Mecosta – Osceola Career Center
Construction Technology
Course Syllabus
2026-2027

Instructors

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Program Goals

To provide instruction, training, and opportunities which result in student competence and preparation for employment as an entry level construction worker and/or acceptance to a post-secondary institution to pursue a construction certificate or degree.

CIP Code 46.0000

Course Description

Construction Trades is a two-year program where the course is delivered through the construction of an onsite residential house. Split into a rough and finish year the residential house build is completed in two years. Students taking Construction Trades will obtain technical skills, knowledge and work habits necessary to succeed in the construction industry. The program is designed to provide an overview of many areas of construction including; safety, construction mathematics, career readiness skills, construction tools, equipment, materials, print reading, carpentry masonry, electrical, mechanical, plumbing, heavy equipment, civil construction, construction careers and business management. Students are able to earn a Career Connection Certificate through the Carpenters International Training Fund, they also earn OSHA10, First Aid, CPR and AED training Certificates.

Student Learning Objectives

A. Employ information management techniques and strategies in the workplace to assist in decision-making.
B. Employ planning and time management skills and tools to enhance results and complete work tasks.
C. Reads, interprets, and uses technical drawings, documents, and specifications to plan a project.
D. Use and maintain appropriate tools, machinery, equipment, and resources to accomplish project goals.
E. Construction Equipment and Tools
F. Material Resources for Construction Activities
G. Regulations & Quality Assurance
H. Construction of Heavy/Highway & Civil Structures
I. Site Preparation for Heavy/Highway & Civil Structures
J. Heavy Equipment Operations
K. Materials & Installation Used in Heavy/Civil Projects
L. Residential Construction
O. Green Building Practices
R. Employability Skills
S. Safety in hand/power tool usage
T. Hand/Power Tools & Fasteners
U. Shop/Lab safety
V. Workbase Learning Opportunities-2nd Year CT Students will have an opportunity to work in either paid or unpaid capacity in construction related fields as part of our CTE program. There are work based learning placement procedures that must be followed and met in order to be eligible for placement.

Course Requirements

In order to assure the student a "reasonable probability of success" in this program of study it is highly recommended that the student possess a level of academic skills and attitudes that will result in successful completion of the program. If you feel that you may need help with any of the items listed below let one of the instructors know (confidentially, of course). Help may be available.

- Good reading and comprehension skills
- Good general math skills

- Good communication skills – the ability to write a *complete* sentence
- The ability and desire to learn
- A positive attitude
- Good Career Readiness
- A good attendance record
- Critical Thinking and Problem-Solving Skills

Grading Procedures & Components

70% of your grade is composed of class work, lab activities, and career exploration (if applicable). The 70% is composed of; 40% is onsite/lab skills, 20% is tests/quizzes, 10% is daily log/class assignments. The weight of each in the final assessment depends upon the semester being assessed. The remaining 30% is based upon your Career Readiness. All are explained in greater detail below.

Class Work may include any or all of the following:

* study guides
* Tests
* quizzes
* career interview
* Pre-Test exam
* Post-Test exam
* applied math, science, And English assignments

Lab Work may include any or all of the following:

- Demonstrations
- Lab assignments
- Performance tests
- Lab Participation - a subjective assessment based on your overall performance in the shop as observed by the Construction Instructor and Para-educator

Career Readiness is composed of three components with fourteen categories:

- Personal Management
  - Attendance
  - Respect and Ethics
  - Organization

Productivity
Appearance
Stewardship

- Problem Solving
  Perseverance
  Critical Thinking
  Technology, Creativity and Innovation
  Research, Academic, and Technical Skills

- Teamwork
  Participation
  Emotional Intelligence
  Communication
  Leadership

Note: Career Readiness and how it affects your grade will be covered in much greater detail later in the syllabus.

Grading Scale:

A 100-95	C+ 79.99-77	D- 62.99-60
A- 94.99-90	C 76.99-73	F 59.99-1
B+ 89.99-87	C- 72.99-70	I 0.99-0
B 86.99-83	D+ 69.99-67	
B- 82.99-80	D 66.99-63	

Textbooks

*Modern Carpentry 11th Edition by Wagner/Smith
Copyright 2008 by The Goodheart-Willcox Company, Inc.
*Michigan Residential Code Book by ICC
*Career Connections

Leadership Opportunities

★ **Small Group Lead on Bridge Construction Project**
★ **GYCIG Student Tour Leader & Station Ambassador**
★ **Open House Student Ambassador & Campus Guide**

★ And other opportunities that may include:

1. Job-Site & Lab Leadership (Field Operations)

- **Student Project Managers / Superintendents:** Rotate students into leadership roles overseeing overall daily production, timelines, and trade coordination.
- **Safety Officers / Crew Foremen:** Assign students to lead daily safety briefings ("toolbox talks"), inspect PPE, enforce site compliance, and complete job hazard analyses.
- **Inventory & Tool Crib Managers:** Have students oversee tool checkout, routine equipment maintenance, log tracking, and material orders.

