



## ENGR 5430: Teaching Engineering: Communication & Pedagogy

### Course and Facilitator Information

**Course Title:** Teaching Engineering: Communication & Pedagogy

**Credits:** 1.0

**Format:** In-person

**Prerequisites:** None

**Class time:** TBD

**Facilitator:**

**Fayekah Assanah**, Assistant Professor in Residence, Dept. of Biomedical Engineering, UConn

**Email:** [fayekah.assanah@uconn.edu](mailto:fayekah.assanah@uconn.edu)

**Nusaybah Quasem**, program Assistant, School of Engineering

**Email:** [nusaybah.quasem@uconn.edu](mailto:nusaybah.quasem@uconn.edu)

**Phone:** 718 664 8404

**Office Hours:** By Appointment

### Course Materials

*All course materials will be available within HuskyCT and/or through an Internet link.*

### Course Description

*Full Course Title: "Teaching Engineering: Communication and Pedagogy".*

*The goal of this course is to formalize the practice of professional development skills related to "teaching" (i.e., communication and pedagogy) in settings typically encountered by graduate students in engineering utilizing the foundations of course design, and effective communication strategies.. Topics include: (i) Education Theory, (ii) Teaching Philosophy and Diversity in the classroom, (iii) Instruction Design, (iv) Learning Objectives, (v) Motivating others to learn; (vi) Assessments Basics and (vii) Developing an effective instructional strategy, including methods, modules and assessments to effectively execute instructional learning.*

### Course Objectives

By the end of the course, participants should be able to:

1. Identify effective education theories

2. Create an effective engineering teaching philosophy
3. Formulate goals and learning objectives for multidisciplinary engineering courses
4. Design assessments and evaluation rubrics
5. Create a motivational teaching practice to enhance student engagement
6. Examine current competencies communication and teaching
7. Create and execute a plan for facilitated learning and design a course from the basics that include:
  - a. Establishing course objective(s).
  - b. Motivating audience/students.
  - c. Effective teaching strategies including designing and planning modules.
  - d. Execute activities and course content.
  - e. Plan assessment for the course with real-life scientific problem solving.

## Course Outline and Schedule

Spring 2022

Time: TBA

## Course Requirements and Grading

### Summary of Course Grading:

Course Components	Graded	Feedback Method	Weight
Active Participation	Complete/ Incomplete	Facilitator	25%
<i>Assignments</i>	Complete/ Incomplete	Performance & Facilitator	10%
<i>Effective Course Design and Demonstration</i>	Quality	Performance, Facilitator, Peer Review	40%
Final Reflection	Complete/ Incomplete	Facilitator	25%

### Due Dates and Late Policy

Please turn in all work on time.

### Feedback and Grades

Feedback to “quick questions” can take up to 2 business days. If you need a faster response to a “quick question” send me a text. Feedback time on longer questions/final deliverables will be at least 1 week.

### Time Commitment

You should expect to dedicate approximately 42 hours to this course, including time attending class/discussions.

## Student Responsibilities and Resources

As a member of the University of Connecticut student community, you are held to certain standards and academic policies. In addition, there are numerous resources available to help you succeed in your academic work. Review these important [standards, policies and resources](#), which include:

- The Student Code
  - Academic Integrity
  - Resources on Avoiding Cheating and Plagiarism
- Copyrighted Materials
- Credit Hours and Workload
- Netiquette and Communication
- Adding or Dropping a Course
- Academic Calendar
- Policy Against Discrimination, Harassment and Inappropriate Romantic Relationships
- Sexual Assault Reporting Policy

### **Students with Disabilities**

The University of Connecticut is committed to protecting the rights of individuals with disabilities and assuring that the learning environment is accessible. If you anticipate or experience physical or academic barriers based on disability or pregnancy, please let me know immediately so that we can discuss options. Students who require accommodations should contact the Center for Students with Disabilities, Wilbur Cross Building Room 204, (860) 486-2020 or <http://csd.uconn.edu/>.

Blackboard measures and evaluates accessibility using two sets of standards: the WCAG 2.0 standards issued by the World Wide Web Consortium (W3C) and Section 508 of the Rehabilitation Act issued in the United States federal government.” (Retrieved March 24, 2013 from [Blackboard's website](#))

### **Software/Technical Requirements (with Accessibility and Privacy Information)**

The software/technical requirements for this course include:

- HuskyCT/Blackboard ([HuskyCT/ Blackboard Accessibility Statement](#), [HuskyCT/ Blackboard Privacy Policy](#))
- Adobe Acrobat Reader ([Adobe Reader Accessibility Statement](#), [Adobe Reader Privacy Policy](#))
- Google Apps ([Google Apps Accessibility](#), [Google for Education Privacy Policy](#))
- Microsoft Office (free to UConn students through [uconn.onthehub.com](http://uconn.onthehub.com)) ([Microsoft Accessibility Statement](#), [Microsoft Privacy Statement](#))
- Dedicated access to high-speed internet with a minimum speed of 1.5 Mbps (4 Mbps or higher is recommended).
- Webcams and microphones

For information on managing your privacy at the University of Connecticut, visit the [University's Privacy page](#).

**NOTE:** This course has NOT been designed for use with mobile devices.

### **Help**

[Technical and Academic Help](#) provides a guide to technical and academic assistance.

This course is completely facilitated online using the learning management platform, [HuskyCT](#). If you have difficulty accessing HuskyCT, you have access to the in person/live person support options available during regular business hours through the [Help Center](#). You also have [24x7 Course Support](#) including access to live chat, phone, and support documents.

### **Minimum Technical Skills**

To be successful in this course, you will need the following technical skills:

*Syllabus information may be subject to change.  
The most up-to-date syllabus is located within the course in HuskyCT.*

- Use electronic mail with attachments.
- Save files in commonly used word processing program formats.
- Copy and paste text, graphics or hyperlinks.
- Work within two or more browser windows simultaneously.
- Open and access PDF files.

University students are expected to demonstrate competency in Computer Technology. Explore the [Computer Technology Competencies](#) page for more information.

### **Evaluation of the Course**

A survey will be administered at the end of the course. This is where you can provide constructive feedback so this course experience can be continually improved.