



Outcome-based 18/SU Course Syllabus

Course Rubric Number Section: ABDR 2359 2001
Lecture-Lab-Credit: 2-4-3
CIP Code: 47.0603
Course Title: Structural Sectioning
Course Description: Skill development in the practical application of welded panel replacement and structural sectioning procedures as well as practical equipment applications in structural vehicle straightening, alignment, welding, and corrosion protection.
Prerequisites: Take ABDR-1307 ABDR-1419(64) ABDR-2435; Minimum grade C,CR;
Co-requisites:
Course Meets: 200F 110 LEC T 08:00AM 10:20AM 200F 112 LAB T 10:30AM 11:40AM 200F 112 LAB T 01:00PM 04:20PM

Instructor: Joseph Cantu
Office Phone Number: 956-364-4825
Email Address: jcantu18@tstc.edu
Office Fax Number:
Building & Office Room Number: F 102
Office Hours: 8-5

Approved by: Clint Campbell	Date: 2018-05-07
------------------------------------	-------------------------

Course Outcomes

- CO1:** Perform vehicle disassembly procedures
- CO2:** Perform vehicle reassembly procedures
- CO3:** Properly remove welded panels
- CO4:** Align and attach replacement panels within correct tolerances
- CO5:** Administer manufacturers' recommended corrosion protection procedures
- CO6:** Perform structural sectioning procedures

TSTC Grading Policy

(Grades for courses must be C or better)

Grade	Percent	Description	Grade Points
A	90-100	Excellent/Superior Performance Level	4
B	80-89	Above Required Performance Level	3
C	70-79	Minimum Required Performance Level	2
D	60-69	Below Required Performance Level	1
F	Below 60	Failure to meet Performance Requirements	0
IP	--	In Progress	
W	--	Withdrawal	0
CR	--	Credit	0
AUD	--	Audit of Course	0

See College Catalog for complete descriptions.

Competencies Rating Scale

Rating Scale Key			
6	90+	Proficient	Student consistently performs the task accurately to industry standards without supervision.
5	80-89	Proficient	Student performs the task to industry standards with no supervision.
4	70-79	Proficient	Student performs the task to industry standards with little supervision. This is the minimum performance rating for STAR skill completion.
3	60-69	Exposed/Not Proficient	Student has been introduced to the task and can perform some of the tasks to industry standards.
2	50-59	Exposed/Not Proficient	Student has been introduced to the task, but cannot perform the task to industry standards.
1	0-49		Student was absent or did not complete assignment.

Campus Standard Policies

The [Student Handbook](#) contains valuable information on campus policies and procedures.

- Student Code of Conduct
- Student Drug and Alcohol Testing Policy
- Plagiarism
- Student Grievances and Complaints

Disability Services

Any student who, because of a disability, may require special accommodations in order to meet the course requirements, should contact the Disability Services office, as soon as possible, to make necessary arrangements. Please note that instructors are not allowed to provide classroom accommodation to a student until appropriate verification from the Disability Services office has been provided.

Abilene Campus

Susan Hash
Testing and Support Services
Abilene Main Campus Bldg. Rm. 112
325-734-3641

Breckenridge Campus

Lisa Langford
Testing and Advisement located in
The Main Building Rm. 106
254-559-7731

Brownwood Campus

Nicole Whitley
Testing and Advisement
Building 2 Rm. 120
325-641-5955

Fort Bend Campus

Schauna Boynton
Brazos Center Rm. 113
346-239-3394

Harlingen Campus

Corina De La Rosa
Disabilities Services
Student Support Services
Student Services Bldg. Rm. 216
956-364-4521

Marshall Campus

Annette Ellis
Administration and Admissions Rm. 150
909-923-3313

Sweetwater Campus

Misty Walden
Disability Services
Student Support Services
Lance Sears Building Rm. 140
325-236-8292

North Texas Campus

Amanda Warren
Student Services, Room 227
972-617-4724

Waco Campus

Marilyn Harren
Disabilities Services Office
Student Services Center Rm. 198
254-867-3600

Williamson County

Chemese Armstrong
Enrollment Services Rm. B113C
512-759-5907

Tutoring Statement

The Supplemental Instruction & Tutoring Program at TSTC offers free tutoring and academic support services to help you achieve your academic and career goals. You can access the Tutoring Schedule, as well as *MyTSTC Video Tutor Library*, by visiting: https://portal.tstc.edu/student/Student_Learning/Pages/Tutoring.aspx (shortened link: goo.gl/Z9vJvY). For more information, please contact Norma A. Salazar@ 956-364-4557.

