

SOCIETAL-IMPACT & ETHICS COURSE CONTENT DESCRIPTION & OUTCOMES TEMPLATE

Course Number: **MAE 157A**

Course Name: **Aerospace Design Laboratory**

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COURSE CONTENT DESCRIPTION

- **Description of specific societal impact topics or ethics issues that are addressed in the course:**

Two societal-impact topics will be integrated in the course content and lectures with goals of student recognition. (1) Students will gain perspective on professional responsibilities to members of a product-oriented team of engineers reflecting common industry organization; (2) Students will understand engineering product development in terms of both the process and as it relates to end-use applications in the aerospace industry.

- **Time dedicated to cover this content through lecture and other in-class learning activities:**

This content will be covered in approximately a total of 100 minutes of lecture distributed over the 10-week quarter.

OUTCOMES

- **Aligned with ABET Student Outcome Criteria #4:** *The ability to recognize ethical and professional responsibilities in engineering situations and make informed judgments, which must consider the impact of engineering solutions in global, economic, environmental, and societal contexts.*

Outcome 1: Students learn division of work and shared responsibilities related to product development as part of an engineering team

Outcome 2: Students learn the engineering process from concept development, design, analysis, manufacturing, and testing in the context of aerospace applications