Collision Task List Instructions

1. At the **top** of 1st Tab fill in student names - The names will populate throught the entire sheet & workbook.

2. For each question enter **P** for pass or **F** for fail-not case sensitive.

3. If an **F** is entered the cell will change color- F this will help you track students.

4. At the bottom of each section will be the number of tasked performed correctly and the %.
   This is automatically calculated.

5. At the bottom of each worksheet is a tabulation of all taskes and whether the crieteria was met.
   If the criteria was met the box will be green 95% If not met the box will be red 75%

STRUCTURAL ANALYSIS AND DAMAGE REPAIR

For every task in Structural Analysis and Damage Repair, the following safety requirement must be strictly enforced:

Comply with personal and environmental safety practices associated with clothing and the use of gloves; respiratory protection; eye protection; hand tools; power equipment; proper ventilation; and the handling, storage, and disposal of chemicals/materials in accordance with local, state, and federal safety and environmental regulations. Identify vehicle system hazard types (Supplemental Restraint System (SRS), hybrid/electric/alternative fuel vehicles), locations and recommended procedures before inspecting or replacing components.

I. STRUCTURAL ANALYSIS AND DAMAGE REPAIR
A. Safety Precautions

Course	FRESHMEN 2019		Ryan G	Gerry L*	Jarrod L	Joshua L*	Mack O	Max O	Ethan P	Sean S*
CRTN102	1. Select and use proper personal safety equipment; take necessary precautions with hazardous operations and materials in accordance with federal, state, and local regulations.	HP-I	p	p	p	p	p	p	p	p
CRTN102	2. Locate procedures and precautions that may apply to the vehicle being repaired.	HP-I	p	p	p	p	p	p	p	p
CRTN102	3. Identify vehicle system hazard types (supplemental restraint system (SRS), hybrid/electric/alternative fuel vehicles), locations and recommended procedures before inspecting or replacing components.	HP-I								
CRTN102,105	4. Select and use a NIOSH approved air purifying respirator. Inspect condition and ensure fit and operation. Perform proper maintenance in accordance with OSHA regulation 1910.134 and applicable state and local regulation.	HP-I	p	p	p	p	p	p	p	p
		Total P	3	3	3	3	3	3	3	3
		% P	75%	75%	75%	75%	75%	75%	75%	75%

I. STRUCTURAL ANALYSIS AND DAMAGE REPAIR
B. Frame Inspection and Repair

Course	FRESHMEN 2019		Ryan G	Gerry L*	Jarrod L	Joshua L*	Mack O	Max O	Ethan P	Sean S*
CRTN210,211	1. Measure and diagnose structural damage using a tram gauge.	HP-I	p		p		p	p	p	
CRTN210,211	2. Attach vehicle to anchoring devices.	HP-G	p		p		p	p	p	
CRTN210,211	3. Analyze, straighten and align mash (collapse) damage.	HP-G								
CRTN210,211	4. Analyze, straighten and align sag damage.	HP-G								
CRTN210,211	5. Analyze, straighten and align side sway damage.	HP-G								
CRTN210,211	6. Analyze, straighten and align twist damage.	HP-G								
CRTN210,211	7. Analyze, straighten and align diamond frame damage.	HP-G								
CRTN210,211	8. Remove and replace damaged structural components.	HP-G								
CRTN210,211	9. Replace protective coatings; restore corrosion protection to repaired or replaced frame areas and anchoring	HP-G	p		p		p	p	p	
CRTN210,211,	10. Analyze and identify misaligned or damaged steering, suspension, and powertrain mounting points.	HP-G								
CRTN210,211,	11. Align or replace misaligned or damaged steering, suspension, and powertrain mounting points that can	HP-G								
CRTN210	12. Identify heat limitations and monitoring procedures for structural components.	HP-G	p		p		p	p	p	
CRTN210	13. Demonstrate an understanding of structural foam applications.	HP-G	p		p		p	p	p	
CRTN210,211	14. Measure and diagnose structural damage using a three-dimensional measuring system (mechanical, electronic, laser), etc.	HP-G	p		p		p	p	p	
CRTN210	15. Determine the extent of the direct and indirect damage and the direction of impact; document the methods	HP-I								
CRTN210	16. Analyze and identify crush/collapse zones.	HP-I								
		HP-I Total P	1	0	1	0	1	1	1	0
		% P	33%	0%	33%	0%	33%	33%	33%	0%
		HP-G Total P	5	0	5	0	5	5	5	0
		% P	38%	0%	38%	0%	38%	38%	38%	0%

I. STRUCTURAL ANALYSIS AND DAMAGE REPAIR
C. Unibody and Unitized Structure Inspection, Measurement, and Repair

Course	FRESHMEN 2019		Ryan G	Gerry L*	Jarrod L	Joshua L*	Mack O	Max O	Ethan P	Sean S*
CRTN210.235	1. Analyze and identify misaligned or damaged steering, suspension, and powertrain mounting points that can	HP-G								
CRTN210.235	2. Align or replace misaligned or damaged steering, suspension, and powertrain mounting points that can cause	HP-G								
CRTN210,211	3. Measure and diagnose unibody damage using tram gauge.	HP-I	p		**p**		**p**	p	p	
CRTN210	4. Measure and diagnose unibody vehicles using a dedicated (fixture) measuring system.	HP-G								
CRTN210,211	5. Diagnose and measure unibody vehicles using a three-dimensional measuring system (mechanical,	HP-G	p		p		p	p	p	
CRTN210	6. Determine the extent of the direct and indirect damage and the direction of impact; plan and document the	HP-I								
CRTN210	7. Attach anchoring devices to vehicle; remove or reposition components as necessary.	HP-I	p		p		p	p	p	
CRTN210	8. Straighten and align roof rails/headers and roof panels.	HP-G								
CRTN210	9. Straighten and align rocker panels and pillars.	HP-G								

CRTN210	10. Straighten and align vehicle openings, and floor pans.	HP-G								
CRTN210	11. Straighten and align quarter panels, wheelhouse assemblies, and rear body sections (including rails and	HP-G								
CRTN210	12. Straighten and align front-end sections (aprons, strut towers, upper and lower rails, steering, and	HP-G								
CRTN210	13. Identify substrate and repair or replacement recommendations.	HP-I								
CRTN210	14. Identify proper cold stress relief methods.	HP-I								
CRTN210	15. Repair damage using power tools and hand tools to restore proper contours and dimensions.	HP-I								
CRTN210	16. Determine sectioning procedures of a steel body structure.	HP-I								
CRTN210	17. Remove and replace damaged structural components.	HP-G								
CRTN210	18. Restore corrosion protection to repaired or replaced structural areas, and anchoring locations.	HP-I								
CRTN210	19. Determine the extent of damage to aluminum structural components; repair, weld, or replace.	HP-G								
CRTN210	20. Analyze and identify crush/collapse zones.	HP-I								
		HP-I Total P	2	0	2	0	2	2	2	0
		% P	22%	0%	22%	0%	22%	22%	22%	0%
		HP-G Total P	1	0	1	0	1	1	1	0
		% P	9%	0%	9%	0%	9%	9%	9%	0%

I. STRUCTURAL ANALYSIS AND DAMAGE REPAIR
D. Stationary Glass

Course	FRESHMEN 2019		Ryan G	Gerry L*	Jarrod L	Joshua L*	Mack O	Max O	Ethan P	Sean S*
CRTN245	1. Identify considerations for removal, handling, and installation of advanced glass systems (rain sensors,	HP-G								
CRTN201	2. Remove and reinstall or replace modular glass using recommended materials.	HP-G								
CRTN151,201	3. Check for water leaks, dust leaks, and wind noise.	HP-G								
		HP-G Total P	0	0	0	0	0	0	0	0
		% P	0%	0%	0%	0%	0%	0%	0%	0%

Criteria		Ryan G	Gerry L*	Jarrod L	Joshua L*	Mack O	Max O	Ethan P	Sean S*	#?
95%	HP-I	38%	19%	38%	19%	38%	38%	38%	19%	16
90%	HP-G	22%	0%	22%	0%	22%	22%	22%	0%	27

