Document modified on 2/18/19 to reflect special "Note" below per ECC Committee Request

**TO:** The Faculty of the College of Engineering

**FROM:** School of Engineering Education

**RE:** Online Delivery Option for ENE 69000

The faculty of the School of Engineering Education has approved the option to offer ENE 69000 online. The only change to this course is that online delivery would become an option. This action is now submitted to the Engineering Faculty with a recommendation for approval.

### **ENE 69000 Seminar in Engineering Education**

Terms offered: fall and spring semesters

Credit type: zero credit hours

Schedule type: 50 minutes per meeting, one meeting per week

Pre-requisites: NoneRestrictions: NoneAttributes: None

**Note:** The seminars are available to students via Boilercast or similar distance learning technology.

**Reason:** The seminar is a way for Engineering Education students, both full-time and part-time, to stay abreast of recent research in the field. Students who are not on campus some semesters want the option to enroll in the seminar. Thus we would like to offer it online.

Since students are required to take the seminar twice during their graduate program, formal enrollment in the course is typically about 10. However, attendance is usually 20-30.

Donna Riley, Kamyar Haghighi Head School of Engineering Education

# ENE 69000-001 Seminar in Engineering Education Spring 2019

	Thursday's
Meeting Time	Formal Presentation 3:30-4:15 p.m.
	Informal Conversation with Light Refreshments 4:15-4:45 p.m.
Location	ARMS B071
Organizer	Audeen Fentiman (fentiman@purdue.edu)

#### Course overview

Through presentations on current topics in engineering education and related subjects, this seminar strives to build an intellectual community by forging connections within the School of Engineering Education (ENE), between ENE and the other schools in the College of Engineering, with colleagues who conduct STEM education research across the campus, and with other engineering education researchers across the U.S. Speakers may come from the campus, from other universities, and from business, industry, and government. The seminar is open to the entire Purdue community. As a course, this seminar is required for first-year doctoral students in ENE, but any graduate student may register. Students may register repeatedly in multiple semesters, without limit.

# **Course objectives**

To introduce current research and programs in engineering education. To provide networking opportunities for ENE graduate students with scholars both within and outside ENE.

## Credit and grading

This zero-credit course is graded pass/fail based on attendance. To receive a pass, you must attend seven or more of the fourteen sessions at which attendance is recorded.

### **Professional expectations**

Seminar participants are expected to act professionally. Please arrive on time and stay for the whole session. If you arrive late or leave early, please minimize disruptions.

As professional colleagues, we believe that each of us has something valuable to contribute to the seminar discussion. Please respect the different experiences, beliefs, and values expressed by other seminar participants; avoid derogatory remarks about individuals, cultures, groups, or viewpoints. The School of Engineering Education supports Purdue University's **commitment to diversity**. The school welcomes individuals of all ages, backgrounds, citizenships, disabilities, education, ethnicities, family statuses, genders, gender identities, geographical locations, languages, military experience, political views, races, religions, sexual orientations, socioeconomic statuses, and work experiences (See <a href="http://www.purdue.edu/diversity-inclusion/">http://www.purdue.edu/diversity-inclusion/</a>).

### Course policies

If you believe **special circumstances** will affect your participation (e.g., visual, hearing or learning disabilities or language differences), please notify Professor Fentiman as soon as possible. We

can make appropriate accommodations. As required by the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990, Purdue University must provide auxiliary aids and services that allow a student with a disability to fully access and participate in the university's programs, services, and activities. For additional information, see the Disability Resource Center website at <a href="http://www.purdue.edu/odos/drc/">http://www.purdue.edu/odos/drc/</a>.

The course is subject to **changes** prompted by unanticipated events such as inclement weather. Changes will be announced through the ENE-seminars listserv and other ENE listservs.

To prepare for **emergencies** such as fires, tornadoes, and other hazards, please review the safety information posted in Armstrong Hall and on Purdue's emergency preparedness website: http://www.purdue.edu/emergency\_preparedness/.

Seminars will usually be posted to **BoilerCast** for access through Blackboard by all Purdue community members enrolled in the seminar course.

# Schedule of speakers (subject to change) - Spring 2019

(areas of interest listed are general research areas and not titles of presentations)

Date	Speaker
Jan 10	<b>Craig Zilles</b> , Associate Professor of Computer Science, University of Illinois at Urbana-Champaign (http://zilles.cs.illinois.edu/) – computer science education
Jan 17	Adam Kirn, Assistant Professor of Engineering Education, University of Nevada – Reno ( <a href="https://www.unr.edu/engineering/contact-us/kirn">https://www.unr.edu/engineering/contact-us/kirn</a> ) – engineering student motivation and identity
Jan 24	<b>Michael Loui</b> , Dale and Suzi Gallagher Professor of Engineering Education, Purdue University - engineering ethics education
Jan 31	<b>Craig Zywicki</b> , Interim Director for Institutional Effectiveness, Purdue Office of Institutional Research, Assessment, and Effectiveness - accessing and using data OIEAE has available
Feb 7	Kristen Moore, Associate Professor of Engineering Education, The State University of New York, University at Buffalo ( <a href="http://engineering.buffalo.edu/engineering-education/people/directory/moore-kristen.html">http://engineering.buffalo.edu/engineering-education/people/directory/moore-kristen.html</a> ) – technical communication for engineers
Feb 14	Samantha Brunhaver, Assistant Professor, The Polytechnic School, Arizona State University ( <a href="https://isearch.asu.edu/profile/2452662">https://isearch.asu.edu/profile/2452662</a> ) – career pathways and persistence of engineering students and practicing engineers (she has industry experience prior to moving to ASU)
Feb 21	Aditya Johri, Associate Professor, Information Sciences and Technology, George Mason University ( <a href="https://volgenau.gmu.edu/profile/view/3759">https://volgenau.gmu.edu/profile/view/3759</a> ) - use of information and communication technologies (ICT) for learning and knowledge sharing, with a focus on cognition in informal environments including online communities
Feb 28	Christina Krist, Assistant Professor, Curriculum & Instruction, University of Illinois at Urbana-Champaign ( <a href="https://education.illinois.edu/faculty/ckrist">https://education.illinois.edu/faculty/ckrist</a> ) - making science learning meaningful for students and teachers, especially in the context of current reforms such as the NGSS

Mar 7	Christopher Wright, Assistant Professor in Science Education, Drexel University ( <a href="https://drexel.edu/soe/faculty-and-staff/faculty/Wright-Christopher/">https://drexel.edu/soe/faculty-and-staff/faculty/Wright-Christopher/</a> ) — engineering and science education, urban education, elementary teacher education
Mar 14	Spring Break – No Seminar
Mar 21	ENE GSA Town Hall
Mar 28	<b>Erin Cech</b> , Assistant Professor, Department of Sociology, University of Michigan ( <a href="https://lsa.umich.edu/soc/people/faculty/erin-cech.html">https://lsa.umich.edu/soc/people/faculty/erin-cech.html</a> ) – large statistical studies around social inequality in STEM and engineering education
Apr 4	Fredy Andres Olarte Dussan, a faculty member at Universidad Nacional de Colombia ( <a href="http://www.docentes.unal.edu.co/faolarted/#distinciones">http://www.docentes.unal.edu.co/faolarted/#distinciones</a> ). His research areas include (1) approaches to developing communication skills in engineering students and (2) workshops (in conjunction with Colombia's Ministry of Education) to help K-12 teachers develop curriculum for teaching technology.
Apr 11	Exchange Ph.D. Student Presentation – student not yet selected
Apr 18	ENE 590 Students – poster presentations
Apr 25	<b>Sheri Sheppard</b> , Professor, Mechanical Engineering, Stanford University ( <a href="https://engineering.stanford.edu/people/sheri-sheppard">https://engineering.stanford.edu/people/sheri-sheppard</a> ) – distinguished lecture hosted by the College of Engineering

