

RI: EML 4551 – DESIGN PROJECT
Common Course Syllabus

Catalog Description: 3 CREDIT. Continuation and completion of individual and group projects initiated in prerequisite course RI: EML 4521C, Engineering Design.

Goals: The students will work together in a team environment to complete the project. This will involve the use of engineering analysis and design methodologies. The course will improve their team participation and management skills, as well as their written and oral communication skills. It will make the students aware of both safety and environmental issues.

Prerequisite:

1. RI: EML 4521C - Engineering Design (with a minimum grade of C)

Topics:

1. Application of the design process
2. Application of creativity and problem-solving
3. Application of team building
4. Application of communication skills (report writing, oral presentation)
5. Application of project planning and management
6. Consideration of safety, hazard, and environmental issues.

Course Outcomes: (numbers in parentheses indicate correlation of the outcome with the appropriate ABET program outcomes 1-8)

1. The students will be able to formulate and analyze problems, and synthesize and develop solutions based on fundamental principles. (2)
2. The student will communicate with different audiences. (3)
3. The students will demonstrate an understanding of professional, societal, and ethical responsibility. (4)
4. The students will function effectively in teams and communicate their ideas to their peers. (5)
5. The students will recognize the need to engage in life-long professional development and learning. (7)
6. The students will apply engineering standards and codes with attention to safety and societal impacts. (8)

Updated 05/26