

Construction Technology 1 & 2 Course Syllabus

Course Title:	Construction Technology 1
Teacher:	Mr. Bui
Contact Information:	Email: sbui@mvrop.org Phone: (510)657-1865 ex15602
Class Location:	MVROP Main Building Room 602
Class Schedule	Mon, Tue, Thu, Fri: <ul style="list-style-type: none"> ● Block 1: 7:30 – 9:30 ● Block 2: 9:38 - 11:01 ● Block 4: 1:30 – 3:30 Wed: <ul style="list-style-type: none"> ● Block 1: 7:30 – 9:30 ● Block 2: 10:30-11:40 ● Block 4: 1:30 -3:30
CTE Course Industry Sector and Career Pathway:	Building and Construction Trades <ul style="list-style-type: none"> ● Carpentry ● Electrical ● Plumbing ● Drywall
Course Credit:	10 credits/semester
Course Hours	2 semesters/360 hours
Grades	9-12

COURSE DESCRIPTION:

This course is designed to help students develop skills and knowledge to prepare them for a career in the building and construction trades. Students will learn and practice different areas of the construction field: carpentry, electrical, plumbing, drywall. The class is designed for learning through lectures and hands-on lab. Students will learn building codes and how to build using various materials. Students will learn techniques for wiring and plumbing a residential and commercial building. Throughout the school year, guest speakers from the trades will come in and assist in teaching to help students get an idea of what the real world is doing. Numerous different Unions (DC 16: glazers, painters, flooring, and drywall. IBEW 595: Electrical. SMW104: Sheet metal) will stop by and talk about their different unions and the application process for becoming an apprentice. If students are interested, these advisors will assist students in becoming an apprentice.

Class Goal

- Students will experience and gain entry level apprenticeship knowledge to the construction trades.
- Students will learn the proper safety of all machines and hand tools in the classroom.
- Students will develop skills to think critically about different projects and how to complete an assignment given to them.
- Students will gain the necessary skills to enter an apprenticeship in their preferred construction trade.

Student Learning Outcomes

- Students will differentiate between different types of measurements used in the construction field.
- Students will recognize different safety hazards associated with different hand and machine tools.
- Students will be able to define and describe different aspects of a construction project.
- Students will be able to construct and create from reading blueprints.
- Students will be able to apply what they have learned in class to real life scenarios.

Classroom Rules and Procedures:

- **Classroom RULES are posted throughout the classroom.**
 - **Language:**
 - Students will show respect and courtesy towards all other students at all times. Hateful comments concerning race, gender, sexuality, political views, appearance, or any other types of negative language will not be tolerated.
 - “I’m just kidding, It’s just a joke” will not be accepted.
 - **Safety:**
 - Goggles must be worn at all times in the workshop. There are possibilities of wood chips and other materials that may accidentally go airborne and proper precaution must be taken.
 - Always be aware of your surroundings before using any tools.
 - If a tool is being used, make sure you are not disturbing the person using the tool and are out of harm’s way.
 - Proper footwear must be worn at all times. (No open toed or soft soled shoes)
 - Long pants must be worn at all times. (Shorts, skirts and dresses are not allowed)

- **Directions:**
 - Always follow directions when given. This means do not argue when a teacher (myself or any other teacher) asks you to do something. (E.g. putting tools away, go to your seat, stop talking, etc.)
 - **Physical contact**
 - Keep hands and feet to yourself.
 - No rough housing, pushing, hitting, kicking or throwing things.

- **Attendance**
 - Mission valley ROP's mission is to prepare students for employment, and career preparation via post-secondary education opportunities. **Just as in business and industry, where employees are expected to show up on time every day, Mission Valley ROP students are expected to be on time for class every day.** If your home high school has no school, a minimum day, or an optional student event that may conflict with your Mission Valley ROP class, you are still expected to attend your Mission Valley ROP class, unless otherwise directed by your MVROOP instructor.
 - Make up assignments will be given for excused absences only, which include medical, legal, or bereavement circumstances. Failure to complete make-up assignments will adversely affect your grade. If you are tardy or miss a Mission Valley ROP class multiple times your grade will be adversely affected.
 - **Students must arrive on time to class.** Talking on a cell phone or having personal conversations outside the class is unproductive and will be considered tardy. Tardiness reduces instruction time and is disruptive to the classroom. Tardies may result in a student earning a lower grade or prevent the student from receiving a course certificate for the course. Tardy students will be placed on contract, which may result in being dropped from the ROP center class.
 - Except in cases of serious emergency, a student must have a note or receive the permission of the instructor to leave class to see an administrator.
 - Hall passes prescribed by teachers are required for unaccompanied students to exit the classroom when class is in session. Students are to present their hall pass when asked by a school official.
 - Come to class on time and **ready** to work.
 - Being on time to class but spending time to get ready (changing clothes, eating food, etc.) will be considered late.
 - This is a hands-on class, missing class time means you will fall behind and will struggle to keep up.