2. Career & Technical Student Organizations (CTSOs)

- **SkillsUSA Leadership Roles or like entity:** Chapter officers (President, Vice President, Secretary) managing meeting agendas, program initiatives, and community service projects.
- **Competition Team Captains:** Leading peer practice sessions for regional and state competitions (e.g., carpentry, masonry, electrical, or safety demonstrations).

3. Mentorship & Peer Coaching

- **Peer-to-Peer Trainers:** Pairing advanced (2nd year) students with introductory students to mentor them on tool operation, reading blueprints, and layout work.
- **Special Education & Middle School Workshop Facilitators:** Leading hands-on building workshops or summer camp sessions for younger students.

4. Community-Based & Service Leadership

- **Habitat for Humanity / Community Build Lead:** Coordinating student teams on off-site community builds, ramp installations, or local shed/bench construction.
- **Client & Trade Advisory Contact:** Serving as the student liaison to present

project progress updates to school boards, community partners, or trade advisory committees.

Articulation & Direct Credit

MOCC Construction Technology currently has an articulation agreement that means you can earn not only high school credit for completing this course, but you can also earn ***college credit*** at participating colleges and technical colleges! with **Northern Michigan University** CN110 Construction Processes 2 Northern Michigan University Construction Technology CN 156 Systems & Methods **Davenport University** up to 27 credits available. **Macomb Community College** CNST 1126 Residential Builders Pre-License Course 3 Macomb Community College Construction Trades ATBC 1200 Applied Building-Foundations and Framing 2 Macomb Community College Construction Trades CIVL 1020 OSHA Construction Safety

Purpose of this Agreement.

1) Expand educational opportunities for high school students allowing them to earn postsecondary credits.
2) Eliminate unnecessary duplication of course materials and instruction.
3) Maximize the use of resources for students to complete programs as efficiently as possible.
4) Support postsecondary enrollment, retention, and completion.

Tools & Clothing

Tools: few hand will be provided by MOCC. You will however, be responsible for those tools. If you break a tool let us know so we can replace or repair the tool. We understand tools can be broken under normal use. You're learning and you are going to make a mistake, that's how you learn! If you break a tool **deliberately or lose** a tool that you were responsible for you will be held liable for its repair or replacement at cost. You are encouraged to provide your own set of tools. Tools are a good investment (if you take care of them), and you will need to have your own tools if you are planning on a career in this field anyway. Why not start early and add to your investment slowly? Then, when you're out of school and secure that job, you'll be ready to go!

Safety glasses will be provided, and must be worn at all times in the shop/lab and on site. However, you can provide your own if you wish. If you lose your safety glasses, **YOU** are responsible for replacing them; a pair can be purchased at the main office. Students will NOT be allowed in the lab without glasses on!

Each student will be provided with a locker, and a lock. You are encouraged to bring **clothes** to work in (coveralls or overalls or jeans) and a pair of work boots or shoes. You will not do any work in the shop or site if you are wearing any type of open toed shoes, (sandals & flip-flops), or shorts. Not working in the shop because you don't want to get your clothes dirty *will not* be an option! Wear, or bring, clothes you can work in.

Required clothes/uniform: Each student will wear long pants/jeans (NO Sweatpants, shorts), shirt/jacket, safety work boots, and safety glasses and hard hat which is provided. Tool belts with the given tools must be worn and ready to work. **NO** loose or dangling article of clothing. **NO** loose or dangling jewelry. Long hair must be tied back or covered. Work clothing must be weather appropriate. We work off site in All elements, we must dress accordingly

Class Operation & Procedures

First, there will be an introduction and discussion to new material and concepts. Next, there will be a demonstration on procedures and practices. And finally you will have the opportunity to practice the procedure.

The first part will involve a lecture and a study guide, the second will have you watching a demonstration, and the third will have you performing the job yourself.

The class will go on if you choose not to show up. Some lab assignments may be made up upon your return after an absence if it does not interfere with the day's activity. Class work will be made up on your time.

The ***curriculum*** is multiple areas of construction that you are going to study and perform a task to demonstrate competency.

Tasks are the assignments, both paper/pencil and lab, that you will be responsible for. Also, most tasks are sequential which means that one task should be completed before another.

