

CS 8001 OED Syllabus

CS Educators

Summer 2026

Instructor Information

Instructor of Record: Ana Rusch, ARusch3@gatech.edu

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General Course Information

Description

It seems like every few weeks we read another article about the shortage of computer science graduates and how that is having negative effects on the tech industry. The issue doesn't stem from a lack of interest in the field, but rather a dearth of computer science educators. Led by instructional associate and Oregon State University lecturer Eric Ianni, this seminar is designed to help prepare future computer science teachers for success or help update current educators' pedagogical tool chest. No matter your teaching experience, there is something in this seminar for you. We will start with general educator best practices and progress to computer science specific techniques. The seminar will cover all sorts of modalities of learning: synchronous and asynchronous. So if you ever had the itch to teach computer science this seminar is for you!

Course Learning Outcomes

1. Upon successful completion of this course, you should be able to:
2. Identify the primary stakeholders for a given educational setting and course.
3. Design a course with a stakeholder-focused perspective.
4. Evaluate and Implement different pedagogical methods to support the needs of the students.
5. Compare and Contrast online education vs. in-person education from the perspectives of the students and instructor.

Required Course Materials

All readings will be published on Canvas.

Course Requirements & Grading:

This seminar is a Pass/Fail fully online modality that centers on engagement, collaboration, and peer discussion. Grading will be passed on overall class participation, with the expectation that everyone will pass unless some choose to stay unengaged altogether. Within this pedagogical framework, here's what participating in the class will entail:

- **Weekly Participation:** The mode of participation is entirely up to you. Every person is a different type of learner, and to ensure maximum accessibility, there are different modes of participation. You can participate in either our weekly synchronous meetings via Teams and/or in the Ed Discussion forum, where I will post a question or topic to discuss every week based on that week's article, topic, or video.
- **Dialogue Facilitator:** You are more than welcome to facilitate and lead a dialogue on CS Education in either one of our weekly Teams meetings (please email me what time and day you would like to lead this discussion) or through Ed Discussions, where you can post a new thread and facilitate the discussion and comments on it. This dialogue could be anything from a current event to research conducted about CS Education that interested you, to an idea on how to better serve CS learners in the classroom or online. The bounds of this are limited only by your imagination. Think of this seminar as your platform to exchange ideas with your peers and have your voice heard in a safe space of intellectual growth.

Topics Covered

While I have a pretty clear vision of what we will cover, I am providing a *tentative* topic list because I also want to remain responsive to you, the students. These are subject to change as we work our way through the term, if you, the students, would be better benefited by covering different topics.

- Design:
 - Stakeholder Identification
 - Course Learning Objectives
 - Types of Motivation
- Pedagogies:
 - Gamification
 - Experiential Learning
 - Project Based Learning
 - Active Learning

- Assessments:
 - Formal
 - Informal
- Delivery:
 - Asynchronous vs. Synchronous
 - Lectures vs. Text
- Tools:
 - AI
 - Replit
 - Gradescope
 - GitHub

Course Format

Each week, we will be tackling one of the topics listed above. We will start by providing you with hand-selected readings to review before the weekly synchronous meeting. The meeting time will be set after analyzing the first week's survey results. Discussion questions will also be posted each week on Ed, but you are free to start your own threads based on the week's topic. The goal is to build a community of learners where we all come away more knowledgeable than we started (us included!).

Course Policies

Attendance and/or Participation

To gain the full course and learning experience, participation is vital. Whether that is through our weekly synchronous meetings or through Ed Discussions, participation and peer support is the key to success in this seminar.

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. Review [Georgia Tech's Honor Code](#) and the student [Code of Conduct](#).

Any student suspected of cheating or plagiarism on a quiz, exam, or assignment will be reported to the Office of Student Integrity, who will investigate the incident and identify the appropriate penalty for violations.

Accommodations for Students with Disabilities

If you are a student with learning needs that require special accommodation, [contact the Office of Disability Services](#) (404-894-2563) 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. The Student-Faculty Expectations articulate some basic expectations 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.