

Mecosta - Osceola Career Center
Construction Technology
Course Syllabus
2024-2025

Instructors

Mr. Eric Richardson, Construction Trades Instructor
erichardson@moisd.org 231-796-5805 X 1161

Mr. Blake Elliott, Para-Educator
belliott@moisd.org 231-796-5805 X 1161

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 46.000

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.

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
- T. Hand/Power Tools & Fasteners

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). 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 thirty - percent 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
- * applied math, science, And English assignments
- * career interview
- * Pre-Test exam
- * Post-Test exam

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

Articulation & Direct Credit

MOCC Construction Technology currently has an articulation agreement with Baker University. This 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! Students also have the option of direct credit through Baker College: Baker ACT 104; Baker ACT 203.

Tools & Clothing

Tools 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. 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. 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. 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 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 cloths/uniform: Each student will wear long pants/jeans (NO Sweatpants), 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 the 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 on your own time. 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 and Ethics
- Organization
- Productivity
- Appearance
- Stewardship
- Perseverance
- Critical Thinking
- Technology, Creativity and Innovation

- Research, academic and technical skills
- Participation
- Emotional Intelligence
- Communication
- Leadership

Application

Every day you will be rated in each of the fourteen categories earning a maximum of 14 points overall. Students are rated on the MOCC Career Readiness Rubric which has four levels; Beginning-1 (well below standard), developing-2 (below standard), proficient-3 (at standard), and advanced-4 (above standard).

Points are subtracted for any noticeable and obvious infractions.

Dependability & Attendance Policy

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). When you return from an absence you must fill out a "Leave Request/Record of Leave Taken" form. 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.

Students can miss up to 2 days per term and 12 days per school year with minimal penalty to their career readiness grade (these **MUST** be pre-arranged or called in, No-Call will have a **BIG** penalty). On the thirteenth (13) absence the student will get a -50 for missing. Points can be made up by students, by doing one of two things: Points must be made up within ten calendar days from the day last

day absent. This is the students responsibility to set up with the teacher.

Option #1 is to do a 4-5 minute Speech in front of the classroom and their peers. Speech has to be about the Construction topic. Topic must be approved by the instructor.

Option #2 is to write a report that is at least 2-3 pages, about a construction topic. Topic must be approved by the instructor

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. and attendance is taken, 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 during test/quiz taking. Cell phones will NOT be taken into the hallways and bathrooms during the hours of the class, NO EXCEPTIONS. If the instructor has to ask you more than once for the phone to be put away, a parent will have to pick the phone up during office hours.

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

You will lose Career Readiness points for late assignments. This means that if an assignment is due on a particular day, you will lose Career Readiness points - one, as stated above, for not coming to class prepared, and another for not completing the work on time. If you are granted more time to complete the assignment, you will lose more Career Readiness points if you again fail to meet the deadline. You could also lose these points until the assignment is completed.

Off task means not doing what you're supposed to be doing. If you have to be reminded of what your job is, or task is, you will lose Career Readiness points.

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