CRT 1130

Division: Career and Technical Education
Department: Collision Repair and Refinishing Technology
Course: CRT 1130
Title: Overall Refinishing and Problem Solving
Catalog Description:

This course teaches use and maintenance of shop paint spray equipment. Students study types of sealers, their use, and their application. Students will refinish products and recommend refinish systems. This course teaches removal of orange peel or sags left in the refinishing process and covers cutting and buffing. The course includes lecture, demonstrations, and lab and uses Inter-Industry Conference on Auto Collision Repair (I-CAR) curriculum. Students who successfully complete the course will be prepared for Automotive Service Excellence (ASE) certification.

General Education Requirements: N/A
Semesters Offered: TBA
Credit/Time Requirement: Credit: 4; Lecture: 1; Lab: 7
Clock/Hour Requirements: 128
Offered for Non-Credit: No
Prerequisites: None

Corequisites: None

Justification:

The I-CAR curriculum is recognized as the leader in collision repair training. It also provides the necessary information to pass the ASE task lists and tests required for certification. This course was approved by the advisory committee and similar courses are taught at Utah Valley State College (CRT 1130) and Salt Lake Community College (AR 1100).

Student Learning Outcomes:

Upon successful completion, students will be able to:

- identify and use proper spray gun for type of refinishing required
- recognize air contaminants in separators, compressors, and lines
- follow the prescribed sequence of surface preparation operations 100% of the time
- apply a final coat without flaws; i.e., wax contaminants, fish-eyes, or excessive orange peel
- apply clear coat, top coat, color coat, and metallic color according to label directions and without streaking, blotching, or mottling of flake.

Content:

Course objectives will be achieved by providing students with instructional and hands-on experiences in the following areas:

- hazard management
- metal conditioners
- types of metal
- ferrous chemical cleaners
- non-ferrous chemical cleaners
- primer surfacer, lacquer, and enamel
- thinning and mixing
- wet sanding
- dry sanding
- block sanding
- masking
- masking for spot repair
- refinishing
- overall spraying
- panel spraying
- spot spraying
- detailing vehicle.

General Education Outcomes:

5) Apply a cultural and historical awareness to a variety of phenomena.

In this course, students must understand the history of painting processes and the materials used. This understanding will allow students to make better decisions regarding repairs and restorations.

6) Apply computational skills to a variety of contexts.

In this course, students will be required to estimate materials needed, figure reduction with thinners and blending agents, and apply rates and ratios for proper performance.

7) Apply scientific reasoning to a variety of contexts.

Students must understand and apply the procedures by which chemical materials are combined. The process by which the correct mixtures are arrived at will require students to understand the scientific nature of the chemical processes involved.

Key Performance Indicators:

In class:

- Student progress will be evaluated on skill levels demonstrated in lab (70%), quiz scores (10%), and a final comprehensive exam (20%).

Following class:

- Upon completion of the course, safety and competency will be demonstrated in subsequent courses and on custom projects.
- Students will apply the techniques acquired on the job and pass national ASE certification tests.

Representative Text and/or Supplies:

- James E. Duffy, *I-CAR student textbooks and modules,* current editions, Delmar Publishers.

Optimum Class Size: 10
Maximum Class Size: 20

Signatures:

I hereby submit this course syllabus:

Andy Morgan, ,

I hereby find this course consistent with the goals and resources of the Collision Repair and Refinishing Technology Department:

Andy Morgan, , , Chair

I hereby find this course consistent with the goals and resources of the Career and Technical Education Division:

Michael P. Medley, MBA, Assistant Professor, Dean

I have discussed the need for library resources related to this class with the person submitting the syllabus:

Lynn Anderson, MLIS, Technical Services Librarian (Main Campus)

Michelle Olsen, MLS, Campus Librarian (Richfield Campus)