

## **Course Syllabus** **Technology Education 9**

(1 credit)

73 hours

This exploratory entry-level course is outlined to expose students to the numerous opportunities in vocational education. Students will be exposed to occupational safety and practices. Skills introduced include carpentry, woodworking, metal fabrication, and computer aided drafting (CAD). Alternative energy awareness, home maintenance and the unique and diverse opportunities in career and vocational education will be discussed.

### **Course Objectives:**

- 1) Students will learn and practice safety rules and regulations of the wood shop and metal shop.
- 2) Students will complete a small project of their choice using some of the tools in the wood shop and metal shop.
- 3) Students will prepare and print out actual sized blue prints using Soft Plan.
- 4) Students will learn how to model three dimensional objects for industry with Pro-desktop.
- 5) Students will learn of career opportunities in vocational field.

### **Instruction:**

#### A. Shop Safety

1. Eye protection
2. Hearing protection
3. Conduct
4. Clothing
5. Material Safety Data Sheets

#### B. Measuring Tools

1. Tape
2. Protractor
3. Scale

#### C. Stationary Power Tools ( includes sharpening, adjustments and safe operation)

1. Planer
2. Chop saw
3. Disc sander

#### D. Portable Power Tools

1. Drills
2. Routers
3. Sanders

#### E. Wood Technology

1. Wood types
2. Grading

3. Shrinkage predictions
4. Moisture meter

F. Adhesives

1. water-based
2. Oil-based

G. Soft Plan

1. Blue prints
2. Residential drafting

H. Pro-desktop

1. Engineered drawing.
2. Scale drawings.
3. Three dimensional drawing.