Course Number: In this course the student will learn how to prepare the surface for the refinishing process. The student will cover topics about sandpaper and learn techniques to choose the proper grit and how to operate sanding equipment. This course will provide instruction in masking techniques and products used to mask and protect areas not in the refinishing operation. The students will learn proper techniques for block and finish sanding prior to topcoat application. Students will learn to apply proper substrate cleaning before the application of refinishing products.

Instructor: Jeff Owen

OCAS Code: Phone Number: 580.327.0344

Course Length: 105 hours

Email: jowen@nwtech.edu

Career Cluster: Transportation, Distribution, & Logistics

Campus: Alva

Career Pathway: Automotive Collision Repair

Program: Collision Technology

Career Major: Combination Collision Repair Technician, Refinishing Technician

Pre-requisite: None

Course Description:

Course Goals: The instructor will provide not only technical training in the Auto Collision Technology area but also soft-skills training in an effort to provide training and services needed for students to succeed in the workplace.

Upon successful completion of this course, the student will be able to:

- Inspect, remove, store, and replace exterior trim and molding.
- Soap and water wash entire vehicle; use appropriate cleaner to remove contaminants.
- Inspect and identify substrate, type of finish and surface condition; develop a plan for refinishing using a total product system.
- Remove paint finish.
- Dry or wet sand areas to be refinishing.
- Featheredge broken areas to be refinishing.
- Apply suitable metal treatment or primer.
- Mask trim and protect other areas that will not be refinishing.
- Mix primer, primer-surfacer or primer-sealer.
- Apply primer onto surface of repaired area.
- Apply two-component finishing filler to minor surface imperfections.
- Dry or wet sand area to which primer-surfacer has been applied.
- Dry sand area to which two-component finishing filler has been applied.
- Remove dust from area to be refinished, including cracks or moldings of adjacent areas.
- Clean area to be refinishing using a final cleaning solution.
- Remove, with a tack rag, any dust or lint particles from the area to be refinishing.
- Apply suitable sealer to the area being refinishing when sealing is needed or desirable.
- Scuff sand to remove nibs or imperfections from a sealer.
- Apply stone chip resistant coating.
Refinish Preparation Course Syllabus

- Restore corrosion-resistant coatings, caulking, and seam sealers to repaired areas.
- Prepare adjacent panels for blending.
- Review damage report and analyze damage to determine appropriate methods for overall repair; develop repair plan.
- Inspect, remove, store, and replace exterior trim and moldings.
- Inspect, remove, store, and replace interior trim and components.
- Inspect, remove, store, and replace non-structural body panels and components that may interfere with or be damaged during repair.
- Inspect, remove, store, and replace all vehicle mechanical and electrical components that may interfere with or be damaged during repair.
- Protect panels, glass, and parts adjacent to repair area.
- Soap and water wash entire vehicle; use appropriate cleaner to remove contaminants from those areas to be repaired.
- Remove corrosion protection, undercoatings, sealers, and other protective coatings necessary to perform repairs.
- Inspect, remove, and replace repairable plastics and other components that are recommended for off-vehicle repair.
- Apply safety procedures associated with vehicle components and systems such as ABS, air bags, refrigerants, batteries, tires, oil, anti-freeze, engine coolants, etc.
- Apply environmental practices associated with vehicle components and systems such as substrates, fluids, refrigerants, batteries, etc.

**Major Course Projects:**

Students are allowed to work on their own projects as well as live-work projects as approved by instructor.

Students will compile a portfolio which includes classroom theory and activities as well as a summary of hands-on work in the shop. Students will include photographs of projects and live work projects with descriptions for each photo.

**Project Outline:**

Students may begin working on projects as their skill level allows. All projects must be completed by the first of May. These projects will reinforce classroom theory instruction and will require the student to consult industry service information during the course of task performance.

**Instructional Delivery Plan:**

The instruction for this course will utilize various methods in an effort to promote and accommodate different learning styles including classroom lecture, classroom demonstrations, shop demonstrations, hands-on learning activities, classroom discussion, interactive media, textbook, computer based learning activities, research projects, guest speakers, and student presentations. Students will be required to work independently as well as in teams. Assignments will require students to use academic skills in math, science, and language arts.
### Assessment Plan:
- Pass Safety Test with 100% accuracy.

Assessment Plan:
- 50% Performance of technical skills
- 45% Tests and written assignments
- 5% Academic Career Center (ACC)

<table>
<thead>
<tr>
<th>Grade</th>
<th>Percentage</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>90-100</td>
<td>Exceeds expectations</td>
</tr>
<tr>
<td>B</td>
<td>80-89</td>
<td>Meets industry standards and expectations</td>
</tr>
<tr>
<td>C</td>
<td>70-79</td>
<td>Passing grade, but does not meet some standards</td>
</tr>
<tr>
<td>D</td>
<td>60-69</td>
<td>Passing, but only meets the minimum standards</td>
</tr>
<tr>
<td>F</td>
<td>Below 60</td>
<td>Failing, does not meet minimum standards</td>
</tr>
</tbody>
</table>

### Alliance Credit Offered:
- OSU-IT

### Industry Alignments:
- ICAR

### End of Instruction Industry Assessment:
Students will have to pass Safety Test at 100% accuracy and demonstrate safety practices.

- Auto Body: Painting and Refinishing Technician - CTTC
  - [http://www.okcareertech.org/testing/Skills_Standards/TransportationCareer_Cluster.htm](http://www.okcareertech.org/testing/Skills_Standards/TransportationCareer_Cluster.htm)

- ASE: Collision Repair and Refinish Series – Painting and Refinishing

### Resources:
- I-CAR Worker Protection Curriculum
- SP2 – [http://www.sp2.org](http://www.sp2.org)

### Attachments:
- Student curriculum is available at [www.nwtech.edu/owen](http://www.nwtech.edu/owen)