

Prof. Adam M. Wickenheiser Department of Mechanical Engineering 110 Spencer Lab <u>amwick@udel.edu</u> 302-831-8143 Spring 2019 Office hours: Mon. 4-5 PM Thurs. 10-11 AM

MEEG 104

Analysis and Communication of Technical Information

Spring 2019, 2 credits

PREREQUISITES

None

COURSE LEARNING OBJECTIVES

To be able to analyze and communicate technical information through proficiency in various engineering forms of communication, formulation of quantifiable arguments, and persuasive presentation of numerical data. By the end of the course, the student will be able to:

- 1. Identify and utilize appropriate (i.e. professional) engineering forms of communication
- 2. Perform statistical analysis in Excel, Python, etc. to support an argument or hypothesis
- 3. Produce quality technical documents in preparation for later laboratory and design courses
- 4. Deliver oral and poster presentations on technical matters

COURSE TOPICS

- 1. Forms of technical communication of engineering products
- 2. Usage of data to support arguments, including statistics and significance testing
- 3. Professional communication skills: organization, style, voice
- 4. Career skills involving written and oral communication

MEETING TIMES

Lecture:	Tuesdays	3:30pm-4:45pm	Brown Lab 101
Discussion Sections:	Thursdays	3:30pm-4:30pm	Spencer Lab 133 (sec. 20) Spencer Lab 131 (sec. 21) Gore Hall 310 (sec. 22) Gore Hall 218 (sec. 23) Memorial Hall 048 (sec. 24)
	Thursdays	5:00pm-6:00pm	Penny Hall 209 (sec. 25) Penny Hall 206 (sec. 26) Drake Hall 074 (sec. 27) Purnell Hall 232 (sec. 28) Brown Lab 116 (sec. 29)

GRADING

Discussion assignments (due Thursdays):	20%
Homework (due Tuesdays):	40%
Catapult technical report:	15%
Final poster presentation:	15%
Participation:	10%

Discussion assignments: These assignments will be introduced in lecture and posted on Canvas. As a rule, they will be assigned on Tuesday and due by Thursday at 3:30pm. All submissions will be made through Canvas, and in some cases you will be required to bring a paper copy of your submission to discussion section. No late submissions are accepted. With extenuating circumstances, extensions can be provided if approved <u>beforehand</u> by the instructor.

Unlike other submissions, the grade from your peer will be factored into the grade you receive.

Homework: Each of these assignments will build off a discussion assignment or be revisions of a discussion assignment. They are generally due at the beginning of lecture each week and are submitted through Canvas.

Catapult technical report: This is a major submission that builds off several revisions, using data from simulations and experiments.

Final poster presentation: The final project for this course is a poster presentation; the grade for this project will be based on the poster itself and the oral presentation of it. This is a group project based on your MEEG 102 final projects. If you are not enrolled in MEEG 102, you will present on a different technical topic.

Participation: This grade represents attendance in lecture and discussion sections, submission of satisfactory lecture responses, completion of in-discussion work (e.g. peer reviews), and any extraordinary effort put into the course. This grade can be boosted over 10%, taking the place of any formal extra credit. Any absences must be approved <u>beforehand</u> by the instructor, unless it is an emergency. You must attend only the discussion section you are enrolled in.

Re-grade requests must be emailed or brought to the instructor's office hours to discuss within one week following the return of the graded material. A justification must accompany any re-grade request. It is possible for a grade to be lowered after a re-grade. <u>Please check your grades on Canvas every week to take advantage of this policy.</u>

<u>Grades are not curved in this course.</u> It is theoretically possible for everyone in the class to get an A (or an F). Your grade depends only on your own performance, not on how well everyone else does. Adjustments or supplements may be made to graded materials if they prove to be unfairly difficult. Grades may also be adjusted due to outstanding attitude and effort. No extra credit or make-ups will be given on an individual basis.

GRADE SCALE

Grade	Interval	Grade	Interval
Α	≥ 93%	С	73% to 77%
A-	90% to 93%	C-	70% to 73%
B+	87% to 90%	D+	67% to 70%
В	83% to 87%	D	63% to 67%
В-	80% to 83%	D-	60% to 63%
C+	77% to 80%	F	≤ 60%

Техтвоок

There is no required textbook for this course. Various online resources will be shared on Canvas.

ATTENDANCE

Students are expected to attend every lecture and discussion section, and they are responsible for all course material and announcements discussed in class. Students are encouraged to avoid attending class if they are ill. Please inform the instructor as soon as possible if you must miss class due to illness. Other reasons for absence must be communicated to the instructor <u>ahead of time and approved</u>.

Handouts, PowerPoint slides, and code will be posted on Canvas, and all administrative announcements made in class will also be posted there.

