

LOCALLY DEVELOPED COURSE OUTLINE

# Autobody Repair 25 K & E-5

Submitted By:  
Chinook's Edge School Division No. 73

Submitted On:  
May. 6, 2015

# **Board Motion**

Motion Conclusion

Motion Date

Motion Number

Motions

## Course Basic Information

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| <b>Course Name</b>          | Autobody Repair 25 K & E  |
| <b>Credit Number</b>        | 5   |
| <b>Hours of Instruction</b> | 125.00 hrs  |
| <b>Implementation Dates</b> | 9/1/2015 - 8/31/2019  |
| <b>Proposal Type</b>        | Authorization   |
| <b>Development Type</b>     | Acquired  |
| <b>Designed Grade Level</b> | Grade 10<br>Grade 11<br>Grade 12  |
| <b>Acknowledgment</b>       |   |
| <b>Course Description</b>   | The Autobody Repair program is meant to meet individual student needs while developing the work skills that can apply to a variety of workplaces. |
| <b>Course Prerequisite</b>  | 15: prerequisite   none<br>25: prerequisite   15<br>35: prerequisite   25   |

# Philosophy

All major aspects of the Autobody trade are presented through the learning outcomes in this course in order to provide students with the opportunity to understand the theoretical, as well as the practical aspects of the many skills and competencies that are relevant to their learning and to many workplace settings.

This locally developed course provides additional opportunities for students to develop and refine the learner competencies outlined in the Inspiring Education document.

# Rationale

The main objectives of the three year course are:

- 1) To gain general knowledge of the Autobody trade, and
- 2) To learn the basic skills required in order to pursue autobody as a career.
- 3) To acquire employability competencies

Students apply communication, computational and critical thinking skills as they learn all aspects of the autobody trade.

- Communication skills are developed in a variety of ways which include interaction with classmates, teachers, and customers.
- Interpersonal skills addressing teamwork, respect for, and cooperation with others, are addressed on a daily basis with interaction among peers, teachers and employer/employee relationships.
- Math literacy and computational skills are enhanced through calculation of customer accounts, ordering of supplies and inventory control.
- Strategies to promote critical thinking, problem solving processes ,and decision making processes are part of the program. Skills and strategies in these areas promote analysis and application of the information learned in order for the student to identify or pose problems and determine the causes, dimensions and solutions to the problems.

# Learner Outcomes

Upon completion of all three levels of the Autobody course students should be able to successfully demonstrate Employability Competencies, Occupational Competencies, and Academic Competencies including:

- Introductory skills required for entry into the Autobody industry.
- Organizational skills required for employment in the Autobody industry.
- The ability to use metric and imperial units, as well as calculate mathematical problems which relate to the Autobody industry.
- The ability to recognize and understand signs and symbols related to the Autobody industry.
- An awareness of the entrepreneurial skills required to start an Autobody business.
- The mastery of the work skills required to ensure success in the Autobody industry.

The competencies listed in this program of studies effectively cover the content required for all three levels of this course, in the 2012 – 2015 contexts. In an integrated setting, this K and E Autobody course can align with the learning objectives that are contained in the CTS courses as listed below. Personalization is required to meet each student's learning needs in relation to the learning outcomes for Autobody K&E 15, 25, 35 and projects in the shop.

**Employability Competencies (EC):** These competencies are developed throughout the learning process and are demonstrated in daily life and the workplace. Students will develop and demonstrate these competencies through individual effort and interpersonal interaction while completing a variety of projects and activities.

**Occupational Competencies (OC):** Students will develop and demonstrate the following competencies to succeed in a specific occupation or career. They will achieve results

through a variety of projects/activities as appropriate to enhance their knowledge and skills. Students will ensure the quality of their work through effective task management and will highlight their achievements in a career-based portfolio.

**Academic Competencies (AC):** These are the minimum academic competencies that provide a foundation for further learning. The following outcomes are provided as a reminder to address these academic competencies within the occupational context and to reinforce cross-curricular connections.

**NOTE:** Where the symbol √ appears at more than one level, it indicates an increased sophistication and independence in demonstrating the outcome. Overall, general and specific outcomes can be achieved and assessed concurrently rather than sequentially.

# General Outcomes

- 1 EC - Managing transitions: develop goal setting and planning in relation to learning and the workplace.**
- 2 EC - Managing transitions: develop the ability to manage change effectively to support their goals.**
- 3 EC - Personal management: prepare for employment through the development of personal interests related to the workplace.**
- 4 EC - Personal management: set personal goals related to the workplace in order to accomplish workplace tasks.**
- 5 EC - Working with others: understand and manage risks and be accountable for their actions in occupational environments to achieve personal and workplace goals.**
- 6 EC - Working with others: develop, practice and model effective communication skills and strategies in an occupational context.**
- 7 EC - Personal management: work within a group to achieve community goals.**
- 8 EC - Personal Management: work to achieve their group goals in a team environment.**
- 9 OC - Ensuring quality: determine outcomes for effective task management processes by applying knowledge and skills to simulated and actual work situations**
- 10 OC - Ensuring quality: develop decision making skills and understand the value of effective task management processes by applying knowledge and skills to simulated and actual work situations**
- 11 OC - Ensuring quality: when planning, develop an understanding of the value of effective task management processes by applying knowledge and skills to simulated and actual work situations**
- 12 OC - Ensuring quality: develop an understanding of the value of effective task management processes that align with performance standards by applying knowledge and skills to simulated and actual work situations**
- 13 OC - Ensuring Quality: develop an understanding of the value of effective task management processes and engage in evaluation of the processes by applying knowledge and skills to simulated and actual work situations**
- 14 OC - Achieving Results: explore a variety of occupations within an autobody career environment and prepare for entry level employment.**



