

EGS 6930 - Engineering Education Seminar

EGS 6930 Section EED1

Class Periods: Friday, Period 3, 9:35 AM - 10:25 AM

Location: NSC 520

Academic Term: Fall 2025

Instructor:

Dr. Curtis Taylor

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352-392-4440

Office Hours: Thursdays, 4 – 5 p.m., 481 WERT

Teaching Assistant/Peer Mentor/Supervised Teaching Student:

Please contact through the Canvas website

- None

Course Description

Graduate seminar in engineering education. Speakers may include graduate students in the program, faculty from campus, and speakers from other institutions.

Course Pre-Requisites / Co-Requisites

None

Course Objectives

The purpose of the course is to provide students with practical instruction and opportunities to improve their technical oral and written communication skills. Students will be able to:

- Apply the fundamentals of audience analysis and adaptation.
- Better cope with communication apprehension.
- Structure an organized message to fulfill the presentation's general purpose.
- Construct a presentation outline.
- Demonstrate effective extemporaneous delivery that is adapted to the speaker, audience, purpose and occasion.
- Use language in presentations that is fitting for the audience, speech purpose and occasion.

To meet these objectives, the seminar employs a hybrid instructional model that alternates between invited guest speakers and Communities of Practice (CoP) sessions, using a journal club format. Invited speakers, including graduate students, faculty, and experts from other institutions, present on diverse topics in engineering education, providing students with exposure to cutting-edge research and professional perspectives. The CoP sessions are grounded in Wenger's (1998) social theory of learning, which emphasizes learning as a participatory process that occurs through shared practices and mutual engagement within a community. By using a journal club format, students critically engage with scholarly literature, fostering peer learning, interdisciplinary exploration, and the development of essential skills such as facilitating discussions and presenting critiques. Journal clubs, as an application of CoP theory, have been shown to support collaborative learning and help participants internalize disciplinary norms (Wenger et al., 2002). This instructional strategy bridges theoretical knowledge and practical application, aligning with contemporary shifts in graduate education that emphasize preparation for ill-structured, collaborative professional environments (National Academy of Engineering, 2004; Wenger, 1998). Through the combined use of expert-led sessions and CoPs, the seminar equips students to navigate and contribute to the dynamic landscape of engineering education while developing critical skills in scholarly communication, mentorship, and interdisciplinary collaboration (Newswander, 2009).

Materials and Supply Fees

None

Required Textbooks and Software

None

Recommended Materials

- Cox, T., Columbus, C., Ahmed, K., & Higginbotham, J. (2024). How to present and summarize a scientific journal article. Baylor University Medical Center Proceedings, 37(5), 884–887. Free access: https://pmc.ncbi.nlm.nih.gov/articles/PMC11332616/pdf/UBMC_37_2371766.pdf
- National Academy of Engineering . 2004 . The engineer of 2020 , Washington, DC : National Academies Press.
- Newswander, L. K., & Borrego, M. (2009). Using journal clubs to cultivate a community of practice at the graduate level. European Journal of Engineering Education, 34(6), 561–571. <https://doi.org/10.1080/03043790903202959>
- Wenger , E. 1998 . Communities of practice , New York , NY : Oxford University .
- Wenger , E. 1998 . Communities of practice: learning as a social system . The Systems Thinker , 9 (5) : 1 – 12 .
- Wenger , E. , McDermott , R. and Snyder , W. 2002 . Cultivating communities of practice , Cambridge , MA : Harvard Business School Press .

Required Computer

Recommended Computer Specifications: <https://it.ufl.edu/get-help/student-computer-recommendations/>

HWCOE Computer Requirements: <https://www.eng.ufl.edu/students/advising/fall-semester-checklist/computer-requirements/>

Course Schedule

- Seminars and CoP discussions will be presented weekly. Attendance and critiques will be assessed weekly.
- Please be aware that the schedule posted on Canvas is subject to change. For details and updates, refer to Canvas.
- Access to the seminar is open to others. Please share the following information with others for updates.

Evaluation of Grades

Assignment	Total Points	Percentage of Final Grade
Seminar Attendance	2 each	70%
Seminar Reports	2 each	15%
Presentation	10	15%
		100%

Seminar Reports (2 points each). For seminars led by EED-organized and external speakers, students will submit a critique for each session.

- Contribution to Course Objectives: This assignment helps students critically engage with current issues and research in engineering education while developing skills in summarizing and analyzing complex topics.
- Critiques must include:
 - A 2-sentence summary capturing the seminar's main point.
 - A 150-300 word analysis discussing the strengths and weaknesses of the research.
- Scoring:
 - 1 point: The summary fails to capture the seminar's main point, and/or the analysis is superficial.
 - 2 points: The summary effectively captures the seminar's main point, and the analysis demonstrates reflection and critical thinking.

Presentation (10 points): Each student will complete a 10-minute technical/research presentation. The presentation will be critiqued by peers and the instructor. The instructor will provide the final score based on a rubric to be assigned.

Grading Policy

This course is graded on a Satisfactory/Unsatisfactory (S/U) basis. To achieve a grade of Satisfactory (S), students must score 70% or higher. Attendance is recorded at EED-organized seminars, and no points for critiques can be earned if absent (unless the absence is excused; in such cases, contact the instructor promptly).

Academic Policies & Resources

To support consistent and accessible communication of university-wide student resources, instructors must include this link to academic policies and campus resources: <https://go.ufl.edu/syllabuspolices>. Instructor-specific guidelines for courses must accommodate these policies.

Commitment to a Positive 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.

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 Coordinator
- HWC OE Human Resources, 352-392-0904, student-support-hr@eng.ufl.edu
- Pam Dickrell, Associate Dean of Student Affairs, 352-392-2177, pld@ufl.edu