Experimental Projects I

AEROENG 4510

Description / Conditions

Transcript Abbreviation:
Exp Projects I

Course Description:
Conceive, plan and design an experiment with a group of students. Emphasis on planning and experiment preparation.

Course Levels:
Undergraduate (1000-5000 level)

Designation:
Required

General Education Course:
(N/A)

Cross-Listings:
(N/A)

Course Detail

Credit Hours (Minimum if “Range” selected):
2.00

Max Credit Hours:
(N/A)

Select if Repeatable:
Off
Maximum Repeatable Credits:
(N/A)

Total Completions Allowed:
(N/A)

Allow Multiple Enrollments in Term:
No

Course Length:
14 weeks (autumn or spring)
12 weeks (summer only)

Off Campus:
Never

Campus Location:
Columbus

Instruction Modes:
In Person (75-100% campus; 0-24% online)
Hybrid Class (25-74% campus; 25-74% online)
Distance-Enhanced (1-24% campus; 75-99% online)

Prerequisites and Co-requisites:
Prereq: 3543 and 3570, and Sr standing, and enrollment as AeroEng-BS student (No pre-majors can enroll in this class).

Electronically Enforced:
No

Exclusions:
(N/A)

Course Goals and Learning Objectives
Course Goals / Objectives:
Develop as a team the strategy and tactics for the design of an experiment and for data analysis procedures to achieve experimental objectives, including detailed description of the necessary technical tasks
Formulate an experimental program and success criteria to obtain information for a particular problem
Implement as a team a detailed design for an experiment and for data analysis procedures necessary to achieve the objectives defined above
Effectively communicate orally and in writing the results of the project design process, and subsequently the key aspects of the overall project (from concept to end goal)
GE Reflection-Engag Citizens & Intercult Comp: Students consider public health, safety, and welfare as well as global, cultural, social, environmental, and economic factors in applying engineering design to produce solutions meeting specified needs
GE Reflection - Personal and Professional Development: Students individually assess and pursue personal professional growth in concert with project requirements and personal career goals
GE Reflection - Cultivate Engineering Mindset: Students develop an engineering mindset that demonstrates constant curiosity, makes connections between disparate bodies of information, and seeks opportunities to create value

Check if concurrence sought:
No

Contact Hours
Contact Hours:

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<tr>
<th>Topic</th>
<th>LEC</th>
<th>REC out-of-class</th>
<th>REC in-class</th>
<th>Weekly LAB out-of-class</th>
<th>Weekly LAB in-class</th>
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Grading and Texts

Grading Plan:
Letter Grade
Course Components:
Lecture
Recitation

Grade Roster Component:
Lecture

Credit by Exam (EM):
No

Grades Breakdown:

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Representative Textbooks and Other Course Materials:

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ABET Student Learning Outcomes

ABET-CAC Criterion 3 Outcomes:
(N/A)

ABET-ETAC Criterion 3 Outcomes:
(N/A)

ABET-EAC Criterion 3 Outcomes:
(N/A)

Embedded Literacies (UG courses only)
Embedded Literacies Info:

Attachments / Additional Notes or Comments

Attachments:
(N/A)

Additional Notes or Comments:
(N/A)