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Writing for Engineering

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CUNY City College

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ENGL 21007 –F

WRITING FOR ENGINEERING

Monday & Wednesday 3:30pm – 4:45pm NAC 121B
SPRING 2020

Michael Coppola

Office Hours: Monday, 2:20pm – 3:20pm NAC 6/333B

Course Description: This course is designed to help you write in ways specific to engineering fields. As with any writing course or any profession for that matter, clarity is the goal. You need good ideas, of course. But they need to be understandable beyond the scope of your own head.

Course Learning Outcomes

Over the course of the semester, you will:

1. acknowledge your and others' range of linguistic differences as resources, and draw on those resources to develop rhetorical sensibility
2. enhance strategies for reading, drafting, revising, editing, and self-assessment
3. negotiate your own writing goals and audience expectations regarding conventions of genre, medium, and rhetorical situation
4. develop and engage in the collaborative and social aspects of writing processes
5. engage in genre analysis and multimodal composing to explore effective writing across disciplinary contexts and beyond
6. formulate and articulate a stance through and in your writing
7. practice using various library resources, online databases, and the Internet to locate sources appropriate to your writing projects
8. strengthen your source use practices (including evaluating, integrating, quoting, paraphrasing, summarizing, synthesizing, analyzing, and citing sources)

Required Materials

Since this is a zero-cost textbook class, we will use free online Technical Communications textbooks. Each reading assignment is listed on the syllabus schedule with links to the chapters.

The online textbooks are:

Technical Writing Skills by Susan Last:

<https://pressbooks.bccampus.ca/technicalwriting/front-matter/acknowledgements/>

Technical Writing by Annemarie Hamlin, Chris Rubio, Michele DeSilva:

<https://coccoer.pressbooks.com/front-matter/copyright/>

Online Technical Writing by David McMurrey

<https://www.prismnet.com/~hcexres/textbook/acctoc.html>

In addition, there will be an active Blackboard and Academic Commons site for this class. Any additional materials will be posted to Academic Commons and reading assignments are listed on the syllabus schedule with links.

<https://coppola21007.commonsc.gc.cuny.edu/>

Grading

- | | |
|--|-----|
| • Resume and Cover Letter | 5% |
| • Business Memo | 5% |
| • Lab Reports Memo | 10% |
| • Technical Description and Instructions | 15% |
| • Final Group Project/Engineering Proposal | 20% |
| • Final Group Project/Presentation | 15% |
| • Digital Portfolio and Self-Assessment | 15% |
| • Preparation and Participation *** | 15% |

*** Preparation and Participation includes all other writing done for homework, reading the required materials in preparation for class, and active participation in class discussion, in class writing, peer review, and group work.

Assignments:

- A **printed** copy of each graded assignment must be turned in on the due date. If you are absent, please email me a copy to receive credit for on time work but bring a printed copy to the next meeting. A letter grade will be deducted for each day an assignment is late. Any assignment without a draft submitted will receive a deduction of half a grade. You will have the opportunity for the final portfolio to revise the assignments (excluding the Group Project) again for consideration of a higher grade.

Resume and Cover letter: For this assignment you will research a company related to your Engineering field of study and you will prepare a resume and cover letter for applying for a summer internship. 1 page minimum each, 11-12-point font, Times New Roman, Resume and Business Cover letter format

Business Memo: For this assignment, you will evaluate a company's Code of Ethics and report your evaluation to me in business memo. 1 page, 11-12-point font, Business Memo format

Lab Reports Memo: For this assignment, you will do a comparative analysis of 2 Engineering lab reports related to your field of study and report your analysis to me in a Business memo. 1-2 pages. 11-12-point font, Business Memo format

Technical Descriptions and Instructions: For this assignment., you will describe a mechanism related to you field of study, describe its function, how it operates including its major parts for a person unfamiliar with the item. In addition, you will write a set of instructions for the end user to use this mechanism. You will incorporate proper graphics and images for each and pay close - attention to visual space and composition to aid in the understanding of the mechanism and how to use it. 4 pages minimum total. Format examples provided in online textbooks and in class.

Final Group Project: For this assignment you will put in groups specific to your majors (as best as we can accommodate) and you work collaboratively on a proposal that proposes an innovative well

focused engineering solution to a problem. You will also compose slides and present your proposal to the class. Proposal: 6 pages, 11-12pt font, double spaced. Presentation: 20 minutes and a 10-minute Q and A.