ACADEMIC INTEGRITY

Please familiarize yourself with UD policies regarding academic dishonesty. To falsify the results of one's research, to steal the words or ideas of another, to cheat on an assignment, to re-submit the same assignment for different classes, or to allow or assist another to commit these acts corrupts the educational process. Students are expected to do their own work and neither give nor receive unauthorized assistance. Complete details of the university's academic integrity policies and procedures can be found at http://www1.udel.edu/studentconduct/policyref.html Office of Student Conduct, 218 Hullihen Hall, (302) 831-2117. E-mail: student-conduct@udel.edu

Students are encouraged to discuss assignments with each other, the TAs, and the instructor. However, unless otherwise allowed, all submissions must reflect an individual effort. It is considered plagiarism to share your work with someone else or to copy someone else's work (even if it is rewritten or paraphrased). If another's work is used either verbatim or paraphrased, it must be properly cited.

HARASSMENT AND DISCRIMINATION

The University of Delaware works to promote an academic and work environment that is free from all forms of discrimination, including harassment. As a member of the community, your rights, resource and responsibilities are reflected in the non-discrimination and sexual misconduct policies. Please familiarize yourself with these policies at <u>www.udel.edu/oei</u>. You can report any concerns to the University's Office of Equity & Inclusion, at 305 Hullihen Hall, (302) 831-8063 or you can report anonymously through UD Police (302) 831-2222 or the EthicsPoint Compliance Hotline at www1.udel.edu/compliance. You can also report any violation of UD policy on harassment, discrimination, or abuse of any person at this site: sites.udel.edu/sexualmisconduct/how-to-report/

FACULTY STATEMENT ON DISCLOSURES OF INSTANCES OF SEXUAL MISCONDUCT

If, at any time during this course, I happen to be made aware that a student may have been the victim of sexual misconduct (including sexual harassment, sexual violence, domestic/dating violence, or stalking), I am obligated to inform the university's Title IX Coordinator. The university needs to know information about such incidents in order to offer resources to victims and to ensure a safe campus environment for everyone. The Title IX Coordinator will decide if the incident should be examined further. If such a situation is disclosed to me in class, in a paper assignment, or in office hours, I promise to protect your privacy--I will not disclose the incident to anyone but the Title IX Coordinator. For more information on Sexual Misconduct policies, where to get help, and how to reporting information, please refer to www.udel.edu/sexualmisconduct. At UD, we provide 24-hour crisis assistance and victim advocacy and counseling. Contact 302-831-1001, UD Helpline 24/7/365, to get in touch with a sexual offense support advocate.

For information on various places you can turn for help, more information on Sexual Misconduct policies, where to get help, and reporting information please refer to www.udel.edu/sexualmisconduct

INCLUSION OF DIVERSE LEARNING NEEDS

Any student who thinks he/she may need an accommodation based on a disability should contact the Office of Disability Support Services (DSS) office as soon as possible. The DSS office is located at 240 Academy Street, Alison Hall Suite 130, Phone: 302-831-4643, fax: 302-831-3261, DSS website (<u>www.udel.edu/DSS/</u>). You may contact DSS at <u>dssoffice@udel.edu</u>

NON-DISCRIMINATION

The University of Delaware does not discriminate against any person on the basis of race, color, national origin, sex, gender identity or expression, sexual orientation, genetic information, marital status, disability, religion, age, veteran status or any other characteristic protected by applicable law in its employment, educational programs and activities, admissions policies, and scholarship and loan programs as required by Title IX of the Educational Amendments of 1972, the Americans with Disabilities Act of 1990, Section 504 of the Rehabilitation Act of 1973, Title VII of the Civil Rights Act of 1964, and other applicable statutes and University policies. The University of Delaware also prohibits unlawful harassment including sexual harassment and sexual violence.

For inquiries or complaints related to non-discrimination policies, please contact: Director, Institutional Equity & Title IX Coordinator- Susan L. Groff, Ed.D. groff@udel.edu, 305 Hullihen Hall Newark, DE 19716 (302) 831-8063

For complaints related to Section 504 of the Rehabilitation Act of 1973 and/or the Americans with Disabilities Act, please contact: Director, Office of Disability Support Services, Anne L. Jannarone, M.Ed., Ed.S. - ajannaro@udel.edu

Alison Hall, Suite 130, Newark, DE 19716 (302) 831-4643 OR contact the U.S. Department of Education - Office for Civil Rights (<u>wdcrobcolp01.ed.gov/CFAPPS/OCR/contactus.cfm</u>)

CENTER FOR COUNSELING AND STUDENT DEVELOPMENT (CCSD)

At times, personal problems, stress, or life circumstances can interfere with your academic functioning. UD's Center for Counseling and Student Development provides a variety of services to support you in your academic work and be successful. The Center works with you on a confidential and individual basis; in addition, you may utilize assessment and counseling services, and referral to additional resources off campus. CCSD is funded by the student health fee and does not charge for services. For more information, visit <u>http://sites.udel.edu/counseling/</u>, or call the office at 831-2141.