

Auto Body II Course Competencies

Demonstrating Workplace Readiness Skills: Personal Qualities and People Skills

1. Demonstrate positive work ethic.
2. Demonstrate integrity.
3. Demonstrate teamwork skills.
4. Demonstrate self-representation skills.
5. Demonstrate diversity awareness.
6. Demonstrate conflict-resolution skills.
7. Demonstrate creativity and resourcefulness.

Demonstrating Workplace Readiness Skills: Professional Knowledge and Skills

8. Demonstrate effective speaking and listening skills.
9. Demonstrate effective reading and writing skills.
10. Demonstrate critical-thinking and problem-solving skills.
11. Demonstrate healthy behaviors and safety skills.
12. Demonstrate an understanding of workplace organizations, systems, and climates.
13. Demonstrate lifelong-learning skills.
14. Demonstrate job-acquisition and advancement skills.
15. Demonstrate time-, task-, and resource-management skills.
16. Demonstrate job-specific mathematics skills.
17. Demonstrate customer-service skills.

Demonstrating Workplace Readiness Skills: Technology Knowledge and Skills

18. Demonstrate proficiency with technologies common to a specific occupation.
19. Demonstrate information technology skills.
20. Demonstrate an understanding of Internet use and security issues.
21. Demonstrate telecommunications skills.

Examining All Aspects of an Industry

22. Examine aspects of planning within an industry/organization.
23. Examine aspects of management within an industry/organization.
24. Examine aspects of financial responsibility within an industry/organization.
25. Examine technical and production skills required of workers within an industry/organization.
26. Examine principles of technology that underlie an industry/organization.
27. Examine labor issues related to an industry/organization.
28. Examine community issues related to an industry/organization.
29. Examine health, safety, and environmental issues related to an industry/organization.

Addressing Elements of Student Life

30. Identify the purposes and goals of the student organization.
31. Explain the benefits and responsibilities of membership in the student organization as a student and in professional/civic organizations as an adult.
32. Demonstrate leadership skills through participation in student organization activities, such as meetings, programs, and projects.
33. Identify Internet safety issues and procedures for complying with acceptable use standards.

Practicing Safety

34. Demonstrate precautions with hazardous operations and materials according to federal, state, and local regulations.
35. Identify safety and personal health hazards according to OSHA guidelines and the *right-to-know* law."
36. Inspect spray environment.
37. Use the NIOSH-approved personal sanding respirator.
38. Use the NIOSH-approved (Fresh Air Make-up System) personal painting/refinishing respirator system.
39. Use personal safety equipment.

Preparing the Surface

40. Remove and replace exterior trim and molding.
41. Wash entire vehicle.
42. Identify substrate, type of finish, surface condition, and film thickness.
43. Remove paint finish.
44. Dry- or wet-sand areas to be refinished.
45. Featheredge broken areas to be refinished.
46. Apply metal treatment or primer.
47. Mask trim, and protect other areas that will not be refinished.
48. Mix primer, primer-surfacer, or primer-sealer.
49. Apply primer onto surface of repaired area.
50. Apply two-component finishing filler to minor surface imperfections.
51. Dry- or wet-sand area to which primer-surfacer has been applied.
52. Dry-sand area to which two-component finishing filler has been applied.
53. Remove dust from area to be refinished.
54. Clean area to be refinished, using a final cleaning solution.
55. Apply sealer to the area being refinished.
56. Scuff-sand to remove nibs or imperfections from a sealer.
57. Apply stone chip-resistant coating.
58. Restore corrosion-resistant coatings, caulking, and seam sealers to repaired areas.
59. Prepare adjacent panels for blending and overall refinishing.
60. Identify the types of rigid, semi-rigid, or flexible plastic parts to be refinished.
61. Identify aluminum parts to be refinished.

Operating Spray Gun and Related Equipment

62. Clean spray guns and related equipment (air hoses, regulators, air lines, air source, and spray environment).
63. Adjust spray gun operation for HVLP (high volume, low pressure) or LVLP (low volume, low pressure) guns.
64. Set up spray gun, using fluid, air, and pattern control valves.