Digital Portfolio and Self-Assessment: For this assignment, you will post your major assignments to an Academic Commons Word Press site. Each assignment will include abstracts as introductions to the work. You will also write a self-assessment essay discussing your work, your development as a writer and to what extent you achieved the course learning outcomes. Self-Assessment essay: 4 pages minimum,

Course Policies

You may use your laptops to access the reading assignments and for your group work. Technology outside of these texts or for non-class related work is prohibited. Non adherence to this rule will result in being marked absent for that class. Continued usage will result in being asked to leave the classroom.

Plagiarism and Academic Integrity

I will not tolerate any plagiarism. Any assignment in which there is plagiarized material will receive no credit. You are expected to read, understand, and adhere to CCNY's Policy on Academic Integrity, which is available here:

<http://www1.cuny.cuny.edu/current/upload/Academic-Integrity-Policy.pdf> .

Attendance:

You are allowed 4 absences in this class. Over four and you will fail the class. One lateness or early departure is half an absence. Please communicate with me if you are out.

Student Code of Conduct:

<http://www.cuny.cuny.edu/studentaffairs/community-standards.cfm>

Food and Drinks:

Please do not bring your lunch or dinner to class. Light snacks are permitted, as are drinks. All drinks should have closed lids.

Plagiarism (Please don't do it. Please.)

- Plagiarism is the unacknowledged use of another's words or ideas. Any paper with your name on it signifies that you are the author. Ideas are intellectual property; taking an idea created by someone else and passing it off as your own is considered theft. Plagiarism will not be tolerated in any form, and will be subject to severe penalties. Evidence of plagiarism will result in one or more of the following: a failing grade for the assignment, a "Z" in the course - CUNY's grade that indicates failing due to academic dishonesty, a report filed with the college, and disciplinary action.
- A complete account of the CUNY Policy on Academic Integrity can be downloaded from the College's home page. (<http://www1.cuny.cuny.edu/current/upload/Academic-Integrity-Policy.pdf>)
- Everything on the internet is considered an outside source and must be cited properly.

- Using a thesaurus to change the language of another person's ideas is plagiarism and tends to be very easy to spot.

Support Services Offered to Students

There are a number of Support Services available for CCNY students (visit http://www1.cuny.edu/current/tutoring_services.cfm for a complete list):

Gateway Advising Center, NAC 1/220 – students without a declared major receive academic advising through the Gateway Center.

Samuel Rudin Writing Center, NAC 3rd floor plaza – offers writing assistance to all CCNY students through one-on-one tutoring and group workshops. ESL tutoring is also available through the Writing Center. <http://www.cuny.edu/writing/>

AccessAbility Center Tutoring Services, NAC 1/218 – provides one-on-one tutoring and workshops to all registered students with learning or physical disabilities.

SEEK Peer Academic Learning Center, Harris 08 – offers counseling and peer tutoring for students in need of academic and financial support who have registered for the SEEK Program.

Calendar/Subject to change

Weekly Schedule. Subject to Change

WEEK 1
M 1.27 Syllabus: Introductions/Expectations In class writing
W 1.29 Discuss: “What is Technical Communications?” S. Last , Online textbook: Chaps 1.1-1.5 https://pressbooks.bccampus.ca/technicalwriting/part/techcomm/ **** Click left menu too expand chapter for all sections 1.1 through 1.5
Complete exercises in chapter in notebook in preparation for class
WEEK 2
M 2.3 Discuss: Companies related to your Engineering career goals (Research 2 examples for class) Discuss: “Correspondence” S. Last , Online textbook: Chap 7.1 https://pressbooks.bccampus.ca/technicalwriting/chapter/correspondence/
Discuss: Early career resumes: D. McMurrey , Online textbook https://www.prismnet.com/~hcexres/textbook/resume.html#early_career
In class job interviews exercise
W 2.5 DRAFT 1 DUE: Resume & Cover Letter, PRINT for peer review Resume Group Work
WEEK 3
M 2.10 FINAL DRAFT DUE: Resume and Cover Letter Discuss: “Ethics in Technical Writing” A. Hamlin et al , Online textbook, Chap 10 https://coccoer.pressbooks.com/chapter/ethics-in-technical-writing/
Discuss NYT article “An Engineer’s Eureka Moment with a GM Flaw” https://www.nytimes.com/2014/03/29/business/a-florida-engineer-unlocked-the-mystery-of-gms-ignition-flaw.html