COMMENTS:								
	Certificate		Certificate				Certificate	

BASIC COLLISION REPAIR LAB

For every task in Non-Structural Analysis and Damage Repair (Body Components), the

Comply with personal and environmental safety practices associated with clothing and the

II. NON-STRUCTURAL ANALYSIS AND DAMAGE REPAIR (BODY COMPONENTS)
A. Safety Precautions

Course	FRESHMEN 2019		Ryan G	Gerry L*	Jarrod L	Joshua L*	Mack O	Max O	Ethan P	Sean S*
CRTN101,	1. Select and use proper personal safety equipment; take necessary precautions with hazardous	HP-I	p	p	p	p	p	p	p	p
CRTN102	2. Locate procedures and precautions that may apply to the vehicle being repaired.	HP-I	p	p	p	p	p	p	p	p
		Total P	2	2	2	2	2	2	2	2
		% P	100%	100%	100%	100%	100%	100%	100%	100%

II. NON-STRUCTURAL ANALYSIS AND DAMAGE REPAIR (BODY COMPONENTS)
B. Preparation

Course	FRESHMEN 2019		Ryan G	Gerry L*	Jarrod L	Joshua L*	Mack O	Max O	Ethan P	Sean S*
CRTN230	1. Review damage report and analyze damage to determine appropriate methods for overall repair; develop and document a repair plan.	HP-I								
CRTN151,	2. Inspect, remove, label, store, and reinstall exterior trim and moldings.	HP-I	**p**	**p**	**p**	**p**	**p**	p	p	p
CRTN151,	3. Inspect, remove, label, store, and reinstall interior trim and components.	HP-I	p	p	p	p	p	p	p	p
CRTN151,	4. Inspect, remove, label, store, and reinstall body panels and components that may interfere with	HP-I	p		p		p	p	p	
CRTN151,	5. Inspect, remove, protect label, store, and reinstall vehicle mechanical and electrical components	HP-G	p		p		p	p	p	
CRTN151,	6. Protect panels, glass, interior parts, and other vehicles adjacent to the repair area.	HP-I	p		p		p	p	p	
CRTN151,	7. Soap and water wash entire vehicle; complete pre-repair inspection checklist.	HP-I	p	p	p	p	p	p	p	p
CRTN101,1	8. Prepare damaged area using water-based and solvent-based cleaners.	HP-I	p	p	p	p	p	p	p	p
CRTN201,2	9. Remove corrosion protection, undercoating, sealers, and other protective coatings as necessary	HP-I	p		p		p	p	p	
CRTN151,2	10. Inspect, remove, and reinstall repairable plastics and other components for off-vehicle repair.	HP-I	p	p	p	p	p	p	p	p
		HP-I Total P	8	5	8	5	8	8	8	5
		% P	89%	56%	89%	56%	89%	89%	89%	56%
		HP-G Total P	1	0	1	0	1	1	1	0
		% P	100%	0%	100%	0%	100%	100%	100%	0%

II. NON-STRUCTURAL ANALYSIS AND DAMAGE REPAIR (BODY COMPONENTS)
C. Off-Vehicle Transmission and Transaxle

Course	FRESHMEN 2019		Ryan G	Gerry L*	Jarrod L	Joshua L*	Mack O	Max O	Ethan P	Sean S*
CRTN201,2	1. Inspect/locate direct, indirect, or hidden damage and direction of impact.	HP-I								
CRTN151,2	2. Inspect, remove and replace mechanically fastened welded steel panel or panel assemblies.	HP-G	p	p	p	p	p	p	p	p
CRTN151,2	3. Determine the extent of damage to aluminum body panels; repair or replace.	HP-G	p	p	p	p	p	p	p	p
CRTN151,2	4. Inspect, remove, replace, and align hood, hood hinges, and hood latch.	HP-I	p		p		p	p	p	
CRTN151,2	5. Inspect, remove, replace, and align deck lid, lid hinges, and lid latch.	HP-I	p		p		p	p	p	
CRTN151,2	6. Inspect, remove, replace, and align doors, latches, hinges, and related hardware.	HP-I	p		p		p	p	p	
CRTN151,2	7. Inspect, remove, replace and align tailgates, hatches, liftgates and sliding doors.	HP-G	p	p	p	p	p	p	p	p
CRTN151,2	8. Inspect, remove, replace, and align bumpers, covers, reinforcements, guards, impact absorbers,	HP-I	p	**p**	**p**		**p**	p	p	p
CRTN151,2	9. Inspect, remove, replace and align fenders, and related panels.	HP-I	p		p		p	p	p	
CRTN201	10. Restore corrosion protection during and after the repair.	HP-I								
CRTN201	11. Replace door skins.	HP-G								
CRTN201,2	12. Restore sound deadeners and foam materials.	HP-G								
CRTN201	13. Perform panel bonding and weld bonding.	HP-G								
CRTN151,2	14. Diagnose and repair water leaks, dust leaks, and wind noise.	HP-G	p	p	p	p	p	p	p	p
CRTN102	15. Identify one-time use fasteners.	HP-G	p	p	p	p	p	p	p	p
CRTN201,2	16. Weld damaged or torn steel body panels; repair broken welds.	HP-G	p	p	p	p	p	p	p	p
		HP-I Total P	5	1	5	0	5	5	5	1
		% P	71%	14%	71%	0%	71%	71%	71%	14%
		HP-G Total P	6	6	6	6	6	6	6	6
		% P	67%	67%	67%	67%	67%	67%	67%	67%

II. NON-STRUCTURAL ANALYSIS AND DAMAGE REPAIR (BODY COMPONENTS)
D. Metal Finishing and Body Filling

Course	FRESHMEN 2019		Ryan G	Gerry L*	Jarrod L	Joshua L*	Mack O	Max O	Ethan P	Sean S*
CRTN101,2	1. Prepare a panel for body filler by abrading or removing the coatings; featheredge and refine	HP-I	p	p	p	p	p	p	p	p
CRTN101	2. Locate and repair surface irregularities on a damaged body panel using power tools, hand tools,	HP-I	p	p	p	p	p	p	p	p
CRTN101	3. Demonstrate hammer and dolly techniques.	HP-I	p	p	p	p	p	p	p	p
CRTN101	4. Heat shrink stretched panel areas to proper contour.	HP-G	p	p	p	p	p	p	p	p
CRTN101	5. Cold shrink stretched panel areas to proper contour.	HP-I	p	p	p	p	p	p	p	p
CRTN101	6. Identify body filler defects; correct the cause and condition. (Pinholing, ghosting, staining, over	HP-I	p	p	p	p	p	p	p	p
CRTN101	7. Identify different types of body fillers.	HP-G	p	p	p	p	p	p	p	p
CRTN101	8. Shape body filler to contour; finish sand.	HP-I	**p**	**p**	**p**	**p**	**p**	p	p	p
CRTN151	9. Perform proper metal finishing techniques for aluminum.	HP-G	**p**	**p**	**p**	**p**	**p**	p	p	p
CRTN151	10. Perform proper application of body filler to aluminum.	HP-G	**p**	**p**	**p**	**p**	**p**	p	p	p
CRTN101	11. Straighten contours of damaged panels to a suitable condition for body fillings or metal	HP-I	**p**	**p**	**p**	**p**	**p**	p	p	p
		HP-I Total P	7	7	7	7	7	7	7	7
		% P	100%	100%	100%	100%	100%	100%	100%	100%
		HP-G Total P	4	4	4	4	4	4	4	4
		% P	100%	100%	100%	100%	100%	100%	100%	100%

