Teaching and Learning in Higher Education

CETL 8713
Dr. Amanda Nolen (she/hers)
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Spring 2024

About our class

This highly interactive and practical course gives you the opportunity to learn and apply principles of learner-centered teaching based on the research about how people learn. Through readings, discussions, activities, practice, and peer review, you will explore the principles of learner-centered teaching, synthesize course content and personal experience, and hone your teaching craft.

Class meeting information

Mon & Wed 9:30 a.m. - 10:45 a.m.
Skiles 368

Office Hours

I set aside every Tuesday and Thursday from 2-4pm as time to meet with students about the course. If you would like to clarify a concept, check in with me about your understanding or progress, or would just like to chat about the course, you can sign up for a time at this link:
https://calendly.com/amandanolen/30min
If the times I have available do not fit your schedule, send me an email (amanda.nolen@gatech.edu) with some other options and we will find a time that works.

Required text

Lovett, M. C., Bridges, M. W., DiPietro, M., Ambrose, S. A., & Norman, M. K. (2023). How Learning Works: Eight Research-based Principles for Smart Teaching. John Wiley & Sons.
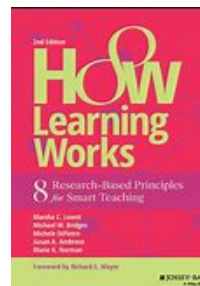
"The work in this course made me want to complete the assignments regardless of the amount of time spent. I spent most of my time really engaged and effortlessly paying attention." – *Former CETL 8713 student*

MACHINE LEARNING REVOLUTION | RESPECT FOR DR. ADLER FROM MOOCs TO MASTER'S DEGREES | DYNAMIC DUOS TOP FACULTY + TOP STUDENTS

GEORGIA TECH
ALUMNI MAGAZINE

A BRAND NEW AGE OF LEARNING

How the disruption of centuries-old teaching models is helping make a Tech education more affordable, accessible and acclaimed than ever before.

Important Spring Semester Dates:

- January 15th, Holiday (no class)
- March 13th, Grade Mode Deadline/Withdrawal Deadline
- March 18-22, Spring Break (no class)
- April 22-23, Final Instructional Days
- April 24th, Reading Day
- April 25 - May 2, Final Exams

Course Goals and Mutual Expectations
Our collective goals and how we will achieve them

Course goals:

The goals of this class are aligned with the Tech to Teaching program goals, noted in parentheses. Upon successful completion of this course, you will be able to:

1. Explain how people learn through the principles of knowledge retention, transfer and mastery (F1.1)
2. Analyze discipline-specific scholarship of teaching and learning literature (F1.2)
3. Identify and explain how motivation (F2.1), student development, and student diversity (F2.2) impact learning.
4. Identify and practice evidence-based teaching techniques (F3.1) and methods for formative assessment of student learning (F3.2)

Technical and human interactions:

- Please come to class on time and clear your mind of distractions so you maximize the benefits of our limited time together.
- You are welcome to take notes in class in any format you prefer.
- We will regularly use collaborative documents and polling via a smartphone or tablet. You can partner with a neighbor if you are unable to use your own device.
- We may discuss issues of a sensitive nature to your classmates. I expect you to listen respectfully and comment with care and concern for your fellow human.

Co-developing our course:

- What you will learn: While our course-level outcomes are based on the Tech to Teaching learning goals, we will collaboratively set goals for specific knowledge and skills you want to gain through this course.
- Attendance policy: **UPDATE: The class agreed that there would not be an attendance requirement in the traditional sense, however, agreed that there are times in the semester is essential because others are depending on their presence (i.e., presentations).**
- Assignment Due Dates: I have suggested dates for the assignments. During the first week of class, together we will look at our calendars to confirm or modify those dates. **UPDATE: Dates for the Jigsaw activity and Poster presentation have been adjusted to provide some flexibility for students' schedules.**

Student-Faculty Expectations Agreement
At Georgia Tech we believe that it is important to strive for an atmosphere of mutual respect, acknowledgment, 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.

