

Manual Drivetrain & Axles

AUTO - 2130 001

Course Description

This ASE-EF accredited course is a study of the automotive manual drivetrain systems. In this lecture/lab course students demonstrate their proficiency in the design, maintenance, diagnosis, and repair of modern automotive manual transmissions & transaxles, 4-wheel & all-wheel drive systems, and drive axles. It is recommended that students take AUTO 2160 and AUTO 2120 in the same semester as this course.

Prereq: Successful completion of all TEAU (SLTC) Courses: TEAU 1010, TEAU 1050, TEAU 1100, TEAU 1140, TEAU 1150, TEAU 1160, TEAU 1210, TEAU 1240, TEAU 1250, and TEAU 1270.

Semester(s): All

Course Student Learning Outcomes

- Demonstrate proficiency in Automotive Service Excellence-Education Foundation (ASE-EF) Master Automotive Service Technology (MAST) tasks in accordance with industry standards.
- Assigned lab work to complete in a professional manner, by working in teams in automotive labs that emulate industry automotive shops.

Course Prerequisites

Successful completion of all TEAU Salt Lake Technical College (SLTC) Courses:

TEAU 1010, TEAU 1050, TEAU 1100, TEAU 1150, TEAU 1140, TEAU 1160, TEAU 1210, TEAU 1250, TEAU 1240, and TEAU 1270.

Recommended Corequisite: AUTO 2160, AUTO 2120

Transfer/Certification/Licensure/Employment Information

This automotive specialty course fulfills one of the automotive AAS degree or certificate requirements for the Automotive Program at Salt Lake Community College.

This class is designed to teach:

- the information and skills required by the discipline.
- vital workplace skills.
- strategies that can be used for life-long learning.

Education is much more than the acquisition of facts; it is being able to use information in meaningful ways to enrich one's life.

Engagement Plan

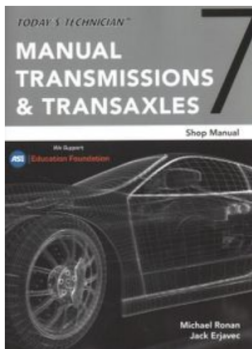
Participation in the classroom is expected and encouraged.

- I will respond to email within 48 hours I will offer feedback on major assignments within 3 days. The best way to contact me is via the Canvas Inbox, as I will prioritize this email over other modes of communication.
- In this course I will be posting announcements periodically which will share specific changes to the class schedule or assignments.

Keys for Success (how to succeed in the course)

- I expect professionalism. I believe that conducting yourself in this manner will be beneficial in your career.
- Team concepts that are commonplace within the industry at dealerships and aftermarket shops are incorporated in this course. Work in a collegial manner.
- Students are to check their Canvas site daily.
- Contact or message the instructor in the event of an illness or absence and advise instructor of your attendance if arriving after roll is taken.
- You will track your course progress and prepare reflections related to the course content or assigned selected topics.

Required Text or Materials



Title: Today's Technician: Manual Transmissions & Transaxles Classroom Manual and Shop Manual

ISBN: 9781337795456

Authors: Michael Ronan/ Jack Erjavec

Publisher: Delmar, Cengage Learning

Publication Date: 2020

Edition: 7th

For more information on textbook accessibility, contact Accessibility & Disability Services at ads@slcc.edu.

Additional Materials

Safety glasses and automotive service tools to perform lab work or live work.

Brief Description of Assignments/Exams

All assignments and due dates are listed chronologically in your Canvas calendar. Assignments can be submitted in person (on paper) or can be submitted electronically by attaching to a message in canvas (using a file type that can be opened in Canvas).

Quizzes for each section and a final exam are given for Manual Drive Train and Axles. These tests are closed book unless specified and can include multiple choice, true/false, fill-in the blank and essay type questions. Refer to the pages within the Canvas modules for dates, points, and grading.

Assignment Schedule

Due Date	Assignment Name	Assignment Type	Points
	Final Exam Study Guide	Assignment	
	Introduce Yourself	Discussion	0
	Introduce Yourself	Discussion	0
	Introduce Yourself	Discussion	0
	Roll Call Attendance	Assignment	100
8/28/25	Activity 1 Terms Chapter 1	Assignment	10
8/28/25	Chapter 1	Quiz	20
8/28/25	Chapter 1 Fill-in the Blank Chapter Review	Assignment	10
8/28/25	Job Sheet 1	Assignment	10
8/28/25	Job Sheet 2	Assignment	10
8/29/25	Chapter 2	Quiz	20
8/29/25	Chapter 2 Fill-in the Blank Chapter Review	Assignment	10
8/29/25	SP-2 Certificates	Assignment	30
8/29/25	Worksheet 4	Assignment	10

