

ENED 7010 – Preparing to Be an Effective Engineering Educator

Instructor

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Course Information

Semester: Fall 2020

Day & Time: Tuesdays and Thursdays, 5:30 PM to 6:45 PM

Format: Synchronous Online, with the option of in-person attendance

Online Software: Zoom

In-Person Location: Driftmier Engineering Center, Room 1460

Office Hours

4:30 – 5:30 PM Tuesdays and Thursdays via Zoom, or by appointment

Feel free to reach out to me by phone or email any time.

Please allow 24 hours during weekdays for response.

Course Description

ENED 7010 is a teaching support course intended to help you discover who you are as a teacher, understand general principles that underlie effective teaching practices, and explore how teaching fits into your future goals and career path. The course will serve as a learning community to aid you in building a foundation of pedagogical knowledge and developing a repertoire of engineering teaching practices that can be adapted to a variety of teaching contexts you might encounter, both in academia and in industry. You will also become familiar with UGA resources that you can leverage as a teaching assistant. This course is a departmental equivalent of GRSC 7770 and fulfills the TA Policy requirements outlined at:

https://ctl.uga.edu/grad-student/ta-policy/ta_policy/.

Learning Outcomes

At the completion of this course, you will be able to:

1. Select and evaluate effective strategies to efficiently complete teaching-related tasks, including:
 - a. Grade student assignments and examinations
 - b. Provide productive feedback to students
 - c. Plan and teach lessons
 - d. Formatively assess student knowledge and learning
 - e. Interact professionally with students and professors in a way that establishes a positive course climate

2. Identify and appropriately use:
 - a. Relevant UGA resources (e.g., DAE, DRC, CTL, Writing Center, Student Care and Outreach, ISL, CAPS)
 - b. Relevant UGA policies (e.g., FERPA, Academic Honesty, lab procedures)
 - c. eLC gradebook
3. Apply evidence-based teaching practice to your current roles, including:
 - a. Active learning pedagogy common to engineering classrooms (e.g., problem-based learning, project-based learning, case studies, inquiry learning.)
 - b. Inclusive and equitable classroom strategies
 - c. Reflective teaching practice
4. Articulate how teaching experience can play a role in achieving your future career goals, which may include:
 - a. Academic teaching activities
 - b. Technical research activities (in academia or industry)
 - c. Mentoring (in academia or industry)
 - d. Problem-solving (in academia or industry)
 - e. Pitching ideas (in academia or industry)
 - f. Industry training activities

Classroom Community

One of my primary goals for this course is to create a classroom community around teaching, learning, and other challenges and opportunities related to being a teaching assistant. Accordingly, the first 30-60 minutes of each class period will be used to facilitate an open discussion around new challenges you and your classmates face in your TA duties, and supporting one another through brainstorming solutions as a community.

The foundation for community begins on the first day of class and continues with the knowledge that you will be interacting with the same people each week. Your classmates will begin to depend on you for feedback, as you will begin to depend on them. Being present each class period ensures that the course dynamics and experience is consistent for all students. Moreover, the conversations and activities we will do during class are opportunities that cannot be matched by merely sending you materials if you miss a class.

If you are sick, we want you to stay home and get healthy. If you have a non-negotiable obligation that has an impact on your personal or professional success, we want you to attend to your obligations and be successful. Outside of these exceptional circumstances, **please make a commitment to yourself, your classmates, and me to be here each week.**

If you cannot attend class for any reason, please reach out to me in advance to let me know.

Course Presentation and Format

The COVID-19 pandemic has affected us all in different ways. It has left many of us with uncertainty regarding the Fall semester, so I wish to be upfront and transparent about how this course will be run and the reasoning behind my decisions.

