

SCHOOL OF AUTOMOTIVE TECHNOLOGY

COLLISION REPAIR I

Course # 1088

Credits 8.33

March 2018

I. Course Description:

Since inception, Passaic County Technical Institute's Automotive Collision Repair Program has strived to meet the ever-changing industry standards. Recently we have partnered with the Automotive Service Excellence Education Foundation. Their main objective is "to uphold high quality standards of excellence in automotive service" (ASE Alliance 2018). PCTI's School of Auto Collision Repair has incorporated ASE/NATEF standards and I-CAR industry training to meet the demands and challenges of repairing the modern automobile. NATEF Standards set our path and I-CAR Crosswalk enhances and aligns our current curriculum to meet changing industry demands.

Our curriculum is a series of individual training modules, which allow instructors the freedom to choose segments that best fit our students' needs. This approach offers an in-depth coverage of both conventional and innovative collision repair technologies and processes. The program features knowledge-based training and performance-based testing, with an increased emphasis on hands-on tasks. Being current with the most updated repair techniques and methods affords PCTI the ability to remain at the forefront of collision training. At PCTI we remain proactive with our training but also realize we need to react immediately to any changes in industry vehicle design technology.

I-CAR and ASE are industry recognized leaders in training and testing, respectively. Our students prepare for testing in ASE categories B2 and B3, and receive industry-recognized certificates upon completion. Participation in PCTI's program ensures students have completed the prerequisites required for future testing/certification they may choose. Preparing for I-CAR testing and having ASE certificates in two collision areas is a great resume builder and increases the student's employability when he or she enters the workforce. This is also an added savings for the future employer's training expense.

PCTI is excited about the potential we have to produce world class experts in the auto collision field. Upon graduation, the skills and training we instill in our students provide a competitive edge as they enter the workforce of today's global market place. Below is a synopsis of the available modules that are part of our challenging, rigorous, dynamic, and comprehensive curriculum for this level: Introduction to Collision Repair & Vehicle Construction; Safety & Personal Protective Gear; Introduction to Collision Damage & Tools; Introduction to Surface Preparation; Introduction to Nonstructural Repairs;

II. Units:

Content Area:	Collision Repair Tech I	Grade(s)	9
Unit Plan Title:	Introduction to Collision Repair & Vehicle Construction		
NJSLS/CCTC Standard(s) Addressed in this unit			
<p>8.1.5. E.1a Use digital tools to research and evaluate the accuracy of, relevance to, and appropriateness of using print and non-print electronic information sources to complete a variety of tasks.</p> <p>9.3. ST.1 Apply engineering skills in a project that requires project management, process control and quality assurance.</p> <p>9.3.ST.3 Describe the following safety, health, and environmental standards related to science, technology, engineering and mathematics (STEM) workplaces.</p> <p>9.3ST-ET.3 Apply processes and concepts for the use of technological tools in STEM.</p> <p>9.3.ST-ET.5 Apply knowledge in STEM to solve problems</p> <p>3-5-ETS1-1. Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.</p> <p>3-5-ETS1-2. Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.</p> <p>3-5-ETS1-3. Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.</p> <p>MS-ETS1-3. Analyze data from tests to determine similarities and differences among several design solutions to identify the best characteristics of each that can be combined into a new solution to better meet the criteria for success.</p> <p>CRP1. Act as a responsible and contributing citizen and employee.</p> <p>CRP2. Apply appropriate academic and technical skills.</p> <p>CRP3. Attend to personal health and financial well-being.</p> <p>CRP4. Communicate clearly and effectively and with reason.</p> <p>CRP5. Consider the environmental, social and economic impacts of decisions.</p> <p>CRP6. Demonstrate creativity and innovation.</p> <p>CRP7. Employ valid and reliable research strategies.</p> <p>CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.</p>			

CRP9. Model integrity, ethical leadership and effective management.
CRP10. Plan education and career paths aligned to personal goals.
CRP11. Use technology to enhance productivity.
CRP12. Work productively in teams while using cultural global competence.

Essential Questions (3-5)

What are some typical steps in the collision repair process?
What are the various types of body shop ownership?
What are the various types of jobs available in the collision repair industry?
What are the educational qualifications needed for a career in the collision repair industry?
What are the different vehicle classifications?
What are the materials used to construct the automotive body?
What are the major assemblies of an automotive body; and what is the vehicle production process?
What are vehicle safety ratings?