Respect for Each Other:

It is my intent that students from all backgrounds and perspectives be well served by this course, that students' learning needs be addressed both in and out of class, and that the diversity that students bring to this class be viewed as a resource, strength and benefit. It is my intent to present materials and activities that are respectful of diversity: gender, sexuality, disability, age, socioeconomic status, ethnicity, race, and culture. Your views about the content are encouraged and valued.

Sign up for office hours (30 minutes) with Dr. Nolen here: https://calendly.com/amandanolen/30min

Course Policies and Guidelines

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/.

Use of Generative Artificial Intelligence (AI) Tools
You may use generative AI programs, e.g. ChatGPT, to help generate ideas and brainstorm. You should note, however, that the material generated by these programs may be inaccurate, incomplete, biased or otherwise problematic. Be aware that use may also stifle your own independent thinking and creativity.

Generative AI derives its output from previously created texts from other sources that the models were trained on, yet doesn't cite sources. Per GaTech's Honor Code, you may not submit any work generated by an AI program as your own. If you include material generated by an AI program, it should be cited like any other reference material (with due consideration for the quality of the reference, which may be poor). When/if you use Artificial Intelligence (AI) platforms in your assignments, please write a note to clarify where in your process you used AI, include your prompt, and which platform(s) you used. See this article for proper APA formatting of such citations: How to cite ChatGPT https://apastyle.apa.org/blog/how-to-cite-chatgpt

Collaboration
You are invited to talk with each other as you prepare your work for this course. You will see your peers' drafts during our peer review process. Your final individual submissions are expected to be your own words and reflect your own work, with proper citation where appropriate.

Accommodations for Students with Disabilities
If you are a student with documented disability (or need to have a disability documented), 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.

Use of Mobile Devices, Laptops, etc. During Class
As research on learning shows, unexpected noises and movement automatically divert and capture people's attention, which means you are affecting everyone's learning experience if your cell phone, laptop, etc. makes noise or is visually distracting during class. That said, many students find it useful to have a mobile device on hand to access course materials.

With this in mind, I request that you turn the sound off so that you do not disrupt other students' learning. In addition, if you are doing anything other than taking notes or looking at course materials on your laptop, please sit in the back row so that other students are not distracted by your screen.

Student Well-being
The well-being of students is of primary importance. If you are facing any challenges related to your physical or mental health, or obstacles like food or housing insecurity, please go to the following link for some helpful university and community resources: https://students.gatech.edu/student-resource-guide

Sign up for office hours (30 minutes) with Dr. Nolen here: https://calendly.com/amandanolen/30min

Grading:

I use a grading strategy called "specifications grading". I designed assessments in this class that allow you to demonstrate your mastery of the material. I will specify the expectations for each assignment, which are graded pass/fail (or, more accurately "meets expectations/does not yet meet expectations"). You might pass most assignments on the first attempt, while sometimes you might need additional feedback in order to demonstrate mastery of the learning outcome. All of the work in this class builds up to the microteaching assignment; satisfactory completion of the microteaching project is required to pass the class.

Semester grades will be determined as follows:

If you elect pass/fail grading:	
Pass	Microteaching plus 2 other assignments are passed (equivalent of B work)
Fail	Microteaching plus 2 other assignments are *not* passed

If you elect traditional letter grading:	
A	All 4 assignments are passed
B	Microteaching plus 2 other assignments are passed
C	Microteaching plus 1 other assignments are passed
D	Microteaching assignment is passed
F	Microteaching assignment is *not* passed

Assignments: (Further details about these assignments, plus due dates and rubrics, are available in Canvas under the 'Assignments' Tab)

Short paper on learning with peer review – In this short paper assignment, you will summarize what you learned about how learning works and apply these principles to your own teaching choices. Everyone will participate in a peer review process.

Group case study on motivation – After the modules on student development and student diversity, you will work with a small group to apply ideas about motivation, student development, and inclusive teaching to a case challenge.

Teaching research poster presentation – In this assignment, you will consult the body of educational literature to inform your understanding of effective teaching and share this information with our class via a poster presentation. Specifically, you will:

1. Find an article of interest in a peer-reviewed scholarly journal about teaching in your field.
2. Create a poster explaining the results of the article that includes a) a summary of the research question, b) the research methods, c) the findings presented in the article, d) one way you can use these results in your teaching.
3. Your poster will be accompanied by a 5-minute poster presentation in class.
4. Submit the poster and a brief reflection paper for grading.

