

# Washtenaw Community College Comprehensive Report

## ABR 135 Collision-Related Mechanical and Electrical Repairs Effective Term: Spring/Summer 2017

### Course Cover

**Division:** Advanced Technologies and Public Service Careers

**Department:** Automotive Body

**Discipline:** Auto Body Repair

**Course Number:** 135

**Org Number:** 14110

**Full Course Title:** Collision-Related Mechanical and Electrical Repairs

**Transcript Title:** Collis. Relatd Mech & Elec Rpr

**Is Consultation with other department(s) required:** No

**Publish in the Following:** College Catalog , Time Schedule , Web Page

**Reason for Submission:** Three Year Review / Assessment Report

**Change Information:**

**Consultation with all departments affected by this course is required.**

**Course description**

**Outcomes/Assessment**

**Rationale:** Course assessment submitted 11/2/16. Review after assessment after course assessment.

**Proposed Start Semester:** Spring/Summer 2017

**Course Description:** This course will introduce the student to the fundamental principles of the automotive mechanical, electrical and body component repair issues required to restore vehicle collision damage to pre-accident condition.

### Course Credit Hours

**Variable hours:** No

**Credits:** 4

**Lecture Hours: Instructor:** 60 **Student:** 60

**Lab: Instructor:** 45 **Student:** 45

**Clinical: Instructor:** 0 **Student:** 0

**Total Contact Hours: Instructor:** 105 **Student:** 105

**Repeatable for Credit:** NO

**Grading Methods:** Letter Grades

Audit

**Are lectures, labs, or clinicals offered as separate sections?:** NO (same sections)

### College-Level Reading and Writing

College-level Reading & Writing

### College-Level Math

### Requisites

### General Education

## **Request Course Transfer**

**Proposed For:**

### **Student Learning Outcomes**

1. Identify principles of mechanical and electrical repair issues.

**Assessment 1**

Assessment Tool: Final Exam

Assessment Date: Winter 2019

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Answer key

Standard of success to be used for this assessment: 85 percent of students will score 80 percent or higher.

Who will score and analyze the data: Department faculty

2. Analyze auto body components and determine needed repairs or replacement.

**Assessment 1**

Assessment Tool: Student Achievement Record and Final Exams

Assessment Date: Winter 2019

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Answer key

Standard of success to be used for this assessment: 85 percent of students will score 80 percent or higher.

Who will score and analyze the data: Department faculty

3. Perform necessary automotive collision repairs in accordance with safety standards as instructed.

**Assessment 1**

Assessment Tool: Student Achievement Record

Assessment Date: Winter 2019

Assessment Cycle: Every Three Years

Course section(s)/other population: All

Number students to be assessed: All

How the assessment will be scored: Answer key

Standard of success to be used for this assessment: 85 percent of students will score 80 percent or higher.

Who will score and analyze the data: Department faculty

### **Course Objectives**

1. Explore planned classroom activities and demonstrate the ability to apply fundamental principles of collision related mechanical and electrical repairs.
2. Inspect, remove and replace steering knuckle/spindle/hub assemblies (including bearings, races, seals, etc.)
3. Inspect, test, and replace fusible links, circuit breakers, and fuses.
4. Inspect flexible brake hoses for leaks, kinks, cracks, bulging, or wear; remove and replace hoses; tighten loose fittings and supports.
5. Locate and identify A/C system service parts.
6. Inspect, remove and replace electric cooling fan sensors, check operation.
7. Inspect, remove and replace half shafts and axle constant velocity joints.
8. Inspect, remove and replace exhaust pipes, mufflers, converters, resonators, tail pipes, and heat shields.
9. Inspect, remove and replace engine components of air intake systems.
10. Verify that Supplemental Restraint System (SRS) is operational.

### **New Resources for Course**

#### **Course Textbooks/Resources**

Textbooks  
 Manuals  
 Periodicals  
 Software

#### **Equipment/Facilities**

<b><u>Reviewer</u></b>	<b><u>Action</u></b>	<b><u>Date</u></b>
<b>Faculty Preparer:</b> <i>Scott Malnar</i>	<i>Faculty Preparer</i>	<i>Sep 28, 2016</i>
<b>Department Chair/Area Director:</b> <i>Gary Sobbry</i>	<i>Recommend Approval</i>	<i>Oct 21, 2016</i>
<b>Dean:</b> <i>Brandon Tucker</i>	<i>Recommend Approval</i>	<i>Nov 02, 2016</i>
<b>Curriculum Committee Chair:</b> <i>David Wooten</i>	<i>Recommend Approval</i>	<i>Dec 13, 2016</i>
<b>Assessment Committee Chair:</b> <i>Michelle Garey</i>	<i>Recommend Approval</i>	<i>Dec 15, 2016</i>
<b>Vice President for Instruction:</b> <i>Bill Abernethy</i>	<i>Approve</i>	<i>Dec 20, 2016</i>