○ **Bullying and Harassment**

- Bullying is repeated behavior, which involves an imbalance of power by the perpetrator(s) that causes harm to the target(s). It may harass, intimidate, threaten, terrorize, harm, or exclude. Such behavior is often executed using electronic, written, verbal, visual, physical act or gesture, or conduct toward another person or persons.
- Mission Valley ROP is committed to providing a safe educational environment for students and staff in which all members of the school community are treated with dignity and respect in an environment free of harassment, intimidation or bullying. Mission Valley ROP prohibits harassment, bullying, hazing, or any other forms of victimization.
- This policy is in effect while students are on property within the jurisdiction of the school; going to or coming from the school, on school-owned and/or school-operated vehicles, attending or engaged in school sponsored activities; on/or away from school grounds if the misconduct directly affects the good order, efficient management and welfare of the school.

○ **Cheating**

- Mission Valley ROP is committed to preparing students for the workforce. This preparation includes technical skills as well as business ethics. Mission Valley ROP does not tolerate cheating.
- Any student caught cheating on an exam or copying work from other students will be given one warning and a failing grade on that assignment. Any subsequent incident will result in termination from his/her Mission Valley ROP program, a failing grade, and loss of credits.

○ **Dress Code**

- Proper attire is expected of Mission Valley ROP students. Pajamas, slippers, or clothing that is too revealing, a distraction, or poses a safety concern (i.e. pants that must be held up with one hand because they are too baggy) should not be worn. Appropriate undergarments must be worn at all times. Clothing must be clean, neat, in good repair, and must convey professionalism. Clothing/accessories that identify affiliation with street gangs may not be worn. Clothing which covers the head and eyes for fashion purposes will not be allowed in MVROP buildings (i.e.: hats, caps, hoodies, do-rags, skull caps, bandannas, sunglasses, etc.) Applying makeup must be done outside of class. At the discretion of instructor and/or administrator, students may be placed on contract for violating dress code and/or removed from class. Repeated dress code violations may result in dismissal from ROP Center class.
- MVROP students at internship sites must wear picture Identification Badges.

○ **OFF-CAMPUS RELEASE:**

- When circumstances require a student to be released from class early at the parent's request, photo identification will be required by Mission Valley ROP to facilitate release of the minor child to the parent.
- Photo identification will be copied and a signature will be required.
- If parent/guardian cannot come to the ROP Center, a signed note from parent/guardian to the instructor and/or front desk stating the date, time, reason for release, and valid signature. The note must contain a phone number to verify with the parent/guardian the reason for leaving campus.
- If a signed note is not presented to proper personnel and a parent/guardian cannot be present to check out the student, a phone call from the parent is required.
- Once on campus, students may not leave Mission Valley ROP campus during school hours without proper authorization. Unauthorized students leaving campus may result in dismissal from ROP Center class.

○ **NO FOOD/NO DRINKS:**

- No food or drinks will be allowed in MVROP buildings, including classroom, lobby, hallway, and restrooms. The Student Lounge is the only room where food or drinks other than water should be consumed. Students violating this policy will receive one warning via a behavior contract. Further incidents may result in termination from the ROP program.
- Students are encouraged to brown bag their lunch and eat before attending their ROP class to avoid being tardy.
- No food delivery services are allowed to be delivered to MDROP such as GrubHub, DoorDash, or pizza delivery except when pre-approved by the instructor for a class party.

- **SMOKING/ALCOHOL/ILLEGAL SUBSTANCES:**
 - The use of tobacco, alcohol and drugs by minors is against the law. Students found in violation will be reported to law enforcement, dropped from his/her Mission Valley ROP program, and returned to his/her home school for further disciplinary action. This policy extends to all Mission Valley ROP-related training and activities including internship and job shadowing opportunities, field trips and events.

- **STUDENT BEHAVIOR:**
 - Mission Valley ROP provides courses for both high school and adult students, often in the same classroom. Appropriate behavior is expected from every student.
 - Attending Mission Valley ROP programs is a privilege and is elective, not compulsory. Students who are unable or unwilling to comply with the established policies and procedures will be referred for transfer to their home school.

