



THE OHIO STATE UNIVERSITY
COLLEGE OF ENGINEERING

Teaching Preparation and Support

ENGREDU 7189.01

Credit Hours:

2.00 - 2.00

Course Levels:

Graduate

Course Components:

Lecture

Course Description:

This course supplements teaching content based training by exposing teachers to instructional pedagogies. It is a practical introduction to engineering education for instructors. Topics include using assessment for learning, best practices in instructional methods, techniques for self-reflection, etc. This version of the course is designed for new instructors.

Prerequisites and Co-requisites:

Prereq: Grad standing in the College of Engineering.

Course Goals / Objectives:

- Contribute to high-impact efforts to use and/or transform engineering education to best meet stakeholder needs
 - Formulate applications of engineering education to engineering practice and vice versa
 - Educate with attention to inclusion of multiple perspectives and demographics so that every student has the opportunity to learn
 - Design a course or other significant educational experience founded in learning theory explicitly addressing stakeholder need
 - Analyze how multiple courses integrate into a curriculum
 - Instruct a course or other significant educational experience using appropriate and evidence- based pedagogical techniques
 - Assess and improve their own teaching through informed, inquiry- based practice
 - Develop effective tools to evaluate learning
 - Evaluate and improve student learning responsibly, equitably, and in alignment with learning outcomes
 - Design and implement evaluations/assessments of a variety of educational programming
 - Engage in professional activities with attention to inclusion of multiple perspectives and demographics in order to create synergy in the midst of differences
 - Function effectively on diverse, multidisciplinary teams
 - Demonstrate effective leadership skills
 - Demonstrate empathy and cultural competence across professional interactions
-

Course Topics:

- teaching statements
 - teaching reviews
 - curriculum development
 - critical feedback and reflection
 - assessment and evaluation
-

Designation:

Required