

The course will cover unibody, frame measurement, and repair. This course also covers suspension and alignment repair. Safety will be emphasized throughout the course. Prerequisite: AUBO 125. Semester offered: Fall and Spring.

AUBO-236 Advanced Auto Body Repair II 9 cr.
The Auto Body student who has successfully completed AUBO 125 and AUBO 135 will be able to specialize in collision repair and/or automotive refinishing. This course is designed for the upgrading of a student's ability in the auto body field. Prerequisite: AUBO 135. Prerequisite or Corequisite: AUBO 235. Semester offered: Fall and Spring.

AUBO-240/241 Body Shop Management I and II 6 cr.
This course is offered to degree seeking and advanced auto body students. All phases of body shop management will be covered. Prerequisite: AUBO 235. Semester offered: Fall and Spring.

AUBO-280 Cooperative Education 1-18 cr.
Covers the industrial application of the auto body industry. Students will be supervised and evaluated jointly by the Director of Cooperative Education and the employer. Prerequisites: AUBO 235, AUBO 236, and WELD 237. Semester offered: Fall and Spring.

AUTOMOTIVE TECHNOLOGY

AUTE-111 Steering and Suspension 5 cr.
A theory and shop course to introduce the student to steering geometry, front and rear suspension service, wheel alignment, power steering service, and wheel balancing. Safety is emphasized. Corequisite: AUTE 112. Semester offered: Fall.

AUTE-112 Brakes 5 cr.
A study of the theory and diagnostic procedures of disc and drum brake systems, including anti-lock brakes. Instruction on machining of discs, drums, and rebuilding of brake hydraulic components will be given. Safety is emphasized. Corequisite: AUTE 111. Semester offered: Fall.

AUTE-113 Basic Electrical 4 cr.
Basic fundamentals of electrical theory, magnetism, current flow, Ohms Law, series, parallel, and series parallel circuit calculations. The use of basic meters and their application to circuit diagnosis will be taught. Safety is emphasized. Semester offered: Fall and Spring.

AUTE-114 Electrical Systems 6 cr.
Diagnosis of the general electrical system to include battery, starting, charging, lighting, gauges, horn, wiper/washer and accessories using meters and schematics with standard troubleshooting procedures. Prerequisites or Corequisite: AUTE 113. Corequisite: AUTE 117. Semester offered: Fall and Spring.

AUTE-115 Manual Drive Train and Transaxles 6 cr.
The theory and repair of manual transmission, differentials, clutches, transaxles and drive axles will be covered. Diagnosis and troubleshooting will be stressed. Safety is emphasized. Corequisite: AUTE 116. Semester offered: Spring.

AUTE-116 Auto Transmission and Transaxles 6 cr.
The operating principles of automatic transmissions, diagnosis, electrical and electronic controls, and repair will be covered. Safety is emphasized. Semester offered: Spring. Corequisite: AUTE 115.

AUTE-117 Engine Performance 12 cr.
This course will cover the use of engine performance test equipment, fuel system operation, fuel injection, ignition systems, starting and charging systems. A systematic method of troubleshooting will be taught. Safety is emphasized. Prerequisite: AUTE 113. Co/prerequisite: AUTE 114. Semester offered: Spring.

AUTE-118 Engine Repair 8 cr.
This course will cover the principles and operation of the internal combustion engine. Engines will be properly disassembled, inspected, measured, and reassembled. Safety is emphasized. Corequisite: AUTE 119. Semester offered: Fall.

AUTE-119 Heating and Air Conditioning 4 cr.
A theory and shop course to teach the student automotive air conditioning and heating systems as they apply to automotive vehicles. The use of test equipment will be emphasized and the student will learn to diagnose, evacuate, recover refrigerant and recharge air conditioning systems. Safety is emphasized. Co/prerequisite: AUTE 113. Corequisite: AUTE 118. Semester offered: Fall.

AUTE-280 Cooperative Education 1-9 cr.
The student will be employed at an approved work station which will provide relevant learning experiences that are directly related to the student's career and educational goals. The student will be supervised and evaluated jointly by his/her employer and San Juan College personnel. Semester offered: Fall and Spring.

AVIATION TECHNOLOGY

AVIA-110 Aviation Ground School 3 cr.
Covers the basic study of federal aviation regulations, meteorology, navigation, theory of flight, use of radar and general service of aircraft. Semester Offered: On Demand.

AVIA-120 Commercial Ground School 4 cr.
Covers the basic study of meteorology, navigation, theory of flight, use of radar, and the study of the aircraft power plant and general service of aircraft. Corequisite: AVIA 145. Semester offered: Fall, Spring and Summer.

AVIA-135 Airline Operations 3 cr.
Acquaints the student with the development and operation factors of airlines since passage of the Airline Deregulation Act of 1978. Topics include flight operations, operating specifications, types of services provided, domiciles, training, labor relations, communications and pertinent FARs specific to Mesa Air Group. Crew Resource Management concepts of communication, problem solving, group dynamic, work load management, and situational awareness will be stressed. Corequisite AVIA 145.