2012

Applied Epidemiology - Course Syllabus 2011-2012

APPLIED EPIDEMIOLOGY

COURSE OVERVIEW

The final course in the epidemiologic methods course sequence, this course provides students the opportunity to apply the methods and principles learned previously to a specific research problem of their own choosing. This course is designed to provide students with an understanding of the processes involved in applying their training to the design and conduct of research. Students will prepare a research grant application in the format expected for a National Institutes of Health R21 grant application. Students will also learn how other organizations differ in their grant application process, with particular attention to AHRQ. The course offers students the opportunity to critically evaluate scientific research proposals for scientific merit.

INSTRUCTOR
Kathleen Y. Wolin, ScD
Assistant Professor
Division of Public Health Sciences

CLASSROOM
KHB 2306

TIME
Tuesday 1-4pm

OFFICE HOURS
By appointment

CONTACT
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e: wolink@wustl.edu
o: Kingshighway Building, Suite 2306

COMPETENCIES

1) Apply epidemiologic methods to a research question of interest

2) Be familiar with the key principles in developing a grant application for submission got NIH or other similar funding agencies including content, format and style

3) Be familiar with the NIH grant review process

4) Be able to present grant proposal to a body of peers for feedback

5) Be able to conduct a critical review of a grant according to NIH procedures and scoring and partake in constructive discussions with other reviewers to reach a consensus on a priority score for funding.

M19 600

Your grade is based on:

40% grant proposal
20% presentation
30% written critique
10% class participation

COURSE REQUIREMENTS

Grant proposal development and submission (40%)

Successful careers in academic medicine involve submitting effective grant proposals to funding agencies. As NIH is the largest funder of research in the US, each student will be expected to develop a grant proposal meeting the R21 requirements for NIH. Students will work with a faculty mentor to prepare a grant application that applies epidemiologic methods to a research question of clinical interest. The proposal should follow NIH format . In addition to the research plan, students should include a project summary, relevance, and inclusion enrollment table. While a budget and budget justification are not required, students may find it useful to estimate numbers associated with the proposal, as projects proposing research beyond the typical R21 timing and budget scope may be judged as not feasible during peer review.

Presentation of grant proposal (20%)

Each student will give a 20 minute presentation of the 4 key components of the submitted research plan: specific aims, significance, innovation, approach.

Written critique of a grant proposal (30%)

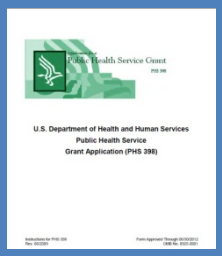
Peer review is a critical part of the grant review and funding process. Each student will submit his/her grant proposal for review by the course instructor and two classmates. Writing a thoughtful, concise review is an essential part of the peer review process.

Class participation (10%)

All students are expected to actively engage in classroom discussions. Students should be prepared to ask questions, raise concerns and interact with fellow students during each class.

Required Reading

Public Health Service Grant PHS 398
http://grants.nih.gov/grants/funding/phs398/phs398.pdf



CLASS EXPECTATIONS

The instructor will prepare and deliver course material; be available to students by appointment; and provide timely and clearly explained feedback on student performance. The instructor expects students to attend each class on time; complete all assignments in a timely manner; come to class prepared, having read all assignments; participate in class discussions; seek any necessary clarification regarding course expectations; and provide feedback about the effectiveness of the course**. Any issues with attendance, meeting deadlines, or completing assignments should be discussed promptly with the instructor.** E-mail is the best way to contact me.

Academic Honesty:

Students are expected to complete exams and assignments in accordance with Washington University's academic rules and regulations regarding honesty and integrity. Any evidence of academic misconduct, including **cheating, failure to cite sources, and plagiarism** will result in appropriate action as dictated by Washington University. Violations of academic honesty will result in notification to the Associate Dean of Academic Affairs at the Washington University School of Medicine, as well as to the MPHS Director and Program Committee. Any hint of violation during exams/assignments will result in no grade for the exam/assignment. For more information, see the University's Student Academic Integrity Policy: www.wustl.edu/policies/undergraduate-academic-integrity.html

Special Needs: Per University policy, students with a learning, sensory, or physical disability or other impairment, should contact the Washington University Center for Advanced Learning Disability Resources (DR) at 935-4062 (tel) or visit http://disability.wustl.edu/DisabilityResources.aspx. The DR office is located in Cornerstone on the Danforth Campus. Students whose second language is English and/or those in need of assistance in lectures, reading or writing assignments, and/or testing, may contact the University Writing Center at 935-4981 or visit http://artsci.wustl.edu/~writing/home.html

CLASS EXPECTATIONS

Attendance

Class attendance is required. As a courtesy to other students, you are expected to arrive on time. More than one unexcused absence from class may result in a lowered grade. Do not enroll if you have absences already planned. Be especially responsible about attendance during review dates. The value of the class stems from the quality of the input received from peers and course instructors.

