

THE UNIVERSITY OF TEXAS AT EL PASO – COLLEGE OF ENGINEERING  
DEPARTMENT OF MECHANICAL ENGINEERING

**MECH 2131 Manufacturing Engineering Lab**

1. **Course number and name:** MECH 2131: Manufacturing Engineering Lab
2. **Credits and contact hours:** 1 SCH – 3 hours of laboratory
3. **Instructor’s or course coordinator’s name:** Angel Lerma /Arturo Bronson/ Louis Everett
4. **Text book, title, author, and year:** None
5. **Specific course information**

- a. **brief description of the content of the course (catalog description):** Fall 2012  
**UTEP catalog description:** Basic, automated, and advanced manufacturing concepts. Shop demonstration and practices.
- b. **prerequisites or co-requisites:** MECH 1305: Graphic and Design Fundamentals
- c. **indicate whether a required, elective, or selected elective (as per Table 5-1) course in the program:** Required.

6. **Specific goals for the course**

a. **specific outcomes of instruction:**

The primary objective of this class is to introduce the fundamentals of the machining trade. Emphasis is placed on the following topics:

- Machine shop safety,
- Blueprint interpretation,
- Measuring instruments,
- Hand tools,
- Machine shop conventional machines,
- Principles of computer numerical control machines and programming.

b. **explicitly indicate which of the student outcomes listed in Criterion 3 or any other outcomes are addressed by the course:**

Student Outcomes						
1	2	3	4	5	6	7
X	X					

7. **Brief list of topics to be covered:** Lab activities only

- Machine shop safety,
- Blueprint interpretation,
- Measuring instruments,
- Hand tools,
- Machine shop conventional machines,

- Principles of computer numerical control machines and programming.