II. NON-STRUCTURAL ANALYSIS AND DAMAGE REPAIR (BODY COMPONENTS)
E. Moveable Glass and Hardware

Course	FRESHMEN 2019		Ryan G	Gerry L*	Jarrod L	Joshua L*	Mack O	Max O	Ethan P	Sean S*
CRTN151,2	1. Inspect, adjust, repair or replace window regulators, run channels, glass, power mechanisms,	HP-I	p	p	p	p	p	p	p	p
CTN151,20	2. Inspect, adjust, repair, remove, reinstall or replace weather-stripping.	HP-G	p		p		p	p	p	
CRTN151,2	3. Inspect, repair or replace, and adjust removable power operated roof panel and hinges, latches,	HP-G	p	p	p	p	p	p	p	p
CRTN201	4. Inspect, remove, reinstall, and align convertible top and related mechanisms.	HP-G								
CRTN135,2	5. Initialize electrical components as needed.	HP-G								
		HP-I Total P	1	1	1	1	1	1	1	1
		% P	100%	100%	100%	100%	100%	100%	100%	100%
		HP-G Total P	2	1	2	1	2	2	2	1
		% P	50%	25%	50%	25%	50%	50%	50%	25%

II. NON-STRUCTURAL ANALYSIS AND DAMAGE REPAIR (BODY COMPONENTS)
F. Plastics and Adhesives

Course	FRESHMEN 2019		Ryan G	Gerry L*	Jarrod L	Joshua L*	Mack O	Max O	Ethan P	Sean S*
CRTN151	1. Identify the types of plastics; determine repairability.	HP-I	p	p	p	p	p	p	p	p
CRTN151	2. Clean and prepare the surface of plastic parts; identify the types of plastic repair procedures.	HP-I	p	p	p	p	p	p	p	p
CRTN151	3. Repair rigid, semi-rigid, and flexible plastic panels.	HP-I	p		p	p	p	p	p	p
CRTN151	4. Remove or repair damaged areas from rigid exterior composite panels.	HP-G	p	p	p	p	p	p	p	p
CRTN151	5. Replace bonded rigid exterior composite body panels; straighten or align panel supports.	HP-G	p	p	p	p	p	p	p	p
		HP-I Total P	3	2	3	3	3	3	3	3
		% P	100%	67%	100%	100%	100%	100%	100%	100%
		HP-G Total P	2	2	2	2	2	2	2	2
		% P	100%	100%	100%	100%	100%	100%	100%	100%

	Criteria		Ryan G	Gerry L*	Jarrod L	Joshua L*	Mack O	Max O	Ethan P	Sean S*	#?
	95%	HP-I	84%	58%	84%	58%	84%	84%	84%	61%	31
	90%	HP-G	68%	61%	68%	61%	68%	68%	68%	61%	20

Comments:		Ryan G	Gerry L*	Jarrod L	Joshua L*	Mack O	Max O	Ethan P	Sean S*
			Certificate		Certificate				Certificate

MECHANICAL AND ELECTRICAL COMPONENTS

For every task in Mechanical and Electrical Components, the following safety requirement

Comply with personal and environmental safety practices associated with clothing and the

Course	III. MECHANICAL AND ELECTRICAL COMPONENTS A. Safety Precautions FRESHMEN 2019		Ryan G	Gerry L*	Jarrod L	Joshua L*	Mack O	Max O	Ethan P	Sean S*
CRTN102	1. Select and use proper personal safety equipment; take necessary precautions with hazardous	HP-I	P	P	P	P	P	P	P	P
CRTN102	2. Locate procedures and precautions that may apply to the vehicle being repaired.	HP-I	P	P	P	P	P	P	P	P
CRTN102,245	3. Identify vehicle system hazard types (supplemental restraint system (SRS),	HP-I	P	P	P	P	P	P	P	P
CRTN102,105	4. Select and use a NIOSH approved air purifying respirator. Inspect condition and ensure fit and	HP-I	P	P	P	P	P	P	P	P
		Total P	4	4	4	4	4	4	4	4
		% P	100%	100%	100%	100%	100%	100%	100%	100%

Course	III. MECHANICAL AND ELECTRICAL COMPONENTS B. Suspension and Steering FRESHMEN 2019		Ryan G	Gerry L*	Jarrod L	Joshua L*	Mack O	Max O	Ethan P	Sean S*
CRTN210,211, 235	1. Perform visual inspection and measuring checks to identify steering and suspension collision damage.	HP-G								
CRTN102	2. Identify one–time use fasteners.	HP-I	p	p	p	p	p	p	p	p
CRTN102,235	3. Clean, inspect, and prepare reusable fasteners.	HP-I								
CRTN235	4. Remove, replace, inspect or adjust power steering pump, pulleys, belts, hoses, fittings and pump	HP-G								
CRTN235	5. Remove and replace power steering gear (non-rack and pinion type).	HP-G								
CRTN235	6. Inspect, remove, and replace power rack and pinion steering gear and related components.	HP-G								
CRTN235	7. Inspect and replace parallelogram steering linkage components.	HP-G								
CRTN235	8. Inspect, remove and replace upper and lower control arms and related components.	HP-G								
CRTN235	9. Inspect, remove and replace steering knuckle/spindle/hub assemblies (including bearings, races,	HP-G								
CRTN235	10. Inspect, remove and replace front suspension system coil springs and spring insulators	HP-G								
CRTN235	11. Inspect, remove, replace, and adjust suspension system torsion bars, and mounts.	HP-G								
CRTN235	12. Inspect, remove and replace stabilizer bar bushings, brackets, and links.	HP-G								
CRTN235	13. Inspect, remove and replace MacPherson strut or assembly, upper bearing, and mount.	HP-G								
CRTN235	14. Inspect, remove, and replace rear suspension system transverse links, control arms, stabilizer	HP-G								
CRTN235	15. Inspect, remove, and replace suspension system leaf spring(s) and related components.	HP-G								
CRTN235	16. Inspect axle assembly for damage and misalignment.	HP-G								
CRTN235	17. Inspect, remove and replace shock absorbers.	HP-G								
CRTN235	18. Diagnose, inspect, adjust, repair or replace active suspension systems and associated lines and	HP-G								
CRTN235	19. Measure vehicle ride height and wheel base; determine necessary action.	HP-I								
CRTN210,235	20. Inspect, remove, replace, and align front and rear frame (cradles/sub).	HP-G								
CRTN235	21. Diagnose and inspect steering wheel, steering column, and components.	HP-G								
CRTN235	22. Verify proper operation of steering systems including electronically controlled, hydraulic and	HP-G								
CRTN235	23. Diagnose front and rear suspension system noises and body sway problems; determine	HP-G								
CRTN235	24. Diagnose vehicle wandering, pulling, hard steering, bump steer, memory steering, torque	HP-G								
CRTN235	25. Demonstrate an understanding of wheel, suspension, and steering alignments (caster, camber,	HP-G								
CRTN235	26. Diagnose tire wear patterns; determine cause.	HP-I								
CRTN235	27. Inspect tires; identify direction of rotation and location; check tire size, tire pressure monitoring	HP-I								
CRTN235	28. Diagnose wheel/tire vibration, shimmy, tire pull (lead), wheel hop problems; determine needed	HP-G								
CRTN235	29. Measure wheel, tire, axle, and hub runout; determine needed repairs.	HP-I								
CRTN235	30. Reinstall wheels and torque lug nuts.	HP-I								
CRTN235	31. Perform initialization or calibration procedures following suspension and/or steering system repairs.	HP-G								
		HP-I Total P	1	1	1	1	1	1	1	1
		% P	14%	14%	14%	14%	14%	14%	14%	14%
		HP-G Total P	0	0	0	0	0	0	0	0
		% P	0%	0%	0%	0%	0%	0%	0%	0%

