EGN6933 Learning and Teaching in Engineering

Instructor:
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Office hours: by appointment or use the **Conversations (Inbox)** tool within Canvas

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

Required Textbooks and Software
- Teaching and Learning STEM: A Practical Guide
- Richard M. Felder and Rebecca Brent
- 2016, 1st edition
- ISBN 978-1118925812

Recommended Materials
- None

Course Schedule
Start here: due 09/01/2019
Start Here: Welcome to Engineering Supervised Teaching
- Syllabus quiz

module 1: due 09/01/2019
Module 1: Introduction to College Teaching
- Module 1 Discussion (initial post due 08/29/19)
- Module 1 Intro to College Teaching Quiz
- Module 1 UF FERPA Training

module 2: due 09/08/2019
Module 2: Creating an Inclusive Environment
- Module 2 Diversity, Equity, and Inclusion
- Module 2 Creating an Inclusive Environment
- Module 2 Diversity Statement for Syllabus

module 3: due 09/15/2019
Module 3: Writing Learning Objectives
- Module 3 Writing Learning Objectives

module 4: due 09/22/2019
Module 4: Planning Class Sessions
- Module 4 Discussion (initial post due 09/19/19)

- Comic Book Panel & Class Session Plan Formation

module 5: due 09/29/2019
Module 5: Teaching Effectively
- Module 5 Writing a Teaching Script
- Module 5 Lecture Video

module 6: due 10/06/2019
Module 6: Writing a Teaching Philosophy
- Module 6 Writing a Teaching Philosophy

module 7: due 10/20/2019
Module 7: Adopting Active Learning
- Module 7 Active Learning Assignment

module 8: due 10/27/2019
Module 8: Teaching with Technology
- Module 8 Social Media Activity Discussion (initial post due 10/24/2019)

module 9: due 11/03/2019
Module 9: Evaluating Knowledge, Skills, and Values
- Module 9 Assignment Instructions and Rubric

module 10: due 11/10/2019
Module 10: Teaching Teamwork Skills
- Module 10 Teamwork Reflection Discussion (initial post due 11/07/2019)

module 11: due 11/17/2019
Module 11: Enhancing Problem-Solving Skills
- Module 11 Learning Process Reflection

module 12: due 11/24/2019
Module 12: Teaching Professional Skills
- Module 12 Professional Skills Assignment

module 13: due 12/01/2019
Module 13: Revisiting Learner-Centered Teaching
- Module 13 Writing a Teaching Philosophy Revision

module 14: moving forward
- No assignments due in this module

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 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 (http://gradcatalog.ufl.edu/content.php?catoid=10&navoid=2020#attendance) and require appropriate documentation.

Evaluation of Grades

Assignment	Percentage of Final Grade
Module Assignments	30%
Discussions	20%
Quizzes	10%
Lecture and Script Assignments	20%
Teaching Philosophy and Revision Assignments	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.
3 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

Percent	Grade	Grade Points
94.0 - 100.0	A	4.00
90.0 – 93.9	A-	3.67
87.0 - 89.9	B+	3.33
84.0 – 86.9	B	3.00
80.0 - 83.9	B-	2.67
77.0 - 79.9	C+	2.33
74.0 – 76.9	C	2.00
70.0 - 73.9	C-	1.67
67.0 - 69.9	D+	1.33
64.0 - 66.9	D	1.00
61.0 - 63.9	D-	0.67
0 - 60.9	E	0.00

More information on UF grading policy may be found at:
http://gradcatalog.ufl.edu/content.php?catoid=10&navoid=2020#grades

Students Requiring Accommodations
Students with disabilities requesting accommodations should first register with the Disability Resource Center (352-392-8565, https://www.dso.ufl.edu/drc) by providing appropriate documentation. Once registered, students will receive an accommodation letter which must be presented to the instructor when requesting accommodation. Students with disabilities should follow this procedure as early as possible in the semester.

Course Evaluation
Students are expected to provide feedback on the quality of instruction in this course by completing online evaluations at https://evaluations.ufl.edu/evals. Evaluations are typically open during the last two or three weeks of the semester, but students will be given specific times when they are open. Summary results of these assessments are available to students at https://evaluations.ufl.edu/results/.

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://www.dso.ufl.edu/sccr/process/student-conduct-honor-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.

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: http://registrar.ufl.edu/catalog0910/policies/regulationferpa.html

Campus Resources:

<u>Health and Wellness</u>

> **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 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.
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> **Counseling and Wellness Center:** http://www.counseling.ufl.edu/cwc, and 392-1575; and the University Police Department: 392-1111 or 9-1-1 for emergencies.
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> **Sexual Assault Recovery Services (SARS)**
> Student Health Care Center, 392-1161.
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> **University Police Department** at 392-1111 (or 9-1-1 for emergencies), or http://www.police.ufl.edu/.

<u>Academic Resources</u>

> **E-learning technical suppor**t, 352-392-4357 (select option 2) or e-mail to Learning-support@ufl.edu. https://lss.at.ufl.edu/help.shtml.
>
> **Career Resource Center**, Reitz Union, 392-1601. Career assistance and counseling. https://www.crc.ufl.edu/.
>
> **Library Support**, http://cms.uflib.ufl.edu/ask. Various ways to receive assistance with respect to using the libraries or finding resources.
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> **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://www.dso.ufl.edu/documents/UF_Complaints_policy.pdf.
>
> **On-Line Students Complaints**: http://www.distance.ufl.edu/student-complaint-process.