

DATES	DESCRIPTION	DAILY OBJECTIVES
8/14-21	TECH CENTER INTRODUCTION	WELCOME(WHY ARE YOU HERE/WHAT DO YOU WANT TO LEARN) RAPPOR BUILDING ,CARD GAME(NAME/FROM/FUN FACT), TOUR FINANCE(BUDGET BUILDING/REALITIES) FINANCE(BANK ACCOUNTS, LOANS, CREDIT, WRITING CHECKS,ETC) RESUME INFO AND BUILDING (SP2/GOOGLE FORMAT?)
8/21-25	AUTO COLLISION INTRODUCTION	1.INTERVIEW QUESTIONS, INTERVIEW PEERS, ASSIGN QUESTIONS CONTINUE WITH BUILDING RAPPOR(FAVORITE CAR) 2.JOB RESEARCH(WHAT ARE YOU DRAWN TO AND WHY) 3.PIONEER RESEARCH(FIND AN AUTOMOTIVE PIONEER, 5 SLIDES, WHO,WHEN, WHERE, WHAT MAKES THEM A PIONEER OR HOW DID THEY CHANGE OUR INDUSTRY) 4.RULES IN OUR SHOP/INDUSTRY(COMLETE SAFETY MAP OF SHOP)
8/28-9/1	Students will be able to identify and demonstrate safe work practices.	Identify general shop safety rules and procedures. Utilize safe procedures for handling of tools and equipment. Identify and use proper placement of floor jacks and jack stands. CRP2 Identify and use proper procedures for safe lift operation. Utilize proper ventilation procedures for working within the lab/shop area. 1.1.6 Identify marked safety areas. Identify the location and the types of fire extinguishers and other fire safety equipment; demonstrate knowledge of the procedures for using fire extinguishers and other fire safety equipment.
9/4-9/8	Students will be able to practice personal safety.	9/4 - Labor Day (No School)  Identify the location and use of eye wash stations. Identify the location of the posted evacuation routes. Comply with the required use of safety glasses, ear protection, gloves, and shoes during lab/shop activities. Identify and wear appropriate clothing for lab/shop activities. Secure hair and jewelry for lab/shop activities. Demonstrate awareness of the safety aspects of supplemental restraint systems (SRS), electronic brake control systems, and hybrid vehicle high voltage circuits. Demonstrate awareness of the safety aspects of high voltage circuits (such as high intensity discharge (HID) lamps, ignition systems, injection systems, etc.). Locate and demonstrate knowledge of safety data sheets (SDS).
9/11-9/15	The student will demonstrate an understanding of safety concerning body components.	Select and use proper personal safety equipment; take necessary precautions with hazardous operations and materials in accordance with federal, state, and local regulations. Locate procedures and precautions that may apply to the vehicle being repaired. Identify vehicle system hazard types (supplemental restraint system (SRS),

		<p>hybrid/electric/alternative fuel vehicles), locations and recommended procedures before inspecting or replacing components.</p> <p>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.</p>
9/18-9/122	Vehicle Construction and Parts Identification	<ol style="list-style-type: none"> <li>1. Identify type of vehicle construction (unibody, body-over-frame).</li> <li>2. Recognize the different collision damage between unibody and body-over-frame vehicles.</li> <li>3. Identify impact energy absorbing components.</li> <li>4. Identify different types and strengths of substrates (steel types, aluminum, magnesium, plastic, composites, etc.); determine repairability.</li> <li>5. Identify vehicle glass components and repair/replacement procedures.</li> <li>6. Identify add-on accessories.</li> <li>7. Recognize different vehicle joining/attaching methods (e.g., welding, adhesives, rivets, etc.)</li> </ol>
9/25-9/29	Student will demonstrate knowledge of shop tools and equipment.	<p>Identify tools and their usage in automotive applications.</p> <p>Identify standard and metric designation. CRP12</p> <p>Demonstrate safe handling and use of appropriate tools.</p> <p>Demonstrate proper cleaning, storage, and maintenance of tools and equipment.</p> <p>Demonstrate proper use of precision measuring tools (i.e. micrometer, dial-indicator, dial-caliper).</p>
10/2-10/6	Student will demonstrate preparation procedures.	<p>Review damage report and analyze damage to determine appropriate methods for overall repair; develop and document a repair plan.</p> <p>Inspect, remove, label, store, and reinstall exterior trim and moldings.</p> <p>Inspect, remove, label, store, and reinstall interior trim and components.</p> <p>Inspect, remove, label, store, and reinstall body panels and components that may interfere with or be damaged during repair.</p>
10/9-10/13	Student will demonstrate preparation procedures.	<p>Inspect, remove, protect label, store, and reinstall vehicle mechanical and electrical components that may interfere with or be damaged during repair.</p> <p>Protect panels, glass, interior parts, and other vehicles adjacent to the repair Area.</p> <p>Soap and water wash the entire vehicle; complete pre-repair inspection checklist.</p> <p>Prepare the damaged area using water-based and solvent-based cleaners.</p> <p>Remove corrosion protection, undercoating, sealers, and other protective coatings as necessary to perform repairs.</p> <p>Inspect, remove, and reinstall repairable plastics and other components for off-vehicle repair.</p>
10/16-10/20	Student will demonstrate panel repair, replacement and adjustment knowledge.	<ol style="list-style-type: none"> <li>1. Inspect/locate direct, indirect, or hidden damage and direction of impact.</li> <li>2. Inspect, remove and replace welded steel panel or panel assemblies.</li> <li>3. Determine the extent of damage to aluminum body panels; repair or replace.</li> <li>4. Inspect, remove, replace, and align hood, hood hinges, and hood latch.</li> <li>5. Inspect, remove, replace, and align deck lid, lid hinges, and lid latch.</li> </ol>

