



AUBO 144 Sheet Metal Welding Section Name Section Credit Hours Credits
Syllabus

Course Information

Meeting times and location: section meeting_times section location

Catalog description: This course is designed to introduce the students to welding safety, procedures, set up, tools, and terminology used in sheet metal welding. The students will be exposed to STEEL MIG welding, ALUMINUM MIG welding, and MIG BRAZING. The course may also include plasma torch industry safety. This course will provide the students with the basic knowledge and hands on experience to successfully demonstrate proper sheet metal welds in a variety of joints and types.

Terms offered: All Semesters

Section-specific Course Description:

Course Level Objectives

AUBO-144 SHEET METAL WELDING

This course is designed to introduce the students to steel MIG welding procedures, set up, and terminology used in sheet metal welding. The students will be exposed to all areas of MIG, and plasma torch industry safety. This course will provide the students with the basic knowledge and hands on experience to successfully demonstrate proper sheet metal welds in a variety of joints and welding positions.

Required Texts and/or Materials

I-CAR Professional Development Program - Education Edition

Free 2 year subscription through San Juan College

Required Technology and Software

- Canvas
- Chrome, Safari, or Firefox

Course Requirements

Students will do the following activities:

- Viewing online presentations & taking follow-up quizzes.
- Written work including taking notes, writing short essays, and filing out repair & paint plans.
- Hands-on work in shop & classroom.
- Working in groups
- Cleaning the shop & work areas
- Moving vehicles
- Completing individual projects & labs

Grading

Final grades are calculated based on the following...

Grade Weights	
I-CAR Assignments	5%
ATTENDANCE	10%
WRITTEN	15%
PARTICIPATION	20%
LAB	30%
FINAL EXAM/PROJECT	20%

Course Time Commitment

Students can expect to work on their online assignments for 1-3 hours (outside of class) per week.

Canvas Participation and Expectations

Students will be expected to log into canvas daily.

Participation and Attendance Policy

BREAKING DOWN THE GRADE

The Auto Body program is designed to simulate a progressive shop environment. All aspects of the student technicians performance is taken into consideration when formulating a grade. The grading system is as follows:

- 5% I-CAR Course Grades (ICAR)
- 10% Attendance (ATT)
- 15% Written assignments and Quizzes/Midterm (WRT)
- 20% Participation (PART)
- 20% Final test (FIN)
- 30% Lab work (LAB)

5% I-CAR

At the end of every I-CAR assignment (either online or in class), each student will complete a graded quiz. The grade earned on that quiz will be the grade entered for that courses ICAR Grade.

10% Attendance

Roll will be taken at the beginning of each class. If you are not present during roll call, you will be considered absent. Success in this program depends on your participation in shop exercises and lectures. If you are not present, you WILL NOT pass. Verified emergencies will be excused. Appointments should be scheduled outside of classroom time whenever possible. Students will be allowed to make up 2 days per 8 week term.

ATTENDANCE GRADING SCALE

10 WEEK CLASSES

Absences

- **100%** (0 absences)
- **66.6%** (1 absence)
- **33.3%** (2 absences)

- **0%** (3 or more absences)

8 WEEK CLASSES

Absences

- **100%** (0 absences)
- **66.6%** (1 absence)
- **33.3%** (2 absences)
- **0%** (3 or more absences)

6 WEEK CLASSES

Absences

- **100%** (0 absences)
- **50%** (1 absence)
- **0%** (or more absences)

15% Written Assignments, Quizzes, and Midterms

Any written course work including assignments delivered by means of Canvas, Mindtap, James E Duffy Text, or industry software utilized by the Auto Body Program.

20% Participation

The Participation part of your grade is designed to influence positive work ethic. The factors taken into consideration are one's ability to work with others, wearing proper work attire and practicing safety and cleanliness in the work environment. Completed JOB SHEETS are another means of grading your participation.

20% Final Exam

Written and/or Lab exam administered at the conclusion of every Auto Body Section. The END of PROGRAM EXAM(s) through I-CAR will also be factored in to every students Final Grade.

30% Lab Work

Lab work and performance will be assessed using a 5 point system. Five would indicate that the student can complete the task using industry standards, without supervision in real time. The mark of zero would indicate that the student had no exposure to the subject material. The industry consists of

a vast amount of information and skill areas. Our goal is to prepare technicians to a level of mastery of the basic skills needed to perform in a collision repair facility. Also to provide students with an overall exposure and understanding of all things related to auto body. A performance evaluation task list will be used as a tool to track individual students understanding of the concepts within the collision repair industry. These task lists are created based on ASE and I-CAR standards and evolve with the advancements of the industry's technology.

Grading Scale

A 100-93

B 92-85

C 84-77

D 76-69

F 68-0

Instructor Response Times & Regular Interaction Expectations

Typical response time to reply to phone calls & emails is 1 day. Typically grades are entered on the due date of the assignment and handed back immediately.

Key Dates to Remember

[Full Academic Calendar](#)

Course Schedule

144 COURSE OUTLINE: SHEET METAL WELDING

144-1 Safety Module

- 144-1A PART Shop Safety Layout

100 pts

- 144-1B ICAR Intro to Personal Safety (IPS00e)

100 pts

144-2 TOOL SAFETY & TECHNOLOGY FOR SHEET METAL WELDING

- 144-2A ICAR ITM02e Intro to Tools, Equipment, & Attachment Methods 2

100 pts

- 144-2B WRT Welding Equipment & Tool Outline

100 pts

- 144-2C WRT Tool ID Quiz & Demonstration

100 pts

144-3 MIG (GMAW) WELDER/METALLURGY

- 144-3A PART Steel GMA (MIG) Welding Theory (WCS06e)

100 pts

- 144-3B WRT M.I.G. Safety

100 pts

- 144-3C WRT M.I.G. Diagram Drawing

100 pts

- 144-3D PART MIG Welder Set Up, Maintenance, Welding, & Destructive Tests

100 pts

144-4 MIG (GMAW) WELDING

- 144-4A LAB Butt w/ Backing & Plug Welds

100 pts

- 144-4B LAB T-Weld & Corner Weld

100 pts

- 144-4C LAB Lap Weld & Open Butt Joint Welds

100 pts

- 144-4D LAB Welding a Structural "Boxed" Section Using Butt w/ Backing & Plug Welds

300 pts

144-5 PLASMA CUTTING

- 144-5A PART Plasma Cutting Extra Credit

100 pts

- 144-5B LAB Patch Panel Replacement Extra Credit

100 pts

144-7 FINAL EXAM

- 144-7A FIN (LAB)

500 pts

- 144-7B FIN (WRT)

100 pts

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.