El Paso Community College Syllabus Part II Official Course Description

SUBJECT AREA	Engineering
COURSE RUBRIC AND NUMBER	ENGR 1201
COURSE TITLE	Introduction to Engineering
COURSE CREDIT HOURS	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.
- 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.

Revised by Discipline: Fall 2015 (next revision in 3 years)

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:

Score	<u>Grade</u>
90-100	A
80-89	В
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.