Blackboard

Please check the site regularly for class announcements and readings. Blackboard will be the primary vehicle for course communication.

Readings

You should complete the required readings *before* each class session. Read your fellow students' proposals prior to class.

Grading Scale:

A 94-100 B+ 88-89 B- 80-83 C 73-77 F ≤69

A- 90-93 B 84-87 C+ 78-79 C- 70-73

Course assignments

All written assignments should be delivered prior to class on the day of the deadline via Blackboard. Do not use email for submitting course assignments. Be responsive to deadlines as they also impact other students – this includes all assigned dates for proposals and reviews. Exceptions or changes to due dates will not be granted.

Policy on Late Assignments: Due to the condensed nature of class, late problem sets will not be accepted for credit. Students who are unable to attend class must make arrangements with the professor to turn the problem set in early. All other late assignments will result in a deduction of five percentage points for each day late (including weekends) unless prior approval is obtained from the professor or a compelling situation prevents prior approval. The professor will allow for (documented) family emergencies (e.g. birth/death in the family). Health issues must be documented by a physician.

CLASS EXPECTATIONS

Grade Challenges: Students have 1 week from the day an assignment/exam is returned to the class to challenge a grade. Under no circumstances will a grade be adjusted beyond this time. During a grade challenge, the professor reserves the right to review the entire assignment/exam and add or deduct points as appropriate

Mobile phones/IM/social networking

Phone ringers should be silenced during class. Please resist the urge to utilize IM or social networking sites during class.

Classroom environment

This is a course where students bring research ideas in development. Ideally, everyone should be involved in classroom discussions. In order for everyone to feel comfortable presenting work and voicing opinions and suggestions, a climate of tolerance and respect is essential. Proposals you are asked to read and review are confidential and are not to be shared with anyone. As with the federal peer review process, respect for the privacy of the investigators' ideas is important.

Misappropriation of intellectual property, including the unauthorized use of ideas or unique methods obtained from a grant review, is considered plagiarism and falls under the definition of scientific misconduct. Be a sharp, focused, concise and *gentle* reviewer.

Grant Proposal

Building a successful research career involves collaboration with other colleagues. As part of this course, it is expected that you will identify a primary mentor in your clinical discipline who has a successful track record of research grant submission. This mentor is expected to review your topic, proposed aims and a draft of your grant proposal prior to submission. Please identify a clinical mentor and have a meeting with him/her by January 24.

Following your meeting (and by January 24), let Dr. Wolin know your planned grant proposal topic (3-5 sentences is sufficient). This will help identify a public health sciences mentor for your project. In addition, based on your research topic and methods, Dr. Wolin will assign you a mentor from the public health sciences to provide input on your aims and research methods.

A draft of your grant proposal aims is due on February 14. In advance of this, it is expected that you will have done the following:

1) Meet with your discipline-based mentor and review your topic of interest and proposed aims
2) Meet with your public health sciences mentor and review your topic and proposed aims.

Following submission of your aims, you will be expected to meet with Dr. Wolin to review your aims.

It is also expected you will meet with both mentors during the drafting of your grant proposal and that both mentors will have reviewed your proposal before you submit it on March 20.

Recognizing that research is most successful when it crosses disciplinary and training boundaries, time is set aside in the course calendar to allow you to meet with your mentor and any other collaborators who might be critical to the success of your research project.

M19 600
2012 Syllabus, Class Schedule, and Deadlines
Kathleen Y. Wolin, ScD

January		**17** NIH Grant Format Overview	**24** 1st meeting with mentor to review topic AHRQ grant format and process – Dr. Pam Owens	**31** Grant writing worksheets.
February	**7** Aims drafting, meet with mentors &/or Dr. Wolin	**14** Draft aims due Aims drafting, meet with mentors &/or Dr. Wolin	**21** Peer review overview	**28** Proposal drafting, meet with mentors &/or Dr. Wolin
March	**6** Proposal drafting, meet with mentors &/or Dr. Wolin	**13** Proposal drafting, meet with mentors	**20** Grant proposal due	**27** Writing effective critiques
April	**3** Draft critiques	**10** Written critiques due	**17** Study section	**24** Study section
May	**1** Study section			