

ME/Tech 42

Faculty Information Fall 2018

Course Instructor: Douglas Muntz Office: IS 130

Phone: (408) 924-4372 Cell 408-410-5449 email: douglas.muntz@sjsu.edu

Office Hours: Mon. 3:00- 4:30 Room IS 130

Class times Wed. 6:00 to 8:45

Description

Prerequisites: ME 20, Tech 20, CE 20 (or equivalent) and ME/Tech 41

Units: 1 unit, laboratory

(Have the following by the second class meeting. Graded!)

Safety goggles/safety glasses

Course Goals

1. To acquire hands on experience with fabrication of mechanical components and assemblies.
2. To be able to create a product project for other class assignments clubs and competitions.
3. To create from an idea to sketch to a CAD drawing to the final product.
4. To enhance knowledge about the interdependence among design and manufacturing.

Student Learning Objectives

Students who complete this course successfully will be able to:

1. Show through documentation the development of a manufactured product
2. Independently and safely operate common sheet metal tools including a shear, press brake, punch, notcher, and spot welder.
3. Select appropriate tooling, fixturing, and operating parameters for common woodworking operations including layout, sawing, drilling, sanding and finishing.
4. Independently and safely operate common machining tools including a band saw, drill press, lathe, and vertical mill.

Safety:

Prior to working in the course, each student is required to take a general laboratory safety test and pass it at the 100% performance level.*

A sign-in and sign out sheet will be used each day.P

Major requirement to be successful in this class:

I MUST have a drawing of each item that you will be building. The drawing or sketch must be presented and approved by me before any material is worked. I will gladly assist you in the development of the product sketch. It will be your job to make the final CAD drawing for documentation and grading purposes.

Shop Clean-up

A clean shop is a safe shop. The last 10 to 15 minutes of each class will be reserved for shop clean-up. It is the students' job and responsibility to clean their area and check with instructor before leaving.

Other:

Please do not bring friends into the lab without the proper safety attire.

Materials will be supplied by the student.