# Transportation, Distribution and Logistics Career Cluster Introduction to Collision Repair Course Number 47,56500

# **Course Description:**

Introduction to Collision Repair is the prerequisite course in all of the collision repair pathways. Employment opportunities in the collision repair field will be explored in this course. Students will be exposed to all areas of collision repair and automotive refinish, such as safety, refinishing, metal repair, plastic repair, automotive construction, and estimate reading and writing. Basic skills in all of the above mentioned areas will be taught. The pre-requisite for this course is advisor approval.

# Course Standard 1

#### TDL-ICR-1

The following standard is included in all CTAE courses adopted for the Career Cluster/Pathways. Teachers should incorporate the elements of this standard into lesson plans during the course. The topics listed for each element of the standard may be addressed in differentiated instruction matching the content of each course. These elements may also be addressed with specific lessons from a variety of resources. This content is not to be treated as a unit or separate body of knowledge but rather integrated into class activities as applications of the concept.

# **Standard:** Demonstrate employability skills required by business and industry. The following elements should be integrated throughout the content of this course.

1.1 Communicate effectively through writing, speaking, listening, reading, and interpersonal abilities.

Person-to-Person	Telephone and	Cell Phone and	Communicating At	Listening
Etiquette	Email Etiquette	Internet Etiquette	Work	
Interacting with	Telephone	Using Blogs	Improving	Reasons, Benefits,
Your Boss	Conversations		Communication Skills	and Barriers
Interacting with	Barriers to Phone	Using Social Media	Effective Oral	Listening
Subordinates	conversations		Communication	Strategies
Interacting with	Making and		Effective Written	Ways We Filter
Co-workers	Returning Calls		Communication	What We Hear
Interacting with	Making Cold Calls		Effective Nonverbal	Developing a
Suppliers			Skills	Listening
				Attitude
	Handling Conference		Effective Word Use	Show You Are
	Calls			Listening
	Handling Unsolicited		Giving and Receiving	Asking Questions
	Calls		Feedback	
				Obtaining
				Feedback
				Getting Others to
				Listen

<b>Nonverbal Communication</b>	Written	Speaking	Applications and Effective
	Communication		Résumés
Communicating Nonverbally	Writing Documents	Using Language Carefully	Completing a Job Application
Reading Body Language and	Constructive	One-on-One	Writing a Cover Letter
mixed Messages	Criticism in Writing	Conversations	

# Georgia Department of Education

Matching Verbal and	Small Group	Things to Include in a Résumé
Nonverbal communication	Communication	
Improving Nonverbal	Large Group	Selling Yourself in a Résumé
Indicators	Communication	
Nonverbal Feedback	Making Speeches	Terms to Use in a Résumé
Showing Confidence	Involving the Audience	Describing Your Job Strengths
Nonverbally		
Showing Assertiveness	Answering Questions	Organizing Your Résumé
	Visual and Media Aids	Writing an Electronic Résumé
	Errors in Presentation	Dressing Up Your Résumé

# 1.2 Demonstrate creativity by asking challenging questions and applying innovative procedures and methods.

Teamwork and Problem Solving	Meeting Etiquette	
Thinking Creatively	Preparation and Participation in Meetings	
Taking Risks	Conducting Two-Person or Large Group Meetings	
Building Team Communication	Inviting and Introducing Speakers	
	Facilitating Discussions and Closing	
	Preparing Visual Aids	
	Virtual Meetings	

1.3 Exhibit critical thinking and problem solving skills to locate, analyze and apply information in

career planning and employment situations.

career planning and employment situations.				
Problem	Customer Service	The Application Process	Interviewing Skills	Finding the Right
Solving				Job
Transferable Job	Gaining Trust and	Providing Information,	Preparing for an	Locating Jobs and
Skills	Interacting with	Accuracy and Double	Interview	Networking
	Customers	Checking		
Becoming a	Learning and	Online Application Process	Questions to Ask in	Job Shopping
Problem Solver	Giving Customers		an Interview	Online
	What They Want			
Identifying a	Keeping Customers	Following Up After	Things to Include in	Job Search
Problem	Coming Back	Submitting an Application	a Career Portfolio	Websites
Becoming a	Seeing the	Effective Résumés:	Traits Employers	Participation in Job
Critical Thinker	Customer's Point		are Seeking	Fairs
Managing	Selling Yourself and	Matching Your Talents to a	Considerations	Searching the
	the Company	Job	Before Taking a Job	Classified Ads
	Handling Customer	When a Résumé Should be		Using Employment
	Complaints	Used		Agencies
	Strategies for			Landing an
	Customer Service			Internship
				Staying Motivated
				to Search