Microteaching project – The semester culminates with a sample teaching demonstration that applies the new knowledge and skill you gain over the course of the semester. This project includes planning, delivery, and analysis of a sample teaching demonstration. This project includes both a lesson plan and a self-reflection for your microteaching demonstration as well as providing feedback to your peers. You can find examples of projects from previous semesters in Canvas.

Late or Missing Assignments:

Together, we will identify the due dates for each of the assignments as many of them involve collaboration or peer review. I have suggested dates in the calendar, but we will confirm/modify those during the first week of class. Once we confirm those dates, I can work with you on an individual basis if more flexibility is required.

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Course Schedule Spring 2024– DRAFT

Week	Date	Topic	Special Activities or Assignments Due
UNIT ONE - LEARNING			
1	Jan. 8	Getting Started with Teaching & Learning	💻👥 Review Canvas; Review Syllabus and Calendar; Read Lang's "How to Teach a Good First Day of Class"
1	Jan. 10	Getting Started with Teaching & Learning	
2	Jan. 15	MLK Day – No Class	💻👥 Read Willingham's "What will Improve Students' Memory?"
2	Jan. 17	The Psychology of Learning and Attention (Lovett, et al., - Intro)	
3	Jan. 22	Predicting and Retrieving for Deep Learning	🗣 Jigsaw groups will begin planning for Jan. 31 exercise
3	Jan. 24	Connecting and Practicing for Deep Understanding	
4	Jan. 29	Meta-cognition and study skills (Ch 7, App. A)	🗣 Jigsaw Classroom Activity Wednesday (1/31): complete required reading and planning
4	Jan. 31	7 Principles of Learning: (Ch 2) Prior knowledge, (Ch 3) organization, (Ch 5) mastery,	📋 Short Paper on Learning (draft) due Friday 2/2
UNIT TWO - STUDENTS			
5	Feb. 5	Universal Design for Learning	📋 Peer review of Learning Paper due Wednesday (2/7)
5	Feb. 7	Inclusive Teaching and Individual Differences	
6	Feb. 12	Student Development (Ch 1)	📋 Short paper on Learning Final Draft including revisions from Peer Review due Sunday (2/11)
6	Feb. 14	Student Motivation and Engagement (Ch 4)	
7	Feb. 19	Motivation continued (Ch 8)	📋 Group case study outline due Friday (2/23)
7	Feb. 21	Motivation continued and group project work	
8	Feb. 26	Fostering a Sense of Belonging	📋 Group case study on learner differences due Friday (3/1)
8	Feb. 28	Creating the Learning Environment (Ch 7)	
UNIT THREE - TEACHING			
9	Mar. 4	Teaching through Better Lecture	📋 Due at end of this unit: find research article on teaching to present for poster session.
9	Mar. 6	Active Learning & Formative Assessment (Ch 6)	
10	Mar. 11	Active Learning & Formative Assessment (Ch 6)	📢 Withdrawal or grade change deadline (3/13, 4pm)
10	Mar. 13	Problem-based Learning, Experiential Learning & Flipped classes	📢 Submit your article info for your poster on the discussion board Friday (3/15)
11	Mar. 18	Spring Break	
11	Mar. 20	Spring Break	
12	Mar. 25	Teaching with Class Discussion	📢 REMINDER: Print out your poster in the LIBRARY for next Monday's Poster Session!!!
12	Mar. 27	Teaching Large Classes	
UNIT FOUR - PRACTICE			
13	Apr. 1	Poster Session	🖼 Poster Presentation
13	Apr. 3	Lesson Planning	📋 Poster and reflection paper due Friday (4/5)
14	Apr. 8	Assessment Planning	📋 Microteaching lesson plan *draft* due Friday (4/12)
14	Apr. 10	Using Feedback to Support Learning	
15	Apr. 15	Microteaching	📋🖼 Provide in-class feedback (during Microteaching Sessions)
15	Apr. 17	Microteaching	
16	Apr. 22	Microteaching reflection and feedback; Semester wrap-up: What do we know and how do we know it?	📋 Final microteaching project report due on Canvas by FRIDAY April 26th.