

Class start Date :14 February

Class end: 10 Jun, 2022



IMPERIAL VALLEY COLLEGE

Basic Course Information

Semester:	Spring 2022	Instructor Name:	Jose Lopez
Course Title & #:	Mechanical Automatic Transmissions	Email:	Jose.lopez@imperial.edu
CRN #:	20433	Webpage (optional):	
Classroom:	1101	Office #:	1104
Class Dates:	Feb. 14 - Jun 10	Office Hours:	1.00 pm – 2:00 pm
Class Days:	T-TH	Office Phone #:	760-355-6163 - CELL 760-791-9574
Class Times:	T-TH 6: 00 – 10:15 pm	Emergency Contact:	Contact me by cell phone, text or E-mail.
Units:	4 UNITS – Lec :2 hrs -Lab 6 hrs	Class Format:	

Course Description

Design construction, mechanical, and hydraulic function and repair of the Automatic Transmission.

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

[Paste in the course prerequisite(s) and/or corequisite(s) from the COR, located at <https://imperial.curricunet.com/Search>]

Student Learning Outcomes

- 1. Diagnose fluid loss and condition concerns; check fluid level in transmissions with and without dipsticks; determine necessary action. (IL01, IL02, IL03)*
- 2. Inspect and replace external seals, gaskets, and bushings. (IL01, IL02, IL03)*
- 3. Disassemble, clean, and inspect transmission/transaxle. (IL01, IL02, IL03)*
- 4. Assemble transmission/transaxle. (IL01, IL02, IL03)*

IVC as an institution has adopted five student learning outcomes (SLO's). They are interconnected with each other. They will be inherent throughout this course:

- 1. [Communication](#)*
- 2. [Skills](#)*
- 3. [Critical Thinking Skills](#)*
- 4. [Information Literacy](#)*
- 5. [Global Awareness](#)*

Course Objectives

To prepare graduates for employment as automotive mechanics, parts and supply house technicians and service station mechanics and operators. The training program is intended to meet the entry level skill needs in the occupational field of Automotive Technology(mechanics).

Upon successful completion of this course, students will be able to:

- A. [Comply with all safety shop procedures associated with standards, air tools, hydraulic jacks, and car lifts.](#)
- B. [Have a thorough understanding of Automotive Transmissions.](#)
- C. [Describe the power flows systems of the Automotive Transmissions.](#)
- D. [Describe the proper steps and procedures to disassembly and assembly of Automatic Transmissions.](#)

Textbooks & Other Resources or Links

Modern Automotive Technology Book & Workbook, 10Th Edition.
Author: Van Gelder ISBN:978-1-64564-688-4

Course Requirements and Instructional Methods

Out of Class Assignments: The department of Education policy states that one (1) credit hour is the amount of student work that reasonably approximates no less than one hour of class time and two (2) hours of out-of-class time per week over the span of a semester. WASC has adopted a similar requirement.

Course Policies

[Describe other policies such as attendance, academic honesty, netiquette, expected classroom behavior, etc.]

Other Course Information

[Optionally, include other necessary information.]

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.]

Spring Class Schedule 2022

Classes begin: Feb. 14, 2022 – Jun 10, 2022 - Late Registration: Feb. 26 – 2022

CLASS SYLLABUS

AUT 220 -AUTOMATIC TRANSMISSIONS

Online February 16, - April 1

Textbooks: Modern Automotive Technology Book. 10TH Edition,

Author: James E. Duffy

ISBN: 978-1-64564-688-4

IMPORTANT: Midterm Exam (60 Points) Will be given on April 05, 2022

Weeks:	<u>TOPIC CHAPTERS</u>	Activities	Quiz/ Exams / Assignments
Week 1	Introduction Automatic Transmission: Shop Automotive safety Review	Review safety videos 1 ,2, 3	Safety Exam- True/ False Matching, multiple choice, and review questions
Week 2	Types of Transmissions Repair	Review Transmission videos 1 ,2, 3	Fill-in Transmission Worksheet
Week 3	Chapter #1 -Chapter Automobile Textbook:- Read pages 3-16	Chapter#1 Class Review Worksheets from workbook	Answer: Worksheets Questions pages_____ Quiz
Week 4	Chapter # 3 - Vehicle Basic tools Textbooks: Read pages 29-40	Chapter #3 Worksheets from workbook	Answer: Worksheets Questions pages:_____ Quiz
Week 5 Part I	Chapter #4 Power-Tools and Equipment Read pages :42 -52	Chapter # 4 Worksheets	Answer: Worksheets Questions pages:_____ Quiz
Part II -	Chapter # 6 Automotive Measurement Pages 67-74	Chapter # 6 Worksheets	Answer: Worksheets Pages:_____ Quiz



Week 6 Part I	Chapter #7 Service information and work order pages: 78-84	Worksheets	Answer: Worksheets Questions pages: _____ Quiz
Week 7 Part II	Watch Video - Ford Part I (AODE) Transmission	Part I Worksheets	ASSIGNMENTS: Review video questions VIDEO ASSIGNMENT
	Watch Video - Ford Part II (AODE) Transmission	Part II Worksheets	Review video questions VIDEO ASSIGNMENT
Week 8	Chapter #65 Automatic Transmission Technology Read pages: 984-1002	Chapter #65 Worksheets	Answer: Worksheets pages: _____ Quiz
Week 9	Chapter #66 Automatic Transmission Diagnosis, service and repair Read pages: 1005-1016	Chapter #66 Worksheets	Answer: Worksheets pages: _____ Quiz
Week 10 Part I	General Motors Transmission. 4L60E Watch video (Part I)	Part I Worksheets	Assignment Activity Review video questions VIDEO ASSIGNMENT
Week 10 Part II	Watch video (Part II)	Part II Worksheets	Review video questions VIDEO ASSIGNMENT
Week 11	Chapter # 67 Drive Shaft Transfer Case Technology Textbook: Read pages 1019 - 1028	Chapter # 67 Worksheets	Assignment Answer: Worksheets pages: _____ Quiz

Week 12	<p style="text-align: center;">AUTOMOTIVE TRANSMISSION WORKBOOK Activity 4L60-E – Testing Transmission Solenoids Worksheet pages:14-1 - 14-6</p>
Week 13	<p style="text-align: center;">ACTIVITY - 4L60-E - Transmission Solenoids Circuit and Diagnostic Pages 14/7 - 14-10</p>
Week 14	<p style="text-align: center;">ACTIVITY 4L60-E Transmission Electronic Control System Pages 14/12 – 14/30</p>
Week 15	<p style="text-align: center;">Class Discussions and Review <u>A.S.E.</u> Questions Chapters: - #65-66 Transmission Fundamentals and Diagnosis, Service, Repair. Worksheets</p>
Week 16	<p style="text-align: center;">FINAL WEEK EXAM</p>

****Tentative, subject to change without prior notice** - Lecture and Shop Activities**