Course	III. MECHANICAL AND ELECTRICAL COMPONENTS C. Electrical FRESHMEN 2019		Ryan G	Gerry L*	Jarrod L	Joshua L*	Mack O	Max O	Ethan P	Sean S*
CRTN135	1. Check for available voltage, voltage drop and current, and resistance in electrical wiring circuits	HP-I	P	P	P	P	P	P	P	P
CRTN135	2. Repair wiring and connectors.	HP-I	P	P	P	P	P	P	P	P
CRTN135	3. Inspect, test, and replace fusible links, circuit breakers, and fuses.	HP-I	P	P	P	P	P	P	P	P
CRTN135	4. Perform battery state-of-charge test and slow/fast battery charge.	HP-I	P	P	P	P	P	P	P	P
CRTN135	5. Inspect, clean, repair or replace battery, battery cables, connectors and clamps.	HP-I	**P**	**P**	**P**	**P**	**P**	P	P	P
CRTN135	6. Dispose of batteries and battery acid according to local, state, and federal requirements.	HP-G	**P**	**P**	**P**	**P**	**P**	P	P	P
CRTN245	7. Identify programmable electrical/electronic components and check for malfunction indicator	HP-I	**P**	**P**	**P**	**P**	**P**	P	P	P

CRTN135	8. Inspect alignment, adjust, remove and replace alternator (generator), drive belts, pulleys, and	HP-I	**P**	**P**	**P**	**P**	**P**	P	P	P
CRTN245	9. Check operation and aim headlamp assemblies and fog/driving lamps; determine needed repairs.	HP-I								
CRTN245	10. Inspect, test, and repair or replace switches, relays, bulbs, sockets, connectors, and ground	HP-I								
CRTN245	11. Remove and replace horn(s); check operation.	HP-I	P	P	P	P	P	P	P	P
CRTN245	12. Check operation of wiper/washer systems; determine needed repairs.	HP-I	P	P	P	P	P	P	P	P
CRTN245	13. Check operation of power side and tailgate window; determine needed repairs.	HP-I	P	P	P	P	P	P	P	P
CRTN245	14. Inspect, remove and replace power seat, motors, linkages, cables, etc.	HP-G	P	P	P	P	P	P	P	P
CRTN245	15. Inspect, remove and replace components of electric door and hatch/trunk lock.	HP-G	P	P	P	P	P	P	P	P
CRTN245	16. Inspect, remove and replace components of keyless lock/unlock devices and alarm systems.	HP-G	P	P	P	P	P	P	P	P
CRTN245	17. Inspect, remove and replace components of electrical sunroof and convertible/retractable hard top	HP-G	P	P	P	P	P	P	P	P
CRTN245	18. Check operation of electrically heated mirrors, windshields, back lights, panels, etc.; determine	HP-I	P	P	P	P	P	P	P	P
CRTN245	19. Demonstrate self-grounding procedures (anti-static) for handling electronic components.	HP-I	P	P	P	P	P	P	P	P
CRTN245	20. Check for module communication errors using a scan tool.	HP-G								
CRTN135	21. Use wiring diagrams, component location, and diagnostic flow charts during diagnosis of	HP-G	P	P	P	P	P	P	P	P
CRTN245	22. Identify safe disabling techniques of high voltage systems on hybrid/electric vehicles.	HP-G								
CRTN245	23. Identify potential safety and materials handling concerns associated with high voltage	HP-G								
		HP-I Total P	12	12	12	12	12	12	12	12
		% P	86%	86%	86%	86%	86%	86%	86%	86%
		HP-G Total P	6	6	6	6	6	6	6	6
		% P	67%	67%	67%	67%	67%	67%	67%	67%

III. MECHANICAL AND ELECTRICAL COMPONENTS
D. Brakes

Course	FRESHMEN 2019		Ryan G	Gerry L*	Jarrod L	Joshua L*	Mack O	Max O	Ethan P	Sean S*
CRTN235	1. Inspect brake lines, hoses, and fittings for damage or wear; tighten fittings and supports; replace	HP-G								
CRTN235	2. Replace hoses, fittings, seals, and supports.	HP-I								
CRTN235	3. Identify, handle, store, and fill with appropriate brake fluids.	HP-G								
CRTN235	4. Bleed (manual, pressure, or vacuum) hydraulic brake system.	HP-I								
CRTN235	5. Pressure test brake hydraulic system; determine necessary action.	HP-G								
CRTN235	6. Adjust brake shoes or pads; remove and reinstall brake drums or drum/hub assemblies.	HP-I								
CRTN235	7. Remove, clean and inspect caliper and rotor assembly and mountings for wear and damage; reinstall	HP-I								
CRTN235	8. Inspect parking brake system operation; repair or adjust as necessary; verify operation.	HP-I								
CRTN235	9. Identify the proper procedures for handling brake dust.	HP-G								
CRTN235	10. Check for bent or damaged brake system components.	HP-G								
CRTN235	11. Demonstrate an understanding of various types of advanced braking systems (ABS, electronic	HP-G								
		HP-I Total P	0	0	0	0	0	0	0	0
		% P	0%	0%	0%	0%	0%	0%	0%	0%
		HP-G Total P	0	0	0	0	0	0	0	0
		% P	0%	0%	0%	0%	0%	0%	0%	0%

III. MECHANICAL AND ELECTRICAL COMPONENTS
E. Heating and Air Conditioning

Course	FRESHMEN 2019		Ryan G	Gerry L*	Jarrod L	Joshua L*	Mack O	Max O	Ethan P	Sean S*
CRTN135	1. Identify and comply with environmental regulations relating to refrigerants and coolants.	HP-G	P	P	P	P	P	P	P	P
CRTN135	2. Maintain and verify correct operation of certified refrigerant recovery and recharging equipment.	HP-G	P	P	P	P	P	P	P	P
CRTN135	3. Locate and identify A/C system service ports.	HP-I	P	P	P	P	P	P	P	P
CRTN135	4. Identify refrigerant contamination, recover, label, and recycle refrigerant from an A/C system.	HP-G	P	P	P	P	P	P	P	P
CRTN135	5. Select refrigerant, evacuate, and recharge A/C system.	HP-I	P	P	P	P	P	P	P	P
CRTN135	6. Select oil type and install correct amount in A/C system.	HP-I	P	P	P	P	P	P	P	P
CRTN135	7. Inspect, adjust, and replace A/C compressor drive belts; check pulley alignment.	HP-G	P	P	P	P	P	P	P	P
CRTN135	8. Remove and replace A/C compressor; inspect, repair or replace A/C compressor mount.	HP-G	P	P	P	P	P	P	P	P
CRTN135	9. Inspect, repair or replace A/C system mufflers, hoses, lines, fittings, orifice tube, expansion	HP-G	P	P	P	P	P	P	P	P
CRTN135	10. Inspect, test, and replace A/C system condenser and mounts.	HP-G	P	P	P	P	P	P	P	P
CRTN135	11. Inspect and replace receiver/drier or accumulator/drier.	HP-G	P	P	P	P	P	P	P	P
CRTN135	12. Inspect and repair A/C component wiring.	HP-G	P	P	P	P	P	P	P	P
CRTN135	13. Demonstrate an understanding of safe handling procedures associated with high voltage A/C	HP-G	P	P	P	P	P	P	P	P
CRTN135	14. Inspect and protect open A/C system components from contaminants during repairs.	HP-G	P	P	P	P	P	P	P	P
		HP-I Total P	3	3	3	3	3	3	3	3
		% P	100%	100%	100%	100%	100%	100%	100%	100%
		HP-G Total P	11	11	11	11	11	11	11	11
		% P	100%	100%	100%	100%	100%	100%	100%	100%

III. MECHANICAL AND ELECTRICAL COMPONENTS
F. Cooling Systems

Course	FRESHMEN 2019		Ryan G	Gerry L*	Jarrod L	Joshua L*	Mack O	Max O	Ethan P	Sean S*
CRTN135	1. Check engine cooling and heater system hoses and belts; determine necessary action.	HP-I	P	P	P	P	P	P	P	P

CRTN135	2. Inspect, test, remove, and replace radiator, pressure cap, coolant system components, and water	HP-G	P	P	P	P	P	P	P	P
CRTN135	3. Recover, refill, and bleed system with proper coolant and check level of protection; leak test	HP-I	P	P	P	P	P	P	P	P
CRTN135	4. Remove, inspect and replace fan (both electrical and mechanical), fan sensors, fan pulley, fan	HP-G	P	P	P	P	P	P	P	P
CRTN135	5. Inspect, remove, and replace auxiliary oil/fluid coolers; check oil levels.	HP-G	P	P	P	P	P	P	P	P
CRTN135	6. Demonstrate an understanding of hybrid/electric cooling systems.	HP-G	P	P	P	P	P	P	P	P
		HP-I Total P	2	2	2	2	2	2	2	2
		% P	100%	100%	100%	100%	100%	100%	100%	100%
		HP-G Total P	4	4	4	4	4	4	4	4
		% P	100%	100%	100%	100%	100%	100%	100%	100%

III. MECHANICAL AND ELECTRICAL COMPONENTS
G. Drive Train

Course	FRESHMEN 2019		Ryan G	Gerry L*	Jarrod L	Joshua L*	Mack O	Max O	Ethan P	Sean S*
CRTN235	1. Remove, replace, and adjust shift or clutch linkage as required.	HP-G								
CRTN235	2. Remove and replace electronic sensors, wires, and connectors.	HP-G								
CRTN235	3. Remove and reinstall powertrain assembly; inspect, replace, and align powertrain mounts.	HP-G								
CRTN235	4. Remove and replace drive axle assembly.	HP-G								
CRTN235	5. Inspect, remove and replace half shafts and axle constant velocity (CV) joints.	HP-G								
CRTN235	6. Inspect, remove and replace drive shafts and universal joints.	HP-G								
CRTN245	7. Demonstrate an understanding of safe handling procedures associated with high voltage	HP-G								
		HP-G Total P	0	0	0	0	0	0	0	0
		% P	0%	0%	0%	0%	0%	0%	0%	0%

III. MECHANICAL AND ELECTRICAL COMPONENTS
H. Fuel, Intake and Exhaust Systems

Course	FRESHMEN 2019		Ryan G	Gerry L*	Jarrod L	Joshua L*	Mack O	Max O	Ethan P	Sean S*
CRTN245	1. Inspect, remove and replace exhaust pipes, mufflers, converters, resonators, tail pipes, and heat	HP-G								
CRTN245	2. Inspect, remove and replace fuel/DEF tank, tank filter, cap, filler hose, pump/sending unit and	HP-G								
CRTN245	3. Inspect, remove and replace engine components of air intake components.	HP-G								
CRTN245	4. Inspect, remove and replace canister, filter, vent, and purge lines of fuel vapor (EVAP) control	HP-G								
		HP-G Total P	0	0	0	0	0	0	0	0
		% P	0%	0%	0%	0%	0%	0%	0%	0%

III. MECHANICAL AND ELECTRICAL COMPONENTS
I. Restraint Systems

Course	FRESHMEN 2019		Ryan G	Gerry L*	Jarrod L	Joshua L*	Mack O	Max O	Ethan P	Sean S*
CRTN245	1. Inspect, remove, and replace seatbelt and shoulder harness assembly and components.	HP-G								
CRTN245	2. Inspect restraint system mounting areas for damage; repair as needed.	HP-G								
CRTN245	3. Inspect the operation of the seatbelt system.	HP-I								
CRTN245	4. Disable and enable Supplemental Restraint System (SRS).	HP-G								
CRTN245	5. Inspect, protect, remove and replace Supplemental Restraint Systems (SRS) sensors and wiring;	HP-G								
CRTN245	6. Verify that Supplemental Restraint System (SRS) is operational.	HP-I								
CRTN245	7. Inspect, remove, replace and dispose of deployed and non-deployed airbag(s) and pretensioners.	HP-G								
CRTN245	8. Use Diagnostic Trouble Codes (DTC) to diagnose and repair the Supplemental Restraint System	HP-G								
CRTN245	9. Demonstrate an understanding of advanced restraint systems.	HP-G								
CRTN245	10. Identify components of Supplemental Restraint Systems (SRS)	HP-G								
		HP-I Total P	0	0	0	0	0	0	0	0
		% P	0	0	0	0	0	0	0	0
		HP-G Total P	0	0	0	0	0	0	0	0
		% P	0	0	0	0	0	0	0	0

Criteria		Ryan G	Gerry L*	Jarrod L	Joshua L*	Mack O	Max O	Ethan P	Sean S*	#?
95%	HP-I	59%	59%	59%	59%	59%	59%	59%	59%	37
90%	HP-G	29%	29%	29%	29%	29%	29%	29%	29%	73

COMMENTS:								
	Certificate		Certificate					Certificate

PAINTING AND REFINISHING

For every task in Painting and Refinishing, the following safety requirement must be strictly

Comply with personal and environmental safety practices associated with clothing and the use

IV. PAINTING AND REFINISHING
A. Restraint Systems

Course	FRESHMEN 2019		Ryan G	Gerry L*	Jarrod L	Joshua L*	Mack O	Max O	Ethan P	Sean S*
CRTN102,105	1. Select and use proper personal safety equipment; take necessary precautions with hazardous	HP-I	p	p	p	p	p	p	p	p
CRTN102	2. Identify safety and personal health hazards according to OSHA guidelines and the "Right to Know	HP-I	p	p	p	p	p	p	p	p
CRTN105	3. Inspect spray environment and equipment to ensure compliance with federal, state and local	HP-I	p	p	p	p	p	p	p	p
CRTN105	4. Select and use a NIOSH approved air purifying respirator. Inspect condition and ensure fit and	HP-I	p	p	p	p	p	p	p	p
CRTN105	5. Select and use a NIOSH approved supplied air (Fresh Air Make-up) respirator system. Perform	HP-I	p	p	p	p	p	p	p	p
CRTN102,105	6. Select and use the proper personal safety equipment for surface preparation, spray gun and related	HP-I	p	p	p	p	p	p	p	p
		Total P	6	6	6	6	6	6	6	6
		% P	100%	100%	100%	100%	100%	100%	100%	100%

IV. PAINTING AND REFINISHING
B. Surface Preparation

Course	FRESHMEN 2019		Ryan G	Gerry L	Jarrod L	Joshua L*	Mack O	Max O	Ethan P	Sean S*
CFTN151	1. Inspect, remove, store, protect, and replace exterior trim and components necessary for proper surface	HP-I	**p**	**p**	**p**	**p**	**p**	p	p	p
CRTN125,151	2. Soap and water wash entire vehicle; use appropriate cleaner to remove contaminants.	HP-I	p	p	p	p	p	p	p	p
CRTN125	3. Inspect and identify type of finish, surface condition, and film thickness; develop and document a	HP-G	p	p	p	p	p	p	p	p
CRTN125	4. Remove paint finish as needed.	HP-I	p	p	p	p	p	p	p	p
CRTN105,125	5. Dry or wet sand areas to be refinished.	HP-I	p	p	p	p	p	p	p	p
CRTN105,125	6. Featheredge areas to be refinished.	HP-I	p	p	p	p	p	p	p	p
CRTN105,125	7. Apply suitable metal treatment or primer in accordance with total product systems.	HP-I	p	p	p	p	p	p	p	p
CRTN125,225	8. Mask and protect other areas that will not be refinished.	HP-I								
CRTN125	9. Demonstrate different masking techniques (recess/back masking, foam door type, etc.).	HP-G	p	p	p	p	p	p	p	p
CRTN105,125	10. Mix primer, primer-surfacer and primer-sealer.	HP-I	p	p	p	p	p	p	p	p
CRTN225	11. Identify a complimentary color or shade of undercoat to improve coverage.	HP-G								
CRTN105,125,22	12. Apply primer onto surface of repaired area.	HP-I	p	p	p	p	p	p	p	p
CRTN101,105,12	13. Apply two-component finishing filler to minor surface imperfections.	HP-I	p	p	p	p	p	p	p	p
CRTN105,125,22	14. Block sand area to which primer-surfacer has been applied.	HP-I	p	p	p	p	p	p	p	p
CRTN105,125,22	15. Dry sand area to which finishing filler has been applied.	HP-I	p	p	p	p	p	p	p	p
CRTN105,125,22	16. Remove dust from area to be refinished, including cracks or moldings of adjacent areas.	HP-I	p	p	p	p	p	p	p	p
CRTN105,125,22	17. Clean area to be refinished using a final cleaning solution.	HP-I	p	p	p	p	p	p	p	p
CRTN105,125,22	18. Remove, with a tack rag, any dust or lint particles from the area to be refinished.	HP-I	p	p	p	p	p	p	p	p
CRTN125,225	19. Apply suitable primer sealer to the area being refinished.	HP-I	p		**p**		**p**	p	p	
CRTN125,225	20. Scuff sand to remove nibs or imperfections from a sealer.	HP-I								
CRTN225	21. Apply stone chip resistant coating.	HP-G								
CRTN225	22. Restore caulking and seam sealers to repaired areas.	HP-G								
CRTN225	23. Prepare adjacent panels for blending.	HP-I								
CRTN225	24. Identify the types of rigid, semi-rigid or flexible plastic parts to be refinished; determine the	HP-I								
CRTN125,225	25. Identify metal parts to be refinished; determine the materials needed, preparation, and refinishing	HP-I	p	p	p	p	p	p	p	p
		HP-I Total P	16	15	16	15	16	16	16	15
		% P	80%	75%	80%	75%	80%	80%	80%	75%
		HP-G Total P	2	2	2	2	2	2	2	2
		% P	40%	40%	40%	40%	40%	40%	40%	40%