		<p>6. Inspect, remove, replace, and align doors, latches, hinges, and related hardware.</p> <p>7. Inspect, remove, replace and align tailgates, hatches, and liftgates.</p> <p>8. Inspect, remove, replace, and align sliding doors.</p> <p>9. Inspect, remove, replace, overhaul, and align bumpers, covers, reinforcements, guards, impact absorbers, and mounting hardware.</p> <p>10. Inspect, remove, replace and align fenders, and related panels.</p>
10/23-10/27	Student will demonstrate panel repair, replacement and adjustment knowledge	<p>1. Restore corrosion protection during and after the repair.</p> <p>2. Replace seam sealer to match OEM appearance.</p> <p>3. Replace door skins.</p> <p>4. Restore sound deadeners and foam materials.</p> <p>5. Perform panel bonding and weld bonding.</p> <p>6. Diagnose and repair water leaks, dust leaks, and wind noise.</p> <p>7. Identify one-time use fasteners.</p> <p>8. Weld damaged or torn steel body panels; repair broken welds.</p> <p>9. Inspect and identify labels/decals and replace as necessary.</p> <p>10. Follow manufacturers guidelines when applying heat to non-structural components during repair.</p> <p>10/20 - PD Day (No Students)</p>
10/30-11/3	Student will demonstrate diagnostic and repair procedures for fixed glass.	<p>Remove and reinstall or replace fixed glass (heated and non-heated) using recommended materials and techniques.</p> <p>Remove and reinstall or replace modular glass using recommended materials.</p> <p>Check for water leaks, dust leaks, and wind noise.</p>
11/6-11/10	Student will demonstrate Metal Finishing procedures.	<p>Prepare a panel for body filler by abrading or removing the coatings; featheredge and refine scratches before the application of body filler.</p> <p>Locate and repair surface irregularities on a damaged body panel using power tools, hand tools, and weld-on pulling attachments.</p> <p>Demonstrate hammer and dolly techniques.</p> <p>Heat shrink stretched panel areas to proper contour.</p> <p>Cold shrink stretched panel areas to proper contour.</p>
11/13-11/17	Student will demonstrate Body Filling procedures.	<p>Identify body filler defects; correct the cause &amp; condition. (Pinholing, ghosting, staining, over catalyzing, etc.).</p> <p>Identify different types of body fillers.</p> <p>Shape body filler to contour; finish sand.</p> <p>Perform proper metal finishing techniques for aluminum.</p> <p>Perform proper application of body filler to aluminum.</p> <p>Straighten contours of damaged panels to a suitable condition for body fillings or metal finishing using power tools, hand tools, and weld-on pulling attachments.</p>
11/27-12/1	Student will demonstrate Body Filling procedures.	<p>Locate and repair surface irregularities and straighten contours on a damaged panel using Glue-Pulling Dent Repair (GDPR).</p> <p>Mix and apply body filler.</p>

