

## Learning & Teaching in Engineering

EGN 6056 Section 29035

**Class Periods:** N/A

**Location:** Online/Canvas

**Academic Term:** Spring 2024

### **Instructor:**

Dr. Jeremy A. Magruder Waisome

Office: Nuclear Science Building (NSC) room 202C

Email: [jwaisome@eng.ufl.edu](mailto:jwaisome@eng.ufl.edu)

Website: <https://www.eng.ufl.edu/eed/faculty-staff/jeremy-waisome/>

Office Hours: Tuesdays, 5<sup>th</sup> period (11:45 AM – 12:35 PM) and by appointment.

### **Teaching Assistant/Peer Mentor/Supervised Teaching Student:**

N/A

### **Course Description**

Learn and apply evidence-based teaching and assessment techniques. Understand how to create course content based on the student-centered learning approach to teaching. Be introduced to methods to foster an inclusive classroom environment to support diverse learners in your classroom. Develop teaching philosophy based on the principles provided through this course. (1cr).

### **Course Pre-Requisites / Co-Requisites**

Enrolled in a graduate-level engineering program.

### **Course Objectives**

- Understand current practices in pedagogy in engineering.
- Create a diversity statement that describes the environment they will aspire to provide to support students of various attributes, backgrounds, and beliefs.
- Create measurable student learning objectives using Bloom's Taxonomy to address lower-order and higher-order thinking skills.
- Apply best practices to create a functional engineering class session plan.
- Plan engineering class sessions to promote student engagement and learning.

### **Materials and Supply Fees**

N/A

### **Required Textbooks and Software**

- Teaching and Learning STEM: A Practical Guide
- Richard M. Felder and Rebecca Brent
- 2016, 1<sup>st</sup> edition
- ISBN 978-1118925812

### **Recommended Materials**

- Optional recommended course materials can be found in Canvas within each module. Please review these materials at your leisure.

### **Course Schedule**

The following course schedule provides the dates all assignments are due. It is the students' responsibility to complete the relevant course content prior to the due dates to inform their submissions.

**Week 01:** Start here: Welcome to Learning and Teaching Engineering **due 01/12/2024**

- Syllabus Quiz

**Week 02:** Module 01: Introduction to College Teaching **due 01/22/2024**

- Module 1 Discussion **(initial post due 01/19/2024)**
- Module 1 Intro to College Teaching Quiz
- Module 1 UF FERPA Training

**Week 3:** Module 02: Creating an Inclusive Environment **due 01/22/2024**

- Module 2 Assignment: Diversity Statement for Syllabus

**Week 04:** Module 03: Writing Learning Objectives **due 01/29/2024**

- Module 3 Assignment: Writing Student Learning Objectives

**Week 05:** Module 04: Planning Class Sessions **due 02/05/2024**

- Module 4 Discussion **(initial post due 02/02/2024)**
- Module 4 Assignment: Comic Book Panel & Class Session Plan

**Week 06:** Module 05: Teaching Effectively **due 02/19/2024**

- Module 5 Assignment: Lecture Video
- Module 5 Assignment: Teaching Script

**Week 07:** Module 06: Writing a Teaching Philosophy **due 03/01/2024**

- Module 6 Assignment: Writing a Teaching Philosophy

**Week 08:** Module 07: Adopting Active Learning **due 03/08/2024**

- Module 7 Assignment: Active Learning

**Week 09:** Module 08: Teaching with Technology **due 03/22/2024**

- Module 8 Discussion **(initial post due 03/18/2024)**

**Week 10:** Module 09: Evaluating Knowledge, Skills, and Values **due 03/25/2024**

- Module 9 Assignment: Instructions and Rubric

**Week 11:** Module 10: Teaching Teamwork Skills **due 04/01/2024**

- Module 10 Discussion **(initial post due 03/29/2024)**

**Week 12:** Module 11: Enhancing Problem-Solving Skills **due 04/12/2024**

- Module 11 Learning Process Reflection

**Week 13:** Module 12: Teaching Professional Skills **due 04/19/2024**

- Module 12 Assignment: Professional Skills

**Week 14:** Module 13: Revisiting Learner-Centered Teaching **due 04/29/2024**

- Module 13 Assignment: Writing a Teaching Philosophy Revision

***Attendance Policy, Class Expectations, and Make-Up Policy***

Although this is an online course, students are expected to review all material posted on the course E-Learning site (i.e., lectures, articles, videos, etc.), as scheduled, and to read their textbook in the order posted. Students are also expected to complete all quizzes, individual assignments, and discussion posts on schedule. Assignments are due by 11:59 pm EDT on the day assigned unless otherwise specified.

