

# El Paso Community College

## Syllabus

### Part II

## Official Course Description

<b>SUBJECT AREA</b>	<u>Engineering</u>						
<b>COURSE RUBRIC AND NUMBER</b>	<u>ENGR 1201</u>						
<b>COURSE TITLE</b>	<u>Introduction to Engineering</u>						
<b>COURSE CREDIT HOURS</b>	<table style="margin: auto; border-collapse: collapse;"> <tr> <td style="text-align: center; border-right: 1px solid black; padding: 0 10px;">2</td> <td style="text-align: center; border-right: 1px solid black; padding: 0 10px;">1</td> <td style="text-align: center; padding: 0 10px;">3</td> </tr> <tr> <td style="text-align: center; border-right: 1px solid black; padding: 0 10px;">Credits</td> <td style="text-align: center; border-right: 1px solid black; padding: 0 10px;">Lec</td> <td style="text-align: center; padding: 0 10px;">Lab</td> </tr> </table>	2	1	3	Credits	Lec	Lab
2	1	3					
Credits	Lec	Lab					

### I. Catalog Description

Introduces engineering as a discipline and a profession. Includes instruction in the application of mathematical and scientific principles to the solution of practical problems for the benefit of society.

**Prerequisite: MATH 2413. (1:3).**

### II. Course Objectives

Upon satisfactory completion of this course, the student will be able to:

- A. Explain the application of different unit systems in engineering.
- B. Discuss the basic procedure for solving engineering problems.
- C. Apply standards in the design process.
- D. Use mathematical tools, the compute, and the programmable calculator for solving engineering problems.
- E. Describe product design and manufacturing through “reverse engineering” of products.
- F. Communicate technical information clearly and succinctly through oral, written, and graphical presentations.

### III. THECB Learning Outcomes (ACGM)

Upon successful completion of this course, students will:

1. Describe the engineering profession and engineering ethics, including professional practice and licensure.
2. Use technical communication skills to explain the analysis and results of introductory laboratory exercises in engineering and computer science.
3. Explain the engineering analysis and design process.
4. Analyze data collected during laboratory exercises designed to expose students to the different engineering disciplines.
5. Describe the impact engineering has had on the modern world.
6. As part of a team, design a simple engineering device, write a design report, and present the design.
7. Demonstrate computer literacy.

**IV. Evaluation**

- A. The grade for this course will be based on performance on quizzes, lab, writing assignments, homework, three regular exams, and a comprehensive final exam. Every student is required to take the final exam at the end of the semester.
- B. The grade will be assigned based on the scale below:

<u>Score</u>	<u>Grade</u>
90-100	A
80-89	B
70-79	C
60-69	D
Below 60	F

**V. Disability Statement (American with/Disabilities Act [ADA])**

EPCC offers a variety of services to persons with documented sensory, mental, physical, or temporary disabling conditions to promote success in classes. If you have a disability and believe you may need services, you are encouraged to contact the Center for Students with Disabilities to discuss your needs with a counselor. All discussions and documentation are kept confidential. Offices located: VV Rm C-112 (831-2426); TM Rm 1400 (831-5808); RG Rm B-201 (831-4198); NWC Rm M-54 (831-8815); and MDP Rm A-125 (831-7024)

**VI. 6 Drop Rule**

Students who began attending Texas public institutions of higher education for the first time during the Fall 2007 semester or later are subject to a 6-Drop limit for all undergraduate classes. Developmental, ESL, Dual Credit and Early College High School classes are exempt from this rule. All students should consult with their instructor before dropping a class. Academic assistance is available. Students are encouraged to see Counseling Services if dropping because exemptions may apply. Refer to the EPCC catalog and website for additional information.