

BENG 207: Communication Skills for Bioengineers

Spring 2022

Class time and location: Tu/Th 3:30-5 PM PFBH 191
Instructor: Professor Ester J. Kwon (ejkwon@ucsd.edu)

Teaching Assistant: Benjamin Liang (bkliang@ucsd.edu)

Text: Reading provided on Canvas

Course Objectives:

1. To compose an original engineering research proposal based on your independent research ideas.
2. To learn about the peer-review process and constructive criticism.
3. To provide training in reproducibility and rigor.
4. To provide training in oral presentation and effective graphics.

Canvas

Canvas will be used as the main hub for class resources and communication.

- Syllabus, reading, and assignments
- Due dates
- General course announcements
- Keep all posts professional and related to the course.

Class Policies

- Late policy: Any assignments turned in late will have a 20% reduction in points every 24 hours it is late.
- If there is a grade discrepancy, submit the original assignment along with a written request for a re-grade to a TA within one week from the date the assignment is returned. If re-grading is desired, then the entire assignment or project is subject to re-grading.
- Academic dishonesty will not be tolerated. The Department of Bioengineering adheres to the UCSD Policy on Integrity of Scholarship. An excerpt of this Policy states that "*Students are expected to complete the course in compliance with the instructor's standards. No student shall engage in any activity that involves attempting to receive a grade by means other than honest effort....*" Any suspected incident will be dealt with in accordance with UCSD policy, which includes reporting the misconduct to the Dean. More information on UCSD's academic dishonesty policy can be found at: ugr8.ucsd.edu/judicial/JudicialAffairs.htm.

Course Evaluation

- Participation – 20%
- Assignments – 20 %
- Specific aims drafts – 5%
- Background and Significance draft – 5%
- Full proposal draft – 5%
- Peer review – 10%
- Lightning talk and self-assessment – 10%
- Final proposal – 25%

Week	Day	In-class schedule (Codes: L - Lecture; A - Activity; WW - Writing Workshop)	Assignment (Due Monday 11:59 PM unless otherwise noted)
1	Tu Th	L: Structure of a proposal; A: Identification of testable hypotheses WW: Specific Aims outline in small working groups	Submit research area - 25 pts (Due Th 3/31 11:59 PM)
2	Tu Th	A: Peer-review of Specific Aims in groups of 4 based on Merit Review Criteria L: Individual Development Plans; A: Guided Individual Development Plan	1-page Specific Aims First Draft - 50 pts
3	Tu Th	L: Background & Significance; A: Citation managers WW: Background & Significance outline	Send revised Specific Aims to faculty member for feedback.
4	Tu Th	L: Biosketch, curriculum vitae, resumes; A: Biosketch: Personal statement L: Graphics; A: Critique of graphics	Individual Development Plan (IDP) and schedule a meeting with your adviser - 50 pts
5	Tu Th	L: Research Design & Methods, Innovation; A: Yes and! Improv WW: Research Design & Methods	1.5-2 pages Background & Significance - 50 pts Faculty comments on Specific Aims - 25 pts
6	Tu Th	A: Peer-critique of graphics L: Project Summary, Project Narrative, the Lay Abstract; A: Write a Project Summary and a Lay Abstract	NIH Biosketch - 50 pts Proposal graphic with caption - 25 pts
7	Tu Th	A: Biosketch and CV peer critique in groups of 2 L: Peer Review; A: Debate of peer review	Full proposal draft (6 pages + References) - 50 pts
8	Tu Th	L: Oral presentation; A: 2-minute lightning talk in pairs L: How to answer questions; A: Question answering practice	IDP signed by adviser - 25 pts 2 questions per proposal 5/19 (class participation points)
9	Tu Th	A: Mock Study Section L: Rigor & Reproducibility; A: R&R case studies	Peer Review of 2 proposals - 100 pts
10	Tu Th	A: Recorded lightning talks A: Recorded lightning talks	Self-critique of recorded talk - 100 pts (Due Fri 6/3 11:59 PM)
Final		No exam	Final proposal Due Monday 6/6 11:59 PM