Students unable to complete assignments due to documented, excused absences or extenuating circumstances must contact the course instructor no less than 48 hours before a planned absence (e.g., university event, religious holiday) and no more than 48 hours after an unplanned absence (e.g., illness). Make-up opportunities will be offered for absences for which documentation is provided.

Excused absences must be consistent with university policies in the Graduate Catalog (<https://catalog.ufl.edu/graduate/regulations>) and require appropriate documentation. Additional information can be found here: <https://gradcatalog.ufl.edu/graduate/regulations/>

### **Evaluation of Grades**

<b>Assignment</b>	<b>Total Points</b>	<b>Percentage of Final Grade</b>
Module Assignments	100 each	30%
Discussions	100 each	20%
Quizzes	100 each	10%
Lecture and Script Assignments	100 each	20%
Teaching Philosophy and Revision Assignments	100 each	20%
		100%

An assignment is due every week.

- **8 Module Assignments** such as:
  - Completing FERPA Training
  - Writing a Diversity Statement for a Syllabus
  - Writing Student Learning Objectives, etc.
- **4 Discussion Assignments** where students interact with other students in the course.
- **2 Lecture and Script Activities** where students write a script for an online lecture and record it.
- **2 Teaching Philosophy Writing Activities** where students go through the iterative process to write their teaching philosophy statement.

### **Grading Policy**

<b>Percent</b>	<b>Grade</b>	<b>Grade Points</b>
93.4 - 100	A	4.00
90.0 - 93.3	A-	3.67
86.7 - 89.9	B+	3.33
83.4 - 86.6	B	3.00
80.0 - 83.3	B-	2.67
76.7 - 79.9	C+	2.33
73.4 - 76.6	C	2.00
70.0 - 73.3	C-	1.67
66.7 - 69.9	D+	1.33
63.4 - 66.6	D	1.00
60.0 - 63.3	D-	0.67
0 - 59.9	E	0.00

More information on UF grading policy may be found at:

[UF Graduate Catalog](#)  
[Grades and Grading Policies](#)

### **Diversity Statement**

I believe an inclusive, equity-minded environment includes access to higher and continued education. As an instructor, I aim to develop flexible, efficient, and accessible learning environments that welcome and support diversity. Diversity can include disability, age, socioeconomic status, ethnicity, race, nationality, religion, gender identity, sexuality, and culture. I expect you to act respectfully towards others (online and in person) and to utilize differences of opinion as learning opportunities. I also want you to feel comfortable asking for reasonable accommodations so that all students can participate in this course equitably. Please consult the Disability Resource Center <https://disability.ufl.edu/>, and for further on-campus resources, refer to the following sections in this syllabus.

### ***Students Requiring Accommodations***

Students with disabilities who experience learning barriers and would like to request academic accommodations should connect with the disability Resource Center by visiting <https://disability.ufl.edu/students/get-started/>. It is important for students to share their accommodation letter with their instructor and discuss their access needs, as early as possible in the semester.

### ***Course Evaluation***

Students are expected to provide professional and respectful feedback on the quality of instruction in this course by completing course evaluations online via GatorEvals. Guidance on how to give feedback in a professional and respectful manner is available at <https://gatorevals.aa.ufl.edu/students/>. Students will be notified when the evaluation period opens, and can complete evaluations through the email they receive from GatorEvals, in their Canvas course menu under GatorEvals, or via <https://ufl.bluera.com/ufl/>. Summaries of course evaluation results are available to students at <https://gatorevals.aa.ufl.edu/public-results/>.

### ***In-Class Recording***

Students are allowed to record video or audio of class lectures. However, the purposes for which these recordings may be used are strictly controlled. The only allowable purposes are (1) for personal educational use, (2) in connection with a complaint to the university, or (3) as evidence in, or in preparation for, a criminal or civil proceeding. All other purposes are prohibited. Specifically, students may not publish recorded lectures without the written consent of the instructor.

A “class lecture” is an educational presentation intended to inform or teach enrolled students about a particular subject, including any instructor-led discussions that form part of the presentation, and delivered by any instructor hired or appointed by the University, or by a guest instructor, as part of a University of Florida course. A class lecture does not include lab sessions, student presentations, clinical presentations such as patient history, academic exercises involving solely student participation, assessments (quizzes, tests, exams), field trips, private conversations between students in the class or between a student and the faculty or lecturer during a class session.

Publication without permission of the instructor is prohibited. To “publish” means to share, transmit, circulate, distribute, or provide access to a recording, regardless of format or medium, to another person (or persons), including but not limited to another student within the same class section. Additionally, a recording, or transcript of a recording, is considered published if it is posted on or uploaded to, in whole or in part, any media platform, including but not limited to social media, book, magazine, newspaper, leaflet, or third party note/tutoring services. A student who publishes a recording without written consent may be subject to a civil cause of action instituted by a person injured by the publication and/or discipline under UF Regulation 4.040 Student Honor Code and Student Conduct Code.