- 15 OC - Achieving Results: identify, develop and demonstrate workplace protocols and procedures**
- 16 OC - Workplace Health and Safety: develop understanding and demonstrate entry level standards of safe workplace practices and procedures.**
- 17 OC - Workplace Health and Safety: identify the safe work area management practices and procedures commonly used in the care and maintenance of an autobody shop.**
- 18 OC - Workplace Health and Safety - identify and demonstrate safe practices and procedures when handling of tools and materials in the autobody shop.**
- 19 OC - Products and Service identify, select and safely operate tools and equipment in an autobody shop and ensure appropriate storage of the tools and equipment after use.**
- 20 OC - Products and Service: identify and safely handle a variety of materials used in an autobody shop.**
- 21 OC - Products and Service: identify and practice effective customer service and recognize the importance of client relationships in an autobody shop.**
- 22 OC - Products and Service: identify parts of a vehicle and appropriate methods of replacement of autobody parts.**
- 23 OC - Products and Service: identify and demonstrate proper use and application of materials used for surface preparation**
- 24 OC - Products and Service: demonstrate safe use of materials and equipment for metal repair and finishing.**
- 25 OC - Products and Services: identify and demonstrate the use of personal protective equipment for welding in an autobody shop.**
- 26 OC - Products and Services: identify components, describe processes and demonstrate safe handling procedures when using oxyacetylene welding equipment and materials.**
- 27 OC - Products and Services: identify components, describe processes and demonstrate safe handling procedures when using Gas Metal Arc Welding (GMAW) equipment and materials.**
- 28 OC - Perform basic welding cutting operations: demonstrate safe work practices and perform basic welding cutting operations.**
- 29 OC - Painting: demonstrate safe working practices, use appropriate terminology and demonstrate appropriate techniques when working on painting.**

**30 OC - Masking: demonstrate safe working practices and demonstrate appropriate techniques when masking.**

**31 OC - Collision Repair: demonstrate safe working practices, use appropriate terminology and demonstrate appropriate techniques when working on collision repair.**

**32 OC - Plastics Repair: demonstrate safe working practices and demonstrate appropriate techniques to work with plastics.**

**33 AC - demonstrate effective listening, speaking, reading and/or writing skills related to the workplace.**

**34 AC - use research, creative thinking and effective problem solving strategies to solve problems.**

**35 AC - demonstrate mathematical operations to effectively solve problems in the workplace.**

**36 AC - familiarize and demonstrate effective use of information technology in daily workplace operations.**

## Specific Learner Outcomes

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| <b>1 EC - Managing transitions: develop goal setting and planning in relation to learning and the workplace.</b>  | <b>15 K &amp; E-5 25 K &amp; E-5 35 K &amp;</b> |
| 1.1 develop an awareness of how learning contributes to personal success - identify learning preferences and strengths and apply learning styles and strategies appropriate to the situation  | X   |
| 1.2 apply their abilities and interests toward achieving learning goals for personal success - relate learning preferences and strengths to formal and informal learning opportunities and identify post-secondary opportunities within the related field   | X   |
| 1.3 demonstrate personal discovery and continuous learning for personal success - create a plan that demonstrates continuous learning; analyze requirements for graduation and for further education/training; modify a learning plan to reflect requirements and opportunities                                       | X   |
| 1.4 develop an awareness of how learning contributes to personal success - set learning goals and identify how formal/informal learning can help them achieve goals   | X   |
| 1.5 apply their abilities and interests toward achieving learning goals for personal success - assess learning goals and current competencies, identify competencies needing development and identify and prioritize learning goals   | X X   |
| 1.6 apply their abilities and interests toward achieving learning goals for personal success - create a pathway of senior high school courses to reflect learning goals   | X X   |
| 1.7 demonstrate personal discovery and continuous learning for personal success - practise what has been learned to build competence and confidence and evaluate the application of competencies to learning goals  | X   |
| 1.8 develop an awareness of how learning contributes to personal success - develop an awareness of senior high school courses and work experience and identify educational possibilities; e.g., Registered Apprenticeship Program (RAP), Green Certificate, Career and Technology Studies (CTS) and Career Internship | X X   |

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| 1.9 demonstrate personal discovery and continuous learning for personal success - identify learning opportunities related to learning goals, commitments and resources - identify opportunities for further education/training; locate needed financial support systems; locate needed personal support systems | X |
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| <b>2 EC - Managing transitions: develop the ability to manage change effectively to support their goals.</b>  | <b>15 K &amp; E-5 25 K &amp; E-5 35 K &amp;</b> |
| 2.1 manage change effectively - identify available support resources and assess potential barriers  | X   |
| 2.2 practise the skills and abilities needed to manage change: identify the need for personal support and create an inventory of available personal and community sources of support  | X   |
| 2.3 manage change effectively to support their goals - prioritize and assign resources to meet commitments and goals  | X   |
| 2.4 manage change effectively - prepare an action plan to proactively respond to a particular change or challenge.  | X   |
| 2.5 practise the skills and abilities needed to manage change: assess and reflect on the success of an action plan - create alternative choices to deal with unexpected change; identify stressors in personal environments that they can and cannot change | X   |
| 2.6 manage change effectively to support their goals - redefine an action plan as situations change: use adaptive strategies; redefine personal goals; select personal coping mechanisms; access available and appropriate sources of support               | X   |
| 2.7 practise the skills and abilities needed to manage change: identify goals, responsibilities and commitments   | X X   |
| 2.8 manage change effectively to support their goals - prioritize commitments and goals to achieve a balanced lifestyle   | X   |
| 2.9 manage change effectively to support their goals - identify opportunities for improvement and innovation - entrepreneurship   | X   |

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| <b>3 EC - Personal management: prepare for employment through the development of personal interests related to the workplace.</b> | <b>15 K &amp; E-5 25 K &amp; E-5 35 K &amp;</b> |
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| 3.1 explore and discover interests related to occupational opportunities - create an inventory of personal competencies, interests, goals and work preferences and link this inventory to career options                        | X |
| 3.2 orient themselves toward an occupation that reflects their personal interests: assess work preferences and non-preferences (e.g., indoor, outdoor, shift work), assess life/work options and outline career goals and paths | X |
| 3.3 prepare themselves for entry-level employment in an occupation that reflects their personal interests - build personal career paths and networks  | X |
| 3.4 explore and discover personal interests related to occupational opportunities - identify sources of support for investigating and finding work; e.g., Alberta Learning Information Service (ALIS) Web site                  | X |
| 3.5 orient themselves toward an occupation that reflects their personal interests - orient themselves to the workplace, community partnerships and work in a variety of roles and responsibilities                              | X |
| 3.6 prepare themselves for entry-level employment in an occupation that reflects their personal interests - analyze how work contributes to societal and economic needs and a sense of responsibility                           | X |
| 3.7 explore and discover personal interests related to occupational opportunities - describe how work contributes to individual goals   | X |
| 3.8 orient themselves toward an occupation that reflects their personal interests: measure and celebrate personal contributions to workplace goals  | X |
| 3.9 prepare themselves for entry-level employment in an occupation that reflects their personal interests - analyze elements of job satisfaction; e.g., recognition, environment, pay, benefits, prestige                       | X |
| 3.10 explore and discover personal interests related to occupational opportunities - explore the workplace through community partnerships and identify employer and employee expectations, rights and responsibilities.         | X |
| 3.11 orient themselves toward an occupation that reflects their personal interests - assess personal performance in terms of workplace expectations   | X |

