ME 163 Freshmen Orientation to Mechanical Engineering. (1 Activity) Required

Course Description: (2019-20 Catalog)
Introduction to career opportunities in Mechanical Engineering, exploration of the ethical responsibilities of being a student and professional engineer, and familiarization with the Mechanical Engineering curriculum including cooperative education and international exchange opportunities. Cornerstone service learning project. Field trip may be required. 1 activity.

Prerequisite Courses:
Concurrent: ME 128

Prerequisites by Topic:
Introduction to Mechanical Engineering I.

Textbook:
Studying Engineering: A Road Map to a Rewarding Career, by R. B. Landis, S. Peuker, J. Mott, 5th Edition, 2018

References:
NPSE Code of Ethics for Engineers, National Society of Professional Engineers

Course Coordinator/Instructor:
Steffen Peuker, Assistant Professor of ME

Course Learning Outcomes:
The overall objective of this course is to enhance the success of mechanical engineering students. In particular, the student will be able to:

1. Describe ethics in the context of being a student and a member of a profession.
2. Construct a graduation plan demonstrating a good understanding of the ME curriculum.
3. Distinguish between the available concentrations in the ME curriculum.
4. Identify the co-curricular activities available to you as an ME major at Cal Poly.
5. Identify career opportunities in ME.
6. Demonstrate written and oral communication skills.
7. Describe what it means to be "an engineer".
8. Explain the importance of lifelong learning.
9. Work productively as an individual and within a team.
10. Discuss the importance of goal setting and set goals in order to graduate from Cal Poly.
11. Build a supporting community to enhance your success at Cal Poly.
12. Effectively use the university resources, and academic advising available at Cal Poly.
13. Assess and evaluate personal attitudes, behaviors, and mindset to formulate actions for personal and academic improvement.

**Relationship of Course to Mechanical Engineering Student Outcomes:**

|-------|-------|-------|---------------------|-------|-------|---------------------|

**Topics Covered:**

1. Keys to Success in Engineering Study
2. Student Clubs, International Exchange Opportunities
3. Understanding the Teaching and Learning Process
4. Making the Most of How you are Taught
5. Engineering Spotlight Event – Meet industry representatives
6. Making the Learning Process Work for You
7. Career Opportunities
8. Personal Growth and Development
9. Engineering Ethics

**Laboratory Projects:** N/A

**Class/Lab Schedule:** One 110-minute activity per week.

**Contribution of Course to Meeting the Professional Component:**

| (a) College-level mathematics and basic sciences: | 0 credits |
| (b) Engineering Topics: | 1 credits |
| Design: | 0 credit |
| (c) General Education: | 0 credits |
| (d) Other: | 0 credits |

**Prepared by:** Steffen Peuker  
**Date:** 6/12/19