- **COVID/HEALTH REQUIREMENTS:**
 - **All Mission Valley ROP students are required to wear a mask or face covering while inside any classroom or building on the MVROP campus.** A mask will be provided if there is a need.
 - All students should conduct a daily self-assessment for any signs or symptoms of illness.
 - Students should stay home from school and school activities if they have any symptoms of an illness such as a fever, a cough, a sore throat or headache.
 - Students should not return to school after an illness until they have been symptom free without medication for 24 hours.

- **Consequences**

- Everything in life has consequences. Consequences are not a punishment, it is a penalty that results from the options you choose. Consequences are what happens when you choose not to obey the rules. This is what will happen if you choose not to abide by the class rules and policies:
 - 1st time: warning (I will usually look at you and let you know that I have marked you for your first offence)
 - 2nd time: 20 min tool room clean up and reorganization duties and 15 points off of daily work ethic grade.
 - 3rd time: class period tool room clean up and reorganization duties and 50 points off daily work ethic grade.
 - 4th time: Semester grade will be dropped by one full grade.
- **Violations**
 - Consequences will be enforced during the quarterly grading period and will last until the end of the quarter and will be reset after the grading period.
- **Rewards**
 - I always recognize students who choose the responsible thing to do. This class is designed to teach you the professionalism of the industry and if you are acting like a professional you will be rewarded for it. For example: extra credit points, additional time allowed on projects and possible omission of one bad project grade.

Classroom Procedures:

Entering the classroom:

- After you walk into the door, get your time card and mark the time and date of check in.
- Check the agenda to see what tools you will need for the day
- Go to your tool box and get the tools needed for the class.
- Get to work.

Late to class:

- Being late for class means you have not gotten your time card when the bell has rung.
- Being late for class means that you are ready to work when the class starts. Arriving on time but not ready to work is considered late.

Work:

- If you are in class you are expected to be doing work. There are always projects to do and you should know what the next assignment is. "I just finished my project" is not a good excuse. You should get to the next project.
- Always be next to your project while in class. "I was getting a tool" is not accepted since you should have already gotten all the tools needed at the beginning of class.

Entering/leaving class:

- When entering class, do so quietly.
- If another class is leaving, please wait in the yard until they are gone, then enter the room.
 - Do not enter class while another class is in session.
- When leaving a class, please do so quietly without pushing or shoving. I will always give you enough time to catch the school bus.

Completed projects:

- All completed projects should have your names on it and placed in the completed shed.
- Once graded, grades will be posted on my office door.

Respect:

- Professionalism and respect is very important in this class. I will expect respect for myself and every individual that steps foot in this classroom.
- Treat others with respect. Name calling, profanity, teasing, or bullying will not be tolerated.
- Please use common courtesy.
 - Please
 - Thank you
 - You're welcome
 - Excuse/pardon me

End of class procedure

- When there is 15 mins left in class an alarm will ring and you will be expected to begin cleaning up.
- Take your tools back to the tool room and put your tool box away.
- Clean your workstation and all the debris that is around your area. (Put your workstation back against the wall and sweep your area)
- Look around the workshop for anything out of place and put it where it needs to be. (Stray tools that need to be put in the tool room, blue prints that need to be filed, etc.)
- When the work lab is cleaned, go back to the classroom, take a seat and wait to be dismissed.

TEXTBOOKS, READINGS, AND OTHER MATERIALS:

Textbooks are not required for the class, however, are available for reference in the classroom.

PREREQUISITES:

Students must be able to handle general mathematics, both whole numbers and fractions. They must like to work outdoors and have the ability to work with their hands and tools in construction to build, fix and construct things. This will help in establishing the student as a skilled person that employers seek. Students must be able to use and carry items that weigh up to 45 lbs.

COURSE POLICIES:

Attendance and tardiness

Mission Valley ROP's mission is to prepare students for employment, and career preparation via post-secondary educational opportunities. Just as in business and industry, where employees are expected to show up on time every day, Mission Valley ROP students are expected to be on time for class every day. If your home school has a minimum day or an optional student event that may conflict with your Mission Valley ROP class, you are still expected to attend your Mission Valley ROP class.

Make up assignments will be given for **excused** absences only, which include medical, legal, bereavement circumstances or school testing. Failure to complete make-up assignments will adversely affect your grade.

Students must arrive on time to class. Talking on a cell phone or having personal conversations outside the class is unproductive and will be considered tardy. Tardiness reduces instructional time and is disruptive to the classroom. Tardies may prevent the student from receiving a course certificate.

Perfect attendance certificates will only be issued to students who have no absences or tardies. There are no exceptions.

Class participation:

Class participation is dependent on class attendance and includes paying attention in class, talking in discussions and taking part in class lab/activities.

