submitted to Turnitin.com. However, if you choose this option you will be required to provide documentation to substantiate that the papers are your original work and do not include any plagiarized material.