

**SYLLABUS**  
**CONSTRUCTION TRADES I**  
**Mason High School**  
**Erie, MI**  
**2020-21**

**Instructor Information**

Teacher: Mr. Lawn  
Conf. time: 12:35 – 1:35  
Email: [lawn@eriemason.k12.mi.us](mailto:lawn@eriemason.k12.mi.us)  
Phone: 734-848-9311

**Course Information**

Place: Room 109  
Date: All year long  
Days: Monday - Friday  
Time: Periods 1<sup>st</sup>, 2<sup>nd</sup> & 3<sup>rd</sup>

**Course Description**

First semester course will focus on basic knowledge of Drafting and CAD, Residential Electricity, and Woodworking. Second semester will focus on Basic Metalworking, and Construction Trades. Construction Trades I is the prerequisite for Industrial Technology & Construction Trades II.

**Class Goals**

1. The student will learn Safety, Health, and Environment in Constructions.
2. The student will learn Tools and Equipment used in Construction.
3. The student will learn about Construction Materials.
4. The student will learn Common Construction Practices.
5. The student will be given an Industry Overview
6. The student will learn Heavy Equipment and Civil Engineering Techniques
7. The student will learn Construction Business Management.

**Grading**

Grading will follow the new procedure for 9 week, exam, and semesters

First 9 weeks	40%
Second 9 weeks	40%
<u>Exam</u>	<u>20%</u>
Semester Grade	100%

**Grading Distribution**

Participation - daily	20%
Projects and Tests	80%
Total	100%

**Grading Scale**

A	100-90
B	89-80
C	79-70
D	69-60
F	59-0

## **Class Participation**

IF YOU ARE NOT IN SCHOOL YOU CAN NOT PARTICIPATE IN CLASS

You receive 10 pts .per day and you will lose points for:

### In Class

Absent 10 pts

Tardy 5 pts

Behavior 5-10 pts

Participation 5-10 pts

### In Shop

Absent 10 pts

Tardy 5 pts

Behavior 5-10 pts

Participation 5-10 pts

Problem solving 5 pts

Safety glasses 5 pts

Safety problem 5-10 pts

## **Class Outline: 1<sup>st</sup> Semester**

### I Drafting - Board & CAD

1. Isometric drawing
2. Multi view drawings

### II Residential Electricity

1. Lecture- Terms, process, and procedures- Test 30%
2. Electrical Labs-Hands on 70%

### III Safety, Health, Environment (seg-1)

- a. Safety & health on the job
- b. Personal safety & health
- c. Work site safety & environment
- d. Tool & equipment safety
- e. OSHA

### IV Woodworking:

1. Tic- Tac-Toe board
2. Wood Lathe
3. Bird House
4. Cutting Board
5. Shelf

### V Construction Tools & Equipment (seg-5)

1. Tool & equipment safety
2. Hand tools
3. Power tools
4. Machines
5. New technology tools

### VI Construction Materials (seg-4)

1. Common materials used in construction
2. Handle, install, position, move, store, and secure materials properly

## **Class Outline: 2<sup>nd</sup> Semester**

### I Metalworking:

1. Sheet metal box
2. Nail people
3. Forge Cold chisel
4. Welding
5. Sheet metal strip
6. CNC Mill
7. Plasma - Seniors

## II Industry Overview (seg-2)

1. Types of businesses in building
2. Understand various craftsman's roles & responsibility
3. Social, environmental, and political factors in a project
4. National, state, and local regulations & building codes
5. Licenses & certifications

## III Common Construction Practices (seg-8)

1. Construction Vocabulary
2. Methods for home construction
3. Distinction between residential & non-residential
4. Building codes & laws
5. Building systems

## IV Heavy Equipment / Civil Engineering Techniques (seg-11)

1. Understand the use of heavy equipment dump trucks, boom trucks, water trucks, cranes, forklifts, loaders, backhoes, scrapers, etc.
2. Knowledge of bridge, road, and utility construction
3. Knowledge of concrete, steel, and other materials use in road construction.
4. Methods to minimize construction waste & demolition debris

## V Construction Business Management (seg-12)

1. Skills needed for construction management
2. Knowledge of business and management roles & responsibility
3. Common contracts & budgets
4. Permits & licenses
5. Knowledge of blueprints, materials, cost, schedule, and time lines

### **Safety Policies**

-All students will follow all the classroom rules and shop safety rules. Failure to follow the rules may result in disciplinary action and/or removal from the class.

-Everyone must wear safety glasses in the shop at all times, whether working on a machine or not

-More shop safety rules will be discussed in class.

### **No Shop Fee:**

Students will make small projects to complete the skill requirement. With Instructor approval, the student may upgrade a project for an additional fee or bring own materials.

### **Lockers / Locks**

Each student will pick 1 locker partner. I will assign them a locker in the shop and give them a lock for the duration of the class. They must return the lock and clean out the locker at the end of the class. If they lose the lock they will be charged \$5.00. A class cabinet will be provided for this class to lock up larger projects.

### **Media Devices**

The use of Cell Phones, I-Pods, or any other audio/video devices is not allowed at any time in classroom or in the shop. This is a distraction and creates a safety hazard. The student will be disciplined by me or the High School Office.

### **Missed Work:**

Students will be given the time to make up missing work in accordance to the student handbook.

**Cheating, copying, or doing an other students assignment**

Student will receive a 0 for the assignment and not be able to redo the assignment (see student handbook for academic dishonesty).

**Extra credit**

Extra credit will not be give for any reason.

**This syllabus is just a guide and the teacher reserves  
the right to make changes (if needed) at anytime.**

Dear Parent(s),

Please take the time to review this class syllabus with your student. It is my hope that it will provide you with a greater level of information regarding your student's education. The syllabus includes my email address and phone number to increase parent communication. Please feel free to contact me if you have any questions.

**Keep the first 3 pages for future reference...Return this signature page so your student may receive full credit this Friday.**

**My student and I have read this class syllabus**

---

Student Name: \_\_\_\_\_ Date: \_\_\_\_\_

Student Signature: \_\_\_\_\_

Parent/Guardian Name: \_\_\_\_\_

Parent/Guardian Signature: \_\_\_\_\_

(Optional)

Phone \_\_\_\_\_ Email address \_\_\_\_\_