Anchor Text

Auto Collision Repair and Refinishing 2nd edition, Michael Crandell, The Goodheart-Willcox Company Inc. Tinley Park, IL, ISBN# 978-1-63126-400-9

Short & Informational Texts (3-5)

SP-2 Online safety course. www.SP2.org/site/page/automotive

Expected Proficiencies of the Unit

Formative & Summative Assessments

Formative:

- Quizzes
- Task sheets completion
- Goodheart-Willcox on-line assessments
- Homework

Summative:

- Tests both written and performance

Resources (websites, Canvas, LMS, Google Classroom, documents, etc.)

SP-2 Online safety course. www.SP2.org/site/page/automotive

Suggested Time Frame: 2 week (16hrs.40min.)

Content Area:	Collision Repair Tech I	Grade(s)	9
Unit Plan Title:	Safety & Personal Protective Gear		
NJSLS/CCTC Standard(s) Addressed in this unit			
<p>8.1.5. E.1a Use digital tools to research and evaluate the accuracy of, relevance to, and appropriateness of using print and non-print electronic information sources to complete a variety of tasks.</p> <p>9.3. ST.1 Apply engineering skills in a project that requires project management, process control and quality assurance.</p> <p>9.3.ST.3 Describe the following safety, health, and environmental standards related to science, technology, engineering and mathematics (STEM) workplaces.</p> <p>9.3ST-ET.3 Apply processes and concepts for the use of technological tools in STEM.</p> <p>9.3.ST-ET.5 Apply knowledge in STEM to solve problems</p> <p>3-5-ETS1-1. Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.</p> <p>3-5-ETS1-2. Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.</p> <p>3-5-ETS1-3. Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.</p> <p>MS-ETS1-3. Analyze data from tests to determine similarities and differences among several design solutions to identify the best characteristics of each that can be combined into a new solution to better meet the criteria for success.</p> <p>CRP1. Act as a responsible and contributing citizen and employee.</p> <p>CRP2. Apply appropriate academic and technical skills.</p>			

- CRP3. Attend to personal health and financial well-being.
- CRP4. Communicate clearly and effectively and with reason.
- CRP5. Consider the environmental, social and economic impacts of decisions.
- CRP6. Demonstrate creativity and innovation.
- CRP7. Employ valid and reliable research strategies.
- CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.
- CRP9. Model integrity, ethical leadership and effective management.
- CRP10. Plan education and career paths aligned to personal goals.
- CRP11. Use technology to enhance productivity.
- CRP12. Work productively in teams while using cultural global competence.

Essential Questions (3-5)

- What are the hazards that may be encountered in the collision repair shop?
- What is the proper procedure to use protective gear in the collision shop?
- What are the safe working practices associated with the various tasks performed in the collision repair shop?
- What are the hazardous wastes generated in the collision repair shop?
- What means can be used to minimize the amount of waste generated in the collision repair shop?
- How is the waste of the auto collision repair shop regulated by government?

Anchor Text

Auto Collision Repair and Refinishing 2nd edition, Michael Crandell, The Goodheart-Willcox Company Inc. Tinley Park, IL, ISBN# 978-1-63126-400-9

Short & Informational Texts (3-5)

SP-2 Online safety course. www.SP2.org/site/page/automotive

Expected Proficiencies of the Unit

PAINTING AND REFINISHING	
For every task in Painting and Refinishing, 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.	

IV. PAINTING AND REFINISHING		
A. Safety Precautions		
1. Identify and take necessary precautions with hazardous operations and materials according to federal, state, and local regulations.		HP-I
2. Identify safety and personal health hazards according to OSHA guidelines and the “Right to Know Law”.		HP-I
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
Formative & Summative Assessments		
<p>Formative:</p> <ul style="list-style-type: none"> Quizzes Task sheets completion Goodheart-Willcox on-line assessments Homework <p>Summative:</p> <ul style="list-style-type: none"> Tests both written and performance 		
Resources (websites, Canvas, LMS, Google Classroom, documents, etc.)		
SP-2 Online safety course. www.SP2.org/site/page/automotive		
Suggested Time Frame:	2 weeks (16hrs.40min.)	