11/20-11/24		<b>Thanksgiving Break</b>
12/4-12/8	Student will demonstrate knowledge of plastics and adhesives.	<ol style="list-style-type: none"> <li>1. Identify the types of plastics; determine repairability.</li> <li>2. Identify location of damage relative to safety systems (ADAS); determine repairability according to manufacturer repair procedures.</li> <li>3. Clean and prepare the surface of plastic parts; identify the types of plastic repair procedures.</li> <li>4. Repair rigid, semi-rigid, and flexible plastic panels.</li> <li>5. Remove, replace, or repair damaged areas of rigid exterior composite panels.</li> <li>6. Replace bonded rigid exterior composite body panels; straighten or align panel supports.</li> </ol>
12/11-12/15	Student will demonstrate knowledge of plastics and adhesives.	<ul style="list-style-type: none"> <li>Repair plastic parts by welding (nitrogen, airless).</li> <li>Perform a single-sided adhesively bonded cosmetic repair.</li> <li>Perform a double-sided adhesively bonded repair.</li> <li>Perform an adhesively bonded or welded tab repair.</li> <li>Shape or reform damaged plastic</li> </ul>
12/18-1/1/24		<b>Winter Break</b>
1/2-1/5	Students will be able to identify and demonstrate safe work practices.	<b>1/2 - PD Day (No Students)</b> Review general shop safety rules and procedures.
1/8-1/12	Students will be able to identify and demonstrate safe welding practices.	<ul style="list-style-type: none"> <li>Select and use proper personal safety equipment; take necessary precautions with hazardous operations and materials in accordance with federal, state, and local regulations.</li> <li>Locate OEM procedures to identify materials and composition of the vehicle being repaired (mild steel, high strength steel, ultra-high strength steel, aluminum, etc.).</li> <li>Locate procedures and precautions that may apply to the vehicle being repaired.</li> <li>Identify vehicle system precautions and/or inspections to include but not limited to supplemental restraint system (SRS), advanced driver assistance systems (ADAS), hybrid/electric/alternative fuel vehicles, locations and recommended procedures before inspecting or replacing components.</li> <li>Perform vehicle clean-up; complete quality control using a checklist on operations performed.</li> </ul>
1/15-1/19	Students will understand how to work with a MIG welder and what substrates that it can be used on.	<b>1/15 - MLK Day (No School)</b> Identify the considerations for cutting, removing, and welding various types of steel, aluminum, and other metals. Determine the correct GMAW welder type, electrode/wire type, diameter, and gas to be used in a specific welding situation Store, handle, and install high-pressure gas cylinders; test for leaks.

1/22-1/26	Students will know different types of welds, weld joints, and what proper gun angle is.	Determine the proper angle of the gun to the joint and direction of gun travel for the type of weld being made. Determine the joint type (butt weld with backing, lap, etc.) for weld being made. Determine the type of weld (continuous, stitch weld, plug, etc.) for each specific welding operation.
1/29-2/2	Students will identify what parts need to be protected before welding procedures, and how to protect those items.	Protect adjacent panels, glass, vehicle interior, etc. from welding and cutting operations. Protect computers and other electronics/wires prior to welding procedures. Identify hazards; foam coatings and flammable materials prior to welding/cutting procedures.
2/5-2/9	Students will know how to set up, clean, and demonstrate different types of welds	Set up, attach work clamp (ground), and adjust the GMAW welder to "tune" for proper electrode stickout, voltage, polarity, flow rate, and wire-feed speed required for the substrate being welded. Clean and prepare the metal to be welded, assure good metal fit-up, apply weld-through primer if necessary, clamp or tack as required. Perform the following welds: plug, butt weld with and without backing, and fillet etc., in the flat, horizontal, vertical, and overhead positions.
2/12-2/16	Students will identify weld destruction tests, and different types of welding defects.	Perform visual evaluation and destructive test on each weld type. Identify the causes of various welding defects; make necessary adjustments. Identify cause of contact tip burn-back and failure of wire to feed; make necessary adjustments.
2/19-2/23	Students will be able to identify different cutting processes and attachment methods	<b>2/19 - Presidents' Day (No School)</b> Identify cutting process for different substrates and locations; perform cutting operation. Identify different methods of attaching structural components (squeeze type resistance spot welding (STRSW), riveting, structural adhesive, MIG bronze, rivet bonding, weld bonding, etc.).
2/26-3/4	Students will understand how to locate OEM repair procedures for estimating purposes	Locate OEM procedures to identify material and composition of the vehicle being repaired (mild steel, high strength steel, ultra-high strength steel, aluminum, etc.). Locate procedures and precautions that may apply to the vehicle being repaired. Identify vehicle system precautions and/or inspections to include but not limited to supplemental restraint system (SRS), advanced driver assistance systems (ADAS), hybrid/electric/alternative fuel vehicles, locations and recommended procedures before inspecting or replacing components.
3/11-3/15	Students will begin learning the damage estimating process	Position the vehicle for inspection under proper lighting; take photos to identify the vehicle and document damage. Identify components to be removed to gain access to damaged areas. Analyze damage to determine appropriate methods for overall repairs. Determine the direction, point(s) of impact, and extent of direct, indirect, and inertia damage.

