

TO: The Faculty of the College of Engineering
FROM: Office of Professional Practice
RE: New Undergraduate Courses ENGR 23099, ENGR 33099, ENGR 43099

The Faculty Coordinators of the Professional Practice Advisory Council have approved the following new courses. This action is now submitted to the Engineering Faculty with a recommendation for approval.

- ENGR 23099** **Cooperative Education Seminar I**
Semester F, S, SS; Class 1; Credits 1-2
Prerequisite: Student must have completed at least one Co-Op work term.
May be repeated once after the second work term. Can be taken for two credits subsequent to completing two back-to-back work terms.
- ENGR 33099** **Cooperative Education Seminar II**
Semester F, S, SS; Class 1; Credit 1-2
Prerequisite: Student must have completed at least two Co-Op work terms, and ENGR 23099. May be repeated once after the fourth work term. Can be taken for two credits subsequent to completing two back-to-back work terms.
- ENGR 43099** **Cooperative Education Seminar III**
Semester F, S, SS; Class 1; Credit 1-2
Prerequisite: Student must have completed at least three Co-Op work terms, and ENGR 33099. Can be taken for two credits subsequent to completing two back-to-back work terms.

Description:

This will be a series of seminar courses where students who are active in the Co-Op program will share their work experience with fellow co-op students through 10-15 minute presentations followed by a brief discussion and question/answer period. Students will earn three to five credit hours and will be able to use up to three of the credits as free elective, general education elective, or technical elective credits (as determined by the students' academic disciplines) toward their degree requirements.

The intent is to welcome students from all disciplines with approved 3-term or 5-term co-op programs, and to conduct all courses in the series concurrently in order to foster learning across all levels of co-op work experience.

Students are expected to attend at least six (6) classes during the semester, including the first, last, their presentation day, and at least three (3) other classes. The rationale for this proposed schedule is that there is likely to be diminishing returns after a student has participated in 12-16 presentations (i.e. three to four 10-15 minute presentations in each of four 50-minute classes). However, the final determination of the required number of courses, and the number and type of academic credits, will be left with the students' academic disciplines.

Students who conduct back-to-back co-op work terms will be able to "double-up" during the subsequent co-op seminar course by giving two presentations and taking the seminar course for two credit hours.

Chemical and Industrial Engineering co-op students are currently participating in seminar courses in their own disciplines that are similar to the ones outlined in this document. The proposed seminar courses are not intended for the Chemical and Industrial Engineering co-op students.

Reason:

Cooperative Education is an academic program with oversight provided by assigned Faculty Coordinators who serve as the Instructors for participating students. Students register for a co-op course when they are out on the co-op rotation, however, while students are compensated monetarily for their work, no academic credit is earned for the experiential learning they gain during their work term. These cooperative education seminars would provide an opportunity for students to share their learning and expand their knowledge, while earning academic credit commensurate with their efforts at work and in the classroom.



Eckhard Groll
Director of Office of Professional Practice
Reilly Professor of Mechanical Engineering

Approved for the faculty of the Schools
of Engineering by the Engineering
Curriculum Committee

ECC Minutes 14 Date 3-1-16
Chairman ECC [Signature]

Syllabus

ENGR 23099/33099/43099 – Cooperative Education Seminar

Instructor

Stephen P. Wanders, P.E.
Assistant Director, Cooperative Education
Office: POTR 114
Phone: 765.494.7428
E-mail: swander@purdue.edu

Course Information

Semester: _____
Section: _____
CRN: _____
Class Meets: _____
Class Location: _____

Course Description

This seminar course is optional for Co-Op students when they are on-campus. In this course, students share their work experiences, receive feedback from the instructor and seminar participants, and continue their professional development.

Prerequisites

Students must have completed at least one work rotation prior to registering for this course.

Learning Objectives

Students will develop oral and written presentation skills, expand their knowledge of the engineering profession, and learn from the experiences of other participants so that they may apply their knowledge to their situation.

Course Requirements

Work Session Documents

The “Work Session Record and Evaluation” form, the “Professional Practice Student Performance Appraisal” form, and a written Work Report approved by the employer, are due to be submitted to the instructor at the first day of classes, and shall be submitted no later than the end of the first week of classes. (This policy is documented in the *Professional Practice Programs Student Policy Statement*.)