Content Area:	Collision Repair Tech I	Grade(s)	9
Unit Plan Title:	Introduction to Collision Damage & Tools		
NJSLS/CCTC Standard(s) Addressed in this unit			
<p>8.1.5. E.1a Use digital tools to research and evaluate the accuracy of, relevance to, and appropriateness of using print and non-print electronic information sources to complete a variety of tasks.</p> <p>9.3. ST.1 Apply engineering skills in a project that requires project management, process control and quality assurance.</p> <p>9.3.ST.3 Describe the following safety, health, and environmental standards related to science, technology, engineering and mathematics (STEM) workplaces.</p> <p>9.3ST-ET.3 Apply processes and concepts for the use of technological tools in STEM.</p> <p>9.3.ST-ET.5 Apply knowledge in STEM to solve problems</p> <p>3-5-ETS1-1. Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.</p> <p>3-5-ETS1-2. Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.</p> <p>3-5-ETS1-3. Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.</p> <p>MS-ETS1-3. Analyze data from tests to determine similarities and differences among several design solutions to identify the best characteristics of each that can be combined into a new solution to better meet the criteria for success.</p> <p>CRP1. Act as a responsible and contributing citizen and employee.</p> <p>CRP2. Apply appropriate academic and technical skills.</p> <p>CRP3. Attend to personal health and financial well-being.</p> <p>CRP4. Communicate clearly and effectively and with reason.</p> <p>CRP5. Consider the environmental, social and economic impacts of decisions.</p> <p>CRP6. Demonstrate creativity and innovation.</p> <p>CRP7. Employ valid and reliable research strategies.</p> <p>CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.</p> <p>CRP9. Model integrity, ethical leadership and effective management.</p> <p>CRP10. Plan education and career paths aligned to personal goals.</p> <p>CRP11. Use technology to enhance productivity.</p> <p>CRP12. Work productively in teams while using cultural global competence.</p>			

Essential Questions (3-5)

What are the various factors that will influence the way a vehicle will react in a collision?

What do the terms bends, bodylines, and crowns mean?

What is the bend-versus-kink rule?

What is the difference between direct and indirect damage?

What are the kinds of damage that can be found on full-frame and unibody vehicles?

What are the general-purpose hand tools, power tools and shop equipment that are found in a collision repair shop?

What is and how do you use the service information found in the collision repair shop?

Anchor Text

Auto Collision Repair and Refinishing 2nd edition, Michael Crandell, The Goodheart-Willcox Company Inc. Tinley Park, IL, ISBN# 978-1-63126-400-9

Short & Informational Texts (3-5)

<http://www.howstuffworks.com/>

SP-2 Online safety course. www.SP2.org/site/page/automotive

Expected Proficiencies of the Unit

Formative & Summative Assessments

Formative:

Quizzes

Task sheets completion

Goodheart-Willcox on-line assessments

Homework

Summative:

Tests both written and performance

Resources (websites, Canvas, LMS, Google Classroom, documents, etc.)

SP-2 Online safety course. www.SP2.org/site/page/automotive

Suggested Time Frame: 3 weeks-25hrs.

Content Area:	Collision Repair Tech I	Grade(s)	9
Unit Plan Title:	Introduction to Surface Preparation		
NJSLS/CCTC Standard(s) Addressed in this unit			
8.1.5. E.1a Use digital tools to research and evaluate the accuracy of, relevance to, and appropriateness of using print and non-print electronic information sources to complete a variety of tasks.			
9.3. ST.1 Apply engineering skills in a project that requires project management, process control and quality assurance.			
9.3.ST.3 Describe the following safety, health, and environmental standards related to science, technology, engineering and mathematics (STEM) workplaces.			
9.3ST-ET.3 Apply processes and concepts for the use of technological tools in STEM.			
9.3.ST-ET.5 Apply knowledge in STEM to solve problems			
3-5-ETS1-1. Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.			
3-5-ETS1-2. Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.			
3-5-ETS1-3. Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.			
MS-ETS1-3. Analyze data from tests to determine similarities and differences among several design solutions to identify the best characteristics of each that can be combined into a new solution to better meet the criteria for success.			
CRP1. Act as a responsible and contributing citizen and employee.			
CRP2. Apply appropriate academic and technical skills.			
CRP3. Attend to personal health and financial well-being.			
CRP4. Communicate clearly and effectively and with reason.			
CRP5. Consider the environmental, social and economic impacts of decisions.			
CRP6. Demonstrate creativity and innovation.			
CRP7. Employ valid and reliable research strategies.			
CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.			

