

BME185 TECHNICAL WRITING FOR BIOMOLECULAR ENGINEERS

TTH 1-4:30 PM Thimann 101 Summer Session I: 6/26-7/28	Dr. Joy Hagen Office: RCrSn Rm 333 Hours: TBA, also by appointment
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TEXTS AND OTHER COURSE MATERIALS

Significant reading includes peer writing and online resources:

- ✓ \$ For Printing
- ✓ Google Classroom and Canvas sites

Optional and Recommended:

- ✓ Writing handbook equivalent to Lunsford, A. (2009). *Everyday Writer*, 4e. Bedford, St. Martin.
- ✓ Gurak & Lannon (2010). *Strategies for Technical Communication in the Workplace*. Boston: Longman.

TECHNICAL WRITING FOR BIOMOLECULAR ENGINEERS

Writing by biomolecular engineers to engineers, engineering managers, and technical writers. Exercises include job application & resume, library research, graphics, protocols, document specification, progress report, technical report, poster, and presentation.

PREREQUISITES: Satisfaction of Entry Level Writing and Composition requirements; previous or concurrent enrollment in BIOL 101L, BIOL 100K, or BME 150L; enrollment restricted to junior or senior bioengineering or bioinformatics majors.

OUR CLASSROOM STANDARDS SUPPORT INTELLECTUAL HABITS OF MIND:

CURIOSITY, OPENNESS, PERSISTENCE

1. Our classroom is a safe space.
2. Take risks in your writing, research, and class participation. Try, learn, revise.
3. Be a fantastic collaborator and contribute fully to group work.
4. Respond to peer writing critically and helpfully, but not judgmentally.

ENGAGEMENT, RESPONSIBILITY, FLEXIBILITY

5. Take full ownership of your writing, revising deeply until you are truly happy.
6. Challenge yourself. Choose challenging topics, try new approaches, take risks.
7. Use your resources to attain new competencies, including course materials, instructor office hours, peer and instructor feedback, and campus resources.
8. Always bring your writing (drafts, copies) with you to class.
9. Come prepared. Be on time. **Answer procedural questions outside of class time:** read all assignment instructions (even the long ones). Check the course schedule, websites, and email.
10. Keep your deadlines and do not fall behind.
11. Plagiarism and self-plagiarism (or resubmission/ recycling of an assignment) fall under "cheating" within the UCSC Student Code of Conduct. This includes (but is not limited to):
 - a. *Copying from the writings or works of others into one's academic assignment without attribution, or submitting such works as if it were one's own;*
 - b. *Using the views, opinions, or insights of another without acknowledgment; or*
 - c. *Paraphrasing the characteristic or original phraseology, metaphor, or other literary device of another without proper attribution (102.012 Plagiarism, Code of Student Conduct 2015).*
 - d. *Representing, explicitly or implicitly, that work obtained from another source was produced by oneself (102.013 Furnishing false..., Code of Student Conduct 2015).*
 - e. **Submitting the same piece of work as partial fulfillment of the requirements in more than one course without permission of the instructor** (102.013 Furnishing false..., Code... 2015).

CREATIVITY, PERSISTENCE, METACOGNITION

12. Write to learn, to define and hone your own thinking, and to communicate.
13. Develop your writing process recursively.
14. Pursue a variety of goals for your writing.
15. Use multiple strategies to accomplish your writing and research goals.
16. **Reflect** after each class, exercise, writing session, or revision to identify the skills or learning outcomes involved in your work.

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COURSE COMPONENTS

ASSIGNMENTS:

- | | | |
|---|------------------------|-----------------------------------|
| 1. Job resume, cover letter, and letter of recommendation | 4. Scientific Graphics | 7. eProgress Report |
| 2. Library skills | 5. Lab Protocol | 8. Poster |
| 3. Final Project Proposal | 6. Oral Presentation | 9. Final Project/Technical Report |

REVISIONS AND GRADING:

Your goal is personal development as a writer and a scholar, with the instructor coaching your progress toward as much as possible during the meager ten-week quarter. If you choose a graded option for the course, your ten weeks of effort and progress receive a comprehensive letter grade. Grades are not given to individual pieces of writing; instead, a complete portfolio of your work is graded holistically. The final project accounts for about 25% of your grade; participation accounts for about 25% of the final grade; other papers account for the remaining 50% of the final grade.

PORTFOLIOS:

Keep all of your drafts, revisions, and (especially) feedback organized in a folder or binder. This final portfolio is how your course grade will be determined. A passing portfolio must be 1) complete, including all required revisions, and 2) follow final Portfolio Checklist requirements/instructions.

DRC ACCOMMODATION:

I work toward an academic environment where UCSC's diverse student body can thrive. Students with disabilities should work with me to achieve equal access in our writing classrooms. Please submit your Accomodation Authorization Letter from the Disability Resource Center (DRC) to me privately and in-person (outside of class) as soon as possible and within the first two weeks of the quarter. I encourage all students who may benefit from learning more about DRC services to Contact DRC at (831) 459-2089 or by email at drc@ucsc.edu.

