



Note to Instructor: Replace the placeholder text beneath the headings with the appropriate information for your course. Please note that all sections, with the exception of "Other Course Information," are required elements.

Basic Course Information

Semester:	Spring 2021	SPRING	2021
Course Title & #:	AUT 120	Email:	Carlos.araiza@imperial.edu
CRN #:	21684	Webpage (optional):	
Classroom:	1201-1100	Office #:	3121
Class Dates:	16 Feb- 11 Jun2021	Office Hours:	TBA ONLINE
Class Days:	T-R	Office Phone #:	442-231-9622
Class Times:	R 5:30pm-9:45pm ONL-ZM R 5:30pm-9:45pm 1200 T 5:30pm-7:35pm ONL-ZM T 5:30pm-7:35pm 1100 T 7:40pm-9:45pm 1200 T 7:40pm-9:45pm ONL-ZM	Emergency Contact:	760) 355-6361 (Dept. Office) (760) 355-6308 (campus Security) (760) 355-6217 (Dean's Office)
Units:	4	Class Format:	Hybrid(Online Lecture/ Face to Face Lab)

Course Description

Review and advanced study of internal combustion engine operation and the use of the machine shop equipment and machines for rebuilding the diesel and gasoline engines.

Recommended Preparation .AUT 110 or two years of high school in auto mechanics.

Course Prerequisite(s) and/or Corequisite(s)

Recommended Preparation Auto 110 or Diesel AUTO 120 maintenance and repair

Student Learning Outcomes

Upon course completion ,the student will have acquired new skills and be able to.

- 1 Diagnose engine blocks ,cylinder heads and valve train components (IL01, IL02, IL03)
- 2 Repair and replace engine assembly components (IL01, IL02,IL03)
- 3 Assemble engines and their related parts.(IL01, (IL02 .IL03)



Course Objectives

Student will be able to.

- 1 To prepare graduates for employment as automotive and diesel mechanics in the preparation and use of the machine shop equipment
- 2 Comply with all safety shop procedures associated with the use of the machine shop equipment.
- 3 to understanding the basic aspect of machining engine parts and components.
- 4 Use the proper steps and procedures to disassembly, machine and assembly engine sections.

Textbooks & Other Resources or L

Modern Automotive Technology (classroom) 7TH Edition- ISBN 978-1-61960-370-7

Course Requirements and Instructional Methods

Lectures, textbook, workbook, assignments .worksheets, video .internet information, live demonstration quizzes, mid-term and final test and out –class assignments.

Course Policies

Required information.

The instructor will provide a tentative overview or the reading assignments, test and other activities for the duration of the course.

There will be a mid-term and final exam .Each will be 25% of your grade and the final exam will have 100 questions.

Quizzes will make up 25% of your grade and the last 25% will be on projects assigned to the lab participation.

Other Course Information

Percentages

25% Completed Assignments	A
25% Quizzes	B
25% Mid- Term	C
25% Final Exam	D

Exams will consist of information from class lectures, reading assignments, homework, videos, and lab activities.

Make sure to.

- 1 to bring your textbook every lecture
- 2 To bring a notebook and pencils
- 3 TO BE ON TIME FOR THE CLASS
- 4 To participated during lectures and lab activities.

IVC Student Resources

IVC wants you to be successful in all aspects of your education. For help, resources, services, and an explanation of policies, visit <http://www.imperial.edu/studentresources> or click the heart icon in Canvas.

Anticipated Class Schedule/Calendar

[Provide a tentative overview of the readings, assignments, tests, and/or other activities for the duration of the course. A table format as in the example below may be used for this purpose.]

Date or Week	Activity, Assignment, and/or Topic	Pages/ Due Dates/Tests
Week 1	Course Introduction/Shop safety/Tools and Equipment	
Week 2	Automotive parts/Hand tools/ Intro to performance Measurements	
Week 3	Automotive Measurement tools and Measurements of Systems.	
Week 4	Engine Fundamentals	
Week 5	Engine Top End Construction	
Week 6	Engine bottom End Construction	
Week 7	Midterm Exam	
Week 8	Spring Break	
Week 9	Engine Front End Construction	
Week 10	Engine Size and Performance Measurement	
Week 11	Engine Mechanical Problems	
Week 12	Engine Lubrication Systems/Lubrication Diagnosis and Repair	



Week 13	Engine Assembly Specification and Procedures	
Week 14	Engine Clearance Specifications	
Week 15	Troubleshooting Lubrication Systems and Oil Pressure adjustments	No Classes Fall Break
Week 16 Week 17	Tune Up Specifications Final Exams	Final Exam

*****Tentative, subject to change without prior notice*****