

Syllabus
Whitmer Construction Technology
Instructor: Andy Schober Room#C128

Construction Technology I
Junior year- Full year, 1 block
Lab Fee (\$180.00)

Construction Technology II
Senior year- Full year, 2 block
Lab Fee (\$30.00)

Course Description:

This course is an instruction to the basic building materials, components, methods, and sequences in residential construction. It is designed to give students basic, entry level skills in construction and related trades along with an overview of career opportunities available. Emphasis is placed on safety and proper use of both hand and power tools used in the trades. This course provides students with the experience of building house components along with various skilled woodworking projects. Construction Technology II is a continuation of CT I and provides advanced instruction and practical applications in each area.

Instructional Goals:

- Students will learn the basics of 4 major trade areas covered by this course, Carpentry, Electrical, Plumbing, and Masonry.
- By the end of this course the student will:
 1. Understand what trade areas are available to them for future employment.
 2. Be familiar with procedures, materials, tools, work expectations, and the safe practices necessary to participate in the trade desired.
- Register for Skills USA (Fees may apply)
- Successfully complete OSHA 10, CPR, and EPA courses (Const. Tech. II)
- Successfully complete WEB EXAMS

Objectives:

- To introduce and master shop/construction safety precaution and awareness.
- To reinforce basic math skills by incorporation of practical application.
- To identify hand and power tools and describe their use.
- To introduce the students to reading and interpreting construction blueprints.
- To identify construction materials and describe their uses.
- To introduce the students to basic skills and knowledge in fields of Carpentry, Wiring, Masonry, and Plumbing.

Course Outline:

1. Unit 1: Introduction and Orientation
2. Unit 2: Basic Safety (Review and Reinforcement)
3. Unit 3: Basic Math
4. Unit 4: Hand and Power Tools (Review and Reinforcement)
5. Unit 5: Introduction to Blueprints
6. Unit 6: Materials Used in Building Trades
7. Unit 7: Carpentry
8. Unit 8: Electrical Wiring
9. Unit 9: Plumbing
10. Unit 10: Masonry

Required Materials:

1. Pencil (EVERY DAY!!!!) PLEASE :)
2. (1) 1” 3-ring binder (color of your choice)
3. Work Boots and Safety Glasses (necessity in the field)
4. All tools purchased through lab fees.

Policies And Procedures:

- General Rules
- We are under the Washington Local Schools rules and procedures; therefore, all applies to this course.
- Since this course is conducted in an industrial environment stricter behavior rules apply.
- Students will need to modify their behavior to not cause safety concerns to themselves or others.
- Student expectations:
 1. Be on time
 2. Be attentive
 3. Be respectful to others
 4. Use time, tools, and materials appropriately
 5. Practice Professionalism
 6. LEARN!!!!!!

Grading Scale:

WLS adopted grade scale will apply

Safety:

The safety of the students is of our utmost concern. Each student will be taught basic safety and will pass the safety tests with a score of 100% before entering the shop for work. Safety glasses are required and enforced in the shop or on any job site. Hard hats will be worn as applicable. Equipment operation will only be done under direct supervision of the instructor.

Tentative Projects:

Construction Technology I: Bedside table, penny hockey board, saw horse, mock wall, floor, and roof framing components, Habitat For Humanity home, and customer based projects

Construction Technology II: Adirondack chairs, miscellaneous customer requested projects, and senior project.

Apprenticeship Wage Information

Trade	Age	Program Length	Starting Wage*	Journeyman Wage*
Boilermakers	18-Up	4 years	28.20	35.85
Bricklayers	18-Up	4 years	16.58	33.16
Carpenters	17½-Up	4 years	18.73	34.06
Cement Masons	18-Up	3 years	18.16	33.01
Electricians	17½-Up	5 years	11.99	36.98
Floorlayers	17½-Up	4 years	11.62	33.21
Glaziers	18-Up	4 years	14.54	28.27
Insulators	17½-Up	5 years	15.71	34.91
Ironworkers	18-Up	4 years	19.54	35.52
Laborers	18-Up	3 years	15.53	25.89
Mechanical Equipment Workers	18-Up	5 years	15.30	38.98
Millwrights	17½-Up	4 years	11.00	34.16
Operating Engineers	18-Up	4 years	15.77	31.53
Painters & Decorators	18-Up	3 years	11.78	29.44
Plasters	18-Up	4 years	15.85	31.69
Plumbers/Pipefitters	18-Up	5 years	18.95	38.88
Roofers/Waterproofers	18-Up	4 years	14.80	29.59
Sheet Metal Workers	18-Up	5 years	14.77	36.49
Telecommunication Techs.	17½-Up	3 years	13.25	24.81

SKILLED TRADES AVAILABLE

Boilermaker	Equipment Operator	Painter
Bricklayer	Exterior – Interior Specialist	Pipefitter
Carpenter	Glazier	Plasterer
Carpet Installer	Hazardous Material Removal	Plumber
Cement Mason	Heat and Frost Insulator	Rigger
Drywall Finisher	Heating, Ventilating and Air Cond. (HVAC)	Roofer
Electrician	Iron Worker	Sheet Metal
Elevator Mechanic	Laborer	Stone Mason
Tile Installer	Welder	