

ACR275 Structural Analysis & Damage Repair IV 3 Credit Hours (Lecture/Lab) Prerequisites: ACR225 Revision Date: 02/11/2022

Department:

Automotive Collision & Refinishing Technology

Course Description:

Through a variety of classroom and or shop/lab learning and assessment activities, students in this course will: apply safety requirements pertaining to structural damage repair; perform advanced welding and cutting techniques for structural repair; perform inspection and measurement of unibody for structural repair; repair unibody direct and indirect damage; perform frame inspection and measurement procedures; repair frame to industry standards; and remove and install fixed glass.

Course Competencies:

Upon completion of the course, the student should be able to:

- 1. Apply safety requirements pertaining to structural damage repair.
- 2. Perform advanced welding and cutting techniques for structural repair.
- 3. Perform inspection and measurement of unibody for structural repair.
- 4. Repair unibody direct and indirect damage.
- 5. Perform frame inspection and measurement procedures.
- 6. Repair frame to industry standards.
- 7. Remove and install fixed glass.

Course Content:

- A. Safety Requirements for Structural Damage Repairs
- B. Welding and Cutting for Structural Repairs
- C. Unibody Inspection and Measurements
- D. Unibody Direct and Indirect Repair
- E. Frame Inspection and Measurements
- F. Frame Repair
- G. Fixed Glass Removal and Installation

Learning Assessments:

Competencies may be evaluated by multiple measures, including quizzes, tests, project work, demonstrated competence, instructor observation, weekly assignments and/or written papers.

Instructional Materials:

Textbooks: Duffy, J. E. (2016). *Auto Body Repair Technology* (6th ed.). Cengage Learning. ISBN-13: 978-1133702856

Duffy, J. E. (2016). *Tech Manual for Duffy's Auto Body Repair Technology* (6th ed.). Cengage Learning. ISBN-13: 978-1133702863

Guidelines for Requesting Accommodations Based on Documented Disability or Medical Condition

It is the intention of Highland Community College to work toward full compliance with the Americans with Disabilities Act, to make instructional programs accessible to all people, and to provide reasonable accommodations according to the law.

Students should understand that it is their responsibility to self-identify their need(s) for accommodation and that they must provide current, comprehensive diagnosis of a specific disability or medical condition from a qualified professional in order to receive services. Documentation must include specific recommendations for accommodation(s). Documentation should be provided in a timely manner prior to or early in the semester so that the requested accommodation can be considered and, if warranted, arranged.

In order to begin the process all students **must** complete the "Disabilities Self-Identification Form" on our <u>Disability Services</u> <u>website</u>.

This form can also be accessed at the Highland Community College homepage under Students Services/Student Resources/Disability Service or by contacting the Disabilities Coordinator.

A Note on Harassment, Discrimination and Sexual Misconduct

Highland Community College seeks to assure all community members learn and work in a welcoming and inclusive environment. Title VII, Title IX, and College policy prohibit harassment, discrimination and sexual misconduct. Highland Community College encourages anyone experiencing harassment, discrimination or sexual misconduct to talk to report to the Vice President for Student Services, the Human Resources Director or complete an <u>online report</u> about what happened so that they can get the support they need and Highland Community College can respond appropriately.

There are both confidential and non-confidential resources and reporting options available to you. Highland Community College is legally obligated to respond to reports of sexual misconduct, and therefore we cannot guarantee the confidentiality of a report, unless made to a confidential resource. Responses may vary from support services to formal investigations. As a faculty member, I am required to report incidents of sexual misconduct and thus cannot guarantee confidentiality. I must provide our Title IX coordinator with relevant details such as the names of those involved in the incident. For more information about policies and resources or reporting options, please review our Equity Grievance Policy.