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| 3.12 prepare themselves for entry-level employment in an occupation that reflects their personal interests - prepare for employment through community partnership activities and organize and complete specific job tasks effectively and efficiently | X |
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| <b>4 EC - Personal management: set personal goals related to the workplace in order to accomplish workplace tasks.</b>  | <b>15 K &amp; E-5 25 K &amp; E-5 35 K &amp;</b> |
| 4.1 develop the ability to set personal goals and priorities - identify personal strengths and talents and establish an action plan to build on them                      | X X   |
| 4.2 create a long-term plan that continues to develop accomplishments and goals   | X   |
| 4.3 develop the ability to set personal goals and priorities - recognize the use of strengths and talents to achieve goals  | X   |
| 4.4 enhance their ability to set personal goals and priorities - use strengths and talents to achieve personal goals  | X   |
| 4.5 enhance their ability to set personal goals and priorities related to the work place - demonstrate entry-level self-presentation appropriate to the activity and role | X X X   |

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| <b>5 EC - Working with others: understand and manage risks and be accountable for their actions in occupational environments to achieve personal and workplace goals.</b>   | <b>15 K &amp; E-5 25 K &amp; E-5 35 K &amp;</b> |
| 5.1 identify and understand the risks associated with occupational activities - identify current health and safety procedures; e.g., at home, at school, in the community and in the workplace  | X   |
| 5.2 understand risks and be accountable for their actions: follow health and safety procedures; e.g., at home, at school, in the community and in the workplace   | X   |
| 5.3 manage risks to achieve both personal and workplace goals - maintain health and safety procedures; e.g., at home, at school, in the community and in the workplace  | X   |
| 5.4 identify and understand the risks associated with occupational activities - identify risks that could impact themselves and others and identify hazards in the work environment; e.g., chemical, physical, biological and ergonomic | X   |

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| 5.5 understand risks and be accountable for their actions: identify potential hazards, take corrective action and develop and practise action plans to ensure safety                                | X |
| 5.6 manage risks to achieve both personal and workplace goals -monitor success in reducing the impact of hazards on themselves and others   | X |
| 5.7 identify and understand the risks associated with occupational activities - identify a potential emergency situation and develop strategies for personal emergency responses                    | X |
| 5.8 understand risks and be accountable for their actions: practise personal emergency responses  | X |
| 5.9 manage risks to achieve both personal and workplace goals - work with others to respond to emergencies  | X |
| 5.10 identify and understand the risks associated with occupational activities - identify sources of support when taking risks in their personal lives and in the workplace; e.g., entrepreneurship | X |
| 5.11 understand risks and be accountable for their actions: assess their comfort level with, and the consequences of taking risks.  | X |
| 5.12 manage risks to achieve both personal and workplace goals - demonstrate concern for the safety of others by exhibiting appropriate behaviour in the workplace                                  | X |
| 5.13 manage risks to achieve both personal and workplace goals - take planned risks to contribute to personal growth.   | X |

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| <b>6 EC - Working with others: develop, practice and model effective communication skills and strategies in an occupational context.</b>  | <b>15 K &amp; E-5 25 K &amp; E-5 35 K &amp;</b> |
| 6.1 develop communication skills and strategies in an occupational context - demonstrate communication strategies for communicating thoughts and feelings                             | X   |
| 6.2 practise effective communication skills and strategies in an occupational context: assess the effectiveness of communication strategies used to communicate thoughts and feelings | X   |
| 6.3 model effective communication skills and strategies in the home, school, community and workplace  | X   |

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| 6.4 develop communication skills and strategies in an occupational context - develop awareness of verbal and nonverbal communication strategies                                   | X |   |   |
| 6.5 practise effective communication skills and strategies in an occupational context - assess verbal and nonverbal communication strategies                                      |   | X |   |
| 6.6 practise effective communication skills and strategies in an occupational context - apply communication skills to build relationships to achieve personal and workplace goals |   | X | X |
| 6.7 develop communication skills and strategies in an occupational context - communicate with others to achieve personal and workplace goals                                      | X | X | X |
| 6.8 develop communication skills and strategies in an occupational context - communicate common goals and expectations to improve their team's ability to achieve goals           | X | X |   |
| 6.9 model effective communication skills and strategies in the home, school, community and workplace - work together to achieve goals   |   |   | X |
| 6.10 develop communication skills and strategies in an occupational context - identify causes of conflict.  | X |   |   |
| 6.11 model effective communication skills and strategies in the home, school, community and workplace - demonstrate the ability to deal constructively with conflict              |   | X | X |
| 6.12 practise effective communication skills and strategies in an occupational context - demonstrate the ability to accept praise and/or criticism                                | X | X | X |

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| <b>7 EC - Personal management: work within a group to achieve community goals.</b>  | <b>15 K &amp; E-5 25 K &amp; E-5 35 K &amp;</b> |
| 7.1 demonstrate respect for the thoughts and opinions of others in the group - assess and respect how their personal values and beliefs differ from those of others and how those beliefs impact personal behavior                                | X   |
| 7.2 demonstrate the ability to understand and work within the culture of a group: accommodate the beliefs of others in work and personal environments and show respect for differences in beliefs, abilities, etiquette and styles of interaction | X   |



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| 7.3 promote equity in work and community endeavours -demonstrate respect for others and a shared understanding of diverse beliefs, etiquette and styles of interaction            | X |
| 7.4 demonstrate respect for the thoughts and opinions of others in the group - identify the value of volunteering in community activities; e.g., charity work, community car wash | X |
| 7.5 demonstrate the ability to understand and work within the culture of a group: identify opportunities for participation in community growth.                                   | X |
| 7.6 promote equity in work and community endeavours - assess their personal contribution to community growth  | X |