- CRP9. Model integrity, ethical leadership and effective management.
- CRP10. Plan education and career paths aligned to personal goals.
- CRP11. Use technology to enhance productivity.
- CRP12. Work productively in teams while using cultural global competence.

Essential Questions (3-5)

- What is the importance of proper surface preparation?
- How is a panel cleaned prior to surface preparation?
- What are the various paint removal processes?
- How is primer and paint masked?
- What are the steps in preparing the following: scratch, body filler, bear metal, weld, rust, repaint, blend, melt, trim, and aluminum?

Anchor Text

Auto Collision Repair and Refinishing 2nd edition, Michael Crandell, The Goodheart-Willcox Company Inc. Tinley Park, IL, ISBN# 978-1-63126-400-9

Short & Informational Texts (3-5)

<https://www.youtube.com/watch?v=DXv1EX3YQcg>

Proper Technique to Mix Body Filter

SP-2 Online safety course. www.SP2.org/site/page/automotive

Expected Proficiencies of the Unit

Comply with personal and environmental safety practices associated with clothing and the use of gloves; respiratory protection; eye protection; hearing 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 manufacturer’s SRS types, locations and recommended procedures before inspecting or replacing components.		
II. NON-STRUCTURAL ANALYSIS AND DAMAGE REPAIR (BODY COMPONENTS)		
A. Preparation		
6. Protect panels, glass, interior parts, and other vehicles adjacent to the repair area.		HP-I
7. Soap and water wash entire vehicle; complete pre-repair inspection checklist.		HP-I

B. Outer Body Panel Repairs, Replacements, and Adjustments		
II. NON-STRUCTURAL ANALYSIS AND DAMAGE REPAIR (BODY COMPONENTS)		
C. Metal Finishing and Body Filling		
1. Remove paint from the damaged area of a body panel.	HP-I	
Formative & Summative Assessments		
<p>Formative:</p> <ul style="list-style-type: none"> Quizzes Task sheets completion Goodheart-Willcox on-line assessments Homework <p>Summative:</p> <ul style="list-style-type: none"> Tests both written and performance 		
Resources (websites, Canvas, LMS, Google Classroom, documents, etc.)		
SP-2 Online safety course. www.SP2.org/site/page/automotive		
Suggested Time Frame:	2 weeks (16hrs.40min.)	

Content Area:	Collision Repair Tech I	Grade(s)	9
Unit Plan Title:	Introduction to Nonstructural Repairs		
NJSLS/CCTC Standard(s) Addressed in this unit			
<p>8.1.5. E.1a Use digital tools to research and evaluate the accuracy of, relevance to, and appropriateness of using print and non-print electronic information sources to complete a variety of tasks.</p> <p>9.3. ST.1 Apply engineering skills in a project that requires project management, process control and quality assurance.</p> <p>9.3.ST.3 Describe the following safety, health, and environmental standards related to science, technology, engineering and mathematics (STEM) workplaces.</p> <p>9.3ST-ET.3 Apply processes and concepts for the use of technological tools in STEM.</p>			

9.3.ST-ET.5 Apply knowledge in STEM to solve problems

3-5-ETS1-1. Define a simple design problem reflecting a need or a want that includes specified criteria for success and constraints on materials, time, or cost.

3-5-ETS1-2. Generate and compare multiple possible solutions to a problem based on how well each is likely to meet the criteria and constraints of the problem.

3-5-ETS1-3. Plan and carry out fair tests in which variables are controlled and failure points are considered to identify aspects of a model or prototype that can be improved.

MS-ETS1-3. Analyze data from tests to determine similarities and differences among several design solutions to identify the best characteristics of each that can be combined into a new solution to better meet the criteria for success.

CRP1. Act as a responsible and contributing citizen and employee.

CRP2. Apply appropriate academic and technical skills.

CRP3. Attend to personal health and financial well-being.

CRP4. Communicate clearly and effectively and with reason.

CRP5. Consider the environmental, social and economic impacts of decisions.

CRP6. Demonstrate creativity and innovation.

CRP7. Employ valid and reliable research strategies.

CRP8. Utilize critical thinking to make sense of problems and persevere in solving them.

CRP9. Model integrity, ethical leadership and effective management.

CRP10. Plan education and career paths aligned to personal goals.

CRP11. Use technology to enhance productivity.

CRP12. Work productively in teams while using cultural global competence.