W 2.12	<i>NO CLASS COLLEGE CLOSED</i>
WEEK 4	
M 2.17	<i>NO CLASS COLLEGE CLOSED</i>
W 2.19	DRAFT 1 DUE: Business Memo, PRINT for peer review PRINT and ANNOTATE the company Code of Ethics you evaluated in the memo
WEEK 5	
M 2.24	FINAL DRAFT DUE: Business Memo LIBRARY OVERVIEW SESSION: MEET IN LIBRARY. ROOM T.B.D.
W 2.26	Discuss: “Lab Reports” S. Last , Online textbook, Chap 7.6 https://pressbooks.bccampus.ca/technicalwriting/chapter/labreports/ PRINT and ANNOTATE 4 Engineering Lab Reports relative to your major
WEEK 6	
M 3.2	DRAFT 1 DUE: Business Memo: Comparative evaluation of 2 lab reports PRINT for peer review
W 3.4	Discuss: “Technical Descriptions and Definitions” S. Last , Online Textbook Chap 7.4 https://pressbooks.bccampus.ca/technicalwriting/chapter/technicaldescriptions/ Discuss: “Writing Instructions” S. Last , Online Textbook, Chap 7.7 https://pressbooks.bccampus.ca/technicalwriting/chapter/writinginstructions/ In class writing exercises
WEEK 7	
M 3.9	FINAL DRAFT DUE: Lab reports Business Memo PRINT and ANNOTATE 2 sets of technical instructions (found online or at home) Technical Instructions Evaluation Group work
W 3.11	Discuss: <i>Introduction: Grand Challenges of Engineering</i> , National Academy of Engineering Challenges for Engineering: http://www.engineeringchallenges.org/challenges/16091.aspx
WEEK 8	
M 3.16	DRAFT 1 DUE: Technical Descriptions and Instructions PRINT for peer review
W 3.18	Discuss: <i>Restore and Improve Urban Infrastructure</i> , National Academy of Engineering http://www.engineeringchallenges.org/challenges/infrastructure.aspx Utilizing the NAE website’s news feed search function, locate the 3 most compelling articles related to the Infrastructure challenge. Come to class with 3 short paragraph summaries in your notebooks for each article. Choose the “Grand Challenge” from the drop-down menu. http://www.engineeringchallenges.org/14373/17251.aspx?id=17251 Discuss: “Banning Cars from Manhattan” P. Goodman. Posted to Academic Commons
WEEK 9	
M 3.23	FINAL DRAFT DUE: Technical Descriptions and Instructions DUE: Academic Commons URL due Discuss: <i>Making Solar Energy Economical</i> , National Academy of Engineering http://www.engineeringchallenges.org/challenges/solar.aspx Utilizing the NAE website’s news feed search function, locate the 3 most compelling articles related to the Solar Energy challenge. Come to class with 3 short paragraph summaries in your notebooks for each article. Choose the “Grand Challenge” from the drop-down menu. http://www.engineeringchallenges.org/14373/17251.aspx?id=17251 In class reading: Banning Cars From Manhattan

W 3.25	Discuss: <i>Secure Cyberspace</i> , National Academy of Engineering Challenges for Engineering: http://www.engineeringchallenges.org/challenges/cyberspace.aspx
	Discuss: <i>Engineer Better Medicines</i> , National Academy of Engineering Challenges for Engineering: http://www.engineeringchallenges.org/challenges/medicines.aspx
	Utilizing the NAE website's news feed search function, locate the 3 most compelling articles related to Cyberspace challenge and 3 articles for the Biomedical challenge. Come to class with 3 short paragraph summaries in your notebooks for each article. Choose the "Grand Challenge" from the drop-down menu. http://www.engineeringchallenges.org/14373/17251.aspx?id=17251
WEEK 10	
M 3.30	Discuss: "Proposals" S. Last, Online textbook, Chap 7.2 https://pressbooks.bccampus.ca/technicalwriting/chapter/proposals/
	GROUP PROPOSAL WORK
W 4.1	Discuss "Oral and Visual Presentations" S. Last, Online textbook, Chap 8.1 – 8.3 https://pressbooks.bccampus.ca/technicalwriting/part/presentations/
	GROUP PROPOSAL WORK
WEEK 11	
M 4.6	GROUP PROPOSAL WORK
T 4.7	CLASSES FOLLOW A WED SCHEDULE
	GROUP PROPOSAL WORK
W 4.8	SPRING BREAK
WEEK 12	
M 4.13	SPRING BREAK
W 4.15	SPRING BREAK
WEEK 13	
M 4.20	GROUP PROPOSAL WORK/CONFERENCES
W 4.22	GROUP PROPOSAL WORK/CONFERENCES
WEEK 14	
4.27	GROUP PROPOSAL WORK/CONFERENCES
WEEK 15	
M 5.6	PRESENTATIONS
W 5.8	PRESENTATIONS
WEEK 16	
M 5.13	PRESENTATIONS
W 5.15	PRESENTATIONS
	Discuss Digital Portfolio and Self-Assessment Essay
WEEK 17	
M 5.20	Final Digital Portfolio DUE