# Mission Valley ROP Automotive Technology Syllabus 2024 - 2025

"You have to know how it works, to figure out why it doesn't."

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Class Days & Hours: Monday-Friday: #1 - 8:30am - 10:30am

#2 - 10:40am - 12:00pm #3 - 1:45pm - 3:45pm

Room Number: Mission Valley ROP Auto Shop, Building 2, Room 241

#### Overview of the Course

Modern automobiles are amazing, complex machines. The purpose of this course is
to introduce the student to the various systems of the automobile and to teach the
student basic skills necessary for further education in the field. There will be both
classroom and hands-on learning.

# **Course Objectives:**

- Practice general shop, tool, and equipment safety
- Demonstrate proper usage of basic hand tools, as well as specialty tools
- Understand types and usage of fasteners
- Be able to perform basic automotive math
- Understand service and maintenance intervals
- Understand usage of automotive reference materials
- Understand the operation of the four-stroke engine
- Understand the components and principles of an automotive powertrain
- Understand the components and principles of fuel and ignition systems
- Understand the components and principles of starting and charging systems
- Understand the components and principles of brake systems
- Understand the components and principles of steering and suspension systems
- Understand basic automotive electricity
- Understand green and hybrid technology in modern vehicles
- Learn to analyze and solve problems using a logical diagnostic procedure
- Learn to work as part of a team
- Practice professionalism and develop career building skills
- Communicate with appropriate vocabulary

## **Supplies Provided**

- Fundamentals of Automotive Maintenance and Light Repair by Kirk VanGelder, Jones & Bartlett Learning, 2020
- Maintenance and Light Repair Technician, Luke D. Thompson, G-W Publisher, 2023
- Electric Vehicles, Sean Bennett, G-W Publishers, 2024
- ADAS Zack / Shadbolt / Brown, G-W Publishers, 2024
- · Lab materials for hands-on training
- Necessary tools and equipment

## Supplies Needed (Every Day)

- Pencil or pen (black/blue only)
- Notebook or lined paper

## Safety

Safety is our #1 priority. The Auto Shop has many hazardous situations. The student should attempt using the equipment only after receiving instructions from the instructor and PASSING the Shop Safety Exam. Each student must take and pass the safety test with a perfect score. There will be plenty of chances to get a perfect score on the safety test. If the student absolutely cannot pass the safety test, it will be strongly recommended they take a different class. The student must always be aware of any dangerous situations with respect for yourself, your classmates and equipment. In addition, there will be safety tests for specific equipment, which must also be passed with a perfect score. Any infraction of established safety rules may also result in dismissal or a negative affect to their grade.

Long hair must be tied back and all jewelry removed before entering the shop. No headphones, no cell phones or other electronic devices are allowed in the shop or the classroom without instructor permission. Protective clothing (coveralls, shop coats, or other appropriate clothing), must be kept clean and in good repair. No open toe shoes or sandals, no shorts or tank tops. There are some lockers provided for storage if needed.

Safety glasses are to be worn at ALL times while working in the auto shop and yard. **This is NOT optional.** Standard safety glasses and over-prescription glasses will be provided. You are allowed to provide your own glasses only if they are ANSI Z87/Z87+ rated.

## Cleanup

At the end of class, each and every student is responsible for cleanup.

- All work is to stop when told to (last 20 min of the class.)
- The tools are to be cleaned and correctly put away in their respective place.
- The area where the student was working is to be cleaned.
- When all shop duties are completed, the students will return to the classroom, to their seats for dismissal
- Students are NOT to crowd around and line up at the door

Students will not be dismissed unless the shop is secure, all tools are returned, and all students are in their seats.

# All students will participate in a once a month shop and classroom clean-up.

## Attendance, Participation and Citizenship

This is an interactive class and the course work deals with issues that significantly affect a student's success on the job. Much of the work will be done in class. Because of this, the work may be difficult to make up. 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 classes multiple times, your grade will be adversely affected.

If a student is absent, an email (preferred, jfinley@mvrop.org) or an explanation call to the MVROP front desk (510-657-1865) is expected and required.

#### **Classroom Rules**

Students are to:

- Work safely, efficiently, and cleanup their mess
- Arrive to class on time, be prepared, and act professionally at all times
- Show respect for instructor and staff, for fellow students, and for our facility and tools
- Abide by MVROP student policies

# Students are NOT to:

- Use ANY electronic devices unless directed by instructor.
- Dress inappropriately (any clothing with disrespectful or gang writing, or any violation of the MVROP Dress Code), no hats or sunglasses permitted
- Enter the instructor's office without permission, or touch the instructor's computer at any time.
- Use tools from instructor's toolbox without permission.
- Leave class without being dismissed by the instructor.

## Vehicle rules

Students are encouraged to bring vehicles to work on, if the repairs needed are appropriate for the student's experience. Automotive Technology 2 students are requested to provide projects that will provide them with opportunities to further their knowledge. A permission slip must be filled out, and instructor must give prior approval for repairs. Student must have a valid driver's license to bring a vehicle into the yard or shop. No vehicles should be brought into yard unless they are to be worked on <u>and</u> the instructor has given permission.