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| <b>8 EC - Personal Management: work to achieve their group goals in a team environment.</b>   | <b>15 K &amp; E-5 25 K &amp; E-5 35 K &amp;</b> |
| 8.1 identify team goals   | X   |
| 8.2 plan and make decisions with others: participate effectively as group members - generate ideas; assess resources; contribute abilities and interests; monitor progress; share responsibility for completion of a task   | X   |
| 8.3 demonstrate the ability to complete tasks in a team environment - assess the effectiveness of group and personal contributions: generate ideas; assess resources; contribute abilities and interests; monitor progress; share responsibility for completion of a task | X   |
| 8.4 establish short-term and long-term team group goals   | X   |
| 8.5 plan and make decisions with others: clarify the expected outcomes of teamwork  | X X   |
| 8.6 plan and make decisions with others: assume various roles within a group - leadership   | X X   |
| 8.7 demonstrate the ability to complete tasks in a team environment - expand their abilities to contribute to team goals  | X   |

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| <b>9 OC - Ensuring quality: determine outcomes for effective task management processes by applying knowledge and skills to simulated and actual work situations</b> | <b>15 K &amp; E-5 25 K &amp; E-5 35 K &amp;</b> |
| 9.1 Understand task requirements  | X X X   |
| 9.2 ask questions to clarify expected outcomes, procedures and timelines for task requirements  | X X X   |

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| 9.3 Apply knowledge and skills to simulated and actual work situations to meet task requirements | X | X | X |
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| <b>10 OC - Ensuring quality: develop decision making skills and understand the value of effective task management processes by applying knowledge and skills to simulated and actual work situations</b> | 15 K & E-5 25 K & E-5 35 K & |   |   |
| 10.1 identify the parameters of the task   | X                            | X | X |
| 10.2 generate and review alternative ideas and their consequences  | X                            | X | X |
| 10.3 make a decision or select an idea   | X                            | X | X |

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| <b>11 OC - Ensuring quality: when planning, develop an understanding of the value of effective task management processes by applying knowledge and skills to simulated and actual work situations</b> | 15 K & E-5 25 K & E-5 35 K & |   |   |
| 11.1 identify the steps involved in managing a project  | X                            | X | X |
| 11.2 prepare a sample project plan, including budget and timeline   | X                            | X | X |
| 11.3 identify available tools, equipment and materials  | X                            | X | X |

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| <b>12 OC - Ensuring quality: develop an understanding of the value of effective task management processes that align with performance standards by applying knowledge and skills to simulated and actual work situations</b> | 15 K & E-5 25 K & E-5 35 K & |   |   |
| 12.1 identify expected standards for a product or service  | X                            | X | X |
| 12.2 work to agreed quality standards and specifications   | X                            | X | X |
| 12.3 select and use appropriate tools and technology for a task or project   | X                            | X | X |

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| <b>13 OC - Ensuring Quality: develop an understanding of the value of effective task management processes and engage in evaluation of the processes by applying knowledge and skills to simulated and actual work situations</b> | 15 K & E-5 25 K & E-5 35 K & |   |   |
| 13.1 identify opportunities for improving quality  | X                            | X | X |

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| 13.2 establish expectations and measures for improvements   | X | X | X |
| 13.3 create evidence to support an understanding of task management and skill development for inclusion in a personal portfolio | X | X | X |

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| <b>14 OC - Achieving Results: explore a variety of occupations within an autobody career environment and prepare for entry level employment.</b>   | <b>15 K &amp; E-5 25 K &amp; E-5 35 K &amp;</b> |   |   |
| 14.1 explore a variety of occupations within an autobody career environment - identify local opportunities within a career field   | X   |   |   |
| 14.2 orient themselves toward an occupation within an autobody repair career environment - identify entry-level competencies   |   | X |   |
| 14.3 orient themselves toward an occupation within an autobody repair career environment - identify post-secondary opportunities   |   | X | X |
| 14.4 prepare for entry-level employment within an autobody repair career environment -assess entry-level competencies  |   |   | X |
| 14.5 prepare for entry-level employment within an autobody repair career environment - recognize opportunities for further education/training  |   |   | X |
| 14.6 prepare for entry-level employment within an autobody repair career environment - select post-secondary opportunities   |   |   | X |
| 14.7 explore a variety of occupations within an autobody career environment - research employment information; e.g., duties, working conditions, education, salary   | X   |   |   |
| 14.8 orient themselves toward an occupation within an autobody repair career environment - match their personal interests to their job search: identify sources of support for investigating and finding work; describe entry-level requirements; recognize potential career ladders |   | X |   |
| 14.9 orient themselves toward an occupation within an autobody repair career environment - introduce themselves to local business/industry operations  |   | X |   |

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| 14.10 prepare for entry-level employment within an autobody repair career environment - establish contacts with local businesses/industries present marketable skills and strengths: prepare a résumé; write a letter of application; complete application forms; identify contacts and references; collect evidence of competencies in a portfolio | X |
| 14.11 explore a variety of occupations within an autobody career environment - define and recognize entrepreneurship as a potential career path   | X |
| 14.12 orient themselves toward an occupation within an autobody repair career environment - recognize entrepreneurial opportunities within the industry   | X |
| 14.13 prepare for entry-level employment within an autobody repair career environment - identify local entrepreneurs  | X |

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| <b>15 OC - Achieving Results: identify, develop and demonstrate workplace protocols and procedures</b>   | <b>15 K &amp; E-5 25 K &amp; E-5 35 K &amp;</b> |
| 15.1 identify workplace protocols, procedures and standards of conduct; e.g.: clean the entire work area, return tools to designated areas, minimize the waste of materials; identify related health and sanitation standards; treat the shop area with care, pay attention to potential workplace health and safety risks; treat other members of the team with respect; wear appropriate dress   | X   |
| 15.2 develop workplace protocols, procedures and standards of conduct: demonstrate appropriate work habits; use safe and sanitary practices; demonstrate pride in themselves; demonstrate pride in their work performance; show respect for others; respect the property of others   | X   |
| 15.3 demonstrate workplace protocols, procedures and standards of conduct: demonstrate appropriate work habits; demonstrate effective human relations techniques in the workplace; practise safety in the workplace; practise personal and public hygiene procedures; demonstrate entry-level competency in the use of tools and equipment; use supplies correctly; follow good storage practices; demonstrate pride in their work performance; demonstrate a willingness to work; demonstrate respect for others; follow accepted principles and procedures; recognize opportunities for further education/training | X   |