Technical Presentation

Students are required to give a 15-minute technical presentation on their previous work session. You should prepare a PowerPoint presentation that describes: 1) the technical scope of your assignments, 2) your accomplishments, 3) the challenges you faced, and 4) the skills that you developed. For the time allowed, students should target 10-12 slides, maximum. Each presentation will be followed by a 5-minute Q&A. Most students will be able to use a subset of the presentation that they developed in their work session. Please ensure that you do not disclose any company confidential information in the Co-Op seminar. The instructor will provide feedback on your presentation to promote improvement in presentation skills.

Observations and Recommendations

Students will be asked for written or oral feedback to the instructor regarding the value they received from participating in the course; whether the course met the stated learning objectives; and recommendations for future improvements.

Required Texts

None.

Suggested Reading

Professional Practice Programs - Student Policy Statement, Purdue University, 2/2/15

Policies

General Course Policies

Students are encouraged to contact the instructor in person during designated Office Hours. Students may also contact the instructor by phone during designated Office Hours. The instructor will also respond to question from students via e-mail, generally within one day during the week (M-F).

Use of cell phones during class will not be permitted. Students are encouraged to use their computers during class for purposes of taking notes or accessing the internet for class purposes.

Students are expected to be attentive and courteous, and actively participate in the classroom discussion.

Academic Credit

ENGR 23099/33099/43099 is a one (1) credit course to be used as free elective, general education elective, or technical elective credits (as determined by the students' academic disciplines) toward their degree requirements. Students who conduct back-to-back co-op work terms will be able to "double-up" during the subsequent co-op seminar course by giving two presentations and taking the seminar course for two (2) credit hours.

Grading

This course carries a regular, letter grade, with the following weighting factors:

Work Session Documents	15%
Technical Presentation	50%
Attendance and Class Participation	25%
Observations and Recommendations	10%

Attendance

Students shall be on time for class and plan on staying until the end of the designated class time, unless otherwise dismissed by the instructor.

The University policy for attendance is shown below:

Students are expected to be present for every meeting of the classes in which they are enrolled. Only the instructor can excuse a student from a course requirement or responsibility. When conflicts or absences can be anticipated, such as for many University sponsored activities and religious observations, the student should inform the instructor of the situation as far in advance as possible...For unanticipated or emergency absences when advance notification to an instructor is not possible, the student should contact the instructor as soon as possible by email, or by contacting the main office that offers the course. When the student is unable to make direct contact with the instructor and is unable to leave word with the instructor's department because of circumstances beyond the student's control, and in cases of bereavement, the student or the student's representative should contact the Office of the Dean of Students,

Students with Disabilities

Purdue University is required to respond to the needs of the students with disabilities as outlined in both the Rehabilitation Act of 1973 and the Americans with Disabilities Act of 1990 through the provision of auxiliary aids and services that allow a student with a disability to fully access and participate in the programs, services, and activities at Purdue University.

If you have a disability that requires special academic accommodation, please make an appointment to speak with me within the first three (3) weeks of the semester in order to discuss any adjustments. It is important that we talk about this at the beginning of the semester. It is the student's responsibility to notify the Disability Resource Center (<http://www.purdue.edu/drc>) of an impairment/condition that may require accommodations and/or classroom modifications.

Emergencies

The evacuation and shelter-in-place procedure for the _____ Building are specified in the _____ Building Emergency Plan, copy attached.

In the event of a major campus emergency, course requirements, deadlines and grading percentages are subject to changes that may be necessitated by a revised semester calendar or other circumstances beyond the instructor's control. Relevant changes to this course will be posted onto the course website or can be obtained by contacting the instructor via email or phone. You are expected to read your @purdue.edu email on a frequent basis.

Class Schedule

Week	Date	Topic
1		Introductions and Syllabus Review
2		Technical Presentations
3		Technical Presentations
4		Technical Presentations
5		Technical Presentations
6		Technical Presentations
etc.		Technical Presentations
16		Wrap-up, Discussion

PURDUE UNIVERSITY
REQUEST FOR ADDITION, EXPIRATION,
OR REVISION OF AN UNDERGRADUATE COURSE
(10000-40000 LEVEL)

ENGR 43099
201630

DEPARTMENT College of Engineering EFFECTIVE SESSION Summer 2016

- INSTRUCTIONS: Please check the items below which describe the purpose of this request.
- 1. New course with supporting documents
 - 2. Add existing course offered at another campus
 - 3. Expiration of a course
 - 4. Change in course number
 - 5. Change in course title
 - 6. Change in course credit/type
 - 7. Change in course attributes (department head signature only)
 - 8. Change in instructional hours
 - 9. Change in course description
 - 10. Change in course requisites
 - 11. Change in semesters offered (department head signature only)
 - 12. Transfer from one department to another

