Department of Teaching & Learning  
Parent/Student Course Information  

Auto Body and Paint Technology II  
(VO8677)  
Three Credits, One Year  
Grades 11 or 12

Counselors are available to assist parents and students with course selections and career planning. Parents may arrange to meet with the counselor by calling the school’s guidance department.

COURSE DESCRIPTION
This two-year program covers all aspects of auto body repair from estimating to a complete paint job. Students learn to analyze different types of body damage and to restore vehicles to their original appearance. Students will be taught to weld, straighten a frame, repair fiberglass, use plastic filler, complete hand and power sanding, spray paint and replace damaged glass. Students also are trained to custom mix paint.

CERTIFICATION
National Occupational Competency Testing Institute: Collision Repair/Refinishing Technology  
Automotive Service Excellence: Non-Structural Analysis/Damage Repair Certification Environmental Protection Agency (EPA): Safety and Pollution Prevention Certification

STUDENT ORGANIZATION
SkillsUSA is a co-curricular organization for all students enrolled in trade and industrial education programs. SkillsUSA is a partnership of students, teachers and industry working together to ensure America has a skilled workforce. SkillsUSA helps students excel by providing educational programs, events and competitions that support career and technical education (CTE) in the nation’s classrooms. Students are highly encouraged to participate.

PREREQUISITE
Auto Body and Paint Technology I

OPTIONS FOR NEXT COURSE
None

REQUIRED STUDENT TEXTBOOK
None
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.
Identify personal health hazards and related safety measures, according to OSHA guidelines and the right-to-know laws.

Inspect spray environment.

Use the NIOSH-approved personal sanding respirator.

Use the NIOSH-approved personal painting/refinishing respirator system.

Use personal safety equipment.

Preparing the Surface

Remove and replace exterior trim and molding.

Wash entire vehicle.

Identify substrate, type of finish, surface condition and film thickness.

Remove paint finish.

Dry- or wet-sand areas to be refinished.

Featheredge broken areas to be refinished.

Apply metal treatment or primer.

Mask trim and protect other areas that will not be refinished.

Mix undercoats.

Apply undercoat on surface of repaired area.

Apply two-component finishing filler to minor surface imperfections.

Dry- or wet-sand area to which primer-surfacer has been applied.

Dry-sand area to which two-component finishing filler has been applied.

Remove dust from area to be refinished.

Clean area to be refinished, using a final cleaning solution.

Apply stone chip-resistant coating.

Scuff-sand to remove nibs or imperfections from a sealer.

Prepare adjacent panels for blending and overall refinishing.

Identify the types of rigid, semi-rigid or flexible composite materials to be refinished.

Identify aluminum parts to be refinished.

Operating Spray Gun and Related Equipment

Clean spray guns and related equipment (air hoses, regulators, air lines, air source, spray environment).

Set up compliant spray gun, using fluid, air and pattern control valves.

Mixing, Matching, and Applying Paint

Determine type and color of paint already on vehicle.

Prepare paint for application.

Apply the finish, using spray techniques.

Apply selected product on test let-down panel.

Explain the application of single-stage topcoat for refinishing.

Apply basecoat/clearcoat for refinishing and blending.

Denib, buff, and polish finishes.

Refinish rigid, semi-rigid and flexible composite parts.

Apply multi-stage (tri-coat) coats for blending or overall refinishing.

Explain how to mix paint, using a formula.

Tint color, using formula, to achieve a blendable match.

Research alternative color formula to achieve a blendable match.

Identifying Paint Defects--Causes and Cures

Identify paint defects and their causes.

Identify paint-defect cures and corrections.

Correct pin-holing.
Correct buffing-related imperfections (swirl marks and wheel burns).

Applying Final Detailing

Apply decals, transfers, tapes, and pinstripes (painted and taped).
Clean interior, exterior and glass.
Clean body openings (doorjambs and edges).
Remove overspray.

Preparing for a Career in Auto Body Repair

Research opportunities in the auto body repair field.
Prepare/update portfolio of current skills.
Identify additional ASE (Automotive Service Excellence) and other industry-recognized areas of certification.
Create a written estimate of repairs.

Local Competencies

Using Metal Finishing and Body Filling

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

Working with Plastics and Adhesives

Identify the types of plastics and potential for repair.
Identify the types of plastic repair procedures.
Replace or repair rigid, semi-rigid and flexible plastic panels.
Remove or repair damaged areas from rigid exterior composite panels.
Notice of Non-Discrimination Policy

Virginia Beach City Public Schools does not discriminate on the basis of race, color, religion, national origin, sex, sexual orientation/gender identity, pregnancy, childbirth or related medical condition, disability, marital status, age, genetic information or veteran status in its programs and activities and provides equal access to the Boy Scouts and other designated youth groups. School Board policies and regulations (including, but not limited to, Policies 2-33, 4-4, 5-7, 5-19, 5-20, 5-44, 6-7, 6-33, 7-48, 7-49, 7-57 and Regulations 2-33.1, 4-4.1, 4-4.2, 4-4.3, 4-6.1, 5-44.1, 7-11.1, 7-17.1 and 7-57.1) provide equal access to courses, programs, counseling services, physical education and athletic, vocational education, instructional materials and extracurricular activities.

To seek resolution of grievances resulting from alleged discrimination or to report violations of these policies, please contact the Title VI/Title IX Coordinator/Director of Student Leadership at (757) 263-2020, 1413 Laskin Road, Virginia Beach, Virginia, 23451 (for student complaints) or the Section 504/ADA Coordinator/Chief Human Resources Officer at (757) 263-1133, 2512 George Mason Drive, Municipal Center, Building 6, Virginia Beach, Virginia, 23456 (for employees or other citizens). Concerns about the application of Section 504 of the Rehabilitation Act should be addressed to the Section 504 Coordinator/Executive Director of Student Support Services at (757) 263-1980, 2512 George Mason Drive, Virginia Beach, Virginia, 23456 or the Section 504 Coordinator at the student’s school. For students who are eligible or suspected of being eligible for special education or related services under IDEA, please contact the Office of Programs for Exceptional Children at (757) 263-2400, Laskin Road Annex, 1413 Laskin Road, Virginia Beach, Virginia, 23451.

Alternative formats of this publication which may include taped, Braille, or large print materials are available upon request for individuals with disabilities. Call or write The Department of Teaching and Learning, Virginia Beach City Public Schools, 2512 George Mason Drive, P.O. Box 6038, Virginia Beach, VA 23456-0038. Telephone 263-1070 (voice); fax 263-1424; 263-1240 (TDD) or email at Brandon.Martin@vbschools.com.

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