EGR 574: ENGINEERING EDUCATION SYSTEMS IN CONTEXT

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OFFICE HOURS:	Monday, 9:00 – 11:30 am or by appointment	Tuesday, 9:30 – 11:30 am or by appointment
CLASS TIME & LOCATION:	Peralta 117 – Monday & Wednesday 12 – 1:15 pm	
REQUIRED CLASS TEXT:	Johri, A. & Olds, B.M. (2014). *Cambridge Handbook of Engineering Education Research [CHEER]* (ISBN-10: 1107014107; ISBN-13: 978-1107014107) Booth, W.C., Colomb, G.G., Williams, J.M., Bizup, J., & Fitzgerald, W.T. (2016). The Craft of Research (4th. Edition) (ISBN-10: 0226239566X; ISBN-13: 978-0226239569)	
COURSE WEBSITE:	myasucourses.asu.edu (Blackboard)	

CATALOG DESCRIPTION OF COURSE

This course provides a systems understanding of current trends in engineering education research to engage engineering education research graduate students with the latest developments in the field in which they will situate their research projects.

COURSE OVERVIEW

The goal of this course is to provide students with a systems understanding of the enterprise of engineering education and the discipline of engineering education research. Particular emphasis is given to the continuum of events that have and continue to influence engineering education. Upon completion of the course, students should be able to effectively discuss developments, trends and current issues, while appropriately framing their research project with a systems perspective.

STUDENT LEARNING OUTCOMES

Upon successful completion of the course, the student will be able to:
1. Observe and synthesize the past, present, and future of engineering education
2. Understand the dimensions and interplay of stakeholders in the engineering education enterprise
3. Support students' identity development as researchers and members of the engineering education community
4. Frame research projects in context and create artifacts that facilitate pathways into the engineering education research discipline

COURSE DELIVERABLES & GRADING

The course will consist of a series of topics broken down into three parts: 1) Engineering Education Enterprise, 2) Engineering Education Research Discipline, and 3) Special Topics in Engineering Education. This course is based on principles of active learning and is meant to engage students in exploring the material rather than presenting it in a passive way. As a consequence, overall success of the course depends on **students' engagement with the material** and their **participation in the in-class discussions / activities**. A weighted average grade will be calculated using the deliverables in the following table.

Deliverable	Weight
Weekly Journal Entries (22 total), and Final Synthesis	**15%**
Defining Features of Past Reports-- Matrix and Synthesis	**10%**
Perspectives Paper on "What is Engineering Education?"	**20%**
Manuscript Review	**10%**
Description of Specific Interactions	**10%**

Final Project
    • Final GRFP Presentation
    • Peer Reviews/Feedback
    • Final GRFP Project Submission
    • Response to Reviewers
	35%
	5%
	10%
	15%
	5%

Final course grades will be determined based on the following scale.

Grade	Overall Progress
A+	**98 – 100%**
A	**95 – 97%**
A-	**90 – 94%**
B+	**88 – 89%**
B	**85 – 87%**
B-	**80 – 84%**
C+	**78 – 79%**
C	**75 – 77%**
C-	**70 – 74%**
D	**60 – 69%**
F	**below 60%**

A tentative schedule for the class is available on the course Blackboard site. The actual rate at which particular topics are covered in class may change.

LEARNING ENVIRONMENT:
The instructional team believes that:
- The quality of learning is more important than grades (i.e., what you get out of the assignment is more important than "bean counting" points).
- Learning involves questioning your own assumptions and ideas AND listening to and understanding other's ideas.
- Opportunities to practice what you are learning and receive feedback on projects help further the development of your ideas.
- Successful learning is fostered by clear objectives and expectations.

We expect that you will:
1. Attend all classes. If you must miss a class, please let us know and make arrangements with other peers for a summary and review.
2. Fully engage in all classes. Full engagement requires reading all assigned materials by the assigned time, actively participating in class discussions and activities, and completing quality work. Full engagement also means being attentive in class.