| <b>16 OC - Workplace Health and Safety: develop understanding and demonstrate entry level standards of safe workplace practices and procedures.</b>   | <b>15 K &amp; E-5 25 K &amp; E-5 35 K &amp;</b> |   |   |
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| 16.1 develop safe workplace practices and procedures - identify and demonstrate preventive measures to avoid accidents and injury to themselves and others during autobody procedures: identify safety device locations in the shop or classroom; e.g., eyewash station, emergency shut-off, fire extinguisher, emergency exits, telephone; demonstrate the correct procedures for addressing injuries: identify the proper use of tools with regard to other classmates and shop conditions; identify personal protective equipment (PPE); e.g., coveralls, proper eyewear, proper footwear; demonstrate proper body position while at a work station; maintain a safe and clean work area; identify and practice the safe use of electrical equipment; demonstrate an understanding of the Workplace Hazardous Materials Information System (WHMIS) as it relates to the field of study and identify WHMIS symbols, classes and labeling requirements | X   | X | X |
| 16.2 develop safe workplace practices and procedures - identify important standards (codes) and governing bodies in the autobody industry   | X   | X | X |
| 16.3 demonstrate safe workplace practices and procedures identify safety device locations and procedures within the workplace environment   | X   | X | X |
| 16.4 demonstrate safe workplace practices and procedures demonstrate knowledge of, and the ability to access information about, Occupational Health and Safety (OHS) and the Workers' Compensation Board (WCB)  | X   | X | X |
| 16.5 demonstrate safe workplace practices and procedures demonstrate knowledge of, and adherence to, safety rules that are specific to available tools, equipment and materials   | X   | X | X |
| 16.6 demonstrate safe workplace practices and procedures demonstrate knowledge of health hazards associated with the use of chemicals and materials and retrieve information on Material Safety Data Sheets (MSDS) using appropriate print and Internet resources   | X   | X | X |
| 16.7 demonstrate safe workplace practices and procedures select and wear personal protective equipment (PPE) appropriate to the specific task   | X   | X | X |

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| 16.8 demonstrate safe workplace practices and procedures demonstrate knowledge of environmental issues relating to the procedures for handling hazardous waste  | X | X | X |
| 16.9 demonstrate safe workplace practices and procedures demonstrate an understanding of the Workplace Hazardous Materials Information System (WHMIS) as it relates to the field of study and identify WHMIS symbols, classes and labelling requirements.                                     | X | X | X |
| 16.10 demonstrate entry-level standards of safe workplace practices and procedures - identify and explain the use of safety devices within the workplace  | X | X | X |
| 16.11 demonstrate entry-level standards of safe workplace practices and procedures - demonstrate knowledge of, and the ability to access information about, Occupational Health and Safety (OHS) and the Workers' Compensation Board (WCB)  |   |   | X |
| 16.12 demonstrate entry-level standards of safe workplace practices and procedures - demonstrate a pre-work and post work hazard assessment   | X | X | X |
| 16.13 demonstrate entry-level standards of safe workplace practices and procedures - demonstrate knowledge of, and adherence to, safety rules that are specific to available tools, equipment and materials   | X | X | X |
| 16.14 demonstrate entry-level standards of safe workplace practices and procedures - demonstrate knowledge of health hazards associated with the use of chemicals and materials and retrieve information on Material Safety Data Sheets (MSDS) using appropriate print and Internet resources | X | X | X |
| 16.15 demonstrate entry-level standards of safe workplace practices and procedures - model safety consciousness by selecting and wearing personal protective equipment (PPE) appropriate to the specific task   | X | X | X |
| 16.16 demonstrate entry-level standards of safe workplace practices and procedures - demonstrate knowledge of environmental issues relating to the procedures for handling hazardous waste  | X | X | X |
| 16.17 demonstrate entry-level standards of safe workplace practices and procedures - demonstrate an understanding of the Workplace Hazardous Materials Information System (WHMIS) as it relates to the field of study and identify WHMIS symbols, classes and labelling requirements          | X | X | X |

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| <b>17 OC - Workplace Health and Safety: identify the safe work area management practices and procedures commonly used in the care and maintenance of an autobody shop.</b> | <b>15 K &amp; E-5 25 K &amp; E-5 35 K &amp;</b> |   |   |
| 17.1 identify technical references   | X   | X | X |
| 17.2 maintain a clean, safe work area  | X   | X | X |
| 17.3 understand the concept of troubleshooting   | X   | X | X |
| 17.4 understand the concept of updates and new data  | X   | X | X |

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| <b>18 OC - Workplace Health and Safety - identify and demonstrate safe practices and procedures when handling of tools and materials in the autobody shop.</b> | <b>15 K &amp; E-5 25 K &amp; E-5 35 K &amp;</b> |   |   |
| 18.1 understand the importance of safety while using hand and power tools  | X   | X | X |
| 18.2 identify the importance of safety while handling and using autobody materials   | X   | X | X |
| 18.3 demonstrate safe use of products/materials used in autobody   | X   | X | X |

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| <b>19 OC - Products and Service identify, select and safely operate tools and equipment in an autobody shop and ensure appropriate storage of the tools and equipment after use.</b> | <b>15 K &amp; E-5 25 K &amp; E-5 35 K &amp;</b> |   |   |
| 19.1 identify and demonstrate the correct use of common layout and measurement tools   | X   | X | X |
| 19.2 identify equipment commonly used in autobody shops: clamps and vices, floor jacks, sprayers, roll forming machine, bending brakes etc.  | X   | X | X |
| 19.3 identify hand tools: chisel, hacksaw, bolt cutter, tin snips, shears, hammers, dollys, spoons, etc.   | X   | X | X |
| 19.4 identify power tools: grinders, sanders, drills, die grinders, air chisels, shears  | X   | X | X |
| 19.5 identify, select and use autobody tools and equipment   | X   | X | X |
| 19.6 operate safety power tools used in autobody   | X   | X | X |
| 19.7 demonstrate basic skills with hand and power tools  | X   | X | X |