# **Grading Policy**

Grading is based on your completion of all assignments, attendance, participation and professionalism, and quizzes and tests. Letter grade will be based on total points available: Grade weighting (may be adjusted by instructor):

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70% Participation and Professionalism (Attendance, Safety, Effort, Behavior/Attitude, and Employability) Application (Shop tasks, Projects)
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30% Theory (Assignments/Chapter Work) Exams and Quizzes

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A 90 - 100 %
B 80 - <90%
C 70 - <80%
D 60 - <70%
F <60%
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Students who complete Automotive Technology 1 or 2 with a grade of 'B-' or better are eligible for a certificate of completion of the corresponding class.

Students wishing to take Automotive Technology 2 must pass Automotive Technology 1 with a B- or better and demonstrate appropriate behavior, safety, and work ethic.

Automotive Technologies 1 course qualifies for UC a-g "G" credits. Automotive Technologies 1 course qualifies as an AP course at the college level. **Confirm with your school counselor.** 



# **MVROP "SLO" SCHOOL LEARNING OUTCOMES**

#### **WORKPLACE BASIC SKILLS AND BEHAVIORS**

- o Apply skills learned in class
- o Analyze information and make decisions
- o Communicate verbally and in writing
- o Work independently and as a team member in a diverse workplace
- o Work reliably, responsibly, and ethically

#### **CAREER TECHNICAL SKILLS**

- o Demonstrate occupational competencies
- Use appropriate technology
- o Understand and practice occupational safety standards
- o Demonstrate an awareness of how a business or industry functions

#### JOB EMPLOYMENT SKILLS

- o Develop a plan to achieve career goals
- Use effective job search strategies
- o Demonstrate an awareness of the importance of lifelong learning



# MISSION VALLEY ROP Policies and Procedures for High School Students 2024- 2025 School Year

#### **ATTENDANCE:**

- 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 classes 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 MVROP 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 a tardy. Tardiness reduces instructional 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 classrooms when class is in session. Students are to present their hall pass when asked by a school official.

#### **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 from harassment, intimidation or bullying.
  Mission Valley ROP prohibits harassment, bullying, hazing, or any other form 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.
- All incidents of bullying and harassment should be reported to administration for resolution.

#### **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, bandanas, sunglasses, etc.) Applying makeup must be done outside of class. At 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.
- Picture Identification Badges must be worn by MVROP students at internship sites.

#### **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 parent is required.
- Once on campus, students may not leave Mission Valley ROP campus during school hours without proper authorization. Unauthorized student 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 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 MVROP such as Grub Hub, Door Dash, or pizza delivery except when pre-approved by Instructor for a class party. If a food delivery comes through MVROP buildings, the food will be disposed of.

## 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 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 until at least 24 hours have passed since last fever without the use of fever-reducing medications, and symptoms (e.g., cough, shortness of breath) have improved.
- Should you have more questions on when it is safe to return to school, refer to the COVID-19 School Guidance at acoe.org.

Note: Student and Parent/Guardian <u>must</u> sign and return this page provided you understand the class syllabus.

I have read and agree to abide by the rules and regulations of the Automotive Technology course as described in the above syllabus.

Print Student Name	
	Date
Student Signature	
Student email	Student Cell phone number
Print Parent/Guardian Name	
	Date
Parent/Guardian Signature	
Parent/Guardian email	Parent/Guardian phone number
Parent/Guardian email	Parent/Guardian phone number

# Movie/Video Permission Slip

As a rule within our school system, we require permission from parents to screen certain films for your child during class hours. Throughout the year, we may show a variety of different movies or videos that supplement our curriculum, whose ratings may range from G to PG-13. Certain scenes can and will be omitted when deemed too graphic. We firmly believe that showing certain films will greatly enhance student understanding of the subject material, as well as provide an alternate (and entertaining) route for information absorption. Rest assured, however, that this viewing experience is not solely based upon entertainment, as in-class discussion and activities will relate the film back to the curriculum. Thank you for your time and attention.

Yes, I give my son/daughter permission to view curriculum and school appropriate full-length movies rated G to PG-13.	
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Parent Name:	Signature:
Student Name:	Date:
Arti	ficial Intelligence (AI)
Valley ROP is looking to incorporate Artifithis tools is ChatGPT, an AI language mod	rovide a dynamic and engaging learning experience, Mission ficial Intelligence tools into our instruction. An example of the developed by OpenAI. ChatGPT can be an educational including research, creative writing, problem-solving, and
your child to use ChatGPT and other AI p	privacy laws and regulations, we require parental consent for rograms. Only students who are 13 or older are eligible to red to utilize AI, and if permission is not granted, will be lo not require the use of these tools.
Students will be advised <u>against</u> sharing poduring their use whenever possible.	ersonal information with ChatGPT and other AI tools
Students are expected to complete assignments independently and with integrity. The use of artificial intelligence (AI) tools to complete or assist with assignments without permission is strictly prohibited. Any use of AI to plagiarize, cheat, or misrepresent one's own work will result in disciplinary action, which may include a failing grade on the assignment, a failing grade for the course, and/or further action as outlined in the school's academic integrity policy.	
, , , ,	hild to use AI tools as a part of their educational activities at e purpose and data usage as outlined above.
Student Name:	Date:
Parent/Guardian Name:	

Parent Signature: