COMPETENCY ASSESSMENT
for
COLLISION REPAIR TECHNOLOGY (CR)
Associate Degree/ AAS

COLLISION REPAIR TECHNICIAN (CL)
Certificate

This document contains a list of courses, its description, primary concepts taught and job skills taught in the first year of the collision repair programs. Please assess each applicable competency by circling the appropriate code letter, then sign, date, and return the form to:

Office of Admissions
Pennsylvania College of Technology
One College Avenue
Williamsport, PA 17701-5799

_____ _____
Student's Name Student ID Number

_____ _____
School Date

H – Highly skilled, able to work independently
M – Moderately skilled – requires minimum supervision
L – Limited skills – requires full supervision
N – Not covered in instruction or work experience

For students / instructors in the State of Maryland.

(a) ***For students in Certified Maryland Career and Technology (CTE) Programs of Study, skip pages 2-8 and complete the form located on page 9 of this document.***

(b) ***For students not in certified programs complete pages 2-8 of this form.***

Introduction to Non-structural Collision Repair (ABC 100)

The course is designed to help students develop a broad knowledge of shop and personal safety practices; and to develop safe and healthy practices for themselves, their fellow workers and the environment. The course will also study the procedures for the removing, repairing, replacing, and adjusting of outer body panels; straightening and roughing out of damaged steel panels and preparing them for body filler; and the study of the special precautions needed to repair aluminum panels. Students will study the proper replacement of corrosion protection to the repaired panels and adjustment of panels for proper fit. The student will be introduced to the theory of cutting and welding of steel. The learning process will focus on group interaction, group activities, the study of the industry's best practices, and the application of assessment tools. 2 Credits (2/0).

Required Student Outcomes:

Upon successful completion of this course, students should be able to:

H M L N	Identify safety and personal health hazards according to OSHA regulations and "Right to know Law."
H M L N	Identify safety procedures associated with vehicle components and systems such as ABS, air bags, refrigerant, batteries, tires, oil, anti-freeze, engine coolant, etc.
H M L N	Discuss environmental practices associated with vehicle components and systems such as substrates, fluids, refrigerants, batteries, etc.
H M L N	Produce personal damage reports to determine appropriate methods for overall repair and developing a repair plan.
H M L N	Identify the procedure to inspect, remove, store, and replace exterior trim and moldings.
H M L N	Identify the procedure to inspect, remove, store, and replace interior trim and components.
H M L N	Identify the procedure to inspect, remove, store, and replace non-structural body panels and components that may interfere with or be damaged during repairs.
H M L N	Describe how to protect panels, glass, and parts adjacent to repair areas.
H M L N	List the steps to soap and water; wash an entire vehicle; use appropriate cleaners to remove contaminants from those areas to be repaired.
H M L N	Explain the importance of removing corrosion protection, undercoating, sealers, & other protective coatings necessary to perform repairs.
H M L N	Describe how to inspect, remove, and replace repairable plastic and other components that are recommended for off-vehicle repairs.
H M L N	List the process used to inspect, remove, replace, and align hood hinges and hood latch.
H M L N	Develop a process to inspect, remove, replace, and align deck lid and lid hatch.
H M L N	Discuss the process of inspecting, removing, replacing, and aligning doors, tailgates, hatches, lift gates, latches, hinges, and related hardware.
H M L N	Describe how to inspect, remove, replace, and align bumper bars, covers, reinforcement guards, isolators, and mounting hardware.

H M L N Discuss how to inspect, remove, replace, and align front fenders, headers, and other panels.

H M L N List a procedure for straightening and roughing-out a damaged panel—using power tools, hand tools, and weld-on pull attachments—to make the panel's surface condition ready for body filling or metal finishing.

H M L N Describe the process for restoring corrosion protection.

H M L N Discuss how to restore sealers, sound deadeners, and foam fillers.

H M L N List the steps needed to remove paint from the damaged area of a body panel.

H M L N Describe how to locate and reduce surface irregularities on a damaged body panel.

H M L N List the steps for proper use of a hammer and dolly technique.

H M L N List a procedure to use for mixing plastic body filler.

H M L N Discuss the proper application of plastic body filler.

H M L N List a procedure for all the steps for rough sanding cured plastic body filler to a contoured and finished sanding.

H M L N List the steps to inspect, adjust, repair, or replace window regulators, run channels, glass, power mechanisms and related controls.

H M L N Describe the procedure and its importance for protecting adjacent panels, glass, vehicle interiors, etc. from welding and cutting operations.

H M L N List the procedure and importance of protecting computers and other electronic control modules during welding procedures, according to manufacturer's specifications.

H M L N Be able to identify the procedures for cleaning, preparation, and repair of the surfaces of plastic parts.

Introduction to Non-structural Collision Repair Laboratory (ABC 104)

The course is designed to help students develop application skills and practices needed for shop and personal safety, and to develop safe and healthy practices for themselves, their fellow workers and the environment. This course will also help students develop application skills and practices needed for the removing, repairing, replacing, and adjusting of outer body panels; and for straightening and roughing out damaged steel panels and preparing them for body filler. Students will develop application skills and special precautions needed to repair aluminum panels. Students will also develop application skills for the proper replacement of corrosion protection to repaired panels and adjustment of panels for proper fit, and the introduction to welding and cutting of metal. The learning process will focus on demonstrations of industry's best practices, laboratory practice, skill development, and completion of laboratory task sheets. 3 Credits (0/9).

Required Student Outcomes:

Upon successful completion of this course, students should be able to:

H M L N Demonstrate safe personal health habits according to OSHA regulations and "Right to know Law."

H M L N Apply environmental practices associated with vehicle components and systems.

H M L N Review damage reports to determine appropriate methods for overall repair and then develop a repair plan.
H M L N Inspect, remove, store, and replace exterior trim and moldings.
H M L N Inspect, remove, store, and replace interior trim and components.
H M L N Inspect, remove, store, and replace non-structural body panels and components that may interfere with or be damaged during repairs.
H M L N Protect panels, glass, and parts adjacent to repair areas.
H M L N Demonstrate the proper procedures to soap and water wash an entire vehicle; use appropriate cleaners to remove contaminants from those areas to be repaired.
H M L N Remove corrosion protection, undercoating, sealers, and other protective coatings necessary to perform repairs.
H M L N Inspect, remove, and replace repairable plastic and other components that are recommended for off-vehicle repairs.
H M L N Apply safety procedures associated with vehicle components and systems such as ABS, air bags, refrigerants, batteries, tires, oil, anti-freeze, engine coolants, etc.
H M L N Inspect, remove, replace and align hood hinges, and hood latch.
H M L N Inspect, remove, replace, and align deck lid, and lid hatch.
H M L N Inspect, remove, replace, and align doors, tailgates, hatches, lift gates, latches, hinges and related hardware.
H M L N Inspect, remove, replace, and align bumper bars, covers, reinforcement guards, isolators & mounting hardware.
H M L N Inspect, remove, replace, and align front fenders, headers, and other panels.
H M L N Straighten and rough-out a damaged panel—using power tools, hand tools, and weld-on pull attachments—to ready the panel's surface condition for body filling or metal finishing.
H M L N Restore corrosion protection.
H M L N Restore sealers, sound deadeners, and foam fillers.
H M L N Remove paint from the damaged area of a body panel.
H M L N Locate and reduce surface irregularities on a damaged body panel.
H M L N Demonstrate hammer and dolly technique.
H M L N Mix plastic body filler.
H M L N Apply plastic body filler.
H M L N Rough sand cured plastic body filler to a contoured and finish sanding.
H M L N Inspect, adjust, repair or replace window regulators, run channels, glass, power mechanisms and related controls.
H M L N Protect adjacent panels, glass, vehicle interiors, etc. from welding and cutting operations.
H M L N Protect computers and other electronic control modules during welding procedures according to manufacturer's specifications.
H M L N Identify the procedures for the cleaning, preparation, and repair of the surfaces of plastic parts.

Basic Refinishing (ABC 125)

The course is designed to help students study the theoretical aspects of automotive refinishing. This course provides technical information for safety, personal and environmental, as well as

information for the proper surface preparation, application techniques and equipment usage. The student will gain knowledge in the proper selection and application of undercoatings needed for proper long-term durability. 2 Credits (2/0).

Required Student Outcomes:

Upon successful completion of this course, students should be able to:

H M L N List the necessary precautions with hazardous operations and materials according to federal, state, and local regulations.

H M L N Identify safety and personal health hazards according to OSHA regulations and "Right to Know law".

H M L N Discuss the criteria for a NIOSH-approved personal sanding respirator. Inspect conditions and ensure fit and operations. Perform maintenance in accordance with OSHA regulation 1910.134 and applicable state and local regulations.

H M L N Discuss the features and capabilities of a NIOSH-approved (Fresh Air Make-up System) personal painting/refinishing respirator system.

H M L N List the criteria for selection and using the proper personal safety equipment for surface preparation, spray gun and related equipment operations, paint mixing, matching and application, paint defects and detailing (gloves, suit, hoods, eye, and ear protection, etc).

H M L N Develop a procedure to soap and water wash entire vehicle; use appropriate cleaner to remove contaminants.

H M L N Write a standard method to remove paint finish.

H M L N Discuss the process of dry or wet sand areas to be refinished.

H M L N List the steps needed to featheredge broken area to be refinished.

H M L N Discuss the need for using suitable metal treatment or primer.

H M L N List how to mask and protect other areas that will not be refinished is completed.

H M L N Write the steps needed for mixing primer, primer-surfacer or primer-sealer.

H M L N Discuss the application of primer onto surface of repaired area.

H M L N Explain when two-component finishing filler application is needed.

H M L N Understand the difference between dry or wet sanding.

H M L N Explain the process of dry sanding an area to which two-component finishing filler has been applied.

H M L N Describe how to remove dust from area to be refinished, including cracks or moldings of adjacent areas.

H M L N Understand why using a final cleaning solution in an area to be refinished is necessary.

H M L N Explain why the removal of dust or lint particles using a tack rag from the area to be refinished is necessary.

H M L N Discuss how to prepare adjacent panels for blending.

H M L N List the steps needed to inspect, clean, and determine conditions of spray gun and related equipment (air hoses, regulators, air lines, air source, and spray equipment).

H M L N Understand how to check and adjust spray gun operation for HVLP (high volume, low pressure) guns.

H M L N Write a procedure to set-up (fluid needle, nozzle, and air cap), adjust and test spray gun using fluid, air, and pattern control valves.
H M L N Discuss the steps to clean interior, exterior, and glass.
H M L N Make a standard operation procedure for cleaning body openings (door jams and edges, etc.).
H M L N Explain how to remove overspray.

Basic Refinishing Applications (ABC 129)

The course is designed to help students develop application skills and techniques for refinishing vehicles. The course provides demonstration, practice and guidance regarding vehicle refinishing, personal and environmental safety, and techniques needed to accomplish an undetectable repair. Students will develop the needed skills and application expertise for proper surface preparation, spray application techniques, equipment operation and maintenance. Student technicians will compare and contrast common defects that occur in collision refinishing. The student will gain knowledge in the application of undercoatings needed for proper long-term durability. 3 Credits (0/9).

Required Student Outcomes:

Upon successful completion of this course, students should be able to:

H M L N Identify and take the necessary precautions with hazardous operations and materials according to federal, state, and local regulations.
H M L N Identify safety and personal health hazards according to OSHA regulations and "Right to Know law".
H M L N Select and use the NIOSH approved personal sanding respirator. Inspect conditions and ensure fit and operations. Perform maintenance in accordance with OSHA regulation 1910.134 and applicable state and local regulations.
H M L N Select and use NIOSH approved (Fresh Air Make-up System) personal painting/refinishing respirator system. Perform proper maintenance in accordance with OSHA Regulations 1910.134 and applicable state and local regulations.
H M L N Select and use the proper personal safety equipment for surface preparation, spray gun and related equipment operations, paint mixing, matching and application, paint defects and detailing (gloves, suit, hoods, eye and ear protection, etc.).
H M L N Soap and water wash entire vehicle; use appropriate cleaner to remove contaminants.
H M L N Remove paint finish.
H M L N Dry or wet sand areas to be refinished.
H M L N Featheredge broken area to be refinished.
H M L N Apply suitable metal treatment or primer.
H M L N Mask and protect other areas that will not be refinished.
H M L N Mix primer, primer-surfacer or primer-sealer.
H M L N Apply primer onto surface of repaired area.
H M L N Apply two-component finishing filler to minor surface imperfections.
H M L N Dry or wet sand primed areas.