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| 19.8 demonstrate basic tool and equipment maintenance  | X | X | X |
| 19.9 identify and select available tools and equipment for the task; e.g., use, maintain and store, safely, tools and equipment. | X | X | X |
| 19.10 demonstrate use of sandblaster and grinder   | X | X | X |
| 19.11 demonstrate ability to hand and power sand   | X | X | X |
| 19.12 identify the importance of using fire safe metal containers to store materials and waste                                   | X | X | X |
| 19.13 identify correct cleaning techniques for each item   | X | X | X |
| 19.14 identify correct storage locations for each piece of equipment and all tools   | X | X | X |

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| <b>20 OC - Products and Service: identify and safely handle a variety of materials used in an autobody shop.</b>                              | <b>15 K &amp; E-5 25 K &amp; E-5 35 K &amp;</b> |   |   |
| 20.1 identify materials used on autobody related job sites; e.g., hardware items; e.g., nuts, bolts, washers, clips, snap rings, screws       | X   | X | X |
| 20.2 identify fluids; e.g., - fillers, thinners, paints, reducers   | X   | X | X |
| 20.3 identify appropriate materials for various tasks and minimize the waste of materials through proper use                                  | X   | X | X |
| 20.4 recognize the proper disposal methods for different materials  | X   | X | X |
| 20.5 identify ferrous and non-ferrous metals: explain the uses, advantages and disadvantages of each  | X   | X | X |
| 20.6 read labels on chemical containers to check their uses and hazards   | X   | X | X |
| 20.7 handle and properly dispose of environmentally hazardous materials used in autobody shops; e.g., read Material Safety Data Sheets (MSDS) | X   | X | X |
| 20.8 list and become familiar with materials used in autobody   |   | X | X |
| 20.9 select and use materials for repair  |   | X | X |

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| <b>21 OC - Products and Service: identify and practice effective customer service and recognize the importance of client relationships in an autobody shop.</b> | <b>15 K &amp; E-5 25 K &amp; E-5 35 K &amp;</b> |  |  |
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| 21.1 identify client relationships or interactions within the field of autobody         | X | X | X |
| 21.2 identify services needed, required or provided                                     | X | X | X |
| 21.3 collect necessary information to complete a purchase or fill out a work order      | X | X | X |
| 21.4 identify the importance of customer or client service to all businesses/industries | X | X | X |
| 21.5 identify professional practices and work habits                                    | X | X | X |
| 21.6 recognize what is required to meet and exceed the client's expectations            | X |   |   |
| 21.7 strive to meet and exceed the client's expectations                                |   | X | X |

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| <b>22 OC - Products and Service: identify parts of a vehicle and appropriate methods of replacement of autobody parts.</b> | <b>15 K &amp; E-5 25 K &amp; E-5 35 K &amp;</b> |   |   |
| 22.1 identify body panels, frame, trim, interior hardware, moldings, glass   | X   | X | X |
| 22.2 identify the major parts of a vehicle through diagrams while using documentation                                      | X   | X | X |
| 22.3 identify and chart vehicle parts  |   | X | X |
| 22.4 recognize the importance of correct alignment of automobile body parts  |   | X | X |
| 22.5 safely remove and replace automobile body panels  |   | X | X |
| 22.6 identify the appropriate methods of replacing automobile external trim  |   | X | X |
| 22.7 identify various types of fasteners and their uses  |   | X | X |
| 22.8 demonstrate knowledge of metric and imperial threaded fasteners   |   | X | X |

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| <b>23 OC - Products and Service: identify and demonstrate proper use and application of materials used for surface preparation</b> | <b>15 K &amp; E-5 25 K &amp; E-5 35 K &amp;</b> |   |   |
| 23.1 assess the state of a painted surface in order to make decisions about the appropriate restoration procedures                 | X   | X | X |
| 23.2 demonstrate safe work practices for surface preparation, and follow established lab procedures                                | X   | X | X |

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| 23.3 demonstrate safe practices in relation to: abrasive dust; chemicals/fumes; physical hazards | X | X | X |
| 23.4 identify and demonstrate the proper use of wash primers                                     | X | X | X |
| 23.5 identify and demonstrate the proper use of high solid primers                               | X | X | X |
| 23.6 identify and demonstrate the proper use of spot putties                                     | X | X | X |
| 23.7 understand and demonstrate application of abrasives in panel preparation                    | X | X | X |
| 23.8 understand and demonstrate block sanding with guide coating                                 | X | X | X |
| 23.9 learn to use palm of hand as a gauge to find low and high spots on the surface              |   | X | X |
| 23.10 demonstrate correct usage of power sanders   |   | X | X |
| 23.11 apply and sand and spot putties  |   | X | X |
| 23.12 demonstrate correct selection of abrasive materials  |   | X | X |
| 23.13 understand block sanding and guide coating   |   | X | X |
| 23.14 demonstrate effective hand and power sanding techniques                                    |   |   | X |
| 23.15 demonstrate correct techniques of feather edging   |   |   | X |
| 23.16 demonstrate advanced techniques of wet and dry sanding primers                             |   |   | X |
| 23.17 demonstrate the correct techniques of application and sanding of spot putties              |   |   | X |

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| <b>24 OC - Products and Service: demonstrate safe use of materials and equipment for metal repair and finishing.</b>  | <b>15 K &amp; E-5 25 K &amp; E-5 35 K &amp;</b> |   |   |
| 24.1 demonstrate safe work practices when metal forming and finishing, and follow established lab procedures while demonstrating safe practices in relation to: personal protective equipment/clothes; use of impact tools, drills, grinders, cutters, sheet metal brake and shear; safe use of oxyacetylene and GMAW welding equipment; hazards of body fillers. | X   | X | X |
| 24.2 repair and reform damaged metal panels: identify small dents; demonstrate use of dent pullers; demonstrate correct use of hammer and dolly   | X   | X | X |

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| 24.3 apply paste fillers: demonstrate correct mixing techniques, demonstrate proper application of sanding plastic fillers, demonstrate proper techniques of sanding plastic fillers.  | X | X | X |
| 24.4 demonstrate use of uni-welder in pulling out inaccessible dents   |   | X | X |
| 24.5 demonstrate the pick and file techniques  |   | X | X |
| 24.6 demonstrate established safety procedures: demonstrate knowledge of and follow established lab procedures; demonstrate approved safety procedures in the use of jacks, jack stands, impact wrenches, torches, plasma arc and abrasive cutters to remove or replace parts; demonstrate knowledge, skills and aptitudes in the safe use of hand tools |   |   | X |
| 24.7 identify accessible and inaccessible dents  |   |   | X |
| 24.8 demonstrate the mixing and application of fibreglass resins   |   |   | X |
| 24.9 demonstrate the application of plastic resins   |   |   | X |