1.4 Model work readiness traits required for success in the workplace including integrity,

honesty, accountability, punctuality, time management, and respect for diversity,

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Workplace Ethics	Personal	Employer	<b>Business Etiquette</b>	Communicating at
	Characteristics	Expectations		Work
Demonstrating	Demonstrating a	Behaviors	Language and	Handling Anger
Good Work Ethic	Good Attitude	Employers Expect	Behavior	
Behaving	Gaining and Showing	Objectionable	Keeping Information	Dealing with
Appropriately	Respect	Behaviors	Confidential	Difficult Coworkers
Maintaining	Demonstrating	Establishing	Avoiding Gossip	Dealing with a
Honesty	Responsibility	Credibility		Difficult Boss

# Georgia Department of Education

Playing Fair	Showing	Demonstrating	Appropriate Work	Dealing with
	Dependability	Your Skills	Email	Difficult Customers
Using Ethical	Being Courteous	Building Work	Cell Phone Etiquette	Dealing with
Language		Relationships		Conflict
Showing	Gaining Coworkers'		Appropriate Work	
Responsibility	Trust		Texting	
Reducing	Persevering		Understanding	
Harassment			Copyright	
Respecting Diversity	Handling Criticism		Social Networking	
Making	Showing			
Truthfulness a	Professionalism			
Habit				
Leaving a Job				
Ethically				

1.5 Apply the appropriate skill sets to be productive in a changing, technological, diverse workplace to be able to work independently and apply team work skills.

Expected Work Traits	Teamwork	Time Management
Demonstrating Responsibility	Teamwork Skills	Managing Time
Dealing with Information Overload	Reasons Companies Use Teams	Putting First Things First
Transferable Job Skills	Decisions Teams Make	Juggling Many Priorities
Managing Change	Team Responsibilities	Overcoming Procrastination
Adopting a New Technology	Problems That Affect Teams	Organizing Workspace and Tasks
	Expressing Yourself on a Team	Staying Organized
	Giving and Receiving Constructive	Finding More Time
	Criticism	
		Managing Projects
		Prioritizing Personal and Work

Life

1.6 Present a professional image through appearance, behavior and language.

On-the-Job Etiquette	Person-to-Person Etiquette	<b>Communication Etiquette</b>	Presenting Yourself
Using Professional	Meeting Business	Creating a Good Impression	Looking Professional
Manners	Acquaintances		
Introducing People	Meeting People for the First	Keeping Phone Calls	Dressing for Success
	Time	Professional	
Appropriate Dress	Showing Politeness	Proper Use of Work Email	Showing a Professional
			Attitude
Business Meal		Proper Use of Cell Phone	Using Good Posture
Functions			
Behavior at Work		Proper Use in Texting	Presenting Yourself to
Parties			Associates
Behavior at			Accepting Criticism
Conventions			
International Etiquette			Demonstrating Leadership
Cross-Cultural Etiquette			
Working in a Cubicle			

# Support of CTAE Foundation Course Standards and Georgia Standards of Excellence L9-10RST 1-10 and L9-10WHST 1-10:

Georgia Standards of Excellence ELA/Literacy standards have been written specifically for technical subjects and have been adopted as part of the official standards for all CTAE courses. Additional Georgia Standards of Excellence ELA/Literacy standards for Speaking and Listening are listed in the foundational course standards below.

#### TDL-ICR-2

Comply with personal and environmental safety practices associated with clothing and the use of gloves; respiratory protection; eye protection; hand tools; power tools; proper ventilation; and the handling, storage, and disposal of chemicals/materials in accordance with local, state, and environmental regulations. These safety requirements must be strictly enforced for every task in painting and refinishing.

- 2.1 Identify and take necessary precautions with hazardous operations and materials according to federal, state and local regulations.
- 2.2 Identify safety and personal health hazards according to OSHA guidelines and the "Right to Know" law.
- 2.3 Inspect spray environments to ensure compliance with federal, state, and local regulations, and for safety and cleanliness hazards.
- 2.4 Select and use the NIOSH-approved cartridge respirator. Inspect conditions and ensure fit and operation. Perform proper maintenance in accordance with OSHA regulations.
- 2.5 Select and use the NIOSH-approved (fresh air make-up system). Perform proper maintenance in accordance with OSHA regulations.
- 2.6 Select and use proper personal safety equipment for surface preparation, spray gun and related equipment operation, paint mixing, matching and application, paint defects and detailing (gloves, suits, hoods, eye and ear protection, etc.).

Support of CTAE Foundation Course Standards and Georgia Standards of Excellence ELACC9-10SL1: Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 9–10 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively.

# **Course Standard 3**

#### TDL-ICR-3

Explore the different areas of the collision repair industry and understand what skills and knowledge are needed to be successful in each area of collision repair.

