



# Tuscola Construction Trades

*Hello, and I hope this finds you doing well at the beginning of this semester. I want to take a moment and introduce myself, and tell you about the Mountaineer Masonry and Construction programs. My name is Eric Sollie, and I am the masonry/construction instructor for Tuscola High School. I worked in construction for 8 years before I started teaching, and am still an owner/partner of Roberts and Sollie Contracting, LLC. I am a Veteran with a background as a military policeman. I believe in the importance of our younger generations learning the time-tested skills involved in the construction trades. Your student will be a part of a program that is centered around hands-on learning, and the development of life skills. I will challenge your student to think with their mind, be a part of a team, use their hands, and work on leadership skills they can use now and after graduation. Parent involvement is crucial to a student's success in education. Please ask your student what they are learning, and working on in class.*

## **Syllabus: Core and Sustainable Construction**

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**Office Hours:** M-F (3:00-3:30) *\*By appointment as needed.*

**Course Focus:** Students will be given the opportunity to work in an environment modeled around a construction jobsite. Safety is the number one priority and students are required to observe all safety rules and will wear and use the proper personal protective equipment at all times. This is a progressive course where skill proficiency must be demonstrated to advance to the next module. Much of our time will be spent in the shop or in the field. Students who are successful in this course will show up ready to learn, are capable of paying attention to detail, are team focused, and maintain a positive and safety minded attitude.

**Grading Policy:** Student grades will be earned through weekly quizzes, hands on projects, 8 module exams, and 8 module hands on skills tests. Student attendance is of the utmost importance as they will not be able to demonstrate hands-on skills learned in class if they are not here. *\* All grades in this course are weighted equally.*

**Cell Phones:** Phones are a distraction/hazard in my class and shop. Cell phones are not allowed.

**Course Objectives:** This course is designed to introduce students to the basic concepts and skills needed to work in the construction industry. Students will be given the opportunity to earn an industry recognized credential from the National Center for Construction Education and Research.

**PROOF OF LEARNING:** Each student will be given the opportunity to earn an NCCER certification which upon completion results in a score of 100 on the final exam, and exempts them from having to take the end of course test. If the student is not able to complete the certification process, they will be given an end of course final exam and will receive the grade they score for their final exam grade. Not earning the certification does not affect their grade in any way.

## Course Outline

**Module One: Basic Safety (00101)** explains the importance of safety in construction and industrial crafts. Trainees will learn how to identify and follow safe work practices and procedures and how to properly inspect and use safety equipment. Trainees will be able to describe the safety practices associated with elevated work; energy release; and various hazards encountered on job sites.

**Module Two: Construction Math (00102)** introduces trainees to basic math skills needed in the construction environment. The module reviews whole numbers and fractions; working with decimals; the four primary math operations; reading rulers and tape measures; the Imperial and metric units of measurement; basic geometric figures; and area and volume calculations for two-dimensional and three-dimensional objects.

**Module Three: Hand Tools (00103)** instructs trainees in the identification, use, and care of hand tools. Developing the knowledge to properly choose and safely use hand tools is an essential part of the construction industry.

**Module Four: Power Tools (00104)** identifies and describes some of the power tools used by construction workers. The construction of each tool is discussed, along with information regarding the safe usage and typical maintenance requirements of power tools. NOTE: Trainees are required to successfully complete Module 00101-15, Basic Safety (Construction Site Safety Orientation) before studying this module.

**Module Five: Construction Drawings (00105)** provides trainees with the information and skills needed to read and understand construction drawings.

**Module Six: Basic Rigging (00106)** *\*This module is not part of the high school curriculum.*

**Module Seven: Communication Skills (00107)** provides trainees with the information and skills needed to communicate effectively and clearly. Developing good communications skills enables the construction professional to become a confident, reliable asset to their craft.

**Module Eight: Employability Skills (00108)** provides trainees with guidance related to finding and securing a position in the construction trades. In addition, guidance in the areas of

problem-solving and effective interaction with others is offered to help ensure their success in the construction trades.

**Module Nine: Materials Handling (00109)** provides safety guidelines for workers handling materials on the job site. It covers proper procedures and techniques to use when lifting, stacking, transporting, and unloading materials. It also introduces basic motorized and non-motorized material-handling equipment commonly found in the construction environment.