



MCAP 130 Fuel and Emission Systems Section Name Section Credit Hours Credits

Syllabus

Course Information

Meeting times and location: section meeting_times section location

Catalog description: A study of the fuel and emission control systems used on current model Chrysler FCA vehicles. Troubleshooting method for Chrysler FCA fuel, electrical, and electronic systems. Instruction will include diagnostic procedures on fuel injected engines, including direct injections. Engine conditions, and diagnosis and repair of engine sensors and system monitors. Students will learn to use an exhaust gas analyzer, oscilloscopes, and other special test equipment.

Prerequisites: MCAP-120

Terms offered: Spring Only

Section-specific Course Description:

Course Level Objectives

Complete Chrysler Level 1, 2 requirements for:

- Engine Repair and Performance
- Diesel Systems

Required Texts and/or Materials

All textbooks are provided by Chrysler and accessible to the students online on the Chrysler Performance Learning Center.

Required Technology and Software

- Canvas
- Chrome, Safari, or Firefox

Course Requirements

Students will do the following activities:

Chrysler Performance Center

- Engine Performance WBT and ILT for Level 1 and 2
- Diesel Systems WBT and ILT for Level 1 and 2
- 100% Natef priority 1 tasks
- 80% Natef priority 2 tasks
- SPECIFIC LEARNING OUTCOMES

Upon successful completion of the course, the student will be able to...

- Demonstrate safe techniques for servicing Fuel Systems.
- Diagnose & replace fuel regulation components
- Test the fuel delivery system. (Mechanical and Electrical)
- Diagnose and repair an exhaust gas recirculation system.
- Diagnose and repair an evaporative emission system.
- Diagnose and repair an inlet air management system.
- Diagnose and repair an early fuel evaporation system.
- Diagnose and repair an air injector system.
- Test for water and alcohol in gasoline and perform a Reid Vapor pressure test.

Other Classroom Policies and Expectations

Participate in class and lab activities.

Be prepared to perform your share of work in team and lab settings

Grading

Final grades are calculated based on the following...

Below is the grading rubric for final grade calculation:

Category	Weight
Quizzes & Assessments	40%
Shop Work	30%
Final Assessments	30%

Note: Attendance is not directly entered as a grade. Students missing more than 10% of the scheduled days will receive an "X" grade and no credit.

Below is the grading percentage-to- letter grade scale:

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

Course Time Commitment

Expect to spend 5-7 hours per week outside of class on assignments:

- Web based training
- Chapter and text study
- Other assignments

Canvas Participation and Expectations

Students should check canvas often for due dates, assignment instructions and announcements.

Often assignments will have specific deadlines, instructions, and submission requirements.

Participation and Attendance Policy

Class Attendance and Participation Expectation:

Face-to-Face – Students are expected to attend and participate in class regularly. Any student missing more than 10% of consecutive class time, (For example, in a regular 15-week class that meets twice a week, this equates to the student missing 3 consecutive classes) without consultation with the instructor may be considered as having abandoned the course.

Failure to Meet Class Participation Expectation:

Students who fail to meet participation expectations will have their last date of attendance recorded. This date will be used to recalculate any financial aid received/veteran's benefits received, and the student may be required to repay the institution/government. If the student does not drop the course, an 'X' grade will be recorded. An 'X' grade impacts the grade point average the same as an 'F'.

Participation and Attendance Policy

Because of the class emphases on hands-on lab activities, consistent attendance is required. Students that are not in class when attendance is taken will be counted absent. Personal errands should be scheduled for times that will not conflict with class schedule. Students will not be given make-up work.

Federal and State education guidelines has stated that students missing 10% or more of their classes should not be eligible to pass that class. The SJC Automotive Department uses the attendance rubric below when calculating your attendance.

Also, remember that late arrivals are counted absent.

If you miss more than 10% of your classes you will receive an "X" grade. (see page 6) Refer to the following chart:

% Classes Missed	Attendance
0% - 10%	OK
11% - 100%	X
An 8 week 5 days per week class has 40 days. 4 days = 10% A night class will only have 16 days. 1.6 days = 20%	

Instructor Response Times & Regular Interaction Expectations

I may be contacted by text or phone. My office hours are Monday, Wednesday 1:30 – 2:00

I will try to have papers graded and posted within 2 school days

Key Dates to Remember

[Full Academic Calendar](#)

Course Schedule

Due dates:

January 22 - Engine Performance WBT level 1 modules completed

January 26 - All Engine Performance WBT modules up to Engine controls completed

Technical Support

Technical support is available through the San Juan College Help Desk 24/7/365. The help desk can be reached at 505-566-3266 or by creating a ticket at [San Juan College Help Desk](#).

For password reset and Canvas support, visit the [Student Technology Guide](#) website.

Accessibility/Privacy Policies for all Technology Tools Used

[Accessibility/Privacy Policies for all Technology Tools Used](#)

Student Support

At San Juan College, we are committed to supporting your academic success and overall well-being. We recognize that college life can be challenging and stressful, impacting both learning and personal health. We are here to help you succeed.

Academic Support and Resources

We provide a range of academic support services to help you stay on track on your educational journey. Free resources include tutoring, computer loans, life skills workshops, and so much more. Visit the [Academic Support and Resources](#) webpage to learn more about support and resources available through Academic Advising, the Tutoring Center, the Student Resource Center (formerly Student Achievement Center) and the Testing Center.

Student Support and Resources

If you or someone you know could benefit from counseling, accessibility services, career exploration, veteran transitional assistance, or any of our other support services, visit the [Student Support and Resources](#) webpage where you'll find detailed information about various resources available to you as an SJC student.

We encourage you to take advantage of these free resources to enhance your college experience and ensure your success.

College Policies and Resources for Current Students

The [Student Handbook](#) provides information on student support, student organizations, and student conduct policies at San Juan College.

The San Juan College catalog outlines the [Academic Policies](#) students need to know.

Healthy and Safe Practices for Being on Campus

We want a healthy and safe campus for students, faculty, staff, and guests.

Contagious diseases and your responsibility:

If you have COVID-19 symptoms, fever, flu or even the common cold, you should stay home. Do not come to campus if you are feeling sick. Contact your instructor about missing class (and review your instructor's policies on missed or late work). Being sick does not necessarily excuse you from completing your work on time.

Safety on campus and your responsibility:

If you are on campus and experience or witness an emergency, call 9-1-1 first and then the Department of Public Safety at 505-566-3333 (or just 3333 if calling from a campus phone).

When you are on campus, be aware of your surroundings. If you need an escort to your vehicle, call 505-566-4444 (DPS non-emergency line) or 505-215-3091 (officer on duty line).

The College will send information for campus emergencies through SJC AlertAware, email and the webpage. Stay informed and stay safe.

Inclement Weather Information

Students will receive notification of class delays and cancellations due to inclement weather via the SJC AlertAware and SJC student email. Face-to-face classes will not meet in person; however, students are advised to check with instructors about alternative meeting options, as some may choose to meet via zoom. Hybrid classes will meet as scheduled via zoom. For questions regarding your class delay or cancelation, please contact your instructor.

Online Course Fee

Online Courses - San Juan College requires all online courses to include some form of assessment to demonstrate the mastery of course objectives. This could include exams, capstone projects, e-portfolios, presentations, final papers or other appropriate assessments. The use of a proctoring platform, plagiarism detection software or other method to ensure that assessments are completed by the enrolled student is required.

A course fee of \$5.00 is assessed for all online courses at San Juan College to cover the cost of the above services. Students who are required to take a proctored exam and choose to use a physical testing center outside the SJC Testing Center or SJC Disability Services will be responsible for the cost of using that center.