The Following Information Is Added to the Syllabus at the Recommendation of the Provost

## Academic Integrity. <a href="http://www.purdue.edu/odos/osrr/academic-integrity/index.html">http://www.purdue.edu/odos/osrr/academic-integrity/index.html</a>

- Syllabus statement. As we continue to promote academic integrity, consider adding this sentence to your syllabus. "Academic integrity is one of the highest values that Purdue University holds. Individuals are encouraged to alert university officials to potential breaches of this value by either emailing <a href="integrity@purdue.edu">integrity@purdue.edu</a> or by calling 765-494-8778. While information may be submitted anonymously, the more information that is submitted provides the greatest opportunity for the university to investigate the concern."
- Purdue Honor Pledge. The Honor Pledge Task Force, a student organization responsible for stewarding the mission of the Honor Pledge and encourages a culture of academic integrity, asks all instructors to prominently include the student-initiated Purdue Honor Pledge on their syllabus, as well as exams and key assignments. The statement as written by our own Purdue students is "As a boilermaker pursuing academic excellence, I pledge to be honest and true in all that I do. Accountable together we are Purdue." You may use this link to a web page for <a href="Purdue's Honor Pledge">Purdue's Honor Pledge</a> in your syllabi.

#### **Mental Health Syllabus Statement**

On the recommendation of the University Senate, CAPS and the Dean of Students, we ask you to share the following resources on your syllabus.

- If you find yourself beginning to feel some stress, anxiety and/or feeling slightly overwhelmed, try WellTrack, <a href="https://purdue.welltrack.com/">https://purdue.welltrack.com/</a>. Sign in and find information and tools at your fingertips, available to you at any time.
- If you need support and information about options and resources, please see the Office
  of the Dean of Students, http://www.purdue.edu/odos, for drop-in hours (M-F, 8 am- 5 pm).

• If you're struggling and need mental health services: Purdue University is committed to advancing the mental health and well-being of its students. If you or someone you know is feeling overwhelmed, depressed, and/or in need of mental health support, services are available. For help, such individuals should contact Counseling and Psychological Services (CAPS) at (765)494-6995 and <a href="http://www.purdue.edu/caps/">http://www.purdue.edu/caps/</a> during and after hours, on weekends and holidays, or by going to the CAPS office of the second floor of the Purdue University Student Health Center (PUSH) during business hours.

### **Students with Disabilities**

• Accessibility and Accommodations Syllabus Statement: The DRC recommends the following statement be included in your syllabus. "Purdue University strives to make learning experiences as accessible as possible. If you anticipate or experience physical or academic barriers based on disability, you are welcome to let me know so that we can discuss options. You are also encouraged to contact the Disability Resource Center at: <a href="mailto:drc@purdue.edu">drc@purdue.edu</a> or by phone: 765-494-1247." <a href="http://www.purdue.edu/drc/faculty/syllabus.html">http://www.purdue.edu/drc/faculty/syllabus.html</a>

### **EMERGENCY PREPAREDNESS LECTURE**

- Prior to the first day of class, obtain a copy of the building emergency plan for each building in which you will be teaching. Note the evacuation route and assembly area, as well as the shelter in place locations. BEPs are located on the Emergency Preparedness website <a href="http://www.purdue.edu/ehps/emergency\_preparedness/">http://www.purdue.edu/ehps/emergency\_preparedness/</a>
- 2. On the first day of class, the following information is required to be presented to students:

As we begin this semester I want to take a few minutes and discuss emergency preparedness. Purdue University is a very safe campus and there is a low probability that a serious incident will occur here at Purdue. However, just as we receive a "safety briefing" each time we get on an aircraft, we want to emphasize our emergency procedures for evacuation and shelter in place incidents. Our preparedness will be critical IF an unexpected event occurs!

