

**ENGR 150**  
**Introduction to Engineering**  
**TuTh 12 noon – 1:15 p.m.**  
**Room: XXX.XX**

**Fall Quarter, 200X**

**Instructors:** Ray Landis  
**Office** Building XXX, Room XXX  
**Phone:** (818) 845-8378  
**E-mail:** [rlandis@calstatela.edu](mailto:rlandis@calstatela.edu)

**Office Hours:** By appointment

**Text:** *Studying Engineering: A Road Map to a Rewarding Career, 3<sup>rd</sup> Edition*  
by Raymond B. Landis

**Purpose of Course:** To enhance your success as a student and as a person

**Journal:** Please purchase a spiral notebook that will be used to document:

1. All notes taken in class
2. All course assignments
3. Questions, issues, or perspectives you gained from the reading and would like to raise in class
4. Your opinion of each section of the text

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

1. Attendance (20%)
2. Grade on the Journal you keep (30%)
3. Grade on class participation (10%)
4. Grade on the three multiple choice exams to be given during the course (20%)
5. Grade on term paper on "Why I Want to Be an Engineer." (20%)

Note: A grade of "No credit" will be given in the case of more than two absences

**Attendance:** As indicated, attendance is mandatory. There will be no excused absences. Students missing more than two classes will not receive credit for the course.

**Class Participation:** Based on the reading, you should develop at least three questions, issues, or perspectives you would like to raise in class. These should be documented in your Journal.

**Term Paper:** You are required to write a 500-750 word term-paper on "Why I Want to Be an Engineer."

**Final Exam:** There will be no final exam. Final Journals must be turned in no later than the time of the scheduled final exam (1:15 p.m., Tuesday, December xx, 200X)

**NOTE: YOU ARE REQUIRED TO BRING YOUR TEXT AND YOUR JOURNAL TO EVERY CLASS MEETING**

# COURSE SYLLABUS AND ASSIGNMENTS

## **Class #1—Tuesday, September xx**

Reading Assignment: None  
Problem Assignment: None  
Class Discussion: Purpose and philosophy of course  
What do you want/expect to get out of this course?  
Class Activity: Name Game

## **Class #2—Thursday, September xx**

Reading Assignment: Sections 1.1, 1.2, and 1.3  
Problem Assignment: Acquire text  
Acquire spiral notebook for Journal  
Chapter 1. Problems 1, 2, 3, 4, 9, and 10  
Class Discussion: Keys to success in engineering study  
Class Activities: Name Game  
Academic Skills Survey  
Small group discussions on “ability” versus “effort”

## **Class #3—Tuesday, October xx**

Reading Assignment: Sections 1.4 and 1.5  
Problem Assignment: Chapter 1, Problems 21, 22, 23, 24, 25, 26, 27, and 28  
Class Discussion: Models for viewing your education  
Structure your life situation  
Assigned problems  
Class Activities: Name Game  
Small group discussions of Chap 1, Prob. 19 and report out

## **Class #4—Thursday, October xx**

Reading Assignment: Sections 2.1, 2.2, and 2.3  
Problem Assignment: Chapter 2, Problems 1, 3, 6, and 7  
Class Discussion: Learning about engineering  
The Engineering Design Process  
Small group discussions on design specifications for motorized beach wheelchair

## **Class #5—Tuesday, October xx**

Reading Assignment: Sections 2.4, 2.5, 2.6, 2.7, 2.8  
Problem Assignment: Chapter 2, Problems 11, 27, 30, 31, and 32  
Class Presentation: Panel of Engineering Department Representatives

## **Class #6—Thursday, October xx**

Reading Assignment: Sections 2.9 and 2.10  
Problem Assignment: Chapter 2, Problems 37, 38, and 39  
Class Presentation: Important Fields for the Future  
Engineering as a Profession  
Class Activities: Quiz: Multiple Choice Exam covering Chapters 1 and 2

