

MSE 8200 | Georgia Institute of Technology | Fall 2021

Tue & Thu 14:00 - 15:15 | Love 299
Alena Alamgir, Ph.D. | aalamgir7@gatech.edu
Office: 255 Love | Office hours by appointment

Course Description

This course focuses on advanced presentation skills that the students will develop by speaking on topics related to their own research work. Students will gain experience with both delivering and evaluating presentations. Equal emphasis will be placed on achieving excellence in content, delivery, and slide design. Each presentation will have a stated objective, such as informing others of one's research (for example, at a professional conference), or explaining highly technical information to a general audience (both in a standard-length presentation and short form). Each presentation will be recorded so that students can evaluate their own presentations and assess their progress.

Course Requirements

Overall, students will need to be active participants in the classroom. They will be responsible for delivering several individual presentations as well as evaluating their peers' presentations for content, delivery, and slide design. A standard evaluation sheet will be provided, and it must be filled out during each set of presentations. Additionally, each student will be required to submit a self-assessment write-up. Students have the option of scheduling individual conferences with me to discuss their presentations. Other more spontaneous professional speaking skills and practice will be included in the course. The course will also include a writing/revision of a two-page resume or CV. There is no final exam.

Conference-style presentation with slides will be 15 minutes max: 10 minutes for the presentation itself and approx. 5 minutes of Q & A. In addition, each student will give two 60-90 second elevator pitches, one for technical audience and one for general audience. These will be done without slides or any supporting material, and a 3-minute thesis (3MT) talk on their work, accompanied by one static slide, for general audience. Finally, students will also design a scientific poster in the format suitable for a presentation at a professional conference.

Each presentation will be recorded so that students can critique their own performance for their self-evaluation write-up. Students will be required to buy an SD HC I card (of at least 4 GB and rated class 10) to record their presentations. I use a SanDisk, SD HC I (10)— the camera name and model is Canon HD, VIXIA HF E 500.

Students will be required to keep before and after versions of their presentations and send them to me when they submit their self-evaluation.

All reading assignments are posted on Canvas as PDF files.

Grading

Though peer evaluations will be done on many assignments, the peer review score will not be considered when assigning the grade. I will be the final determiner of the grades for any in-class work, quizzes, tests, presentations, and papers. Active participation is part of your grade, which

includes all in-class activities or out of class assignments, including peer reviews, self- evaluations, and all formal assignments.

There will be no final.

Final grade will be based on the following assignment groups:

Attendance	15%
Warm up exercises & preparatory writing	10%
Elevator Pitch	10%
3MT	10%
Presentation for non-technical audience	20%
Conference-style presentation	20%
Elevator Pitch, revisited	7.5%
Poster Design	7.5%
Total	100%

Electronic Devices in Class

This is a small interactive class during which you will be expected to be fully engaged in discussion. Only use your devices to take notes (and this will rarely be necessary), to take pictures of the white board, or to do some other class activity that is requested. Please do not email, text, or otherwise do non-class activity on your devices. I expect that the majority of the time your devices will be stowed during class.

Attendance

Attendance is required for all classes. Students who know that they need to miss a class to attend a conference or out-of-town professional interview must inform me well before the date. *Each unexcused absence will lower a student's final grade by ½ a letter grade.* Excused absences require documentation, and a student may only have 2 excused absences during a semester.

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. If needed, I will make classroom accommodations for students with documented disabilities. These accommodations must be arranged in advance and in accordance with the Office of Disability Services (<http://disabilityservices.gatech.edu/>).

Help Create Resistance to Sexual Harassment

MSE is committed to a community that actively resists sexual and gender harassment. If you see or experience any of the following: sexual harassment, domestic and dating violence, sexual assault and stalking, resources are available:

- **Confidential VOICE Advocates** (www.voice.gatech.edu) can provide support 24/7 and explore resources and options. If after hours, call GTPD dispatcher at 404-894-2500 and ask to speak

to the On-Call VOICE Advocate. You do not need to make a report nor provide any information other than your phone number for a VOICE advocate to contact you.

- Sexual violence or harassment can be reported directly to Georgia Tech's **Title IX Coordinator**, James Newsome, (404) 385-5583 burnsnewsome@gatech.edu.

