Introduction to Literature Review & Technical/Proposal Writing

Time and Place
11:30 AM-12:20 PM Monday-Wednesday-Friday
2133 Seamans Center for the Engineering Arts & Sciences

Course Description
These courses are designed to introduce the student to the skills used in reviewing the literature, reading publications critically, and communicating scientific ideas in both written and oral form. For CBE:5104, this form will be a publication-caliber review article on a select topic. For CBE:5105, this form will be a federal-agency-style research proposal. Both written forms will be accompanied by an appropriate oral presentation. Other communication forms including group writing and posters will be discussed, along with additional practical considerations such as the peer review process and plagiarism.

Instructor
Prof. Jennifer Fiegel
jennifer-fiegel@uiowa.edu, 4128 SC
Office Hours by appointment

Course Format
Lectures with in-class assignments and discussion. Due to the nature of the course, attendance is mandatory. Only excused absences (verifiable illness or conference participation) will be accepted.

Required Text
You must have a reference text which you will use to guide you in writing and preparing presentations. You can choose the text which suits you best. Recommendations include:


Grading
The following criteria will be used to evaluate each student’s performance in the course:

1. Homework and In-class Participation (20% of grade)
   – Participation in classroom discussions and evaluations
   – Performance on periodic in-class and take-home assignments

2. Projects (30% of grade)
   – Written literature review exercise
   – Oral presentation based on literature review exercise
   – Writing log

3. Final Written Review Paper (CBE:5104) / Research Proposal (CBE:5105) (50% of grade)
   – Written original manuscript
   – Oral presentation based on manuscript
Tentative Course Timeline:
Week 1: Introduction, Scope of Course, Critically Evaluation the Literature
Week 2: Literature Searches, Elements of Papers
Week 3: Using Endnote, Elements of Papers
Week 4: Data Management, Presentation Skills
Week 5: Establishing Good Writing Habits, First Presentations
Week 6: Writing Skills
Week 7: Plagiarism, The Research Problem
Week 8: Elements of Proposals
Week 9: Literature Review Presentations and Discussion
Week 10: Presentation Feedback, Biosketches, Poster Presentation Discussion
Week 11: Writing Workshop Evaluating Objectives, Using Feedback, Abstracts
Week 12: Abstracts, Group Writing, Overcoming Writing Roadblocks
Week 13: Labbooks, Statistics, Ethics in Data Presentation
Week 14: Writing workshops, Final Presentations
Week 15: Final Presentations
Finals Week: Final Presentations (if needed)

Scheduling conflicts
Students anticipating a scheduling conflict should contact the instructor as soon as possible. Exams will be offered at alternative times as consistent with the University’s exam policies. These policies can be viewed at www.registrar.uiowa.edu/exams/exampolicy.aspx

Accommodations for Disabilities
If you feel that you may need an accommodation based on the impact of a disability please contact Prof. Fiegel privately to discuss your specific needs. You may also contact the Office of Student Disability Services (319-335-1462) to discuss the accommodations that are available for students with documented disabilities.

This course is housed in the College of Engineering, therefore class policies on matters such as requirements, grading, and sanctions for academic dishonesty are governed by the College of Engineering. Students wishing to add or drop this course after the official deadline must receive the approval of the Dean of the College of Engineering. Details of the University policy of cross enrollments may be found at: http://www.uiowa.edu/~provost/deos/crossenroll.doc