MSE 6775 – Spring 2024 Polymer Communications

Friday 11:00-11:50 AM, Ford ES&T L1118

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 368 J. Erskine Love 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. In addition, three panel discussions will be held on topics chosen by the class. This will be a group assignment, with 1/3 of the class being the panel and the rest leading the Q&A.

The Georgia Tech grading system is described at registrar.gatech.edu/info/grading-system.

AssignmentFinal Grade PercentagesStudents giving 15 min talks30% talk + 70% participationStudents giving 40 min talks70% talk + 30% participation

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

Academic Integrity: 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. 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). For any questions involving any honor code issues, consult the instructor or honor.gatech.edu.

Accommodations: Georgia Tech encourages qualified persons with disabilities to participate in its programs and activities. If you anticipate needing any type of accommodation in this course or have questions about access, please contact the Office of Disability Services at disabilityservices.gatech.edu as soon as possible.

> If you encounter extenuating circumstances that interfere with your ability to complete course requirements 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.

Course Expectations: 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.