3/18-3/22		Spring Break
3/25-3/29	Students will inspect and record structural analysis damage	Gather details of the incident/accident necessary to determine the full extent of vehicle damage. Identify and record pre-existing damage. Identify and record prior repairs. Perform visual inspection of structural components. Identify structural damage using measuring tools and equipment.
4/1-4/5	Students will inspect and record non-structural analysis damage	Perform visual inspection of non-structural components. Determine parts, components, material type(s) and procedures necessary for a proper repair. Identify type and condition of finish; determine refinish labor operations as required.
4/8-4/12	Students will inspect and record suspension, electrical, and mechanical component analysis damage	Identify suspension, electrical, and mechanical component physical damage. Identify safety systems physical damage. Identify interior component damage. Identify add-on accessories and modifications. Identify single (one time) use components. Identify and document illuminated dash malfunction indicator lamp(s) (MIL).
4/15-4/19	Students will identify specific vehicle information for safety and estimating purposes	<b>4/15 - SkillsUSA Arkansas Leadership Conference Hot Springs, AR</b> <b>4/16 - SkillsUSA Arkansas Leadership Conference Hot Springs, AR</b> <b>4/17 - SkillsUSA Arkansas Leadership Conference Hot Springs, AR</b> Determine and record customer/vehicle owner information. Identify and record vehicle identification number (VIN) information, including nation of origin, make, model, restraint system, body type, production date, engine type, build data, and assembly plant. Identify and record vehicle mileage and options, including trim level, paint code, transmission, accessories, and modifications. Identify safety systems; determine precautions, inspections and replacement items as required.
4/22-4/26	Students will use their estimating knowledge to apply appropriate procedures and times on a vehicle estimate	Apply appropriate estimating and parts nomenclature (terminology). Determine and apply appropriate estimating sequence. Utilize estimating procedure pages
4/29-5/3	Students will be able to communicate with customers and explain estimating procedures and processes	Introduce yourself, acknowledge and greet customer/client/visitor; offer assistance. Listen to customer/client; collect information and identify customers/client's concerns, needs and expectations. Interpret and explain estimates to customer/client.
5/6-5/10	Students will understand how to find alternate color options in order to do test panels to verify proper color match	Identify alternative color formulas to achieve a blendable match. Apply selected product on test or let-down panel; check for color match, properly store and maintain a color catalog.

5/13-5/17	Students will learn how to setup, clean, and adjust a spraygun.	Inspect, clean, and determine condition of spray guns and related equipment (air hoses, regulators, air lines, air source, spray environment, and fillers). Select spray gun setup (fluid needle, nozzle, and cap) for product being applied. Test and adjust spray gun using fluid, air and pattern control valves. Demonstrate an understanding of the operation of pressure spray equipment.
5/20-5/24	Students will prepare a vehicle for final detail and delivery	Apply decals, transfers, tapes, stone guards, moldings, and emblems, etc. Sand, buff and polish fresh finish to remove defects and texture as required. Sand, buff and polish existing finish to recondition defects as required, match existing finish. Clean interior, exterior, and glass. Clean body openings (door jambs, gaps, and edges, etc.). Remove overspray. Perform vehicle clean-up; complete quality control using a checklist. Measure and record film thickness before and after buffing. Perform nib sanding to remove small imperfections as required.
5/27-5/31	Students will clean up vehicles following a clean-up checklist.	<b>5/27 - Memorial Day (No Students)</b>  Soap and water wash the entire vehicle; use appropriate cleaner to remove contaminants. Perform vehicle clean-up; complete quality control using a checklist on operations performed.