- 3.1 Compare each career pathway in the collision repair field.
- 3.2 Research and report on one area of the collision repair field.

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# **Course Standard 4**

#### **TDL-ICR-4**

Identify and correctly use power tools and hand tools used in collision repair.

- 4.1 Identify, use, and maintain common hand tools in the collision repair shop.
- 4.2 Identify, use, and maintain common power tools in the collision repair shop.

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#### TDL-ICR-5

# Learn basic metal repair techniques.

- 5.1 Distinguish between steel and aluminum.
- 5.2 Demonstrate the ability to rough out a dent in a steel panel with a hammer and dolly.
- 5.3 Demonstrate the ability to metal finish a dent in a steel panel with a hammer and dolly.
- 5.4 Demonstrate the ability to remove a dent from a steel panel with a weld on dent puller.
- 5.5 Demonstrate the ability to mix, apply, and block sand body filler to level.
- 5.6 Demonstrate the ability to mix, apply, and block sand primer surfaces.
- 5.7 Demonstrate safe work habits at all times and follow all classroom safety rules.

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# **Course Standard 6**

#### TDL-ICR-6

Identify the most common types of plastic used in automotive construction and perform simple repairs using these materials.

- 6.1 Distinguish between the common types of plastic.
- 6.2 Properly repair dents, gouges, and cuts in plastic panels using various methods.
- 6.3 Demonstrate safe work habits at all times and follow all classroom safety rules.

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#### Course Standard 7

#### TDL-ICR-7

Identify the types of vehicle construction and know the advantages and disadvantages of each.

- 7.1 Distinguish between body over frame construction and uni-body construction.
- 7.2 Discuss the advantages and disadvantages of body over frame and uni-body construction.
- 7.3 Identify the parts of each type of vehicle construction.
- 7.4 Discuss how each type of vehicle construction reacts in a collision and differences in repair techniques due to the type of construction.

Support of CTAE Foundation Course Standards and Georgia Standards of Excellence ELACC9-10SL1: Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 9–10 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively.

#### **TDL-ICR-8**

Identify and explain the differences in the types of material used in the automotive refinish industry, as well as demonstrate basic spray techniques.

- 8.1 Distinguish the difference in single stage and basecoat clear coat paint systems.
- 8.2 Demonstrate the ability to mix and spray both single stage and basecoat clear coat paint systems.

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#### Course Standard 9

#### **TDL-ICR-9**

Read and write simple hand-written and computer-generated repair estimates.

- 9.1 Demonstrate the process of information gathering.
- 9.2 Demonstrate the process of inspection.
- 9.3 Process the inspection results with known information and formulate a repair estimate.

Support of CTAE Foundation Course Standards and Georgia Standards of Excellence ELACC9-10SL1: Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 9–10 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively.

#### Course Standard 10

#### TDL-ICR-10

Develop an understanding of automotive careers; describe the principal fields of specializations; and identify associated career opportunities.

- 10.1 Identify education requirements for automotive occupations and locations where programs of study are available.
- 10.2 Match automotive job titles with qualifications and responsibilities.
- 10.3 Participate in activities related to career interests.

Support of CTAE Foundation Course Standards and Georgia Standards of Excellence

**ELACC9-10SL1:** Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 9–10 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively.

**ELACC9-10SL4:** Present information, findings, and supporting evidence clearly, concisely, and logically such that listeners can follow the line of reasoning and the organization, development, substance, and style are appropriate to purpose, audience, and task.

#### TDL-ICR-11

Examine how related student organizations are integral parts of career and technology education courses through leadership development, school and community service projects and competitive events.

- 11.1 Explain the purpose, mission, objectives, motto, colors, official dress, and other distinguishing characteristics of SkillsUSA.
- 11.2 Explain how participation in SkillsUSA can promote lifelong responsibility for community services, as well as professional growth and development.
- 11.3 Explore the impact and opportunities that SkillsUSA can develop to bring business and industry together with education in a positive working relationship through innovative leadership and career development programs.
- 11.4 Explore the local, state, and national opportunities available to students through participation in SkillsUSA including but not limited to conferences, competitions, community service, philanthropy, and other SkillsUSA activities.

Support of CTAE Foundation Course Standards and Georgia Standards of Excellence ELACC9-10SL1: Initiate and participate effectively in a range of collaborative discussions (one-on-one, in groups, and teacher-led) with diverse partners on grades 9–10 topics, texts, and issues, building on others' ideas and expressing their own clearly and persuasively. ELACC9-10SL4: Present information, findings, and supporting evidence clearly, concisely, and logically such that listeners can follow the line of reasoning and the organization, development, substance, and style are appropriate to purpose, audience, and task.