IV. PAINTING AND REFINISHING
C. Spray Gun and Related Equipment Operation

Course	FRESHMEN 2019		Ryan G	Gerry L*	Jarrod L	Joshua L*	Mack O	Max O	Ethan P	Sean S*
CRTN105	1. Inspect, clean, and determine condition of spray guns and related equipment (air hoses, regulators, air	HP-I	p	p	p	p	p	p	p	p
CRTN105	2. Select spray gun setup (fluid needle, nozzle, and cap) for product being applied.	HP-I	p	p	p	p	p	p	p	p
CRTN105	3. Test and adjust spray gun using fluid, air and pattern control valves.	HP-I	p	p	p	p	p	p	p	p
CRTN105	4. Demonstrate an understanding of the operation of pressure spray equipment.	HP-G	p	p	p	p	p	p	p	p
		HP-I Total P	3	3	3	3	3	3	3	3
		% P	100%	100%	100%	100%	100%	100%	100%	100%
		HP-G Total P	1	1	1	1	1	1	1	1
		% P	100%	100%	100%	100%	100%	100%	100%	100%

p

p

IV. PAINTING AND REFINISHING
D. Paint Mixing, Matching, and Applying

Course	FRESHMEN 2019		Ryan G	Gerry L*	Jarrod L	Joshua L*	Mack O	Max O	Ethan P	Sean S*
CRTN125	1. Identify color code by manufacturer's vehicle information label.	HP-I	p	p	p	p	p	p	p	p
CRTN125,225	2. Shake, stir, reduce, catalyze/activate, and strain refinish materials.	HP-I	p	p	p	p	p	p	p	p
CRTN125,225	3. Apply finish using appropriate spray techniques (gun arc, angle, distance, travel speed, and spray	HP-I	p	p	p	p	p	p	p	p
CRTN225	4. Apply selected product on test or let-down panel; check for color match.	HP-I								
CRTN125,225	5. Apply single stage topcoat.	HP-G								
CRTN125,225	6. Apply basecoat/clearcoat for panel blending and panel refinishing.	HP-I								
CRTN125,225	7. Apply basecoat/clearcoat for overall refinishing.	HP-G								
CRTN125,225	8. Remove nibs or imperfections from basecoat.	HP-I								
CRTN105,125,22	9. Identify product expiration dates as applicable.	HP-G	p	p	p	p	p	p	p	p
CRTN225	10. Refinish plastic parts.	HP-I								
CRTN225	11. Apply multi-stage coats for panel blending and overall refinishing.	HP-G								
CRTN125,225	12. Identify and mix paint using a formula.	HP-I								
CRTN225	13. Identify poor hiding colors; determine necessary action.	HP-G								
CRTN225	14. Tint color using formula to achieve a blendable match.	HP-I								
CRTN225	15. Identify alternative color formula to achieve a blendable match.	HP-I								
CRTN225	16. Identify the materials equipment, and preparation differences between solvent and waterborne	HP-G								
		HP-I Total P	3	3	3	3	3	3	3	3
		% P	30%	30%	30%	30%	30%	30%	30%	30%
		HP-G Total P	1	1	1	1	1	1	1	1
		% P	17%	17%	17%	17%	17%	17%	17%	17%

IV. PAINTING AND REFINISHING

	E. Paint Defects - Causes and Cures								
Course	FRESHMEN 2019		Ryan G	Gerry L*	Jarrod L	Joshua L*	Mack O	Max O	Ethan P	Sean S*
CRTN125,225	1. Identify blistering (raising of the paint surface, air entrapment); correct the cause(s) and the	HP-G	p	p	p	p	p	p	p	p
CRTN125,225	2. Identify a dry spray appearance in the paint surface; correct the cause(s) and the condition.	HP-I	p	p	p	p	p	p	p	p
CRTN125,225	3. Identify the presence of fish-eyes (crater-like openings) in the finish; correct the cause(s) and the	HP-I								
CRTN125,225	4. Identify lifting; correct the cause(s) and the condition.	HP-G	p	p	p	p	p	p	p	p
CRTN125,225	5. Identify clouding (mottling and streaking in metallic finishes); correct the cause(s) and the condition.	HP-I	p	p	p	p	p	p	p	p
CRTN125,225	6. Identify orange peel; correct the cause(s) and the condition.	HP-I								
CRTN125,225	7. Identify overspray; correct the cause(s) and the condition.	HP-I								
CRTN125,225	8. Identify solvent popping in freshly painted surface; correct the cause(s) and the condition.	HP-G	p	p	p	p	p	p	p	p
CRTN125,225	9. Identify sags and runs in paint surface; correct the cause(s) and the condition.	HP-I	p	p	p	p	p	p	p	p
CRTN125,225	10. Identify sanding marks or sandscratch swelling; correct the cause(s) and the condition.	HP-I								
CRTN125,225	11. Identify contour mapping/edge mapping; correct the cause(s) and the condition.	HP-G	p	p	p	p	p	p	p	p
CRTN125,225	12. Identify color difference (off-shade); correct the cause(s) and the condition.	HP-G								
CRTN125,225	13. Identify tape tracking; correct the cause(s) and the condition.	HP-G								
CRTN125,225	14. Identify low gloss condition; correct the cause(s) and the condition.	HP-G								
CRTN125,225	15. Identify poor adhesion; correct the cause(s) and the condition.	HP-G	p	p	p	p	p	p	p	p
CRTN125,225	16. Identify paint cracking (shrinking, splitting, crowsfeet or line-checking, micro-checking, etc.);	HP-G	p	p	p	p	p	p	p	p
CRTN125,225	17. Identify corrosion; correct the cause(s) and the condition.	HP-G	p	p	p	p	p	p	p	p
CRTN125,225	18. Identify dirt or dust in the paint surface; correct the cause(s) and the condition.	HP-I	p	p	p	p	p	p	p	p
CRTN125,225	19. Identify water spotting; correct the cause(s) and the condition.	HP-G	p	p	p	p	p	p	p	p
CRTN125,225	20. Identify finish damage caused by bird droppings, tree sap, and other natural causes; correct the	HP-G	p	p	p	p	p	p	p	p
CRTN125,225	21. Identify finish damage caused by airborne contaminants (acids, soot, rail dust, and other industrial-	HP-G	p	p	p	p	p	p	p	p
CRTN125,225	22. Identify die-back conditions (dulling of the paint film showing haziness); correct the cause(s) and	HP-G	p	p	p	p	p	p	p	p
CRTN125,225	23. Identify chalking (oxidation); correct the cause(s) and the condition.	HP-G	p	p	p	p	p	p	p	p
CRTN125,225	24. Identify bleed-through (staining); correct the cause(s) and the condition.	HP-G								
CRTN125,225	25. Identify pin-holing; correct the cause(s) and the condition.	HP-G								
CRTN125,225	26. Identify buffing-related imperfections (swirl marks, wheel burns); correct the condition.	HP-I								
CRTN125,225	27. Identify pigment flotation (color change through film build); correct the cause(s) and the condition.	HP-G								
		HP-I Total P	4	4	4	4	4	4	4	4
		% P	44%	44%	44%	44%	44%	44%	44%	44%
		HP-G Total P	12	12	12	12	12	12	12	12
		% P	67%	67%	67%	67%	67%	67%	67%	67%

	IV. PAINTING AND REFINISHING F. Final Detail								
Course	FRESHMEN 2019		Ryan G	Gerry L*	Jarrod L	Joshua L*	Mack O	Max O	Ethan P	Sean S*
CRTN225	1. Apply decals, transfers, tapes, woodgrains, pinstripes (painted and taped), etc.	HP-G								
CRTN125,225	2. Sand, buff and polish fresh or existing finish to remove defects as required.	HP-I								
CRTN125,225	3. Clean interior, exterior, and glass.	HP-I								
CRTN125,225	4. Clean body openings (door jambs and edges, etc.).	HP-I								
CRTN125,225	5. Remove overspray.	HP-I								
CRTN125,225	6. Perform vehicle clean-up; complete quality control using a checklist.	HP-I								
		HP-I Total P	0	0	0	0	0	0	0	0
		% P	0%	0%	0%	0%	0%	0%	0%	0%
		HP-G Total P	0	0	0	0	0	0	0	0
		% P	0%	0%	0%	0%	0%	0%	0%	0%

Criteria		Ryan G	Gerry L*	Jarrod L	Joshua L*	Mack O	Max O	Ethan P	Sean S*	#?
95%	HP-I	60%	58%	60%	58%	60%	60%	60%	58%	53
90%	HP-G	52%	52%	52%	52%	52%	52%	52%	52%	31

COMMENTS:								
	Certificate		Certificate				Certificate	

DAMAGE ANALYSIS, ESTIMATING AND CUSTOMER SERVICE

For every task in Damage Analysis, Estimating and Customer Service the following safety

Comply with personal and environmental safety practices associated with clothing and the use

V. DAMAGE ANALYSIS, ESTIMATING, AND CUSTOMER SERVICE
A. Safety Precautions

Course	FRESHMEN 2019		Ryan G	Gerry L*	Jarrod L	Joshua L*	Mack O	Max O	Ethan P	Sean S*
CRTN102	1. Select and use proper personal safety equipment; take necessary precautions with hazardous	HP-I								
CRTN102	2. Locate procedures and precautions that may apply to the vehicle being repaired.	HP-I								
CRTN102,245	3. Identify vehicle system hazard types (supplemental restraint system (SRS),	HP-I								
CRTN102,105	4. Select and use a NIOSH approved air purifying respirator. Inspect condition and ensure fit and	HP-I								
		Total P	0	0	0	0	0	0	0	0
		% P	0%	0%	0%	0%	0%	0%	0%	0%

V. DAMAGE ANALYSIS, ESTIMATING, AND CUSTOMER SERVICE
B. Damage Analysis

Course	FRESHMEN 2019		Ryan G	Gerry L*	Jarrod L	Joshua L*	Mack O	Max O	Ethan P	Sean S*
CRTN230	1. Position the vehicle for inspection.	HP-G								
CRTN230	2. Prepare vehicle for inspection by providing access to damaged areas.	HP-G								
CRTN230	3. Analyze damage to determine appropriate methods for overall repairs.	HP-I								
CRTN230	4. Determine the direction, point(s) of impact, and extent of direct, indirect, and inertia damage.	HP-G								
CRTN230	5. Gather details of the incident/accident necessary to determine the full extent of vehicle damage.	HP-G								
CRTN230	6. Identify and record pre-existing damage.	HP-I								
CRTN230	7. Identify and record prior repairs.	HP-G								
CRTN230	8. Perform visual inspection of structural components.	HP-G								
CRTN230	9. Identify structural damage using measuring tools and equipment.	HP-I								
CRTN230	10. Perform visual inspection of non-structural components.	HP-I								
CRTN230	11. Determine parts, components, material type(s) and procedures necessary for a proper repair.	HP-I								
CRTN230	12. Identify type and condition of finish; determine if refinishing is required.	HP-I								
CRTN230	13. Identify suspension, electrical, and mechanical component physical damage.	HP-G								
CRTN230	14. Identify safety systems physical damage.	HP-G								
CRTN230	15. Identify interior component damage.	HP-I								
CRTN230	16. Identify damage to add-on accessories and modifications.	HP-G								
CRTN230	17. Identify single (one time) use components.	HP-G								
		HP-I Total P	0	0	0	0	0	0	0	0
		% P	0%	0%	0%	0%	0%	0%	0%	0%
		HP-G Total P	0	0	0	0	0	0	0	0
		% P	0%	0%	0%	0%	0%	0%	0%	0%

V. DAMAGE ANALYSIS, ESTIMATING, AND CUSTOMER SERVICE
C. Estimating

Course	FRESHMEN 2019		Ryan G	Gerry L*	Jarrod L	Joshua L*	Mack O	Max O	Ethan P	Sean S*
CRTN230	1. Determine and record customer/vehicle owner information.	HP-I								
CRTN230	2. Identify and record vehicle identification number (VIN) information, including nation of origin,	HP-I								
CRTN230	3. Identify and record vehicle mileage and options, including trim level, paint code, transmission,	HP-I								
CRTN230	4. Identify safety systems; determine replacement items.	HP-G								
CRTN230	5. Apply appropriate estimating and parts nomenclature (terminology).	HP-I								
CRTN230	6. Determine and apply appropriate estimating sequence.	HP-I								
CRTN230	7. Utilize estimating guide procedure pages.	HP-I								
CRTN230	8. Apply estimating guide footnotes and headnotes as needed.	HP-I								
CRTN230	9. Identify operations requiring labor value judgment.	HP-G								
CRTN230	10. Select appropriate labor value for each operation (structural, non-structural, mechanical, and refinish).	HP-I								
CRTN230	11. Select and price OEM parts; verify availability, compatibility, and condition.	HP-G								
CRTN230	12. Select and price alternative/optional OEM parts; verify availability, compatibility and condition.	HP-G								
CRTN230	13. Select and price aftermarket parts; verify availability, compatibility, and condition.	HP-G								
CRTN230	14. Select and price recyclable/used parts; verify availability, compatibility and condition.	HP-G								
CRTN230	15. Select and price remanufactured, rebuilt, and reconditioned parts; verify availability,	HP-G								
CRTN230	16. Determine price and source of necessary sublet operations.	HP-G								
CRTN230	17. Determine labor value, prices, charges, allowances, or fees for non-included operations and	HP-G								
CRTN230	18. Recognize and apply overlap deductions, included operations, and additions.	HP-I								
CRTN230	19. Determine additional material and charges.	HP-G								
CRTN230	20. Determine refinishing material and charges.	HP-I								
CRTN230	21. Apply math skills to establish charges and totals.	HP-I								
CRTN230	22. Identify procedural differences between computer generated and manually written estimates.	HP-G								

CRTN230	23. Identify procedures to restore corrosion protection; establish labor values, and material charges.	HP-G								
CRTN230	24. Determine the cost effectiveness of the repair and determine the approximate vehicle retail, and	HP-G								
CRTN230	25. Recognize the differences in estimation procedures when using different information provider	HP-G								
CRTN230	26. Verify accuracy of estimate compared to the actual repair and replacement operations.	HP-G								
		HP-I Total P	0	0	0	0	0	0	0	0
		% P	0%	0%	0%	0%	0%	0%	0%	0%
		HP-G Total P	0	0	0	0	0	0	0	0
		% P	0%	0%	0%	0%	0%	0%	0%	0%