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| <b>25 OC - Products and Services: identify and demonstrate the use of personal protective equipment for welding in an autobody shop.</b> | <b>15 K &amp; E-5 25 K &amp; E-5 35 K &amp;</b> |   |   |
| 25.1 appropriate fire extinguisher use in the event of fire  | X   | X | X |
| 25.2 use of eye protection; use of protective clothing; use of protective footwear   | X   | X | X |
| 25.3 use of proper ventilation; follow proper safety procedures  | X   | X | X |

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| <b>26 OC - Products and Services: identify components, describe processes and demonstrate safe handling procedures when using oxyacetylene welding equipment and materials.</b> | <b>15 K &amp; E-5 25 K &amp; E-5 35 K &amp;</b> |   |   |
| 26.1 identify the basic components of oxyacetylene welding stations   | X   | X | X |
| 26.2 demonstrate the safe use, start-up and shut down of oxyacetylene welding equipment   | X   | X | X |
| 26.3 demonstrate basic competence in welding 18-20 gauge steel sheet metal in flat position   | X   | X | X |

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| 26.4 demonstrate the proper techniques for using welding rods  | X | X | X |
| 26.5 describe the characteristics and safe handling procedures for oxygen and acetylene: identify and describe properties of oxygen gas; identify and describe makeup oxygen cylinder/bottle including valves and safety devices; identify and describe properties of acetylene gas; identify and describe makeup acetylene cylinder/bottle including valves and safety devices; correct cylinder transport procedures; correctly mount cylinder and attach regulator and hoses. | X | X | X |
| 26.6 demonstrate safe handling procedures for regulators and hoses - identify and describe regulators and torches including: purpose; regulator types; torch types; identification, hoses; flashback arrestors; torch check valves - reverse flow check valves; torch types and parts.   | X | X | X |
| 26.7 demonstrate the safe use, care and maintenance of torches and tips by being able to identify and describe conditions that lead to backfires and flashbacks  | X | X | X |
| 26.8 demonstrate the safe use, care and maintenance of torches and tips by being able to identify and describe flame types and functions   | X | X | X |
| 26.9 demonstrate purge and leak test   | X | X | X |
| 26.10 demonstrate start-up and shut down procedure   | X | X | X |
| 26.11 demonstrate correct heating tip selection  | X | X | X |
| 26.12 demonstrate check and clean tips and torches   | X | X | X |
| 26.13 demonstrate the ability to install tips  | X | X | X |
| 26.14 demonstrate the ability to balance regulators and adjust torch flame   | X | X | X |
| 26.15 demonstrate the ability to heat metal  | X | X | X |
| 26.16 demonstrate the ability to shut down equipment   | X | X | X |
| 26.17 demonstrate the ability to balance the torch   |   | X |   |
| 26.18 demonstrate the advanced ability to weld beads across the plate  |   | X |   |
| 26.19 demonstrate the ability to make a butt weld and lap weld in flat position using both welding techniques  |   | X |   |
| 26.20 demonstrate metal shrinking and metal cutting techniques   |   | X |   |

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| 26.21 recognize the applications of plasma cutters.                               | X |
| 26.22 demonstrate and perform safe use of oxyacetylene welding equipment          | X |
| 26.23 demonstrate ability to weld in flat, horizontal and vertical positions      | X |
| 26.24 perfect the correct techniques of metal shrinking and metal cutting         | X |
| 26.25 demonstrate the advanced application of MIG welder safe handling procedures | X |
| 26.26 demonstrate basic skills of plasma cutters                                  | X |

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| <b>27 OC - Products and Services: identify components, describe processes and demonstrate safe handling procedures when using Gas Metal Arc Welding (GMAW) equipment and materials.</b>  | <b>15 K &amp; E-5 25 K &amp; E-5 35 K &amp;</b> |
| 27.1 identify the basic components of a GMAW station - apply safe work practices and procedures - select and use appropriate personal protective equipment; maintain a clean and tidy work station; demonstrate safe tool/material handling and storage techniques, for a given type of weld and/or weldment, select the appropriate: wire type, size and feed rate; current; shielding gas type and flow rate; prepare and clean all surfaces to be welded; properly position metal for welding; identify precautions to take against electric shock, toxic fumes and radiant energy associated with GMAW | X X X   |
| 27.2 demonstrate basic GMAW welding technique - demonstrate tack and weld components to gain competency; make light gauge fillet welds in the flat and horizontal positions, down hand fillet; weld on light gauge tubing; identify two gases; demonstrate the ability to weld beads across the plate; demonstrate basic skills of MIG welder  | X X X   |
| 27.3 demonstrate safe start-up and shut down procedures for a GMAW station   | X X X   |
| 27.4 demonstrate basic welding competencies in a flat position   | X X X   |
| 27.5 demonstrate the proper techniques for using welding rods.   | X X X   |

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| 27.6 describe the principles of operation of GMAW welding equipment through principles of operation and metal transfer   | X | X | X |
| 27.7 demonstrate the ability to balance the torch  | X | X |   |
| 27.8 perfect the ability to weld beads across the plate  |   | X |   |
| 27.9 demonstrate the ability to make a butt weld and lap weld in flat position using both welding techniques   |   | X |   |
| 27.10 demonstrate metal shrinking and metal cutting techniques   |   | X |   |
| 27.11 recognize the applications of GMAW welders   |   | X |   |
| 27.12 recognize the applications of plasma cutters.  |   | X |   |
| 27.13 demonstrate and perform safe use of GMAW welding equipment   |   |   | X |
| 27.14 perfect the correct techniques of metal shrinking and metal cutting  |   |   | X |
| 27.15 demonstrate advanced application of MIG welder   |   |   | X |
| 27.16 diagnose and demonstrate corrective measures for malfunctioning GMAW equipment - describe and demonstrate the maintenance required for wire drive systems and gun assemblies |   |   | X |
| 27.17 demonstrate basic skills of plasma cutters   |   |   | X |