Essential Questions (3-5)

What are the hand tools and power tools used in nonstructural panel repair or replacement; how are they used safely?

Why is filler used and what are the different types available?

What are the characteristics of the various types of sandpaper?

What are the potential problems that can occur when repairing aluminum when there is cross contamination?

What are the steps in the individual panel repair process?

What is the procedure to rough out specific types of nonstructural damage?

How does one use body filler to restore a panel contour?

How does one accomplish the metal finishing process?

What are the considerations that must be taken into account when repairing aluminum panels?

Anchor Text

Auto Collision Repair and Refinishing 2nd edition, Michael Crandell, The Goodheart-Willcox Company Inc. Tinley Park, IL, ISBN# 978-1-63126-400-9

Short & Informational Texts (3-5)

SP-2 Online safety course. www.SP2.org/site/page/automotive

Expected Proficiencies of the Unit

C. Metal Finishing and Body Filling		
1. Remove paint from the damaged area of a body panel.		HP-I
2. Locate and repair surface irregularities on a damaged body panel.		HP-I
3. Demonstrate hammer and dolly techniques.		HP-I
5. Cold shrink stretched panel areas to proper contour.		HP-I
6. Prepare and apply body filler.		HP-I
7. Identify different types of body fillers		HP-G
8. Rough sand body filler to contour; finish sand.		HP-I
II. NON-STRUCTURAL ANALYSIS AND DAMAGE REPAIR (BODY COMPONENTS)		
D. Moveable Glass and Hardware		
II. NON-STRUCTURAL ANALYSIS AND DAMAGE REPAIR (BODY COMPONENTS)		
E. Metal Welding and Cutting		
9. Protect adjacent panels, glass, vehicle interior, etc. from welding and cutting operations.		HP-I

Formative & Summative Assessments

Formative:

- Quizzes
- Task sheets completion
- Goodheart-Willcox on-line assessments
- Homework

Summative:

- Tests both written and performance

Resources (websites, Canvas, LMS, Google Classroom, documents, etc.)	
SP-2 Online safety course. www.SP2.org/site/page/automotive	
Suggested Time Frame:	3 weeks- (25hrs.)

III. Methods of Student Evaluation

Assessment can be divided into two general categories: formal (graded) and informal/classroom-based (both graded and ungraded). The key to effectively assessing a student's mastery of skills is to match the assessment method to the learning objective.

Formal Assessments

- Evaluation
- Class participation
- Creative assignments
- Homework and classwork assignments
- Reports and presentations
- Research methodology
- Technological applications
- Unit tests
- Various speaking and listening assignments
- Multiple choice exams
- Quizzes (announced and unannounced)
- Formal lab reports
- Scientific journal reviews

- Projects
- Short answer and problem solving tests
- Tests and quizzes on blackboard
- Case Study analysis

Informal Assessments

- Instructor's observations of note-taking, and organization of notebooks and assignments
- Cooperative learning activities, including labs
- Creative project assignments
- Laboratory behavior
- Observing citizenship and appropriate social responses
- Instructor's observations of time management skills

IV. Instructional Strategies:

The Automotive Collision Department incorporates an Experiential Learning Environment simulating a modern automotive dealership. Teacher examples of work ethics and habits, cooperative learning and teacher evaluation accent classroom lessons. Lectures are reinforced with the use of web-based automotive curricula; smartboards, modern testing and diagnostic equipment, vehicle components and actual vehicles supplement and enhance classroom instruction. Reinforcement of lessons are complemented with active student participation in a functioning automotive repair lab. Students are expected to demonstrate proficiency of associated NATEF Task lists as well as effective communication skills incorporating applied academics such as science, technology, language arts, analytical and math skills as tasks are completed.

V. Scope and Sequence:

Introduction to Collision Repair & Vehicle Construction;
Safety & Personal Protective Gear;
Introduction to Collision Damage & Tools;
Introduction to Surface Preparation;
Introduction to Nonstructural Repairs;

VI. Textbooks, Instructional Resources:

Auto Collision Repair and Refinishing 2nd edition, Michael Crandell, The Goodheart-Willcox Company Inc. Tinley Park, IL, 2017, ISBN# 978-1-63126-400-9

Student Digital Materials-Online Learning Suite (OLS) of Auto Collision Repair and Finishing, Michael Crandell, The Goodheart-Willcox Company Inc. Tinley Park, IL 2017, ISBN# 978-63126-404-7

SP-2 Online safety course. www.SP2.org/site/page/automotive

Fender Bender (monthly magazine)

Body Shop Business (online monthly magazine)

Ratchet and Wrench (weekly magazine)

Motor Age Training Self-Study Guides for ASE Certification, Collision Repair/Refinish Series B3 Non-Structural Analysis & Damage Repair, 2010.

