

ONLINE:16 February – 1 April
Shop Activity: 13 April – 11 Jun



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 | Instructor Name: | Jose Lopez |
| Course Title & #: | Mechanical Automatic Transmissions | Email: | Jose.lopez@imperial.edu |
| CRN #: | 20855 | Webpage (optional): | |
| Classroom: | 1101 | Office #: | 1104 |
| Class Dates: | Feb. 16 - Jun 18 | Office Hours: | 1.00 pm – 2:00 pm |
| Class Days: | T-TH | Office Phone #: | 760-355-6507 - 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 | Class Format: | |

Course Description

Design construction,mechanical, and hydraulicfunction and repair of the AutomaticTransmission.

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

[Paste in the course perquisite(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](#)*



IMPERIAL VALLEY COLLEGE

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, 2nd Edition.

Author: Van Gelder ISBN:978-1-284-10995-5

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 2021

Classes begin: Feb. 16, 2021 – Jun 11, 2021 Late Registration: Feb. 27 – 2021

CLASS SYLLABUS
AUT 220 -AUTOMATIC TRANSMISSIONS
Online February 16, - April 1

Textbooks: Modern Automotive Technology Book. Second Edition,
Author: Van Gelder
ISBN: 978-1-284-10995-8
IMPORTANT: Midterm Exam (60 Points) Will be given on April 01, 2021

TOPIC CHAPTERS

| Weeks: | Introduction Automatic Transmission: | Online Activities | Online Quiz/ Exams / Assignments |
|----------------|---|---|---|
| Week 1 | Shop Automotive safety | Review safety videos 1 ,2, 3 | Safety Exam 87 True and False Questions |
| Week 2 | Types of Transmissions Repair | Review Transmission videos 1 ,2, 3 | Fill-in Transmission Worksheet |
| Week 3 | Chapter #1 -Chapter Career Automotive Textbook:- Read pages 1-15 | Chapter#1 Worksheets from workbook | Answer: Worksheets Questions pages 1-6 |
| Week 4 | Chapter # 5 - Vehicle service information and diagnostic process. Textbooks: Read pages 83-101 | Chapter # 5 Worksheets from workbook | Answer: Worksheets Questions pages:32-39 |
| Week 5 | Chapter #6 Basic Tools and Precision Measuring Read pages :104 -157 | Chapter # 6 Worksheets Basic Tools | Answer: Worksheets Questions pages:41-50 |
| Part II | Chapter #7 | Chapter #7 | |



| | | | |
|-------------------------------------|--|--------------------------------|--|
| | Power Tools and Equipment Read pages: 154-193 | Worksheets Equipment | Answer: Worksheets Questions pages:52-59 |
| Week 6 | Watch Video - Ford (AODE) Transmission Part I. | Part I Worksheets | ASSIGNMENTS: Review video questions |
| | Part II - Ford Transmission Video | Part II Worksheets | Review video questions |
| Week 7 | Chapter #23 Automatic Transmissions Fundamentals Read pages: 581 - 607 | Chapter #23 Worksheets | Answer: Worksheets pages:217-225 |
| End online course 4/01/21. | | | |
| Start Shop Activity 4/13/21. | | | |
| Week 8 | Chapter #24 Automatic Transmission Fundamentals. Read pages: 608 - 625 | Chapter #24 Worksheets | Answer: Worksheets pages:226-232 |
| Week 9 | General Motors Transmission. 4L60E Watch video (Part I) | Part I Worksheets | Assignment Activity Review video questions |
| | Watch video (Part II) | Part II Worksheets | Review video questions |
| Week 10 | Chapter # 25 Hydraulic Controlled Transmission Textbook: Read pages 626 - 637 | Chapter # 25 Worksheets | Assignment Answer: Worksheets pages:233-240 |



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|---------|--|---|--|
| Week 11 | <p>Chapter # 26 Electronically Controlled Transmission Textbook: Read pages 638- 662</p> | <p>Chapter # 26 Worksheets</p> | <p>Assignment Answer: Worksheets pages:242-248</p> |
| Week 12 | <p>Chapter #27 Servicing the Automatic Transmission Axle Textbook: read pages 663-668</p> | <p>Chapter # 27 Review Worksheet questions</p> | <p>Class Reviews Servicing Transmission</p> |
| Week 13 | <p>Chapter #28 Rebuilding Automatic Transmission Transaxle Textbook: read pages: 681-705.</p> | <p>Chapter # 28 Worksheets</p> | <p>Assignment Answer: Worksheets pages:265-275</p> |
| Week 14 | <p>Class Discussions and Reviews Chapters: - #23 Transmission Fundamentals</p> | <p>#24 Hydraulic Fundamentals</p> | <p>#25 Hydraulic Electronically Controlled Transmission</p> |
| Week 15 | <p>Chapter #26 Electronically Controlled Transmission</p> | <p>#27 Servicing the Automatic Transmission</p> | <p>#28 Rebuilding Automatic Transmission</p> |
| Week 16 | <p>FINAL WEEK EXAM</p> | | |

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

Shop Activity

Section