

# Spring 2014 Engineering 248 Syllabus

## Introduction to Engineering

Room 4118

9 Weeks (1/21 – 3/20/2014)

Tuesdays 8:30 to 10:20 AM

Instructor: Ray Ried

Office: Room 4307

Office Hour: Tuesdays and Thursdays, 5:00 to 5:50 PM

Phone: (805) 546-3264, Engr. Administrative Assistant, Leave Message

E-mail: rried@cuesta.edu

Text: *Studying Engineering: A Road Map to a Rewarding Career, 4th Edition* by Raymond B. Landis

### Student Learning Outcomes:

At the end of this course the student will be able to:

1. Identify five Engineering fields and briefly describe the type of work done by each.
2. Demonstrate an understanding of the minimum requirements for graduation from a four year college or university in the Engineering field of their choice.
3. Write a summary of why they want to be an Engineer.
4. Create or refine a resume outlining past achievements and future goals.

**Grading:** The course will be based on the following:

1. Four to six, multiple choice quizzes to be given during the course (50%)
2. Homework assignments (50%) Homework assignments will be graded on the thoroughness of your answer (not necessarily length), your paper must be legible with good grammar and spelling, but it does not need to be typed.

**Attendance:** Attendance is mandatory. Students that are absent for two classes will be dropped from the course and may receive a failing grade.

## ENGR 248 SCHEDULE AND ASSIGNMENTS

### Week #1—Tuesday, January 21<sup>st</sup>

Reading Assignment: Chapter 1

Problem Assignment: Chapter 1 Problems 3, 5, 14, 21, 26, 27 due 1/28/2014

### Week #2—Tuesday, January 28<sup>th</sup>

Quiz Chapter 1

Reading Assignment: Chapter 2

Problem Assignment: Chapter 2 Problems 1, 4, 12, 27 due 2/4/2014

### Week #3—Tuesday, February 4<sup>th</sup>

Quiz Chapter 2

Reading Assignment: Chapters 3 and 4

Problem Assignment: Chapter 3, Problems 3, 4, 5  
Chapter 4, Problems 5, 10, 11 due 2/11/2014

### Week #4—Tuesday, February 11<sup>th</sup>

Quiz Chapters 3 and 4

Reading Assignment: Chapters 5 and 6

Problem Assignment: Chapter 5, Problems 5, 6, 8  
Chapter 6, Problems 2, 4, 9, 10, 19 due 3/4/2014

### Week #5—Tuesday February 18<sup>th</sup>

Field Trip – Philips 66 Oil Refinery

### Week #6—Tuesday, February 25<sup>th</sup>

Field Trip – San Luis Obispo Wastewater Treatment Plant

### Week #7—Tuesday, March 4<sup>th</sup>

Quiz Chapters 5 and 6

Reading Assignment: Chapter 7

Problem Assignment: Chapter 7, Problems 12, 14, 17 due 3/11/2013

### Week #8—Tuesday, March 11<sup>th</sup>

Quiz Chapter 7

Lecture Chapter 7

### Week #9—Tuesday, March 18<sup>th</sup>

Field Trip – Cal Poly Engineering Facilities