

Syllabus

RULES FOR THE CONSTRUCTION TECHNOLOGY CLASS

CLASSROOM:

1. Be on time, prepared for class.
2. Pay attention during class activities.
4. Keep classroom in order.
5. Do not interfere with class activities.

CLASSROOM RULES:

1. No horseplay.
2. Do not disturb other classes.
3. No vulgar language.
4. Clean your area before leaving.
5. Place chairs as they should be.

CLASSROOM, LAB OR JOB SITE:

1. Use restroom in carpentry facilities only.
2. Practice safety at all times.
3. Do not use equipment without permission.
4. Clean up when requested, as instructed.
5. After clean up, return to classroom until dismissed.

Carpentry offers the opportunity to gain knowledge and skills in the areas of residential and commercial construction.

Residential Carpentry

- A. Form Carpentry
 1. Concrete Foundations
 2. Footing and foundation forms
 3. Edge forms
 4. Special Applications.
- B. Frame Carpentry
 1. Floors and skills
 2. Walls and Ceilings
 3. Roofs
 4. Special Framing
- C. Exterior Finish
 1. Cornices and gable ends
 2. Roof finishes
 3. Exterior walls and trim
 4. Windows
 5. Exterior doors

- D. Interior Finish
 - 1. Insulation
 - 2. Drywall
 - 3. Interior walls and ceilings
 - 4. Interior doors and trim
 - 5. Cabinet and special built-ins
 - 6. Flooring

Fundamentals of Carpentry

- A. Introduction
 - 1. Industry orientation
 - 2. Safety
 - 3. Wood Products
 - 4. Smart buildings
- B. Math and Plan Reading
 - 1. Basic Math
 - 2. Measuring
 - 3. Plan Reading
- C. Carpentry Tools
 - 1. Hand tools
 - 2. Power tools
 - 3. Job site equipment
- D. Site Layout, Level, and Transit
 - 1. Level and Transit
 - 2. Site Layout

Commercial Carpentry

- A. Frame Carpentry
 - 1. Floors and sills
 - 2. Walls and ceilings
 - 3. Metal Studs
- B. Frame Carpentry
 - 1. Roofs
 - 2. Trusses
 - 3. Structural timber construction
- C. Form Carpentry
 - 1. Introduction to forming
 - 2. Footing forms
 - 3. Edge forms

- D. Form Carpentry
 - 1. Wall forms
 - 2. On-grade curb forms
 - 3. Piers and Columns
 - 4. Beam forms

- E. Form Carpentry
 - 1. Above-grade slab systems
 - 2. Stair forms
 - 3. Bridge deck forms

- F. Finish Carpentry
 - 1. Insulation
 - 2. Drywall
 - 3. Interior walls and ceilings
 - 4. Exterior Doors and hardware

Electrical

Students will have hands-on training in:

- 1. The classifications and categories of electricity
- 2. Conduit fittings and supports
- 3. Residential, commercial, and industrial electrical installation
- 4. Heating and lighting practices.
- 5. Conductor properties and characteristics

Plumbing

Students will learn the essential skills of connecting a water pipe system by doing small projects. By doing the projects, students will learn how to connect copper and PVC pipes.

The course will also offer hands-on experience on installing copper and gas applications on the actual work site.

GRADING

Grading is based on the following criteria:

- 60% **Projects**
Accurate completion of all assigned carpentry, electrical, and plumbing projects.

- 20% **Class Participation**
Includes class discussions, class remodeling projects, clean-up, etc.
(Note: Daily participation grades are given and averaged; 4 = A, 3 = B, 2 = C, 1 = D, 0 = F)

- 20% **Employability Skills**
Employability skills are based on attendance, punctuality, attitude, and work ethic.

Congratulations on the first step to success by reading this syllabus!