IBGS-501 Biomedical Communication and Integrity-Fall 2012

Overview

The purpose of this course is to improve students' awareness of proper ethical conduct of scientific research and increase their communication skills. The course will consist of one lecture per week. In addition, each student will prepare an oral research presentation.

Course Requirements

1. **Attendance-** Students are expected to attend every lecture.
2. **Grading** – The overall course grade will be based on 3 criteria.
    a. Research presentation (60 % of grade)
        i. The oral presentation will be based on a review of the literature on a topic of interest. A minimum of three to four papers on the chosen topic should be used for the basis of the presentation.
        ii. An abstract of the presentation will be submitted on **October 16th.**
        iii. A draft of the Powerpoint presentation will be submitted on **November 20th**
        iv. The presentation will be made on either **December 5th**, **December 6th or December 7th**
            1. The presentation will be 10 minutes in length with an additional 5 minutes for questions.
            2. The class as well as the faculty will grade the presentation.
    b. Final exam (20 % of grade)
        i. A written exam on the ethics portion of the course
    c. Class participation (10%), homework (10%) of grade
        i. Every student is expected to participate in class discussions and complete all homework assignments on time. **Assignments turned in late will not be accepted.**

Required Textbooks

"Scientific integrity", by Francis L. Macrina, 4th Edition
"How to write and publish a scientific paper", by Robert A. Day, 7th Edition

Class time: 09:00-11:00 am on Tuesdays except for the first week of December (see schedule)

Place: Risley Hall Amphitheater

Faculty:

Charles A. Ducsay, Ph.D. cducsay@llu.edu
John Farley, Ph.D. Farley@va.gov
Steven M. Yellon, Ph.D. syellon@llu.edu

Date	Topic	Reading Assignment	Faculty
Sep 25	Course Introduction The scientific enterprise – History and philosophy of modern science.		Yellon Longo
Oct 2	Characteristics of good scientific writing -Clear, concise and objective Nuts and bolts of scientific writing -Avoid jargon, abbreviations, etc.	Handouts Day Ch. 30-33	Yellon
Oct 9	Titles, abstracts, introductions, and conclusions – Selling your story Writing Materials and Methods sections Writing Results and Discussion sections Differences between written and oral communication	Day Ch. 8-11 Day Ch. 12&13	Ducsay Yellon Ducsay
Oct 16	Writing Skills and Reference Management	Tutorials	Yellon
Oct 23	Posters and oral presentations Technology for oral presentations -Powerpoint	Day Ch. 27 and 28	Ducsay
Oct 30	Presentation of scientific data – Illustrations, graphs, and tables Choosing a research lab/mentor	Day Ch. 16-18	Ducsay
Nov 6	"Scientists behaving badly"- Conflict of Interest and misconduct, ownership of data and intellectual property	Macrina Ch. 7 Macrina Ch. 9	Farley
Nov 13	The scientific process – The importance of communication and ethics The integrity of authorship on scientific papers The ethics and standard practices for statistical analysis The ethics and standard practices for record keeping and avoiding scientific misconduct	Macrina Ch. 1 Day Ch. 1-4 Macrina Ch. 4 Day Ch. 5 &8 Handouts Macrina Ch. 11	Farley
Nov 20	The ethics and standard practices for citing published works and avoiding plagiarism Ethical use of animals and humans in scientific research	Day Ch. 15 Macrina Ch. 5 & 6	Farley
Nov 27th	No Class		
December 5,6,7 Note: Wed, Thurs, Fri sessions	Student presentations		Ducsay and Yellon
Dec 11	Final Exam		

Make-up or Missed Exams:

If a test cannot be taken when scheduled due to special circumstances, permission must be obtained from the course coordinator prior to that date. Accommodations for sudden illnesses or other unforeseeable events that precluded obtaining prior permission must be presented to the course director with written documentation such as a doctor's note. **If a test is missed without obtaining prior permission, a grade of "0" will be assigned.**

Lifelong Learning:

This course, a requirement for Ph. D. degrees in Anatomy, Biochemistry, Microbiology, Pharmacology and Physiology and MS degrees in Biochemistry, Microbiology, Pharmacology and Physiology, is intended to serve as a gateway into professions based on basic and applied biomedical sciences.

Academic Integrity:

The scientific enterprise is highly dependent on the integrity and reliability of each of its components. Therefore, understanding and practicing scientific and academic integrity is essential for students at each phase of their education. Acts of dishonesty including theft, plagiarism, giving or obtaining information in examinations or other academic exercises, or knowingly giving false information are unacceptable. With regards to this class, examinations are the responsibility of each individual student, and by turning in such an examination, the student is representing that piece of work as having been completed by himself or herself. If other sources are used for the take-home questions, they must be clearly identified by accepted referencing practices. **Substantiated violations will generally result in a score of zero for the affected examination, and may also result in a failing grade for the entire course. Violations may also be taken to the dean for further disciplinary action. Such action may include, but is not limited to, academic probation or dismissal from the program.** To view the Standards of Academic Conduct Policy please visit: http://www.llu.edu/llu/handbook/6r.htm.

Attendance Policy:

Attendance is required, and is especially critical for those elements of class in which dialog and participation are integral. Students will be responsible for all material covered in the lectures as well as any reading material assigned. It is the responsibility of students to be aware of any announcements that may be made in class as well as to obtain any handouts that are distributed during class.

Americans with Disabilities Act (ADA) Policy:

If you are an individual with a certifiable disability and need to make a request for reasonable accommodation to fully participate in this class, please visit the Dean's Office of the School of Medicine. To view the Disability Accommodation Policy please go to: http://www.llu.edu/llu/handbook/6e.htm. **Students with learning difficulties requesting modifications to the standard testing outlined in this syllabus must submit written approval for the requested accommodations to the course director a minimum of 1 week prior to the first examination.**

Protected Health Information:

The purpose of the Protected Health Information (PHI) policy is to provide guidance and establish clear expectations for students regarding the appropriate access to and use of PHI during course studies and related program activities. Under the Health Insurance Portability and Accountability Act (HIPAA), patient health information is

protected. For further information, please go to: http://www.llu.edu/llu/students/documents/phi-guidelines.pdf.

Flexibility:

The course syllabus provides a general plan for the course; deviations may be necessary. If it becomes necessary to alter the dates for the exams or the material covered in these exams, the changes will be announced in class as early as possible. The course director is the final arbiter and reserves the right to make the final decision when situations not described in this syllabus arise. Students are strongly advised to contact the course director for clarification before unusual circumstances occur.