Learning Resource Center

The purpose of the TSTC Learning Resource Center is to serve the TSTC Community and support academic, advanced, specialized and emerging programs, contributing to the educational and economic development of the State of Texas. You can access the Learning Resource Center page at <https://portal.tstc.edu/employee/Departments/operations/Pages/Learning%20Resource%20Center.aspx>

Resources

Tools, Materials:

Item	Resource	Quantity
1	Shredder	5
2	Plastic spreader, 3" wide	3
3	Sanding Block	1
4	Protective goggles	1
5	Putty knife	1
6	Brush, 1-1/2" or 2"	2
7	Ear plugs	1pair
8	3M particle masks	3
9	12" retractable tape	1
10	Solvent resistant gloves	1pair
11	Mixing board	1
12	Leather gloves	1pair
13	Welding gloves	1pair
14	3M Automotive Welding Fume Respirator	1pair
15	Welding cap	1
16	Sanding board (Longboard)	1
17	Cotton weld jacket	1
18	Socket and wrench set	1

Course Schedule			
Unit/Week	Unit Description/Objectives	Assessment Label:Description	Due Date
1	Week 1: Orientation		
	<ul style="list-style-type: none"> Discuss Components of Syllabus, discuss policies and guidelines. 	Lab 1: Lab orientation to familiarize students with how the lab is laid out and where all tools and materials are kept.	
2	Week 2 : Welded and Adhesively Bonded Panel Replacement-EXT02		
	<ul style="list-style-type: none"> Exterior panel replacement; general panel removal, preparation and installation. <p>Door Skin Replacement; Planning, removal, and installation.</p> <p>Quarter Panel, Truck Box Side, and Cab Corner Replacement; Planning removal processes and installation procedures for Quarter panels, Truck Box Sides, and Cab Corners.</p>	Lab 2: Lab: The labs for this class are performing repairs Week 14 to a damaged vehicle. Students will meet their course objective has they return the vehicle to pre-accident condition.	
3	Week 3 : Welded and Adhesively Bonded Panel Replacement-EXT02 Continued		
	<ul style="list-style-type: none"> Roof Panel Replacement; Roof panel designs, attachment methods, removal procedures and installation. <p>Rear Body Panel Replacement; Removal and replacement methods.</p>	Test 1: I-CAR class online ICM00e Lab 3: Attachment methods, removal procedures and installation of panels	Week 3
4	Week 4 : Sectioning of Steel Unitized Structures		
	<ul style="list-style-type: none"> Sectioning Overview: Determining if Sectioning is acceptable in repair process. <p>Sectioning Preparation; Finding and marking cut lines, different cutting techniques and</p>	Lab 4: Sectioning vs Repair	

	imes, different cutting techniques and reattachment methods.		
5	Week 5 : Sectioning of Steel Unitized Structures		
	<ul style="list-style-type: none"> Sectioning joint types and considerations when sectioning is allowed. 	Test 2: I-CAR class online IRP00e Lab 5: Where sectioning will be done on a vehicle.	Week 5
6	Week 6 : Corrosion Protection		
	<ul style="list-style-type: none"> Corrosion Protection; causes of corrosion and OEM corrosion protection <p>Corrosion Protection During Repairs; Cleaning, preparation and application during repair process.</p>	Test 3 : I-CAR class online ITM01e Lab 6: OEM corrosion protection	Week 6
7	Week 7 : Corrosion Protection		
	<ul style="list-style-type: none"> Corrosion Protection After Repairs; Anti-Corrosion compounds application and types of undercoatings. 	Lab 7: Vehicle Makers Corrosion Protection; Recommendation and OEM Warranties.	
8	Week 8 : Full Frame Partial Replacement		
	<ul style="list-style-type: none"> Full Frame Designs and construction 	Lab 8: Sectioning on full frame designs.	
9	Week 9 : Full Frame Partial Replacement		
	<ul style="list-style-type: none"> Partial Replacement options and procedures; Welding, crossmembers and accessories. 	Lab 9: OEM Replacement Options; F150, GM1500 and HD, Stingray, Ram, Jeep, Toyota, Nissan, etc.	
10	Week 10 : Squeeze Type Resistance Spot Welding		
	<ul style="list-style-type: none"> STRSW- process and welding principles. STRSW equipment identification and control settings STRSW bonding process. 	Test 4: I-CAR class online ITM02e Lab 10: Mig and STRSW used in conjunction with each other and vehicle makers recommendations.	Week 10
11	Week 11 : Rocker Panel Building and Sectioning Overview		
	<ul style="list-style-type: none"> Assemble Rocker Panel for sectioning procedures. Rocker Panel sectioning and finishing per instructed <p>Lab: The labs for this class are performing repairs to a damaged vehicle. Students will meet their course objective as they return the vehicle to pre-accident condition.</p>	Lab 11: Assemble Rocker Panel and Overview the sectioning procedure. Section the rocker panel as instructed	Week 11
12	Week 12 : Final Exam		
	<ul style="list-style-type: none"> The class period will be used to complete the final or lab objectives as needed. 	Final Exam: Final Exam Lab 12: Students will finish any objectives needed.	Week 12