Due Date	Assignment Name	Assignment Type	Points
9/2/25	Acknowledgement of Syllabus	Quiz	1
9/2/25	Class Expectations	Quiz	20
9/3/25	Chapter 3	Quiz	20
9/3/25	Chapter 3 Fill-in the Blank Chapter Review	Assignment	10
9/3/25	Worksheet 5	Assignment	20
9/4/25	Section 1 Quiz	Quiz	40
9/4/25	Worksheet 1	Assignment	20
9/4/25	Worksheet 2	Assignment	10
9/5/25	Job Sheet 11	Assignment	10
9/5/25	Section 1 Reflection	Assignment	10
9/9/25	Chapter 4	Quiz	20
9/9/25	Chapter 4 Fill-in the Blank Chapter Review	Assignment	10
9/9/25	Worksheet 6	Assignment	10
9/11/25	Chapter 5	Quiz	20
9/11/25	Chapter 5 Fill-in the Blank Chapter Review	Assignment	10
9/11/25	Worksheet 3	Assignment	20
9/15/25	Section 2 Quiz	Quiz	40
9/15/25	Chapter 6	Quiz	20
9/15/25	Chapter 6 Fill-in the Blank Chapter Review	Assignment	10

Due Date	Assignment Name	Assignment Type	Points
9/15/25	Job Sheet 13	Assignment	20
9/15/25	Job Sheet 15	Assignment	10
9/16/25	Section 2 Reflection	Assignment	10
9/18/25	Chapter 7	Quiz	20
9/18/25	Chapter 7 Fill-in the Blank Chapter Review	Assignment	10
9/22/25	Chapter 8	Quiz	20
9/22/25	Chapter 8 Fill-in the Blank Chapter Review	Assignment	10
9/24/25	Chapter 9	Quiz	20
9/24/25	Chapter 9 Fill-in the Blank Chapter Review	Assignment	10
9/25/25	Live Work	Assignment	298
9/25/25	Live Work Extra Credit up to 40 points	Assignment	0
9/26/25	Chapter 11 Extra Credit up to 20 points	Assignment	0
9/26/25	Total Course Reflection	Assignment	50
9/29/25	Final Exam	Quiz	200

Grading Scale

Grades will be assigned for performance in accordance with the policy outlined in the college catalog.

Final Grade Matrix with Lab Hours in Parenthesis

Letter Grade	Percentage Range	Flat-Rate Hours
A	100 - 94%	(29.8- 28.0)
A-	< 94 - 90%	(27.9- 26.8)
B+	< 90 - 87%	(26.7- 25.9)
B	< 87 - 84%	(25.8- 25.0)
B-	< 84 - 80%	(24.9- 23.8)
C+	< 80 - 77%	(23.7- 22.9)
C	< 77 - 74%	(22.8- 22.0)
C-	< 74 - 70%	(21.9- 20.8)
D+	< 70 - 67%	(20.7- 20.0)
D	< 67 - 64%	(19.9- 19.1)
D-	< 64 - 61%	(19.0- 17.9)
E	< 61 - 0%	(17.8- 0.0)

Note: A letter grade of C or better is required to pass this course.

Manual Drive Train & Axles Point Structure 1229 Points Possible

Assignment Type	Points	Percentage
In-Class Assignments*	210	17.1%
Book-work Assignments	180	14.6%
Quizzes	110	9.0%
Final Exam	200	16.3%
Live Work**	298 (220 Minimum)	24.2%
Worksheets/ Job Sheets	140	11.4%
Course Reflection	91	7.4%

*In-class assignments such as the fill-in-the-blank chapter reviews are completed as a group project in class.

**Live Work flat-rate hours are scored at 10 points per flat-rate hour.

Academic Integrity

Complete assignments, job sheets/worksheets as outlined in the Canvas Modules.

Safety glasses are required in the shop area. Please always follow safe shop practices.

Final grades will be affected due to safety violations.

How to Navigate to Canvas

Institutional Policies

As members of our academic community, we would like to invite you to review the Institutional Syllabus which covers important policies and procedures. This document contains important links for students on the code of student rights and responsibilities, academic integrity, and grading policies, Title IX and other important acknowledgements. By familiarizing yourself with this information, you can help us create a safe and respectful environment for everyone.

For more information, navigate to the Institutional Policies tab on the [Institutional Syllabus](#) page.

Learning Support and Tutoring Services

We are pleased to offer a range of tutoring and learning support services to help you achieve your academic goals. Whether you need assistance with a specific subject or want to improve your study skills, you have many options for tutoring or other support.

To learn more about the services we offer and how to access them, visit the [Institutional Syllabus](#) page under the Tutoring and Learning Support tab. We encourage you to take advantage of these resources to help you succeed in your studies. If you have any questions or would like to schedule a tutoring session, please don't hesitate to reach out to us. We are here to support you in any way we can.

Advising and Counseling Support Services

At our institution, we are committed to supporting your academic and personal growth. That's why we offer a range of advising and counseling services to help you navigate the

challenges of college life. To learn more about the resources available to you and how to access them, visit the [Institutional Syllabus](#) page under the Advising and Counseling Support Services tab. Our advising team and the support centers across campus are here to support you in achieving your goals and overcoming any obstacles you may face.

Student Academic Calendar

As students you should be aware of all important dates in the semester, such as the day that courses begin and end, as well as the drop date and the last day to withdraw. To learn more about those dates, navigate to the Student Academic Calendar below:

[SLCC Student Academic Calendar](#)