COURSE DEADLINES & SCHEDULE: VERSION 1, SUBJECT TO CHANGE

Myths Untruths False Statements (you get the idea)	Week & Date	In Class	Write (in class)	Reading Due (incomplete list, see Course sites)	Assignments DUE
<ul style="list-style-type: none"> ▪ Formal writing utilizes passives & jargon. ▪ Good writers don't work as hard as I have to work to write well. ▪ Revision takes < 1 hour/page 	Week 1 Tues. 6/27	Topics: <i>Course Overview; Audience Assessment; letter format; Concise Writing</i> Keywords: <i>Successful writing, concision, clarity, readability, zombie nouns, actors & actions, active & passive voice</i> Assign: 1.1 Job application cover letter; 1.2 Resumes (general & specific); 1.3 Referral letter/ reference	<ul style="list-style-type: none"> ▪ "All About You" survey ▪ Library assessment survey 	Syllabus, schedule, Watch Dr. Sainani's examples	<ul style="list-style-type: none"> ▪ (in class) All about you and Library assessment surveys
	Thurs. 6/29	Topics: <i>Library Research</i> Keywords: <i>Keywords!, database, citation style, document design, document specification</i> Assign: <i>Library Worksheet (2.3); Report Proposals (document design) (3.1); Project Proposals (3.2-3)</i>	<ul style="list-style-type: none"> ▪ Peer Revision 1.1, 1.2(x2) ▪ Write 1.3 ▪ Diagram doc design ▪ Outline project proposal 	Required: Ramsey, Ch.3 Optional: Huckin & Olsen Chs. 3 & 10; Gurak & Lannon Ch.9	<ul style="list-style-type: none"> ▪ Draft job application letter (1.1) and resumes (1.2) ▪ (In class) Referral/ reference (1.3)

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Myths Untruths False Statements (you get the idea)	Week & Date	In Class	Write (in class)	Reading Due (incomplete list, see Course sites)	Assignments DUE
<ul style="list-style-type: none"> ▪ Background research and library research are the same thing. ▪ My professors don't care about my citation style. ▪ I know how to write a report, like a lab report or academic research paper, and a "technical report" is the same. ▪ My reports must follow usual IMRaD formats. 	Week 2 July 4th Holiday, Thurs. 7/6	Topics: <i>Library Class—Documentation & resources, Document design and specification</i> Keywords: Access, peer review, publication, repository, library database, citation Assign: <i>Graphics for critique (4.1); Graphics (4.2); Library resource presentation (2.2); Progress report 1 (7.1)</i>	<ul style="list-style-type: none"> ▪ Library notes and worksheet ▪ Critique notes 	Optional: Huckin & Olsen Ch.16 Required: Library research course page, Zeiger Ch.8, Report document models for critique In Class: Research topics and keywords, Library worksheet	<ul style="list-style-type: none"> ▪ Proposal (3.2-3) ▪ Revised job application letter (1.1) ▪ Revised resumes (1.2) ▪ (in class) Library worksheet (2.3), Zotero
<ul style="list-style-type: none"> ▪ Excel graphics are fine in my reports. ▪ Library research is for published books or articles. ▪ Acknowledging sources = citing them. 	Week 3 Tues. 7/11	Topics: <i>Charts, graphs, tables, & figures, Graphics, Posters, Document specification review</i> Keywords: <i>Graphical representation, "excellence", see graphics & figures glossary</i>	<ul style="list-style-type: none"> ▪ Acknowledging Sources 	Required: Zeiger Ch.9, Graphics handout, Matlab resources	<ul style="list-style-type: none"> ▪ Library resource presentations ▪ Proposal: doc design (3.1) ▪ Graphics for critique (4.1)
<ul style="list-style-type: none"> ▪ The researchers reading my protocol already are experts and have similar resources or norms. 	Thurs. 7/13	Topics: <i>Graphics wrap-up, Lab Protocol</i> Keywords: Shadow audience, alleged audience Assign: Protocol (5.1)	<ul style="list-style-type: none"> ▪ Presentation critiques 	Required: Protocol readings (two)	<ul style="list-style-type: none"> ▪ Graphics (4.2) ▪ Graphics presentations (4.3) ▪ Progress report 1 (7.1-2)
<ul style="list-style-type: none"> ▪ Posters = summaries of longer papers. 	Week 4 Tues. 7/18	Catch up! See week 3 Topics: <i>Posters</i>	<ul style="list-style-type: none"> ▪ Peer review: Protocols (5.2) and Tech Reports (9) ▪ Presentation critiques 	Required: Purugganan & Hewitt; Poster readings—Powell, Purrington	<ul style="list-style-type: none"> ▪ Tech Report rough draft (9.1) ▪ Protocol draft (5.1) ▪ See 7/13
<ul style="list-style-type: none"> ▪ I'm expected to write passively constructed reports. 	Thurs. 7/20	Topics: Posters!; Style review Assign: Poster (8); Portfolios	<ul style="list-style-type: none"> ▪ Reflection, revision assessment 	Required: Revision resources	<ul style="list-style-type: none"> ▪ Protocol revision ▪ Revision 1 of 2: Tech Report
<ul style="list-style-type: none"> ▪ Practice and learning are the same thing. 	Week 5 Tues. 7/25	Topics: <i>Review/ concision</i>	TBD	None	<ul style="list-style-type: none"> ▪ Poster draft (8) ▪ Revision 2 of 2: Tech Report
<ul style="list-style-type: none"> ▪ Revisions are minor. 	Thurs. 7/27	Topics: <i>Reflection, format, and copy editing</i>	TBD	None	<ul style="list-style-type: none"> ▪ Portfolios