Faculty, Staff and TAs are mandatory reporters and are required to inform the Title IX Coordinator should they become aware that you or any student has experienced sexual violence or sexual harassment.

Website: For more information about MSE CRSH, click the link:

<https://www.mse.gatech.edu/values/crsh>

Schedule

Week 1

Tue, Aug. 23: Introductions.

Thu, Aug. 25: Writing -- and talking -- (in) science.

Read before class: "Writing in Science" & "Science Writing as Storytelling" (Schimel). Also this one-page editorial on style from *Nature Physics*.

Week 2

Tue, Aug. 30: Communicating with children and non-technical audiences. Or just clearly. Read before class: "How to Write a *Frontiers for Young Minds* Article."

Thu, Sep. 1: Communicating with non-technical audiences. Read the original version of a scientific article, and its write-up in daily press. Homework assignment: Outline strategies for "translating" for, and explaining to, non-tech audiences the main conceptual ideas in your own work; submit on Canvas.

Week 3

Tue, Sep. 6: No class meeting, individual work at home. Homework assignment: Read these two -- one and two -- articles from the *Frontiers for Young Minds* journal. Pay attention to how the authors explain the scientific concepts and their research work to a young audience. Then, **draft a similar 300-600-word text** that is either a detailed explanation of one particular concept relevant to your own research, or an overview of your larger research project. In both cases, include not just descriptions/explanations of the concepts or projects, but also what makes the concepts/work interesting and important. Submit on Canvas by EOD Wednesday, Sep. 14.

Thu, Sep. 8: What makes for a good presentation? Before class: watch these three TED talks, take notes, come to class prepared to discuss each.

Week 4

Tue, Sep. 13: Lecture: Principles of effective oral presentations.

Thu, Sep. 15: Examples of good students' presentations + introduction to the genre of the elevator pitch.

Week 5

Tue, Sep. 20: Before class assignment: draft your elevator pitches, submit on Canvas. In class: elevator pitches peer feedback workshop.

Thu, Sep. 22: Presentations of elevator pitches for non-tech audience: everyone. Also submit revised drafts + list of revisions.

Week 6

Tue, Sep. 27: Presentations of elevator pitches technical audience: everyone.

Thu, Sep. 29: Lecture: Slide & poster design & data visualizations basics.

Week 7

Tue, Oct. 4: Draft your 3MT presentations: no class meeting, individual work at home.

Thu, Oct. 6: 3MT presentations: in-class peer feedback session.

Week 8

Tue, Oct. 11: 3MT presentations: Group 1.

Thu, Oct. 13: 3MT presentations: Group 2.

Week 9

Tue, Oct. 18: No class meeting: **FALL BREAK.**

Thu, Oct. 22: No class meeting: work on your poster.

Week 10

Tue, Oct. 25: Draft your presentations for non-technical audiences: no class meeting, individual work at home.

Thu, Oct. 27: Presentations for non-technical audiences: in-class peer feedback workshop.

Week 11

Tue, Nov. 1: Presentations for non-technical audiences: Group 1.

Thu, Nov. 3: Presentations for non-technical audiences: Group 2.

Submit your poster to Mechelle for printing using this online form this week! Also submit the file with your poster on Canvas.

Week 12

Tue, Nov. 8: Presentations for non-technical audiences: Group 3.

Thu, Nov. 10: Draft your conference-style (for technical audience) presentations: no class meeting, individual work at home.

Week 13

Tue, Nov. 15: Conference-style presentations: in-class peer feedback workshop.

Thu, Nov. 17: Conference-style presentations: Group 1.

Week 14

Thu, Nov. 22: Conference-style presentations: Group 2.

Thu, Nov. 24: **THANKSGIVING BREAK**

Week 15

Tue, Nov. 29: Conference-style presentations: Group 3.

Thu, Dec. 1: Poster session + Revised Elevator pitches/3MT-style presentations. Everyone presents.

Week 16

Tue, Dec. 6: Read up on principles for effective CVs/resumes using resources available in Modules. Then, revise your CV/Resume accordingly, and submit on Canvas. **CVs/Resumes in-class feedback.**