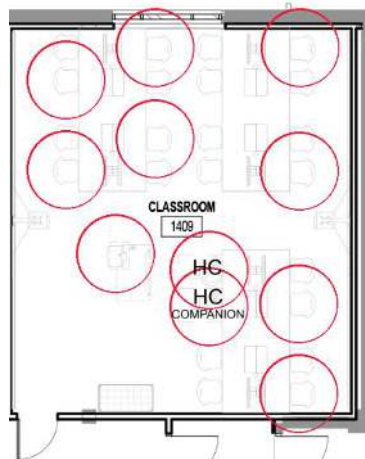


I have a medical condition that prevents me from safely visiting campus during the Fall semester, and a medical accommodation allowing me to work from home. Accordingly, unlike most courses you take this semester, this course will not be using a hybrid format. Rather, **the course will take place via synchronous Zoom meetings during class time.** I have coached many College of Engineering faculty on the best ways to use Zoom in the classroom, and I am intimately familiar with its features. I am confident our synchronous meetings will be interactive, engaging, and effective. **I believe that joining the course from your home or office will result in the best experience.**

That said, University policy dictates that you have the right to an in-person class environment. Accordingly, you may choose to attend class by joining the Zoom meeting from our in-person classroom space (Driftmier 1460). In doing so, you would be participating in the same class activities you would when attending from home. During in-class group activities, you would work with other students who choose to attend in-person, while adhering to University policy regarding face coverings and social distancing (more details at the end of the syllabus and here: <https://coronavirus.uga.edu/>).

To adhere to social distancing guidelines, Driftmier 1460 has a reduced capacity of 9 students, and seating must adhere to the chart below. To ensure we do not exceed room capacity, I will use pre-class surveys to assess how many students would like to attend class in-person. I will also select one student attending in-person to lead class activities and ensure adherence University policy regarding face coverings and social distancing.

Please note that **our first class, August 20, will take place online-only.**



Social Distancing Seating Chart for Driftmier 1460

Course Requirements

To earn a **Pass** in this course, you will need to sustain mastery of the learning outcomes, as demonstrated via:

1. Attendance in class sessions
2. Preparation to participate in class discussions and activities
3. Completion of several of several assignments throughout the semester

Please consider completing course readings and preparing for class discussions to be a primary course task. Students who miss more than 2 course meetings without proper documentation or meeting with the instructor may not receive a satisfactory grade. Repeatedly coming late to class without sufficient reason may be counted as absence.

Course Grading Scheme

My priority for this course is to help you develop as an engineering educator in a way that is meaningful for you and your goals. Accordingly, I have opted for a simple **Pass/Fail** grading scheme in which each student can and will earn a Pass, provided you are willing to put for the effort to do so.

On any assignment, you can receive one of three grades:

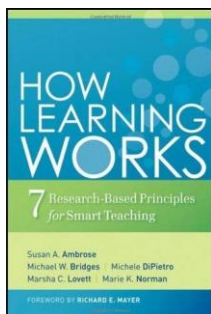
Number Grade	Letter Grade	Criteria
100	A	You submitted an assignment, on time, that addressed the assignment prompt and demonstrated your understanding of relevant concepts learned so far in the course.
75	C	You submitted an assignment that addressed the assignment prompt, but either (1) submitted the assignment late, or (2) did not sufficiently demonstrate your understanding of relevant concepts learned so far in the courses. If the latter, you may resubmit the assignment to respond to my feedback until you have sufficiently demonstrated your understanding, at which point you will earn a 100 (A).
0	F	You did not submit the assignment, or submitted an assignment that did not address the assignment prompt. You may resubmit the assignment to earn a 75 (C).

You will earn a **Pass** in the course if you meet the following criteria:

1. You miss no more than two course meetings without an approved excuse.
2. You have no more than two assignments that earned a C, and no assignments that earned an F.
3. You are sufficiently prepared for class each meeting, having read and processed any pre-class readings. I will reach out to you if I am concerned you do not meet this criterion.

Text and Readings

The primary text for this course is:



Ambrose, S. A., Bridges, M. W., DiPietro, M., Lovett, M. C., & Norman, M. K. (2010). *How learning works: Seven research-based principles for smart teaching*. San Francisco, CA: Jossey-Bass.

