

MSE 6775 – Spring 2027
Polymer Communications
Friday 11:00-11:50 AM, TBD

Course Description: Polymer science and engineering is an interdisciplinary subject. It requires students to acquire and practice the use of physics, math, engineering and chemistry. This course will lead students to solidify their knowledge of polymer science and engineering by offering them a platform to discuss literature results and their own results. They will learn and practice visual and oral delivery. Audience participation will encourage critical thinking in a supportive environment.

1 credit hour (can be retaken 3 times for credit)

Pre-/co-requisite: *suggested* MSE 8200, Advanced Presentation Skills

Instructor: Prof. Scott Danielsen
273A Paper Tricentennial Building
scott.danielsen@mse.gatech.edu

Office Hours: *by email request*

Course Website: Canvas will be used to post important announcements, the course syllabus, and other resources.

Grades: Your grade in the course will be determined based on your presentation and participation in other talks.

Students early in their graduate careers will be asked to give a 15-minute talk. It will often be a short description of an article from the literature or may also be a practice talk for an upcoming scientific meeting or interview. Students will be graded on statement of problem, rational explanation, quality of diagrams/drawings/plots, organization and diction.

Experienced students will be slated to give a 40-minute talk, leaving 10 minutes for discussion. These presentations will typically be based on research. The speaker will be charged with presentation of a problem, providing related background information at a level suitable for beginners, providing advanced information at a level for experts, summarizing, and providing a philosophical perspective on the work.

For other student presentations during the semester, each student will provide feedback on positive qualities of the presentation and potential areas to improve. These can be generated as notes taken during the presentation or written up afterwards. These will be submitted to Prof. Danielsen before the next class period, who will then compile the feedback for delivery to the presenter.

The course grading scale is:

A: 90-100%

B: 80-89%

C: 70-79%

D: 60-69%

F: 0-59%

Assignment

Final Grade Percentages

Students giving 15 min talks 30% talk + 70% participation

Students giving 40 min talks 70% talk + 30% participation

Talks will be individually scheduled at the beginning of the semester.

Academic Integrity: Georgia Tech aims to cultivate a community based on trust, academic integrity, and honor. All students in this class are expected to respect the Georgia Tech honor code and behave in a professional manner when it comes to academic integrity. Copying from other students (current or former), instructor/TA solutions from previous semesters, solution manuals, or websites is considered an honor code violation. Any students violating the honor code or suspected of academic misconduct will be turned over to the Office of Academic Integrity, Dean of Students to investigate the incident(s). Cheating off anyone else's work is a direct violation of the Georgia Tech Academic Honor Code and will be dealt with accordingly. For any questions involving any honor code issues, consult the instructor, the teaching assistants, or honor.gatech.edu.

Accommodations: Georgia Tech encourages qualified persons with disabilities to participate in its programs and activities. If you are a student with learning needs that require special accommodation, contact the Office of Disability Services at disabilityservices.gatech.edu as soon as possible, to make an appointment to discuss your special needs and to obtain an accommodations letter. If you anticipate needing any additional accommodation in this course or have questions about physical access, please tell the instructor as soon as possible. Finally, if you encounter extenuating circumstances that interfere with your ability to complete exams or homework as scheduled, please meet with the Dean of Students. The Dean's office is your best resource so that you do not need to discuss the details of your personal situation with the instructor.

Expectations: At Georgia Tech we believe that it is important to strive for an atmosphere of mutual respect, acknowledgement, and responsibility between faculty members and the student body. In the end, simple respect for knowledge, hard work, and cordial interactions will help build the environment we seek. Therefore, I encourage you to remain committed to the ideals of Georgia Tech while in this class.

Several specific expectations in this course:

- 1) Students will attend and participate.
- 2) If a talk must be re-scheduled, it is up to the speaker to find a replacement.

- 3) Critique will remain rational, objective, and constructive.
- 4) Appropriate attribution will be given for all resources shown during presentations.

Course Outcomes: Upon successful completion of the course, the student will be able to:

- 1) Listen attentively.
- 2) Think critically.
- 3) Assess the meaning of plots and graphs quickly, even in unusual formats.
- 4) Formulate questions in a helpful and constructive fashion that promotes learning for others.
- 5) Communicate effectively in seminar style.
- 6) Communicate effectively in classroom lecture style.