

Foundations in Engineering Education

EGS 6050 Class Number 17645

Class Periods: W periods 3-4 and F period 4

Location: NSC 520

Academic Term: Fall 2024

Instructor:

Gloria J. Kim, PhD

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352-392-9054

Office Hours: TBD

Course Description

An introduction to fundamental issues, questions, and approaches to engineering education; 3 credit hours.

Course Pre-Requisites / Co-Requisites

None.

Course Objectives

- Inquire into the history and philosophy of engineering education.
- Evaluate the strengths of arguments that link the relevant engineering education literature to specific contexts
- Synthesize literature relevant to engineering education to build an argument that goes beyond the conclusions of the cited sources
- Effectively communicate course learning outcomes in writing

Materials and Supply Fees

None

Required Textbooks and Software

I will provide readings to you on the course Canvas site. Engineering education is a multi-disciplinary field that draws on work from a broad range of academic traditions. Therefore, in addition to the primary journal of the field, *Journal of Engineering Education*, we will be reading articles from fields such as the learning sciences, organizational studies, communication, science and technology studies, psychology, anthropology, sociology, and higher education.

Recommended Materials

None

Course Schedule

Week #	Week Starting on	Topic
1	19-Aug	Introductions, course overview and expectations, reading and writing critically
2	26-Aug	What is engineering? Perspectives I
3	2-Sep	What is engineering? Perspectives II
4	9-Sep	Engineering in the workplace
5	16-Sep	Engineering as sociotechnical endeavor
6	23-Sep	Purpose of education
7	30-Sep	History of engineering education
8	7-Oct	Accreditation

9	14-Oct	Pedagogy
10	21-Oct	Engineering education research
11	28-Oct	Current topics in engineering education I
12	4-Nov	Current topics in engineering education II
13	11-Nov	Global perspectives on engineering and engineering education
14	18-Nov	Connecting research to practice in engineering education
15	25-Nov	Thanksgiving - No Class
16	2-Dec	Final Project

Attendance Policy, Class Expectations, and Make-Up Policy

This class is primarily discussion-based and therefore attendance is expected and required. Absences will be excused consistent with university policies in the [Graduate Academic Regulations](#) in the Graduate Catalog and require appropriate documentation. Assignments will be accepted late only in accordance with university policies.

Evaluation of Grades

Assignment	Total Points	Percentage of Final Grade
Daily blog entries	2 each	15%
Weekly participation	4 each	15%
Presentations	10	20%
Final project paper	30	30%
Self-assessment	100	20%
		100%

Grading Policy

Percent	Grade	Grade Points
93.0 - 100.0	A	4.00
90.0 - 92.9	A-	3.67
87.0 - 89.9	B+	3.33
84.0 - 86.9	B	3.00
81.0 - 83.9	B-	2.67
78.0 - 80.9	C+	2.33
75.0 - 77.9	C	2.00
72.0 - 74.9	C-	1.67
69.0 - 71.9	D+	1.33
66.0 - 68.9	D	1.00
63.0 - 65.9	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](#)

Communication Policy

- This course will use Canvas as a Learning Management System. All questions related to the course materials and activities should be sent via Canvas messaging (preferred) or e-mailed to gloriakim@ufl.edu. When emailing the instructor, you must include your full name, the course you are enrolled in, and a clear

description of the matter. Please use your official UF email account for all communication with the instructor.

- The instructor reserves the right to not answer email messages sent from non-UF email accounts such as Yahoo, Hotmail or Gmail.
- Students can meet with the course instructor during regular office hours or by appointment.
- Instructor Response Time: Please allow 24-48 hours for the instructor to respond to your messages/emails. Messages/emails sent during weekends may not be responded until the following week.

Generative AI Content Policy

Presenting substantive content or output of an artificial intelligence platform, technology, or algorithm as your original work will be considered plagiarism and therefore a violation of the University Honesty Policy.

Students Requiring Accommodations

Students with disabilities requesting accommodations should first register with the [Disability Resource Center](#) (352-392-8565) 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 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.bluer.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](#) 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 broad diversity within our community and is committed to individual and group empowerment, inclusion, and the elimination of discrimination. It is expected that every person in this class will treat one another with dignity and respect regardless of gender, sexuality, disability, age, socioeconomic status, ethnicity, race, and culture.

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 Director of Human Resources, 352-392-0904, student-support-hr@eng.ufl.edu
- Pam Dickrell, Associate Dean of Student Affairs, 352-392-2177, pld@ufl.edu
- Toshikazu Nishida, Associate Dean of Academic Affairs, 352-392-0943, 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 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

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 Resource 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: <http://www.distance.ufl.edu/student-complaint-process>