Instructors Attendance/Participation Policy

A student is expected to attend and participate during the scheduled period of instruction (lecture and lab). This begins with the first scheduled class day of the term. A student deemed a non-participant for more than 10% of the lecture and lab periods, regardless of grades earned on assignments, will have to repeat the course. This class meets for 15 weeks and has 4 hours of lab and 2 hours of lecture for a total of 6 hrs each week. 6hrs X 15weeks = 90hrs x 10% = 9hrs or 540 minutes. This is the maximum time that is allowed to be missed to receive credit for the course.

Course Policies:

Safety Procedures

Students are required to participate in a safety lecture prior to performing in the laboratory portion of the course. A written test will be given to each participating student covering the presented safety materials. Students must complete the safety test with 100% accuracy prior to receiving lab assignments.

All lecture and laboratory safety rules and regulations will be followed in every detail. Failure to comply with this policy will result in dismissal from class until further notice.

Acceptance Attire

- NIOSH approved with clear safety glasses will be worn at all times
- Full-toed shoes (no slippers, sandals, flip-flops, or bare feet)
- Full length pants (must extend past ankles)
- Pants must fit around waist within 3 inches of belly button
- Shirts (no sleeveless or tank tops)
- Shirts with and without buttons can be worn with instructor approval on neck opening exposure
- Clothing must be reasonably snug fitting (not excessively loose, baggy, torn)
- An inappropriate slogan on clothing is not acceptable.
- Jogging clothes, sweats, or warm-ups are not acceptable.
- Acceptable headgear: ball caps or bump caps (**No** do-rags, bandanas or shower caps)
- The Instructor has the final authority concerning matters of dress

Classroom and Lab Behaviors

- Smoking in classrooms, laboratories and shops are prohibited
- Smoking is permitted only in designated areas
- Smoking is prohibited within 20 feet of a building, when permitted
- Smoking is prohibited within the fenced area surrounding the ACM and CAT Labs.
- The consumption of drinks, candy, and other food items is restricted to lounge areas
- Eating or drinking in laboratories are hazardous because of the toxic nature of lab materials being handled
- No horseplay at any time
- Be responsible – Be a professional

Late Work/Test Policies

All students are required to be present for class. However, unexpected circumstances will occur. If a student has an excused absence, death or illness in the immediate family, the student must notify the instructor of record immediately. If a test is missed, the instructor has to give permission for make up. The missed test must be made up before the next scheduled period of instruction.

An excused absence only allows for make up of missed assignments or test. The absence is recorded.

Assignments are due at the beginning of class of the set due date. Late assignments will not be accepted and a grade of “zero” will be earned for said assignment. Students who prior contacted the instructor may be considered excused.

Pop Tests

Can be given at any time by the instructor and are not make up items.

Exemptions

Students can be exempted from a final exam if:

- A. Lecture average is 90 or above
- B. Attendance is perfect
- C. Assignments are completed and turned in
- D. Projects are complete

Cell Phone Policy

Cell phones may not be brought into the classroom or lab as they are unsafe and disruptive to the environment.

Anyone failing to adhere to this policy will be dismissed from class and issued a non-participation grade (absence) for that period of instruction.

Departmental Awards Ceremony/Cleanup Policy

Each student is expected to participate in the awards ceremony and cleanup activities once the date has been identified.

Students final exam grade is dependent upon their participation at these functions. One half ($\frac{1}{2}$) of the final exam grade for the course is participation. One half ($\frac{1}{2}$) of the final exam grade is completing the final exam for the course.

Students with unexpected circumstances can be excused by the department chair only.

TSTC school calendar identifies the end of the semester. Student break begins the day after.