PROPOSED: Subject Abbreviation ENGR Course Number 43099 Long Title Cooperative Education Seminar III Short Title Co-Op Seminar III

EXISTING: Subject Abbreviation _____ Course Number _____

TERMS OFFERED: Check All That Apply: Summer Fall Spring

CAMPUS(ES) INVOLVED: Calumet N. Central Cont Ed Tech Statewide Ft. Wayne W. Lafayette Indianapolis

Abbreviated title will be entered by the Office of the Registrar if omitted. (30 CHARACTERS ONLY)

CREDIT TYPE: 1. Fixed Credit: Cr. Hrs. _____ 2. Variable Credit Range: Minimum Cr. Hrs. 1 To Or Maximum Cr. Hrs. 2 3. Equivalent Credit: Yes No

COURSE ATTRIBUTES: Check All That Apply: 1. Pass/Not Pass Only 2. Satisfactory/Unsatisfactory Only 3. Repeatable Maximum Repeatable Credit: _____ 4. Credit by Examining Coop Lab Rate Request 5. Fees 6. Registration Approval Type Department Instructor 7. Variable Title 8. Honors 9. Full Time Privilege 10. Off Campus Experience

Schedule Type	Minutes Per Mtg	Meetings Per Week	Weeks Offered	% of Credit Allocated	Cross-Listed Courses
Lecture	50	1	16	100	
Recitation					
Presentation					
Laboratory					
Lab Prep					
Studio					
Distance					
Clinic					
Experiential					
Research					
Ind. Study					
Pract/Observ					

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MAR 15 2016
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COURSE DESCRIPTION (INCLUDE REQUISITES/RESTRICTIONS):
This seminar course is optional for Co-Op students when they are on-campus. In this course, students share their work experiences, receive feedback from the instructor and seminar participants, and continue their professional development. Prerequisite: Student must have completed at least three Co-Op work terms. Can be taken for two credits subsequent to completing two back-to-back work terms.

COURSE LEARNING OUTCOMES
Students will develop oral and written presentation skills, expand their knowledge of the engineering profession, and learn from the experiences of other participants so that they may apply their knowledge to their situation.

Calumet Department Head	Date	Calumet School Dean	Date
Fort Wayne Department Head	Date	Fort Wayne School Dean	Date
Indianapolis Department Head	Date	Indianapolis School Dean	Date
North Central Faculty Senate Chair	Date	Vice Chancellor for Academic Affairs	Date
West Lafayette Department Head	Date	West Lafayette College/School Dean	Date
		West Lafayette Registrar	Date

William Hall 12/11/15 *Michael P. ...* 3/15/16 *[Signature]* 4/15/16

Enl 401-16

PURDUE UNIVERSITY
REQUEST FOR ADDITION, EXPIRATION,
OR REVISION OF AN UNDERGRADUATE COURSE
(10000-40000 LEVEL)

ENGR 33099
201430

DEPARTMENT College of Engineering EFFECTIVE SESSION Summer 2016

INSTRUCTIONS: Please check the items below which describe the purpose of this request.

<input checked="" type="checkbox"/> 1. New course with supporting documents	<input type="checkbox"/> 7. Change in course attributes (department head signature only)
<input type="checkbox"/> 2. Add existing course offered at another campus	<input type="checkbox"/> 8. Change in instructional hours
<input type="checkbox"/> 3. Expiration of a course	<input type="checkbox"/> 9. Change in course description
<input type="checkbox"/> 4. Change in course number	<input type="checkbox"/> 10. Change in course requisites
<input type="checkbox"/> 5. Change in course title	<input type="checkbox"/> 11. Change in semesters offered (department head signature only)
<input type="checkbox"/> 6. Change in course credit/type	<input type="checkbox"/> 12. Transfer from one department to another

PROPOSED:	EXISTING:	TERMS OFFERED Check All That Apply:
Subject Abbreviation <u>ENGR</u>	Subject Abbreviation _____	<input checked="" type="checkbox"/> Summer <input checked="" type="checkbox"/> Fall <input checked="" type="checkbox"/> Spring
Course Number <u>33099</u>	Course Number _____	CAMPUS(ES) INVOLVED
Long Title <u>Cooperative Education Seminar II</u>		<input type="checkbox"/> Calumet <input type="checkbox"/> N. Central
Short Title <u>Co-Op Seminar II</u>		<input type="checkbox"/> Cent Ed <input type="checkbox"/> Tech Statewide
		<input type="checkbox"/> Ft. Wayne <input checked="" type="checkbox"/> W. Lafayette
		<input type="checkbox"/> Indianapolis