### **Class #7—Tuesday, October xx**

Reading Assignment: Sections 3.1, 3.2, 3.3, and 3.4  
Problem Assignment: Chapter 3, Problems 1, 3, and 4  
Class Discussion: Learning and learning styles  
Improving your learning process  
Learning as a reinforcement process

***Note: Journals will be collected at the end of class***

### **Class #8—Thursday, April xx**

Reading Assignment: Computer Handouts  
Problem Assignment: None  
Class Discussion: Orientation to computer facilities

***Note: Journals will be returned at the beginning of class***

### **Class #9—Tuesday, April xx**

Reading Assignment: Sections 3.5, 3.6, and 3.7  
Problem Assignment: Chapter 3. Problems 5, 6, 8, 9, and 10  
Class Discussion: Teaching styles  
Mistakes students make  
Academic Skills Survey

### **Class #10—Thursday, April xx**

Reading Assignment: Sections 4.1, 4.2, and 4.3  
Problem Assignment: Chapter 4. Problems 3, 5, 6, and 8  
Class Discussion: Early course preparation  
Preparing for lectures  
During your lectures

### **Class #11—Tuesday, May xx**

Reading Assignment: Section 4.4 and 4.5  
Problem Assignment: Chapter 4. Problems 10, 11, 14, and 17  
Class Discussion: Making effective use of your professors  
Tutors and other academic resources

### **Class #12—Thursday, May xx**

Reading Assignment: None  
Problem Assignment: None  
Class Activity: Panel of practicing engineers  
Class Activity: Multiple Choice Exam covering Chapters 3 and 4

### **Class #13—Tuesday, May xx**

Reading Assignment: Section 5.1 and 5.2  
Problem Assignment: Chapter 5. Problems 2, 3, 5, and 6  
Class Discussion: Reading for comprehension  
Analytical problem solving  
Organizing your learning process

### **Class #14—Thursday, May xx**

Reading Assignment: Section 5.3 and 5.4  
Problem Assignment: Chapter 5. Problems 8, 9, and 10  
Class Discussion: Preparing for an taking tests  
Making effective use of your peers

**Class #15—Tuesday, May xx**

Reading Assignment: Sections 6.1, 6.2, and 6.5  
Problem Assignment: Chapter 6. Problems 2, 3, 4, 5, 6, 7, 8, 20, 21, and 22  
Class Discussion: Receptivity to Change  
Barriers to Change  
Personal Assessment

**Class #16—Thursday, May xx**

Reading Assignment: Section 6.6  
Problem Assignment: Chap 6, Problems 24, 25, 28, and 29  
Class Discussion: Written Communications  
Class Activities: Small group discussions on Problem 23 and report out

**Class #17—Tuesday, May xx**

Reading Assignment: Section 6.3, 6.4  
Problem Assignment: Chap 6, Problems 9, 10, 11, 12, 13, 14, 17, 18, 19, 20  
Class Discussion: Understanding Yourself  
Myers Briggs Type Indicator (MBTI)  
Understanding Others

**Class #18—Thursday, May xx**

Reading Assignment: Reread Section 6.6 (Oral Communications)  
Read Sections 6.7 and 6.8  
Problem Assignment: Chapter 6. Problems 30, 31, 32, and 35  
Class Discussion: Oral Communications  
Mental and Physical Wellness  
Motivation  
Class Activities: Small group discussion on Problem 35 and report out  
Class quiz: Multiple choice exam on Chapters 5 and 6

**Class #19—Tuesday, June xx**

Reading Assignment: Sections 7.3 and 7.4  
Problem Assignment: Chapter 7. Problems 11, 12, 13, 19, 20  
Class Discussion: Pre-professional Employment  
Putting Something Back  
Class Activities: Small group discussions on Problem 22 and report out

**Class #20—Thursday, June xx**

Reading Assignment: Chapter 8  
Problem Assignment: None  
Class Discussion: General discussion of Chapter 8  
Class quiz: Multiple choice exam on Chapters 7 and 8  
Class Activities: End of the term refreshments

**Final Exam: 4:30 p.m., Tuesday, June xx, 200x**  
**Turn in final journals**