V. DAMAGE ANALYSIS, ESTIMATING, AND CUSTOMER SERVICE
D. Vehicle Construction and Parts Identification

Course	FRESHMEN 2019		Ryan G	Gerry L*	Jarrod L	Joshua L*	Mack O	Max O	Ethan P	Sean S*
CRTN210,230	1. Identify type of vehicle construction (space frame, unibody, body-over-frame).	HP-G								
CRTN210,230	2. Recognize the different damage characteristics of space frame, unibody, and body-over-frame	HP-G								
CRTN210,230	3. Identify impact energy absorbing components.	HP-G								
CRTN210,230	4. Identify steel types; determine repairability.	HP-G								
CRTN210,230	5. Identify aluminum/magnesium components; determine repairability.	HP-G								
CRTN151,230	6. Identify plastic/composite components; determine repairability.	HP-G								
CRTN151,201,	7. Identify vehicle glass components and repair/replacement procedures.	HP-G								
CRTN230	8. Identify add-on accessories.	HP-G								
		HP-G Total P	0	0	0	0	0	0	0	0
		% P	0%	0%	0%	0%	0%	0%	0%	0%

V. DAMAGE ANALYSIS, ESTIMATING, AND CUSTOMER SERVICE
E. Customer Relations and Sales Skills

Course	FRESHMEN 2019		Ryan G	Gerry L*	Jarrod L	Joshua L*	Mack O	Max O	Ethan P	Sean S*
CRTN230	1. Acknowledge and/or greet customer/client.	HP-I								
CRTN230	2. Listen to customer/client; collect information and identify customers/client's concerns, needs and	HP-I								
CRTN230	3. Establish cooperative attitude with customer/client.	HP-I								
CRTN230	4. Identify yourself to customer/client; offer assistance.	HP-I								
CRTN230	5. Deal with angry customer/client.	HP-I								
CRTN230	6. Identify customer/client preferred communication method; follow up to keep customer/client	HP-G								
CRTN230	7. Recognize basic claims handling procedures; explain to customer/client.	HP-G								
CRTN102,230	8. Project positive attitude and professional appearance.	HP-I								
CRTN230	9. Provide and review warranty information.	HP-I								
CRTN230	10. Provide and review technical and consumer protection information.	HP-G								
CRTN230	11. Estimate and explain duration of out-of-service time.	HP-G								
CRTN230	12. Demonstrate negotiation skills to obtain a mutual agreement.	HP-G								
CRTN230	13. Interpret and explain manual or computer-assisted estimate to customer/client.	HP-I								
		HP-I Total P	0	0	0	0	0	0	0	0
		% P	0%	0%	0%	0%	0%	0%	0%	0%
		HP-G Total P	0	0	0	0	0	0	0	0
		% P	0%	0%	0%	0%	0%	0%	0%	0%

Criteria		Ryan G	Gerry L*	Jarrod L	Joshua L*	Mack O	Max O	Ethan P	Sean S*	#?
95%	HP-I	0%	0%	0%	0%	0%	0%	0%	0%	30
90%	HP-G	0%	0%	0%	0%	0%	0%	0%	0%	38

COMMENTS:		Certificate		Certificate				Certificate

DAECS Tasks	#?
95 % HP-I	30
90% HP-G	38
Total	68

WELDING, CUTTING, AND JOINING

For every task in Welding, Cutting and Joining the following safety requirement must be strictly

Comply with personal and environmental safety practices associated with clothing and the use of

VI. WELDING, CUTTING, AND JOINING
A. Safety Precautions

Course	FRESHMEN 2019		Ryan G	Gerry L*	Jarrod L	Joshua L*	Mack O	Max O	Ethan P	Sean S*
CRTN102	1. Select and use proper personal safety equipment; take necessary precautions with hazardous operations	HP-I	p	p	p	p	p	p	p	p
CRTN102	2. Locate procedures and precautions that may apply to the vehicle being repaired.	HP-I	p	p	p	p	p	p	p	p
CRTN102,245	3. Identify vehicle system hazard types (supplemental restraint system (SRS), hybrid/electric/alternative fuel	HP-I	p	p	p	p	p	p	p	p
CRTN102,105	4. Select and use a NIOSH approved air purifying respirator. Inspect condition and ensure fit and operation.	HP-I	p	p	p	p	p	p	p	p
		Total P	4	4	4	4	4	4	4	4
		% P	100%	100%	100%	100%	100%	100%	100%	100%

VI. WELDING, CUTTING, AND JOINING
B. Metal Welding, Cutting, and Joining

Course	FRESHMEN 2019		Ryan G	Gerry L*	Jarrod L	Joshua L*	Mack O	Max O	Ethan P	Sean S*
CRTN140	1. Identify the considerations for cutting, removing, and welding various types of steel, aluminum, and other	HP-G	p	p	p	p	p	p	p	p
CRTN140	2. Determine the correct GMAW welder type, electrode/wire type, diameter, and gas to be used in a specific	HP-I	p	p	p	p	p	p	p	p
CRTN140	3. Set up, attach work clamp (ground), and adjust the GMAW welder to "tune" for proper electrode stickout,	HP-I	**p**	**p**	**p**	**p**	**p**	p	p	p
CRTN140	4. Store, handle, and install high-pressure gas cylinders; test for leaks.	HP-I	p	p	p	p	p	p	p	p
CRTN140	5. Determine the proper angle of the gun to the joint and direction of gun travel for the type of weld being	HP-G	p	p	p	p	p	p	p	p
CRTN140,201,210	6. Protect adjacent panels, glass, vehicle interior, etc. from welding and cutting operations.	HP-I	p	p	p	p	p	p	p	p
CRTN140,201,210	7. Indentify hazards; foam coatings and flammable materials prior to welding/cutting procedures.	HP-G	p	p	p	p	p	p	p	p
CRTN140,201,210	8. Protect computers and other electronics/wires during welding procedures.	HP-I	p	p	p	p	p	p	p	p
CRTN140,201,210	9. Clean and prepare the metal to be welded, assure good metal fit-up, apply weld-through primer if	HP-I	p	p	p	p	p	p	p	p
CRTN140,201,210	10. Determine the joint type (butt weld with backing, lap, etc.) for weld being made.	HP-I	p	p	p	p	p	p	p	p
CRTN140,201,210	11. Determine the type of weld (continuous, stitch weld, plug, etc.) for each specific welding operation.	HP-I	p	p	p	p	p	p	p	p
CRTN140	12. Perform the following welds: plug, butt weld with and without backing, and fillet etc., in the flat,	HP-I	p	p	p	p	p	p	p	p
CRTN140	13. Perform visual evaluation and destructive test on each weld type.	HP-I	p	p	p	p	p	p	p	p
CRTN140	14. Identify the causes of various welding defects; make necessary adjustments.	HP-I	p	p	p	p	p	p	p	p
CRTN140	15. Identify cause of contact tip burn-back and failure of wire to feed; make necessary adjustments.	HP-I	p	p	p	p	p	p	p	p
CRTN140	16. Identify cutting process for different substrates and locations; perform cutting operation.	HP-I	p	p	p	p	p	p	p	p
CRTN140,210	17. Identify different methods of attaching structural components (squeeze type resistance spot welding	HP-G	p	p	p	p	p	p	p	p
		HP-I Total P	13	13	13	13	13	13	13	13
		% P	100%	100%	100%	100%	100%	100%	100%	100%
		HP-G Total P	4	4	4	4	4	4	4	4
		% P	100%	100%	100%	100%	100%	100%	100%	100%

Criteria		Ryan G	Gerry L*	Jarrod L	Joshua L*	Mack O	Max O	Ethan P	Sean S*	#?
95%	HP-I	100%	100%	100%	100%	100%	100%	100%	100%	17
90%	HP-G	100%	100%	100%	100%	100%	100%	100%	100%	4

COMMENTS:								
	Certificate		Certificate				Certificate	