

Syllabus

MSE 8801 B Polymer Communications, Section 1, 1-0-1 Spring 2019

(Can be retaken 3 times for credit; Permanent Number Requested will be MSE/Chem/ChBE/ME 6755)

Friday, 11:15, Howey Physics

Instructor Information (underlined name is professor of record; varies by semester)

Instructor	Email	Office Hours & Location
Blair Brettmann	blair.brettmann@mse.gatech.edu	[Location, Hours, Days]
Seung Soon Jang	seungsoon.jang@mse.gatech.edu	TBD
<u>Paul Russo</u>	paul.russo@mse.gatech.edu	
Mary Lynn Realff	marylynn.realff@mse.gatech.edu	
Donggang Yao	yao@gatech.edu	

Teaching Assistant(s)	Email	Office Hours & Location
None required	N/A	N/A

General Information

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.

Pre- &/or Co-Requisites

Suggested: MSE 8001, Advanced Presentation Skills (a new number for this course is pending, likely 8200).

Course Goals and Learning Outcomes

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

1. Listen attentively
2. Assess the meaning of plots and graphs quickly, even in unusual formats.
3. Think critically.
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.

Course Requirements & Grading

Assignment	Date	Weight (Percentage, points, etc)
Students giving 10-minute talks	Individually Scheduled	30% Talk+ 70% Participation in other talks
Students giving 40-minute talks	Individually Scheduled	70% Talk + 30% Participation in other talks

Extra Credit Opportunities

None.

Description of Graded Components

Ten-minute talk: Students early in their graduate careers will be asked to give a 10-minute “chalk-talk” (in the parlance of a bygone era where chalk was used). It will often be a short description of an article from the literature. It 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.

Forty-minute talk: Experienced students will be slated to give a 40-minute talk, leaving 10 minutes for discussion. These presentations will typically be based on literature or research. Either way, 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.

Grading Scale

Apparently, YOU get to choose whether P-F or A-F grading applies. If you choose A-F, here's the scale:

A	90-100%
B	80-89%
C	70-79%
D	60-69%
F	0-59%

Course Materials

Course Text

Tufte: Beautiful Evidence, Other Materials Provided.

Additional Materials/Resources

Topics and communications as selected from the literature.

Course Website and Other Classroom Management Tools

Slack and/or Canvas will be used for content delivery.

Office 365 Excel online will be used for sign-up and scheduling.

Course Expectations & Guidelines

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. Proper and polite English will be used.
5. Appropriate attribution will be given to resources shown during presentations.

Academic Integrity

Georgia Tech aims to cultivate a community based on trust, academic integrity, and honor. Students are expected to act according to the highest ethical standards. For information on Georgia Tech's Academic

Honor Code, please visit <http://www.catalog.gatech.edu/policies/honor-code/> or <http://www.catalog.gatech.edu/rules/18/>.

Accommodations for Students with Disabilities

If you are a student with learning needs that require special accommodation, contact the Office of Disability Services at (404)894-2563 or <http://disabilityservices.gatech.edu/>, as soon as possible, to make an appointment to discuss your special needs and to obtain an accommodations letter. Please also e-mail me as soon as possible in order to set up a time to discuss your learning needs.

Student-Faculty Expectations Agreement

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. See <http://www.catalog.gatech.edu/rules/22/> for an articulation of some basic expectation that you can have of me and that I have of you. 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.

Student Use of Mobile Devices in the Classroom

The use of mobile devices in the classroom is restricted to queries related to the topic being presented and discussed. For example, it is appropriate to use the internet to remind oneself of the Phase Rule, but answering email or texting your friends is discouraged.

[Campus Resources for Students \(clickable link\)](#)

[Course Schedule \(clickable link\)](#) <<You may need to log in to VPN if off-campus

No class on Friday that is a holiday or Fall Break, or on a Friday before a holiday or Fall Break.