### ***University Honesty Policy***

UF students are bound by The Honor Pledge which states, “We, the members of the University of Florida community, pledge to hold ourselves and our peers to the highest standards of honor and integrity by abiding by the Honor Code. On all work submitted for credit by students at the University of Florida, the following pledge is either required or implied: “On my honor, I have neither given nor received unauthorized aid in doing this assignment.” The Honor Code (<https://sccr.dso.ufl.edu/process/student-conduct-code/>) specifies a number of behaviors that are in violation of this code and the possible sanctions. Furthermore, you are obligated to report any condition that facilitates academic misconduct to appropriate personnel. If you have any questions or concerns, please consult with the instructor or TAs in this class.

### ***Commitment to a Safe and Inclusive Learning Environment***

The Herbert Wertheim College of Engineering values varied perspectives and lived experiences within our community and is committed to supporting the University’s core values, including the elimination of discrimination. It is expected that every person in this class will treat one another with dignity and respect regardless of race, creed, color, religion, age, disability, sex, sexual orientation, gender identity and expression, marital status, national origin, political opinions or affiliations, genetic information, and veteran status.

If you feel like your performance in class is being impacted by discrimination or harassment of any kind, please contact your instructor or any of the following:

- Your academic advisor or Graduate Program Coordinator
- HWCOE Human Resources, 352-392-0904, [student-support-hr@eng.ufl.edu](mailto:student-support-hr@eng.ufl.edu)
- Pamela Dickrell, Associate Dean of Student Affairs, 352-392-2177, [pld@ufl.edu](mailto:pld@ufl.edu)
- Toshikazu Nishida, Associate Dean of Academic Affairs, 352-392-0943, [nishida@eng.ufl.edu](mailto:nishida@eng.ufl.edu)

### **Software Use**

All faculty, staff, and students of the University are required and expected to obey the laws and legal agreements governing software use. Failure to do so can lead to monetary damages and/or criminal penalties for the individual violator. Because such violations are also against University policies and rules, disciplinary action will be taken as appropriate. We, the members of the University of Florida community, pledge to uphold ourselves and our peers to the highest standards of honesty and integrity.

### **Student Privacy**

There are federal laws protecting your privacy with regards to grades earned in courses and on individual assignments. For more information, please see: <https://registrar.ufl.edu/ferpa.html>

### **Campus Resources:**

#### **Health and Wellness**

#### **U Matter, We Care:**

Your well-being is important to the University of Florida. The U Matter, We Care initiative is committed to creating a culture of care on our campus by encouraging members of our community to look out for one another and to reach out for help if a member of our community is in need. If you or a friend is in distress, please contact [umatter@ufl.edu](mailto:umatter@ufl.edu) so that the U Matter, We Care Team can reach out to the student in distress. A nighttime and weekend crisis counselor is available by phone at 352-392-1575. The U Matter, We Care Team can help connect students to the many other helping resources available including, but not limited to, Victim Advocates, Housing staff, and the Counseling and Wellness Center. Please remember that asking for help is a sign of strength. In case of emergency, call 9-1-1.

**Counseling and Wellness Center:** <https://counseling.ufl.edu>, and 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.

#### **Sexual Discrimination, Harassment, Assault, or Violence**

If you or a friend has been subjected to sexual discrimination, sexual harassment, sexual assault, or violence contact the **Office of Title IX Compliance**, located at Yon Hall Room 427, 1908 Stadium Road, (352) 273-1094, [title-ix@ufl.edu](mailto:title-ix@ufl.edu)

#### **Sexual Assault Recovery Services (SARS)**

Student Health Care Center, 392-1161.

**University Police Department** at 392-1111 (or 9-1-1 for emergencies), or <http://www.police.ufl.edu/>.

## Academic Resources

**E-learning technical support**, 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu.  
<https://lss.at.ufl.edu/help.shtml>.

**Career Connections Center**, Reitz Union, 392-1601. Career assistance and counseling; <https://career.ufl.edu>.

**Library Support**, <http://cms.uflib.ufl.edu/ask>. Various ways to receive assistance with respect to using the libraries or finding resources.

**Teaching Center**, Broward Hall, 392-2010 or 392-6420. General study skills and tutoring.  
<https://teachingcenter.ufl.edu/>.

**Writing Studio, 302 Tigert Hall**, 846-1138. Help brainstorming, formatting, and writing papers.  
<https://writing.ufl.edu/writing-studio/>.

**Student Complaints Campus:** <https://sccr.dso.ufl.edu/policies/student-honor-code-student-conduct-code/>; <https://care.dso.ufl.edu>.

**On-Line Students Complaints:** <https://distance.ufl.edu/getting-help/>; <https://distance.ufl.edu/state-authorization-status/#student-complaint>.