Classwork:

Classwork is assigned on a daily basis and is done in class. Most assignments will consist of bookwork, takeoffs and lab construction projects. Grades will be assessed on completion, quality and craftsmanship of work created.

Accommodations for students with disabilities or special needs will be made.

ASSESSMENT AND GRADING:

- Safety Tests: Will be given on every machine and hand tool that will be used. Grades will be multiple choice and short answers. Grading will be done on a pass/fail basis with no wrong answer allowed. Retakes are required.
- Quizzes: Students will be given quizzes upon completion of unit activity or project to assess understanding of material in the unit.
- Projects: Students will be graded upon completion of a given project on accuracy, timeliness and craftsmanship.
- Grade will be broken down as such:

Attendance - Prepared for class - Soft skills for employability	20%	This is a hands-on class. If the student is not present, punctual and ready for the class, projects cannot be completed and lectures cannot be learned. Students will be graded accordingly. The first tardy will be a warning, 5 points will be taken off for the second, 10 for the third, 25 for the fourth and a call home will be the final warning before a drop in grade. Soft skills include: Verbal, non-verba and written communication, listening and acting professionally.
Work Ethic	20%	Students must stay on task and continue to learn. These are all qualities that most employers are looking for. It is the duty of the student to learn and gain the work ethic necessary to be a productive person in this field. Students will receive a daily 100 points at the beginning of class and will drop depending on the severity of the actions. This includes: Not being on task, not working on the project assigned, not having the necessary tools to work and fraternizing.
Projects	40%	Grades are based on the timely completion and craftsmanship of projects.
Safety & clean up	10%	Students will be graded on safety (wearing proper eye gear, environmental awareness, using tools correctly) and if they have kept their stations and the shop clean. Although this may seem like a small percentage of the grade, if students are practicing procedures that are unsafe to themselves and/or others it will result in a drop in grade of failure of the class.
Exams & Quizzes	10%	Students will be graded on their knowledge of safety and materials learned in class.

COURSE SCHEDULE:

Week 1: Introduction	
Week 2 – Week 3: Measuring	<ul style="list-style-type: none"> ● Tape Measures, rulers, architect rulers, speed squares and framing squares will be introduced ● Worksheets on lengths, areas and volumes will be provided ● Quiz at the end of unit
Week 4 – Week 5: Machine Safety and Operation	<ul style="list-style-type: none"> ● All machine and hand tools will be introduced ● Quiz upon completion of each tool
Week 6 – Week 7: Construction Building Materials	<ul style="list-style-type: none"> ● Different materials will be introduced ● Quiz at the end of unit
Week 8 – Week 10: Building Codes and Standards	<ul style="list-style-type: none"> ● State building codes in different trades will be discussed ● Quiz at the end of unit
Week 11 – Week 13: Introduction to Blueprints	<ul style="list-style-type: none"> ● Residential/commercial plans will be discussed ● Identification of schematics, layouts and symbols ● Cut-lists and take-offs ● Quiz at the end of unit
Week 14 – Week 17: Framing	<ul style="list-style-type: none"> ● Framing a structure will be introduced including identification and installation of components ● Grades will be based on projects built
Week 18 – Week 21: Roof Finishing	<ul style="list-style-type: none"> ● Application of roofing material will be done ● Components of roof finishing will be introduced including identification and installation ● Grades will be based on projects built
Week 22 – Week 24: Exterior Components of Buildings (Windows, Doors, Wall & Trim)	<ul style="list-style-type: none"> ● Components of exterior installation will be introduced including identification and installation ● Grades will be based on projects built
Week 25 – Week 27: Drywall	<ul style="list-style-type: none"> ● Application of drywall and techniques of finishing interior walls ● Grades will be based on projects built
Week 28 – Week 31: Electrical Wiring	<ul style="list-style-type: none"> ● Components of electrical wiring and fixtures will be introduced, applied and constructed ● Grades will be based on projects built
Week 32 – Week 35: Plumbing	<ul style="list-style-type: none"> ● Components of plumbing will be applied and constructed ● Grades will be based on projects built

COURSE CONTRACT

Student Contract

Name of School/Room Number: Mission Valley ROP/ 602

Course Name: Construction Technology 1

Instructor: Mr. Bui

Student:

I have received a copy of the course syllabus. I agree to abide by all of the standards, requirements and classroom rules. I promise to complete my assignments on time.

Student: Print Name

Student: Signature

Date

Parent:

I have read and discussed this syllabus with my student. My student and I are aware of the expectations of this course. I give my student permission to participate in all activities and discussion related to this course.

Parent: Print Name

Parent: Signature

Date

Parent Cell phone

Parent Home phone

Parent Email