

Engineering Undergraduate Research Experience Non-Credit Course Guidelines and Syllabus

Experience Name: Research Experiences for Undergraduates **Coordinating College, Department, Unit:** College of Engineering **Time Commitment:** 10 weeks (5 or more for 3 credit equivalent, 10 or more for 6 credit equivalent, 15 or more for 9 credit equivalent, 20 or

more hours/week for full-time equivalent)
Instructor/advisor/mentor names: Scott Paja

Instructor/advisor/mentor emails: Scott.Paja@oregonstate.edu

Instructor/advisor/mentor phone: 541-737-6539

Link to Instructor/advisor/mentor bio: http://engineering.oregonstate.edu/scott-paja

Course Description

This non-credit undergraduate research experience is designed for students to engage in research activities appropriate to their discipline; and through the research experience, to acquire skills, techniques, and knowledge relevant to their field of study. In consultation with a faculty mentor, students will engage in research activity, and make and execute a plan for a project that meets the learning outcomes outlined below, present their work, and participate in weekly seminars with most or all of the following components: faculty lectures, special expert presentations from external guests, small group activities, and student presentations.

Student Learning Outcomes

- Participate in data collection and/or analysis to address a specific research question
- Demonstrate increased awareness of research methodologies and/or analysis techniques
- Demonstrate skills have been gained in research methodologies and/or analysis techniques
- Reflect on the research, identifying lessons learned, strengths, and ways to improve
- Demonstrate an ability to communicate research to others
- Demonstrate an ability to articulate the relevance of the experience to coursework and professional future

Assessment of Student Learning

Students non-credit course registration will result in the "SC- successful completion" mark on their transcript for a non-credit undergraduate research experience after satisfying the following requirements, verified by an OSU faculty member and confirmed by the COE Assistant Dean:

- At least 10 weeks of engagement in activities related to the planning and execution of the research project.
- Regular attendance and participation in weekly seminar as well as in research team meetings with faculty and/or graduate student mentors.
- Regular documentation and reflection on progress, challenges, and accomplishments.
 Formats of reflection include, but are not limited to, lab notebooks, short essays, visual displays, blog posts, and journal entries.
- A culminating public presentation of one's work to an audience that extends beyond that of the immediate research group.
- A written report summarizing the main research findings, associated challenges, and broader implications of the work.

Failure to complete these requirements will result in the "NSC- Non-successful completion" mark on their transcript.

Statement Regarding Students with Disabilities

Accommodations for students with disabilities are determined and approved by Disability Access Services (DAS). If you, as a student, believe you are eligible for accommodations but have not obtained approval please contact DAS immediately at 541-737-4098 or at http://ds.oregonstate.edu. DAS notifies students and faculty members of approved academic accommodations and coordinates implementation of those accommodations. While not required, students and faculty members are encouraged to discuss details of the implementation of individual accommodations.

Accessibility

If you require accommodations please contact <u>Disability Access Services (DAS)</u>.

Additionally, Canvas, the learning management system through which this course is offered, provides a <u>vendor statement</u> certifying how the platform is accessible to students with disabilities.

Expectations for Student Conduct

Student conduct is governed by the university's policies, as explained in the <u>Student Conduct Code</u>.

Academic Integrity

Students are expected to comply with all regulations pertaining to academic honesty. For further information, visit <u>Student Conduct and Community Standards</u>, or contact the office of Student Conduct and Mediation at 541-737-3656.