H M L N Dry sand area to which two-component finishing filler has been applied.
H M L N Remove dust from area to be refinished, including cracks or moldings of adjacent areas.
H M L N Clean area to be refinished, using a final cleaning solution.
H M L N Remove, with a tack rag, any dust or lint particles from the area to be refinished.
H M L N Prepare adjacent panels for blending.
H M L N Inspect, clean, and determine conditions of spray gun and related equipment (air hoses, regulators, air lines, air source, and spray equipment).
H M L N Check and adjust spray gun operation for HVLP (high volume, low pressure) guns.
H M L N Set-up (fluid needle, nozzle, and air cap), adjust, and test spray gun using fluid, air, and pattern control valves.
H M L N Clean interior, exterior, and glass.
H M L N Clean body openings (door jams and edges, etc.).
H M L N Remove overspray.

HIGH SCHOOL PROGRAM INFORMATION

Name of program: _____

Length of program: _____

Total instructional hours: _____

This student completed: _____ hours or _____ years

RELATED WORK EXPERIENCE (if applicable)

The student has participated in a planned and approved program of: (Community Exploration, Cooperative Education, and Work Experience).

The student was evaluated by the employer as being: (Above Average, Average, and Below Average).

Employer: _____
Name

_____
Job Supervisor

_____
Title

COMMENTS AND/OR CLARIFICATIONS
(Include any pertinent information or qualifications regarding skills, attitudes, etc.)
_____

_____

_____

CERTIFICATION AND RECOMMENDATION

I have reviewed the above competencies and believe, to the best of my knowledge; my assessment is fair and accurate. I recommend ____, recommend with qualifications, ____, do not recommend ____ this student for advanced placement.

_____
Name

_____
Title

Updated 2/2010

Competency Assessment
for
Collision Repair Courses in State of Maryland

Per the Statewide Articulation Agreement between Pennsylvania College of Technology and Maryland State Department of Education on behalf of local school systems, I certify that _____ has satisfactorily completed NATEF approved coursework
(name of student)

and I recommend he/she should receive advanced credit at Penn College for the following courses (please check all that apply):

_____	ABC-100 Introduction Non-Structural Collision Repair	2-credit
_____	ABC-104 Introduction To Non-Structural Repair Applications	3-credit
_____	ABC-115 Fundamentals of Electrical/Electronic and Air Conditioning	2-credit
_____	ABC-116 Electrical/Electronics and Air Conditioning Applications	1-credit
_____	ABC-127 Chassis Alignment, Steering and Suspension Principles	2-credit
_____	ABC-128 Chassis Alignment, Steering and Suspension Applications	1-credit
_____	ABC-125 Basic Refinishing	2-credit
_____	ABC-129 Basic Refinishing Application	3-credit
_____	ABC-207 Structural Repair Procedures	2-credit
_____	ABC-208 Structure Repair Procedures Laboratory	3-credit
_____	**Total Credits Checked**	

I certify that the above named student has successfully completed student outcomes associated courses named above, and the student is scheduled for or has completed NATEF / NA35A examinations in these subjects.

Date or expected date of NATEF / NAT35A examination: _____. Please submit scores if already taken or forward to Penn College after scores are received. Scores must be received prior to July 1st of the year entering Penn College.

_____ _____
Instructors Signature *Date signed*

CTE Director: I certify that our Collision Repair program currently meets standards set forth for NATEF certification.

_____
CTE Director Name

_____ _____
CTE Director Signature Date