Motor Age Training Self-Study Guides for ASE Certification, Collision Repair/Refinish Series B2 Painting & Refinishing, 2008.

<https://www.youtube.com/watch?v=qQtroDoX8fc>

<https://www.youtube.com/watch?v=gxq5vi-0yxg>

<https://sp2.org/site/>

<http://www.howstuffworks.com/>

<https://www.youtube.com/watch?v=vEyE8PibVDs>

<https://www.youtube.com/watch?v=lzBGZaS1apw>

<https://www.youtube.com/watch?v=mm5IZBJKv-M>

<https://www.youtube.com/watch?v=DXv1EX3YQcg>

<https://www.youtube.com/watch?v=1sP9Ty0jQy8>

<https://www.youtube.com/watch?v=kJjT6eyBhag>

<https://www.youtube.com/watch?v=JIMaFG3y-o8>

<https://www.youtube.com/watch?v=muYweiYpcuM>

<https://www.youtube.com/watch?v=ijgwCwnKZUM>

<https://www.youtube.com/watch?v=Zbhm-wL7s-s>

3 M Plastic Repair

Bumper Tab Repair

Stud Gun

Basic Mig Welding and Set Up

Mig Welding Instructional

Proper Technique to Mix Body Filter

Part 1 Body Filler Mixing, Spreading
Applying and Proper Use of
Sandpaper

Part 2 Filler Mixing Sanding and
Applying

Part 3 Filler Mixing Sanding and
Applying

Hammer and Dolly Basics

Hammer and Dolly Techniques

Proper Masking Techniques

https://www.youtube.com/watch?v=Y8YzPL_wsGg

Masking Best Practices

<https://www.youtube.com/watch?v=pea2GR3rADE>

Wet Sanding and Polishing

https://www.youtube.com/watch?v=T3_C3W3z_1A

Measuring and Pulling a Vehicle

VII. Student Handout:

Course Description:

Since Inception Passaic County Technical Institute's Automotive Collision Repair program has strived to meet the ever-changing industry standards. Recently we have partnered with the Automotive Service Excellence Education Foundation. Their main objective is ...“to uphold high quality standards of excellence in automotive service” (ASE Alliance 2018). PCTI's School of Auto Collision Repair has incorporated ASE/NATEF standards and I-CAR industry training to meet the demands and challenges of repairing the modern automobile. NATEF Standards set our path and I-CAR Crosswalk enhances and aligns our current curriculum to meet changing industry demands.

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PCTI is excited about the potential we have to produce world class experts in the auto collision field. Upon graduation, the skills and training we instill in our students provide a competitive edge as they enter the workforce of today's global market place. Below is a synopsis of the available modules that are part of our challenging, rigorous, dynamic, and comprehensive curriculum.

Proficiencies- Upon successful completion of the requirements of this course, the students will be able to:

Please refer to the Appendix PCTI Student Competency Checklist

VIII. Appendix

PCTI Student Competency Checklist

NATEF Auto Collision Repair and Refinishing Hands-on Competency Checklist

Student Name: _____ Date: _____

Instructor: _____

Suggested Level of Competency Ratings:

- 5** Mastered competency. Able to perform all elements of the task successfully and independently without supervision.
- 4** Satisfactory performance of task. Acceptable performance of all elements of task with mastery of some elements.
- 3** Capable of performing task adequately, but some elements need improvement.
- 2** Satisfactory performance of some elements of task and unsatisfactory performance of some elements of task.
- 1** Unsatisfactory performance of task.

Task Number and Description	Priority	Level of Competency (1-5)	NATEF Job Sheet(JB#), Work Order or Test	Grade Level	Notes
II. NON-STRUCTURAL ANALYSIS AND DAMAGE REPAIR (BODY COMPONENTS)					
A. Preparation					
1. Review damage report and analyze damage to determine appropriate methods for overall repair; develop and document a repair plan.	HP-I		1,6,9,21	III	
2. Inspect, remove, label, store, and reinstall exterior trim and moldings.	HP-I		2	III	