Mixing, Matching, and Applying Paint

65. Determine type and color of paint already on vehicle.
66. Prepare paint for application.
67. Use spray techniques to apply the finish.
68. Apply selected product on test and let-down panel.
69. Apply single-stage topcoat for refinishing.
70. Apply basecoat/clearcoat for panel blending or partial refinishing.
71. Apply basecoat/clearcoat for overall refinishing.
72. Denib, buff, and polish finishes.
73. Refinish rigid, semi-rigid and flexible plastic parts.
74. Apply multi-stage (tricoat) coats for panel blending or overall refinishing.
75. Mix paint, using a formula.
76. Correct the problem of poor hiding colors.
77. Tint color, using formula, to achieve a blendable match.
78. Research alternative color formula to achieve a blendable match.

Identifying Paint Defects--Causes and Cures

79. Identify blistering (raising of the paint surface); determine the cause(s), and correct the condition.
80. Identify blushing (milky or hazy formation); determine the cause(s), and correct the condition.
81. Identify a dry spray appearance in the paint surface; determine the cause(s), and correct the condition.
82. Identify the presence of fish-eyes (crater-like openings) in the finish; determine the cause(s), and correct the condition.
83. Identify lifting; determine the cause(s), and correct the condition.
84. Identify clouding (mottling and streaking in metallic finishes); determine the cause(s), and correct the condition.

85. Identify orange peel; determine the cause(s), and correct the condition.
86. Identify overspray; determine the cause(s), and correct the condition.
87. Identify solvent popping in freshly painted surface; determine the cause(s), and correct the condition.
88. Identify sags and runs in paint surface; determine the cause(s), and correct the condition.
89. Identify sanding marks (sandscratch swelling); determine the cause(s), and correct the condition.
90. Identify contour mapping (shrinking and splitting) while finish is drying; determine the cause(s), and correct the condition.
91. Identify color difference (off-shade); determine the cause(s), and correct the condition.
92. Identify tape tracking; determine the cause(s), and correct the condition.
93. Identify low gloss condition; determine the cause(s), and correct the condition.
94. Identify poor adhesion; determine the cause(s), and correct the condition.
95. Identify paint cracking (crowsfeet or line-checking and micro-checking); determine the cause(s), and correct the condition.
96. Identify corrosion; determine the cause(s), and correct the condition.
97. Identify dirt or dust in the paint surface; determine the cause(s), and correct the condition.
98. Identify water spotting; determine the cause(s), and correct the condition.
99. Identify finish damage caused by bird droppings, tree sap, and other natural causes; correct the condition.
100. Identify finish damage caused by airborne contaminants (acids, soot, rail dust, and other industry-related causes); correct the condition.
101. Identify die-back conditions (dulling of the paint film showing haziness); determine the cause(s), and correct the condition.
102. Identify chalking (oxidation); determine the cause(s), and correct the condition.
103. Identify bleed-through (staining); determine the cause(s), and correct the condition.
104. Identify pin-holing; determine the cause(s), and correct the condition.
105. Identify buffing-related imperfections (swirl marks and wheel burns); correct the condition.
106. Identify pigment flotation (color change through film build); determine the cause(s), and correct the condition.
107. Measure mil thickness.

Applying Final Detailing

108. Apply decals, transfers, tapes, woodgrains, and pinstripes (painted and taped).
109. Buff and polish finish to remove defects as required.
110. Clean interior, exterior, and glass.
111. Clean body openings (door jambs and edges).
112. Remove overspray.

Using Metal Finishing and Body Filling

113. Remove paint from the damaged area of a body panel.
114. Locate and reduce surface irregularities on a damaged body panel.
115. Demonstrate hammer and dolly techniques.
116. Mix body filler.
117. Apply body filler, and shape during curing.
118. Rough- and finish-sand cured body filler to contour.

Working with Plastics and Adhesives

119. Identify the types of plastics and potential for repair.
120. Identify the types of plastic repair procedures.
121. Replace or repair rigid, semi-rigid, and flexible plastic panels.
122. Remove or repair damaged areas from rigid exterior composite panels.

Preparing for a Career in Auto Body Repair

123. Research opportunities in the auto body repair field.
124. Prepare portfolio of current skills.
125. Identify the basic construction of the auto body.
126. Identify additional ASE (Automotive Service Excellence) areas of certification.
127. Identify standards for structural analysis and damage repair.

128. Identify standards for non-structural analysis and damage repair (body components).
129. Identify standards for mechanical and electrical components.
130. Create a written estimate of repairs.