Emergency preparedness is your personal responsibility. Purdue University is actively preparing for natural disasters or human-caused incidents with the ultimate goal of maintaining a safe and secure campus. Let's review the following procedures:

- For any emergency call 911.
- There are nearly 300 Emergency Telephone Systems throughout campus that connect directly to the Purdue Police Department (PUPD). If you feel threatened or need help, push the button and you will be connected to the PUPD.
- If we hear a fire alarm we will immediately evacuate the building and proceed to the grassy area between the Civil Engineering and Nursing buildings
  - Do not use the elevator.
  - Go over evacuation route...see specific Building Emergency Plan.
- If we are notified of a Shelter in Place requirement for a tornado <u>warning</u> we will shelter in the lowest level of this building away from windows and doors. Our preferred location is our classroom.

- If we are notified of a Shelter in Place requirement for a hazardous materials release we will shelter in our classroom shutting any open doors and windows.
- If we are notified of a Shelter in Place requirement for an active threat such as a shooting we will shelter in a room that is securable preferably without windows. Our preferred location is our classroom.

(NOTE: Each building will have different evacuation & shelter locations. The specific Building Emergency Plan will provide specific locations and procedures)

Attached to the syllabus is an "Emergency Preparedness for Classrooms" sheet that provides additional preparedness information. Please review the sheet and the Emergency Preparedness website for additional emergency preparedness information.

### **MORE INFORMATION**

Reference the Emergency Preparedness web site for additional information: https://www.purdue.edu/ehps/emergency preparedness/



### **EMERGENCY PREPAREDNESS SYLLABUS ATTACHMENT**

EMERGENCY NOTIFICATION PROCEDURES are based on a simple concept – if you hear a fire alarm inside, proceed outside. If you hear a siren outside, proceed inside.

- Indoor Fire Alarms mean to stop class or research and immediately evacuate the building.
- Proceed to your Emergency Assembly Area away from building doors. Remain outside until
  police, fire, or other emergency response personnel provide additional guidance or tell you it
  is safe to leave.
- All Hazards Outdoor Emergency Warning Sirens mean to <u>immediately</u> seek shelter (Shelter in Place) in a safe location within the closest building.

"Shelter in place" means seeking immediate shelter inside a building or University residence. This course of action may need to be taken during a tornado, an active threat including a shooting or release of hazardous materials in the outside air. Once safely inside, find out more details about the emergency\*. **Remain in place** until police, fire, or other emergency response personnel provide additional guidance or tell you it is safe to leave.

\*In both cases, you should seek additional clarifying information by all means possible...Purdue Emergency Status page, text message, Twitter, Desktop Alert, Albertus Beacon, digital signs, email alert, TV, radio, etc....review the Purdue Emergency Warning Notification System multi-communication layers at <a href="http://www.purdue.edu/ehps/emergency\_preparedness/warning-system.html">http://www.purdue.edu/ehps/emergency\_preparedness/warning-system.html</a>

#### **EMERGENCY RESPONSE PROCEDURES:**

- Review the Emergency Procedures Guidelines
   https://www.purdue.edu/emergency\_preparedness/flipchart/index.html
- Review the **Building Emergency Plan** (available on the Emergency Preparedness website or from the building deputy) for:
  - evacuation routes, exit points, and emergency assembly area
  - when and how to evacuate the building.
  - shelter in place procedures and locations
  - additional building specific procedures and requirements.

### **EMERGENCY PREPAREDNESS AWARENESS VIDEOS**

"Run. Hide. Fight.®" is a 6-minute active shooter awareness video that illustrates what to look for and how to prepare and react to this type of incident. See: <a href="https://www.youtube.com/watch?v=5mzl\_5aj4Vs">https://www.youtube.com/watch?v=5mzl\_5aj4Vs</a> (Link is also located on the EP website)