

# MANUFACTURING TECHNOLOGY

## CLASS SYLLABUS

In this class we investigate many processes used in industry to manufacture products. Some of the activities available include woodworking with basic hand and machine tools, computer numeric controlled router, computer guided vinyl cutting, basic electronics, leather craft, metal casting, laser etching and cutting, plasma cutting, 3-D printing and sandblasting. Students will make three to four products during the semester. Safety is of utmost importance at all times. Students are now learning about safety, and after they pass a general safety test, we will begin using tools. This will be in about two to three weeks. We do reading and writing every day to support the core curriculum. Math skills are used frequently in measuring and estimating. Students feel great pride in building successful projects.

### Curriculum Outline

#### Class Rules and Expectations

##### Basic Safety:

Hand Tool Names and Proper Uses, Personal Protective Equipment, Safe Working Habits, Accident Prevention, General Safety Test

##### Machine Safety:

Portable Power Tools, Drill Press, Band Saw, Scroll Saw, Laser Engraver, Router table, CNC Router, Vinyl Cutter, Belt, Disc, and Spindle Sander Safety.

##### Product Design: Corel Draw

##### Projects:

Coaster

Woodworking Project: 3-D Animal or Dinosaur

Sandblasted Mirror Project

Laser Engraved Clock Project

Final Project (as time allows): Student choice from website

##### Project Demonstrations:

Laser Engraved Coasters, Pewter Casting, Leather, Sand Blasting, Vinyl Cutter, Woodworking-Wallshelf or Door Knocker

##### Measurement:

Metric System, Customary System

### Grading

The work you do in Manufacturing Technology can be separated into categories. Each category is worth a certain percentage of your grade. Some categories are more important because more time will be spent working on them. The categories and percentages are as follows:

Projects (300 points)	50%
Incoming Activities	15%
Written Assignments	15%
Man-Tec Notebook	5%
Citizenship	5%
Tests and Quizzes	10%
	<hr/>
	100%

Turn in all assignments by placing them in your assignment folder kept in the front of the classroom. If you are absent you only have one week to get the papers you need from the Make-Up-Box. If you are going to be gone for more than a week, make arrangements with the office to get your work ahead of time through independent study. Most work is available on the calendar on Schoology. Once logged in on Schoology, click on “Home” and then “Calendar” to find it. You can actually print the assignments from there! Written work completed during the week is typically turned in on Friday and graded by the following Friday. Grades are only updated at most, once a week on the computer.

Projects are one-half of your grade and must be completed in class. That means frequent attendance, staying on task, and good work habits are important! There are few chances to stay after school to use the lab. Open lab days are scheduled just prior to project due dates. Please see the web site for the dates. Due dates are flexible since some projects take longer than others. However, your grade could be lowered significantly until you get the work completed. If projects are due and you aren't finished, get the points for the tasks you have done so far. Even partial credit will make a big difference in your grade since projects are 50%. There are 300 project points available for your grade. If you attempt an additional project from the website, in your spare time you could earn additional points to help your grade. Since some projects are worth more than others, look at the project point value before beginning your final project, and consider the amount of time you have left.

**Homework:** Homework is rarely given in this class. On occasion if students don't complete their assignment during the ample time given in class, they may have to finish at home. Some review at home is advised prior to tests.

**Late Work:** There is no penalty for turning in work late. Zero points will be entered until the assignment is turned in. Most due dates are flexible since some projects take longer than others. Projects will not be accepted for grading after the last day of Lab for the semester.

**Make-Up Work:** Absent students have one week to get the papers they missed. Most assignments can be printed by clicking on the link on the Schoology calendar. It is difficult to make up missed lab time. Students are expected to use class time wisely and stay on task. Five weeks (18-20 lab days) are given for a typical project which allows a few extra days for unexpected delays or absences. See the website for dates the lab will be open after school.

Please see my website <http://www.rocklin.k12.ca.us/staff/bswasey/> for further information about materials contribution, projects, dates, etc. You can find the link on the Granite Oaks Website under Electives, Man Tec, and Mr. Swasey. The best way to reach me is by email. The address is [BSwasey@rocklinusd.org](mailto:BSwasey@rocklinusd.org) and I check it several times daily. Please sign and return the attached slip to indicate you have been given a copy of the class syllabus and read it. I am excited to work with your student and look forward to a wonderful semester.

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I have received and read the Manufacturing Technology class syllabus.

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Parent                      Signature

Student Name \_\_\_\_\_ Period \_\_\_\_\_

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