This text is available electronically via the University Libraries (<https://www.libs.uga.edu/>), free of charge. If you wish to own a hard copy, it is usually available to purchase online for approximately \$30. An unabridged audiobook is also available from audiobook marketplaces, including Audible and Libro.FM (if you choose to listen to the audiobook, please at least skim through the figures of the electronic version as well.)

All other course readings will be provided via the eLearning Commons (eLC).

Course Assignments

The following assignments provide opportunities to demonstrate the various course learning outcomes.

Assignment	Assignment Purpose & Description
Reading Reflections	A major goal of this course is to help you process course material in a way that is meaningful for your TA role and professional goals. For each <i>How Learning Works</i> chapter (and some other readings), you will be expected to submit a brief summary of the chapter and how it relates to your role and goals (200-300 words.)
Microteaches	When it comes to teaching, practical experience is just as important as conceptual understanding. You will spend two class periods this semester giving a short teaching session (5 and 15 minutes, respectively) and receiving feedback from your peers.
Faculty memo of understanding	A common grievance among TAs is a lack of clarification regarding the extent of their duties and allocation of their time. A memo of understanding allows you and your instructor(s) of record establish these expectations upfront in a way that allows more flexibility than a formal contract.
Expert observation	One can learn a lot about what good teaching looks like by observing experts in pedagogy as they teach. I will ask you to select a faculty member from a provided list to observe one day, and to reflect on your observation.

How I Teach / Why I Teach	It is often important to introspect on our teaching philosophies, both to reconnect with our passion and to be able to communicate our teaching approaches to others. How I Teach / Why I Teach is a light version of a written teaching philosophy that captures the essentials.
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Accommodations

If you have a disability (documented or undocumented) and require reasonable accommodations to participate in course activities or meet course requirements, please contact me as soon as possible.

University Honor Code and Academic Policy

As a University of Georgia student, you have agreed to abide by the University's academic honesty policy, "A Culture of Honesty," and the Student Honor Code. All academic work must meet the standards described in "A Culture of Honesty" found at: <https://honesty.uga.edu/Academic-Honesty-Policy>. Lack of knowledge of the academic honesty policy is not a reasonable explanation for violation. Questions related to course assignments and the academic honesty policy should be directed to the instructor (me.)

Course expectations

What I expect from you:

- Be prepared, on time, respectful, and open-minded toward me and your classmates.
- Be engaged in discussions; use technology only as appropriate for the course.
- Complete assignments by the posted due date.
- Be realistic; if you cannot fulfill an expectation, be proactive and contact those affected.

What you should expect from me:

- Be prepared; start and end class on time.
- Create a supportive and encouraging learning atmosphere.
- Consider students' needs and respect diversity
- Grade in a fair and unbiased manner
- Communication: Respond to email within 24 hours on weekdays.

What you should expect from your classmates:

- Be mindful of the space you take up during activities; act to include everyone
- Be open to providing and receiving feedback; share your insights and experiences
- Encourage and support one another

Course Outline

This outline is the general plan for the course. Deviations (announced to the class by the instructor) may be necessary.