Make-up Policy

Class work (study guides, paper/pencil assignments) can be made up after an absence DUE the next day of their attendance. Other arrangements will be made

for quizzes and tests if the absence was legitimate.
Some **lab assignments** may be made upon your return after an absence if it does not interfere with the day's activity and/or the shop is still set-up for you to perform the lab assignment. Demonstrations *cannot* be made up. If a procedure is demonstrated to the class on Tuesday and you're absent we are not going to put the class on hold Wednesday just to get you caught up, (time is precious!). If the absence is school related you will not lose points, if it is *not* school related it will cost you! It is important for you to be here!

Career Readiness

Introduction

The Career Readiness program was developed by members of the teaching staff at MOCC and is used in all programs. Although it is school policy that Career Readiness accounts for 30% of your grade, each teacher has a different interpretation of the Career Readiness terminology, and therefore, a different approach to determining your Career Readiness grade. This section of the syllabus will describe how the Career Readiness program is applied to the Construction technology program.

Career Readiness Rating Scale

Daily Career Readiness scores are based on the following categories:

- Attendance
- Respect
- Professionalism
- Ownership
- Being prepared
- Productivity
- Stewardship
- Perseverance
- Critical Thinking
- Research, academic and technical skills
- Participation
- Emotional Intelligence
- Communication
- Leadership

Application

Every day you will be rated in each of these categories earning a maximum of 10 points a day.

Points are subtracted for any noticeable and obvious infractions.

Dependability & Attendance Policy

AM Session is 8:30am-10:45am Monday - Friday
PM Session is 12:40pm-2:55pm Monday - Friday

Being "Dependable" in your attendance, punctuality, and safety is emphasized greatly here at MOCC due to the fact that a lot of what we do is hands-on, in class, so missing is "missing a lot". (Please note that it is extremely important for you to be here, it is hard to make up work for this class. For information on the school's attendance policies refer to the student handbook).

Absent

Every time you are absent your Career Readiness grade goes down (unless it is a school related absence). All missed learning and missed work is **YOUR** responsibility, not mine, you need to contact your instructor to find out what you missed and when it needs to be turned in. If you do not call in when absent, we will be contacting your parent(s) or guardian(s). You need to Call or email a minimum of **30 minutes** before class starts and **tell why you are absent**.

Bereavement leave: Five (5) days per year will be granted for each occurrence of death of immediate family members such as parents or child. Three (3) days per year will be granted for each occurrence of death of other immediate family members such as stepparents, sister, brother, step-sister, step-brother, grandparents, guardians.

I am a reasonable teacher and will look at missed days' in consecutive blocks, being sick, or having to miss school because of medical reasons on an individual

basis. You WILL be required to show a doctor's note.

Tardy

A tardy is defined as not being in your seat at the start of class. For example, **if you are not in your seat at 8:30 a.m. or 12: 40 p.m., you are tardy**; being in the lab does not count as being at "class" on time.

Being late at work would eventually cost you your job! Your Career Readiness grade will be affected. If you are late or absent it is very unlikely you will pass this class and may eventually be dropped from the program.

Signing Out

If you need to sign out you must fill out a "sign-out permission slip". It will make things a lot easier if you bring a note from your parent or a phone number where they can be contacted (MOCC school policy).

Left Classroom/Shop

If you are "missing in action" and someone has to go looking for you, you will lose ***all*** of your Career Readiness points for the day. Other consequences may also apply.

Safety

Every item under the safety category is of major importance. If you display any of the behaviors listed you will lose 3 points for each (you will get into the **negative** range real quick). If the problem becomes persistent you might not be allowed in the shop, and you could be removed from the program.

Cell Phones

Cell phones are helpful tools when used properly. Cell phones will **NOT** be out/used/looked at during class or lab time unless instructor authorized. Use of earbuds/headphones will **NOT** be allowed in class or on site unless instructor authorized. Cell phones will NOT be taken into the hallways and bathrooms during the hours of the class, **NO EXCEPTIONS. Phones are expected to be put into the lock box upon arrival.**

Comes Prepared To Work

You will lose Career Readiness points if you didn't bring something to class

that you were responsible for. No writing utensil, left your work boots home, didn't bring an assignment that was due, anything that was your responsibility that causes an inconvenience, or disruption to the class is fair game. ***You will lose ALL of your Career Readiness points for the day if you show up to class wearing shorts and/or open toed shoes and you have nothing in your locker to change into!***

Completes Work on Time

Assignments are due at the date assigned. Up to 3 days late you may receive 50% of the grade, on day 4 and beyond you will receive a **ZERO**. If you were absent when assigned, the assignment will be due the day you have returned.

By signing and returning this portion of the syllabus, the student agrees that they have received, read, and understand the above statements.

_____ _____

Student Signature Date

_____ _____

Parent Signature Date

_____ _____

Best phone # to reach parent Best time to contact parent