

Manual Drivetrain & Axles

AUTO2130 001

Instructor Information

[REDACTED]

Phone: [REDACTED]

Email: [REDACTED]

Office Location: [REDACTED]

Office Hours

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

[REDACTED]

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

This Automotive Service Excellence Education Foundation (ASE-EF) accredited course is a study of the automotive manual drive train 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.

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

TEAU 1270.

Recommended Co-requisite: AUTO 2160, AUTO 2120

Transfer/Certification/Licensure/Employment Information

The automotive industry is at the cutting edge of technology and there is a great demand for highly trained, customer-oriented auto technicians. Skills in automotive technology, diagnosis and repair open the doors to a multitude of jobs throughout the state and nation.

OCCUPATIONS

Automotive Technicians & Repairers

Entry-Level Wage: \$14.32

Median Wage: \$22.24

Monthly Openings: 149

Occupational Data, 2024, Salt Lake County, Lightcast Economic Modeling

Communication Plan

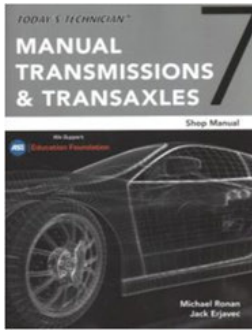
Example language:

- I will respond to e-mail within one day. 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.

Keys for Success (how to succeed in the course)

- I expect professionalism. I believe that conducting yourself in this manner will put money in your pocket.
- 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 on course content or assigned selected topics.
- Participate in class discussions.

Required Text or Materials



Title: Today's Technician Manual Transmissions & Transaxles

ISBN: 9781337795456 It is recommended to purchase e-book 9780357700020

Authors: Mike Ronan/ Jack Erjavec, Author

Publisher: Delmar/ Cengage Learning

Publication Date: 2020

Edition: 7th Edition

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

Brief Description of Assignments/Exams

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.

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 able to be opened in Canvas).

Live work is to be performed to industry standards and is to be inspected by the instructor.

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.

Assignment Schedule

Due Date	Assignment Name	Assignment Type	Points
	Final Exam Study Guide	Assignment	
	Final Exam Timing	Assignment	200
	Introduce Yourself	Discussion	0
	Introduce Yourself	Discussion	0
	Roll Call Attendance	Assignment	100
8/20	Class Expectations	Quiz	20
8/23	Acknowledgement of Syllabus	Quiz	1
8/23	Job Sheet 1	Assignment	10
8/23	Job Sheet 2	Assignment	10
8/26	Chapter 1	Quiz	20
8/26	Activity 1 Terms Chapter 1	Assignment	10
8/26	Chapter 1 Fill-in the Blank Chapter Review	Assignment	10
8/27	Chapter 2	Quiz	20

Due Date	Assignment Name	Assignment Type	Points
8/27	Chapter 2 Fill-in the Blank Chapter Review	Assignment	10
8/27	SP-2 Certificates	Assignment	30
8/27	Worksheet 4	Assignment	10
8/29	Chapter 3	Quiz	20
8/29	Chapter 3 Fill-in the Blank Chapter Review	Assignment	10
8/29	Worksheet 5	Assignment	20
8/30	Worksheet 1	Assignment	20
8/30	Worksheet 2	Assignment	10
9/3	Section 1 Quiz	Quiz	40
9/3	Job Sheet 11	Assignment	10
9/3	Section 1 Reflection	Assignment	10
9/4	Chapter 4	Quiz	20
9/4	Chapter 4 Fill-in the Blank Chapter Review	Assignment	10
9/4	Worksheet 6	Assignment	10
9/6	Chapter 5 Fill-in the Blank Chapter Review	Assignment	10
9/6	Worksheet 3	Assignment	20
9/9	Chapter 5	Quiz	20
9/9	Chapter 6	Quiz	20
9/9	Chapter 6 Fill-in the Blank Chapter Review	Assignment	10

Due Date	Assignment Name	Assignment Type	Points
9/10	Job Sheet 13	Assignment	20
9/10	Job Sheet 15	Assignment	10
9/11	Section 2 Quiz	Quiz	40
9/11	Section 2 Reflection	Assignment	10
9/13	Chapter 7	Quiz	20
9/13	Chapter 7 Fill-in the Blank Chapter Review	Assignment	10
9/17	Chapter 8	Quiz	20
9/17	Chapter 8 Fill-in the Blank Chapter Review	Assignment	10
9/19	Chapter 9	Quiz	20
9/19	Chapter 9 Fill-in the Blank Chapter Review	Assignment	10
9/20	Live Work	Assignment	298
9/20	Live Work Extra Credit up to 40 points	Assignment	0
9/23	Chapter 11 Extra Credit up to 20 points	Assignment	0
9/23	Total Course Reflection	Assignment	50
9/24	Final Exam	Quiz	200

Grading Scale

Grades will be assigned for performance in accordance with the policy outlined in the college catalog. Points are totaled as received from several areas as described in the

Grading Components/Point Structure (next heading below).

The final grade is computed using the grading matrix below: (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.

Grading Components/Point Structure

Manual Drive Train & Axles Point Structure/Breakdown 1099 Points Possible

Assignment Type	Points	Percentage
In-Class Assignments*	90	8.2%
Book-work Assignments	180	16.4%
Quizzes	101	9.2%
Final Exam	200	18.2%
Live Work**	298 (220 Minimum)	27.1%
Worksheets/ Job Sheets	160	14.6%
Course Reflection	70	6.3%

*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

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.

You can access the document by clicking on the following link:

<https://slcc.instructure.com/courses/530981/pages/institutional-syllabus>

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, please visit the Institutional Syllabus under the Tutoring and Learning Support tab:

<https://slcc.instructure.com/courses/530981/pages/institutional-syllabus>. 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, please visit the Institutional Syllabus under the Advising and Counseling Support Services tab: <https://slcc.instructure.com/courses/530981/pages/institutional-syllabus>. 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](#)

Additional Policies

Attendance and Participation

Participation in the classroom is expected and encouraged.

3 absences a student receives no higher than a B grade. (88% attendance)

4 absences a student receives no higher than a C grade. (84% attendance)

5 absences a student receives no higher than a D grade. (80% attendance)

6 absences a student receives a failing E grade. (76% attendance)

3 late arrivals (or early exits) equals 1 absence.

For example: 2 absences and 3 late arrivals would equal no higher than a B grade.

Plan to attend all Theory/Lecture and Lab classes.