#### Advanced Presentation Skills

MSE 8200 | Georgia Institute of Technology | Fall 2024 Tue & Thu 14:00-- 15:15 | Love Bldg., Room 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. <u>On presentation days</u>, students will be <u>required to come to class with</u> <u>cell phones that are sufficiently charged and have a sufficient storage capacity.</u>

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%
Single-slide presentation	5%
3MT	10%
Presentation for non-technical audience	20%
Conference-style presentation	20%
Poster + Technical Elevator Pitch	10%
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 <u>http://disabilityservices.gatech.edu/</u>, 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 (<u>http://disabilityservices.gatech.edu</u>).

#### Schedule

#### Week 1

Tue, Aug. 20: Introducing the class, and ourselves.

Thu, Aug. 22: Communicating with children and non-technical audiences. Or just clearly. Read before class: "How to Write a Frontiers for Young Minds Article " and the chapter "Writing for the Public" by Schimel. Take (informal) notes on the points you find most important and/or surprising, and draw the message box that Schimel discusses in his chapter, adapting it to the story you are writing about. Submit your notes on Canvas, bring them with you to class, and be prepared to share your message box with us.

#### Week 2

Tue, Aug. 27: No class meeting, individual work at home. First, read through these two articles on science topics for young readers, one on quasi crystals and another on acoustic levitation. Pay attention to how the authors explain scientific concepts and their research work to a young audience. Then, draft a 300–600-word text similar to these articles. It can be 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 and explanations of the concepts or projects, but also what makes the concepts or work interesting and important.

Check out this example of how one of your peers approached the assignment. Submit your text on Canvas.

Thu, Aug. 29: Communicating with non-technical audiences. Read the original version of a scientific article, and its write-up in daily press. Homework assignment: submit on Canvas and come to class ready to share.

#### Week 3

Tue, Sep. 3: Before class assignment: draft your elevator pitches, submit on Canvas. In class: elevator pitches peer feedback workshop.

Thu, Sep. 5: Presentations of both elevator pitches : everyone. Also submit revised drafts + list of revisions.

#### Week 4

Tue, Sep. 10: What makes for a good presentation? Before class: watch these three TED talks, take notes, come to class prepared to discuss each.

Thu, Sep. 12: Lecture: Principles of effective oral presentations.

#### Week 5

Tue, Sep. 17: Examples of good students' presentations.

Thu, Sep. 19: Homework assignment: Single-slide presentation. Everyone presents in class.

## Week 6

Tue, Sep. 24: Lecture: Slide & poster design & data visualizations basics. Before class, watch this video Links to an external site. on poster design (~20 minutes). Thu, Sep. 26: Draft your 3MT presentations: no class meeting, individual work at home.

# Week 7

Tue, Oct. 1: 3MT presentations: in-class peer feedback session. Thu, Oct. 3: 3MT presentations: GROUP 1.

## Week 8

Tue, Oct. 8: 3MT presentations: GROUP 2.Thu, Oct. 10: No class meeting: work on your poster.

## Week 9

Tue, Oct. 15: No class meeting: FALL BREAK.

Thu, Oct. 17: Draft your presentations for non-technical audiences: no class meeting, individual work at home.

## Week 10

Tue, Oct. 22: Presentations for non-technical audiences: in-class peer feedback workshop. Thu, Oct. 24: Presentations for non-technical audiences: Group 1.

## Week 11

Tue, Oct. 29: Presentations for non-technical audiences: Group 2. Thu, Oct. 31: Presentations for non-technical audiences: Group 3.

## Week 12

Tue, Nov. 5: No class: Election Day: go vote and/or volunteer.

Thu, Nov. 7: No class meeting, individual work at home: Draft your conference-style (for technical audience) presentations

Remember to submit your poster for printing! Also submit the file with your poster on Canvas.

## Week 13

Tue, Nov. 12: Conference-style presentations: in-class peer feedback workshop. Thu, Nov. 14: Conference-style presentations: Group 1.

## Week 14

Thu, Nov. 19: Conference-style presentations: Group 2 Thu, Nov. 21: Conference-style presentations: Group 3.

## Week 15

Tue, Nov. 26: Poster session + Revised Elevator pitches/3MT-style presentations. Everyone presents.

Thu, Nov. 28: THANKSGIVING BREAK

## Week 16

Tue, Dec. 5: Class wrap up & tying up loose ends