3. Meet with instructional team outside of class time during office hours.
4. Complete and submit a course evaluation so we have constructive feedback for use in improving this class.
5. Follow scholastic conduct policy: https://provost.asu.edu/academicintegrity

You can expect that we (the instructors) will:
1. Provide a supportive learning environment that fosters your success.
2. Create assignments and exercises that are meaningful to you.
3. Provide detailed, constructive formative feedback on your course submissions.
4. Honor and respect your interests.

Students who are successful in this course tend to:
1. Be open to new ways of thinking about engineering education and have a mindset that they are capable of learning about the engineering education enterprise and research discipline.
2. Attend class regularly and come prepared to actively participate.
3. Start assignments the day they are assigned; ask questions when necessary; and complete all assignments to the best of their ability.
4. Check their ASU email and Blackboard regularly, since these are the modes of communication instructors use to communicate information outside of class.
5. Plan to spend at least 3 hours/week outside of class for each course credit hour (i.e., >9 hours/week for this class).

OTHER IMPORTANT POLICIES
ACADEMIC INTEGRITY

Each student has an obligation to act with honesty and integrity, and to respect the rights of others in carrying out all academic assignments. In EGR 574, **any student who is found to have violated the academic integrity policy will, as a minimum, receive an E in the course**. The provided URL defines the policy as well as the process to be used if a student wishes to appeal this action.

- Academic integrity policy: https://provost.asu.edu/academicintegrity/
- Student code of conduct: https://eoss.asu.edu/dos/srr/codeofconduct

ACCOMMODATIONS

If you are a person with special circumstances that you believe will affect your class performance (e.g., visual, hearing or learning disabilities or language differences) please let the professor know if we can make appropriate accommodations.

In compliance with the Rehabilitation Act of 1973, Section 504, and the Americans with Disabilities Act as amended (ADAAA) of 2008, professional disability specialists and support staff at the Disability Resource Center (DRC) facilitate a comprehensive range of academic support services and accommodations for qualified students with disabilities. Qualified students with disabilities may be eligible to receive academic support services and accommodations. Eligibility is based on qualifying disability documentation and assessment of individual need. Students who believe they have a current and essential need for disability accommodations are responsible for requesting accommodations and providing qualifying documentation to the DRC. Every effort is made to provide reasonable accommodations for qualified students with disabilities.

Qualified students who wish to request an accommodation for a disability should contact the DRC by going to https://eoss.asu.edu/drc, calling 480-727-1039, visiting Sutton Hall- Suite 201, or emailing DRC@asu.edu. To speak with a specific office, please use the following information:

ASU Online and Downtown Phoenix Campus
Post Office, Suite 104
602-496-4321 (Voice)

Polytechnic Campus
Sutton Hall, Suite 201
480-727-1165 (Voice)

West Campus
University Center Building (UCB), Room 130
602-543-8145 (Voice)

Tempe Campus
Matthews Center Bldg, 1st Floor
480-965-1234 (Voice)

OTHER ON-CAMPUS RESOURCES
Startup Labs is a collaboration and co-working space available to all students in the College of Technology and Innovation. It is located in the Technology Center, Room 199, and open Monday-Friday from 8am-5pm.

There are lots of valuable resources on campus to help you achieve success both personally and academically. Don't hesitate to use them! A few of these are listed here:

    a.   Tutoring and Writing centers – https://tutoring.asu.edu/tutor-search
    b.   Online Tutoring - https://tutoring.asu.edu/online-tutoring
    c.   Career preparation center: https://eoss.asu.edu/cs
    d.   Counseling/Consultation: https://eoss.asu.edu/counseling

ABSENCE POLICY
Students will have the opportunity to make up exams, quizzes, and other in-class work when missing class due to absences related to religious observances/practices that are in accord with ACD 304–04, "Accommodation for Religious Practices" (http://www.asu.edu/aad/manuals/acd/acd304-04.html) or related to university sanctioned events/activities that are in accord with ACD 304–02, "Missed Classes Due to University-Sanctioned Activities" (http://www.asu.edu/aad/manuals/acd/acd304-02.html).