

Course Syllabus

Construction Technology

Instructor: Mr. Scott Jarrett

Phone: 989-673-5300

Email: sjarrett@tuscolaisd.org

Paraprofessional: Holly Rocheleau

Paraprofessional: Scott Weiland

Program Description:

The construction technology program is designed to prepare students for employment in the construction trades. When students have completed this class, they are prepared to join the work force as laborers, apprentices, and possible trades people and/or they are prepared to go on to a college, university, or trade school to further their education. Eventually, a student's goal may be business ownership in an area of construction trades.

Students learn to use the equipment and technology as it applies to site clearing, building layout, excavation, foundations, framing, roofing, siding, and finish work for a new home. The students will be involved with various construction projects in a lab setting. Safety is strictly emphasized. Prior industrial arts course work is helpful and substantial math skills are needed.

Textbook(s):

W. H. Wagner, H. B. Smith, (2022). *Modern Carpentry 13th Edition*, Goodheart Wilcox Co., Tinley Park, Illinois.
ISBN 978-1-64564-660-0

W.H Wagner, H.B. Smith, (2022). *Modern Carpentry Workbook 13th edition*, Goodhart Wilcox Co., Tinley Park, Illinois.
ISBN 978-1-64564-66

Walter C. Brown, Daniel P. Dorfmueller, (2022). *Print Reading For Construction 8th edition*, Goodhart Wilcox Co., Tinley Park, Illinois
ISBN 978-1-64925-985

Career Connections Online Curriculum

Instructional Resources and Techniques

The students will be exposed to, but not limited to the following resources.

- Online textbook
- Online workbook
- Math exploration relating to business and construction
- Math related to construction estimating
- Newspaper and magazines
- Video
- PowerPoint presentation
- Computers
- Field trips
- Guest Speakers
- Building manuals or manufacturer literature
- Lecture
- Hands on performance

Homework

Homework will consist of vocabulary, construction math, the review questions at the end of the chapter, or the workbook. Each student will be given a username and password to access the textbook and workbook from any computer. Most homework will be assigned at the beginning of the week and will be due by the Friday of that week.

Daily Log Sheets

You will be required to keep a daily log of what **YOU** (not the class as a whole) have done for the day. Think of it as a timesheet for a regular job. You will turn your logs in at the end of the day in your folder and they will be graded on a daily basis. The logs will consist of 2 categories. One category is for filling out the log sheet and the other category is your participation for the day. Each day is worth 10 points for a total of 50 points per week (based on a 5 day week). If you turn in a daily log and you participate in the daily activity then you will get the full 10 points for the day.

Reasons why points may be deducted from participation grade

- Cell phone usage
- Goofing around
- Lack of proper attire
- Safety concerns Ex. no safety glasses, using the saw unsafely etc etc
- Lack of participation (ex. playing games on computer instead of course work, sleeping, sitting there doing nothing etc etc)

Grading Scale

96-100 = A	80-82 = B-	67-69 = D+
90-95 = A-	77-79 = C+	63-66 = D
87-89 = B+	73-76 = C	60-62 = D-
83-86 = B	70-72 = C-	59 and below = F

Grade Determination

40% - Classroom Participation with Daily Work Logs
25% - Tests
15% - Homework
20% - Daily Demonstration of Safety Skills

Proper Attire

You will be required to be prepared for class on a daily basis. Most days we will be in the shop so you will need the proper attire to wear. Think of the shops as a job site; you wouldn't wear flip flops or sandals to the job so you are not to wear them in the shop. You will be required to either wear the right clothes to class or bring them with you to change into. Boots, pants, shirts with sleeves such as t-shirts, and no hoodies with strings that dangle. If you do not come prepared to work in the shop then you will be referred to the office and receive a **zero for the day**.

Competencies for Construction Trades

- Implement personal and jobsite safety rules and regulations to maintain safe and healthy working conditions and environments.
- Describe the various industry operations associated with the Construction Trades field.
- Demonstrate Language Arts, Mathematics and Science knowledge and skills required for educational and career opportunities.
- Develop a variety of communications skills necessary for employment.
- Describe and implement a variety of problem-solving and critical thinking strategies as necessary techniques for successful employment.
- Develop a broad range of career and employability skills necessary for career beyond high school career practices.
- Identify and describe a variety of building and project management methods needed to complete a construction project.
- Identify and demonstrate use of hand, power and construction related machinery.
- Describe and demonstrate leadership and teamwork skills necessary for employment.
- Identify and describe specific materials and methods associated with residential construction.
- Demonstrate and apply knowledge of specific materials and methods associated with residential construction.

- Identify and describe construction trends related to green practices and construction.
- Understand and use necessary technology related skill sets associated with career development and the field of construction trades.
- Identify and describe the use of heavy equipment in construction trades.
- Identify and describe knowledge of heavy/highway and civil projects, materials, and methods in the construction of different projects.
- Identify, describe and demonstrate the necessary elements in business and project management as aligned to the field of construction trades.
- Participate in appropriate work based learning opportunities associated with the field.

It is the policy of Tuscola County ISD that no person on the basis of race, color, religion, national origin or ancestry, age, gender, height, weight, marital status, or disability shall be subjected to discrimination in any program, service, activity, or in employment for which it is responsible.