Week	Date(s)	Reading (Submit reading reflection to eLC Tuesday BEFORE class)	Topic(s)	Assignments Due (Submit to eLC by midnight Thursday AFTER class)
1	Th 8/20/20		Online only. Intro to class and teaching & learning, faculty-student agreements	
2	Tu 8/25/20 Th 8/27/20		Community-building; Being an effective TA: Policies & resources; eLearning Commons crash course	1. Faculty memo of understanding 2. Schedule expert observation
3	Tu 9/1/20 Th 9/3/20	<i>How Learning Works</i> (HLW) Ch. 6	Course climate	
4	Tu 9/8/20 Th 9/10/20	HLW Ch. 5	Giving feedback	Expert observation reflection
5	Tu 9/15/20 Th 9/17/20		Microteach 1 (5 minutes)	
6	Tu 9/22/20 Th 9/24/20	HLW Ch. 1	Leveraging prior knowledge; Formative assessment strategies	
7	Tu 9/29/20 Th 10/1/20	"Tanner – Structure Matters" PDF – Available on eLC	Teaching philosophy & diversity statements; Mid-Semester Formative Evaluation	
8	Tu 10/6/20 Th 10/8/20	HLW Ch. 2	Organizing knowledge to develop expertise	
9	Tu 10/13/20 Th 10/15/20	HLW Ch. 3	Motivating students	
10	Tu 10/20/20 Th 10/22/20	HLW Ch. 4	Developing mastery	
11	Tu 10/27/20 Th 10/29/20	HLW Ch. 7	Metacognition	
12	Tu 11/3/20 Th 11/5/20		Microteach 2 (15 minutes)	
13	Tu 11/10/20 Th 11/12/20		Problem-based and flipped learning in engineering with guest speaker; Student choice topic	Microteach Reflection
14	Tu 11/17/20 Th 11/19/20		Project-based learning in engineering with guest speaker; Student choice topic	How I Teach / Why I Teach
15	Tu 11/24/20		Course wrap-up	How I Teach / Why I Teach pitch (to give during class)
	Th 11/26/20	Thanksgiving Break / Course Complete		

Coronavirus Information for Students

On any day you expect to visit campus, please adhere to the following guidelines.

Face Coverings:

Effective July 15, 2020, the University of Georgia—along with all University System of Georgia (USG) institutions—requires all faculty, staff, students and visitors to wear an appropriate face covering while inside campus facilities/buildings where six feet social distancing may not always be possible. Face covering use is in addition to and is not a substitute for social distancing. Anyone not using a face covering when required will be asked to wear one or must leave the area. Reasonable accommodations may be made for those who are unable to wear a face covering for documented health reasons. Students seeking an accommodation related to face coverings should contact Disability Services at <https://drc.uga.edu/>.

What do I do if I cannot safely visit campus or wear a face covering?

You may be eligible for a medical accommodation through the Americans with Disabilities Act (ADA.) Please contact the Disability Resource Center (drc.uga.edu) for more information.

If you need other COVID-19 related accommodations (e.g., you live with at-risk individuals) please contact Student Care and Outreach (sco.uga.edu) to learn about your options.

DawgCheck:

Please perform a quick symptom check each weekday on DawgCheck—on the UGA app or website—whether you feel sick or not. It will help health providers monitor the health situation on campus: <https://dawgcheck.uga.edu/>

What do I do if I have symptoms?

Students showing symptoms should self-isolate and schedule an appointment with the University Health Center by calling 706-542-1162 (Monday-Friday, 8 a.m.-5 p.m.). Please DO NOT walk-in. For emergencies and after-hours care, see <https://www.uhs.uga.edu/info/emergencies.>

What do I do if I am notified that I have been exposed?

Students who learn they have been directly exposed to COVID-19 but are not showing symptoms should self-quarantine for 14 days consistent with Department of Public Health (DPH) and Centers for Disease Control and Prevention (CDC) guidelines. Please correspond with your instructor via email, with a cc: to Student Care & Outreach at sco@uga.edu, to coordinate continuing your coursework while self-quarantined. If you develop symptoms, you should contact the University Health Center to make an appointment to be tested. You should continue to monitor your symptoms daily on DawgCheck.

How do I get a test?

Students who are demonstrating symptoms of COVID-19 should call the University Health Center. UHC is offering testing by appointment for students; appointments may be booked by calling 706-542-1162.

UGA will also be recruiting asymptomatic students to participate in surveillance tests. Students living in residence halls, Greek housing and off-campus apartment complexes are encouraged to participate.

What do I do if I test positive?

Any student with a positive COVID-19 test is **required** to report the test in DawgCheck and should self-isolate immediately. Students should not attend classes in-person until the isolation period is completed. Once you report the positive test through DawgCheck, UGA Student Care and Outreach will follow up with you.