Abbreviated title will be entered by the Office of the Registrar if omitted. (30 CHARACTERS ONLY)

CREDIT TYPE	COURSE ATTRIBUTES: Check All That Apply
1. Fixed Credit: Cr. Hrs. _____	1. Pass/Not Pass Only <input type="checkbox"/>
2. Variable Credit Range: <u>1</u>	2. Satisfactory/Unsatisfactory Only <input type="checkbox"/>
Minimum Cr. Hrs. _____	3. Repeatable <input checked="" type="checkbox"/> <i>sign 2</i>
(Check One) To <input checked="" type="checkbox"/> Or <input type="checkbox"/>	Maximum Repeatable Credit: <u>2</u>
Maximum Cr. Hrs. <u>2</u>	4. Credit by Examination <input type="checkbox"/>
3. Equivalent Credit: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	<input type="checkbox"/> Coop <input type="checkbox"/> Lab <input type="checkbox"/> Rate Request
	5. Fees <input type="checkbox"/>
	6. Registration Approval Type <input type="checkbox"/>
	7. Variable Title <input type="checkbox"/>
	8. Honors <input type="checkbox"/>
	9. Full Time Privilege <input type="checkbox"/>
	10. Off Campus Experience <input type="checkbox"/>

Schedule Type	Minutes Per Mig	Meetings Per Week	Weeks Offered	% of Credit Allocated	Cross-Listed Courses
Lecture	50	1	16	100	
Recitation					
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Laboratory					
Lab Prep					
Studio					
Distance					
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North Central Faculty Senate Chair _____ Date _____	Vice Chancellor for Academic Affairs _____ Date _____
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	West Lafayette Registrar _____ Date _____

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Handwritten: 4-01-16

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<p>PROPOSED: Subject Abbreviation <u>ENGR</u></p> <p>Course Number <u>23099</u></p> <p>Long Title <u>Cooperative Education Seminar I</u></p> <p>Short Title <u>Co-Op Seminar I</u></p> <p><small>Abbreviated title will be entered by the Office of the Registrar if omitted. (30 CHARACTERS ONLY)</small></p>	<p>EXISTING: Subject Abbreviation _____</p> <p>Course Number _____</p>	<p>TERMS OFFERED Check All That Apply:</p> <p><input checked="" type="checkbox"/> Summer <input checked="" type="checkbox"/> Fall <input checked="" type="checkbox"/> Spring</p> <p>CAMPUS(ES) INVOLVED</p> <p><input type="checkbox"/> Calumet <input type="checkbox"/> N. Central <input type="checkbox"/> Cont Ed <input type="checkbox"/> Tech Statewide <input type="checkbox"/> Ft. Wayne <input checked="" type="checkbox"/> W. Lafayette <input type="checkbox"/> Indianapolis</p>
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<p>CREDIT TYPE</p> <p>1. Fixed Credit: Cr. Hrs. _____</p> <p>2. Variable Credit Range: <u>1</u></p> <p>Minimum Cr. Hrs. _____</p> <p>(Check One) To <input checked="" type="checkbox"/> Or <input type="checkbox"/></p> <p>Maximum Cr. Hrs. <u>2</u></p> <p>3. Equivalent Credit: Yes <input type="checkbox"/> No <input checked="" type="checkbox"/></p>	<p>COURSE ATTRIBUTES: Check All That Apply</p> <p>1. Pass/Not Pass Only <input type="checkbox"/></p> <p>2. Satisfactory/Unsatisfactory Only <input type="checkbox"/></p> <p>3. Repeatable <input checked="" type="checkbox"/> <i>credit</i></p> <p>Maximum Repeatable <u>2</u></p> <p>4. Credit by Examination <input type="checkbox"/></p> <p><input type="checkbox"/> Coop <input type="checkbox"/> Lab <input type="checkbox"/> Rate Request</p> <p>5. Fees <input type="checkbox"/></p> <p><small>Include comment to explain fee</small></p>	<p>6. Registration Approval Type <input type="checkbox"/></p> <p>7. Department <input type="checkbox"/></p> <p>8. Variable Title <input checked="" type="checkbox"/></p> <p>9. Honors <input type="checkbox"/></p> <p>10. Full Time Privilege <input type="checkbox"/></p> <p>11. Off Campus Experience <input type="checkbox"/></p> <p>Instructor <input checked="" type="checkbox"/></p>
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Schedule Type	Minutes Per Mfg	Meetings Per Week	Weeks Offered	% of Credit Allocated	Cross-Listed Courses
Lecture	50	1	16	100	
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