Grade Scheme		
Category Description		Category Value
Lab		80%
Assessment Label:	Assessment Description	Assessment Value
Lab 1:	Lab orientation to familiarize students with how the lab is laid out and where all tools and materials are kept.	6.67%
Lab 2:	Lab: The labs for this class are performing repairs to a damaged vehicle. Students will meet their course objective has they return the vehicle to pre-accident condition.	6.67%
Lab 3:	Attachment methods, removal procedures and installation of panels	6.67%
Lab 4:	Sectioning vs Repair	6.67%
Lab 5:	Where sectioning will be done on a vehicle.	6.67%
Lab 6:	OEM corrosion protection	6.67%
Lab 7:	Vehicle Makers Corrosion Protection; Recommendation and OEM Warranties.	6.67%
Lab 8:	Sectioning on full frame designs.	6.67%
Lab 9:	OEM Replacement Options; F150, GM1500 and HD, Stingray, Ram, Jeep, Toyota, Nissan, etc.	6.67%
Lab 10:	Mig and STRSW used in conjunction with each other and vehicle makers recommendations.	6.67%
Lab 11:	Assemble Rocker Panel and Overview the sectioning procedure. Section the rocker panel as instructed	6.67%
Lab 12:	Students will finish any objectives needed.	6.67%
Category Description		Category Value
Test		20%
Assessment Label:	Assessment Description	Assessment Value
Test 1:	I-CAR class online ICM00e	4.00%
Test 2:	I-CAR class online IRP00e	4.00%
Test 3:	I-CAR class online ITM01e	4.00%
Test 4:	I-CAR class online ITM02e	4.00%
Final Exam:	Final Exam	4.00%
Total Assessment Percent		100.00%
Total Category Percent		100.00%
A = 100-90	B = 89-80	C = 79-70
	D = 69-60	F = 59-0

Description of Graded Elements of the Course			
Assessment Label	Assessment Description/Course outcomes met	Assessment Value in Percent	% of Final Grade
Lab 1	Lab orientation to familiarize students with how the lab is laid out and where all tools and materials are kept. Course outcomes met: CO1, CO2	6.67	6.67%
Lab 2	Lab: The labs for this class are performing repairs to a damaged vehicle. Students will meet their course objective has they return the vehicle to pre-accident condition. Course outcomes met: CO1, CO2, CO3, CO4, CO5, CO6	6.67	6.67%
Test 1	I-CAR class online ICM00e Course outcomes met: CO2, CO3, CO4	4.00	4.00%
Lab 3	Attachment methods, removal procedures and installation of panels Course outcomes met: CO6, CO1, CO2, CO3, CO4	6.67	6.67%
Lab 4	Sectioning vs Repair Course outcomes met: CO1, CO3, CO6	6.67	6.67%
Test 2	I-CAR class online IRP00e Course outcomes met: CO2, CO4, CO3	4.00	4.00%
Lab 5	Where sectioning will be done on a vehicle. Course outcomes met: CO1, CO3, CO6	6.67	6.67%
Test 3	I-CAR class online ITM01e Course outcomes met: CO3, CO4, CO2	4.00	4.00%
Lab 6	OEM corrosion protection	6.67	6.67%

	Course outcomes met: CO5		6.67%
Lab 7	Vehicle Makers Corrosion Protection; Recommendation and OEM Warranties. Course outcomes met: CO5	6.67	6.67%
Lab 8	Sectioning on full frame designs. Course outcomes met: CO5, CO6	6.67	6.67%
Lab 9	OEM Replacement Options; F150, GM1500 and HD, Stingray, Ram, Jeep, Toyota, Nissan, etc. Course outcomes met: CO5	6.67	6.67%
Test 4	I-CAR class online ITM02e Course outcomes met: CO2, CO4, CO3	4.00	4.00%
Lab 10	Mig and STRSW used in conjunction with each other and vehicle makers recommendations. Course outcomes met: CO2, CO4, CO6	6.67	6.67%
Lab 11	Assemble Rocker Panel and Overview the sectioning procedure. Section the rocker panel as instructed Course outcomes met: CO1, CO2, CO3, CO4, CO6	6.67	6.67%
Final Exam	Final Exam Course outcomes met: CO1, CO2, CO3, CO4, CO6	4.00	4.00%
Lab 12	Students will finish any objectives needed. Course outcomes met: CO2, CO4, CO6	6.67	6.67%
		100.00	100.00%