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| <b>28 OC - Perform basic welding cutting operations: demonstrate safe work practices and perform basic welding cutting operations.</b> | <b>15 K &amp; E-5 25 K &amp; E-5 35 K &amp;</b> |
| 28.1 assemble, light and adjust cutting torch  | X   |
| 28.2 maintain cutting torch and tips   | X   |
| 28.3 select correct tip for planned activity   | X   |
| 28.4 cut holes in metal plate  | X   |
| 28.5 cut and remove rivets and bolts   | X   |
| 28.6 shut down cutting torch   | X   |

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| <b>29 OC - Painting: demonstrate safe working practices, use appropriate terminology and demonstrate appropriate techniques when working on painting.</b> | <b>15 K &amp; E-5 25 K &amp; E-5 35 K &amp;</b> |
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| 29.1 demonstrate knowledge of health hazards and environmental impacts of products used   | X | X | X |
| 29.2 demonstrate use of personal protective equipment as recommended by manufacturer  | X | X | X |
| 29.3 demonstrate safe work practices and follow all warnings identified by product manufacturers, Workplace Hazardous Materials Information System (WHMIS), and Occupational Health and Safety; demonstrate knowledge of health hazards and environmental impacts of products used; demonstrate use of personal protective equipment as recommended by manufacturer | X | X | X |
| 29.4 identify and use refinishing materials   | X | X | X |
| 29.5 identify and describe refinishing products and equipment   |   | X | X |
| 29.6 identify types of top coats, solvents and additives  |   | X |   |
| 29.7 describe top coats, solvents and additives used in surface finishes - identify three types of top coats and describe characteristics showing similarities and differences; demonstrate and explain correct procedures in preparing top coats for application including correct selection of solvents and additives   |   |   | X |
| 29.8 demonstrate knowledge of refinishing equipment accessories   |   | X | X |
| 29.9 identify parts of spray gun  | X |   |   |
| 29.10 identify basic types of spray gun types   |   | X | X |
| 29.11 demonstrate knowledge of and perform cleaning of spray guns   | X | X | X |
| 29.12 show how to troubleshoot spray gun  |   | X | X |
| 29.13 complete individual student panel/painting project  | X | X | X |
| 29.14 demonstrate correct application of spray finishes   | X | X | X |
| 29.15 identify and select colour and type of paint on a given vehicle   |   | X | X |
| 29.16 demonstrate knowledge of proper procedure in paint preparation  |   | X | X |
| 29.17 inspect pre-paint project and determine deficiencies  |   | X | X |
| 29.18 demonstrate knowledge of proper top coat application techniques   |   | X | X |
| 29.19 show how to troubleshoot basic application problems   |   | X | X |

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| 29.20 prepare booth for spraying   | X | X |
| 29.21 prepare and apply top coat   | X | X |
| 29.22 apply spray finishes   | X | X |
| 29.23 understand graphic and air brush painting techniques   | X | X |
| 29.24 apply metallic, tu-tone and/or base/clear coat and acrylic enamel finishes   |   | X |
| 29.25 perform final detailing: removal of masking tape; check and correct surface defects; final cleaning and installation of removed components   | X | X |
| 29.26 complete a vehicle re-coat: identification of plates and code books: identify differences in spray gun types and uses required; describe refinishing equipment accessories; select, mix and apply two or more of the following finishes: acrylic, enamel, metallic, tu-tone, base/clear coat;  |   | X |
| 29.27 apply problem-solving techniques to paint and equipment problems - solve paint and equipment problems observed during application; demonstrate ability to adjust the spray pattern; demonstrate basic techniques of painting; identify common painting problems and give their solutions; master basic masking and taping techniques |   | X |

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| <b>30 OC - Masking: demonstrate safe working practices and demonstrate appropriate techniques when masking.</b> | <b>15 K &amp; E-5 25 K &amp; E-5 35 K &amp;</b> |   |
| 30.1 understand basic techniques of masking and taping techniques   | X   |   |
| 30.2 understand materials used in masking and taping  | X   |   |
| 30.3 demonstrate proper masking techniques  | X   |   |
| 30.4 further advance fine motor and eye coordination skills in the area of masking and taping techniques        | X   | X |

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| <b>31 OC - Collision Repair: demonstrate safe working practices, use appropriate terminology and demonstrate appropriate techniques when working on collision repair.</b> | <b>15 K &amp; E-5 25 K &amp; E-5 35 K &amp;</b> |   |
| 31.1 recognize the legal obligations of autobody work   | X   |   |
| 31.2 demonstrate proper care and protection of customer vehicles  | X   | X |



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| 31.3 demonstrate knowledge of safety concerns with automobile frame alignment                                     | X   |
| 31.4 identify various materials used in automobile fabrication  | X   |
| 31.5 identify locations of paint codes on various models of automobiles   | X   |
| 31.6 demonstrate knowledge of the terminology that applies to automobile frames and automobile frame misalignment | X   |
| 31.7 demonstrate knowledge of wheel alignment terms   | X   |
| 31.8 learn to identify damaged parts  | X   |
| 31.9 recognize transmitted damage   | X   |
| 31.10 identify and assesses the damage through the use of computer assisted program                               | X   |
| 31.11 recognize the tools used in frame alignment measurements  | X   |
| 31.12 demonstrate the use of measurement charts to determine misalignment   | X   |
| 31.13 perform basic upper frame measurements  | X   |
| 31.14 perform upper and lower measurements to determine frame damage  | X   |
| 31.15 identify the basic steps in preparing a repair estimate   | X   |
| 31.16 prepare a detailed repair estimate  | X   |
| 31.17 demonstrate knowledge of the sequence of events prior to repairing  | X   |
| 31.18 determine automobile body frame repair procedure  | X   |
| 31.19 perform the preliminary repair procedures   | X X |

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| <b>32 OC - Plastics Repair: demonstrate safe working practices and demonstrate appropriate techniques to work with plastics.</b> | <b>15 K &amp; E-5 25 K &amp; E-5 35 K &amp;</b> |
| 32.1 identify the hazards and safety precautions to be observed when working with plastics                                       | X   |
| 32.2 recognize the various types of plastics   | X   |
| 32.3 determine the proper method of repairing a plastic part   | X   |
| 32.4 select the proper materials for repairing a plastic part  | X   |

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| 32.5 demonstrate the appropriate techniques of repairing a plastic part | X |
| 32.6 recognize the appropriate techniques of refinishing plastic parts  | X |

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| <b>33 AC - demonstrate effective listening, speaking, reading and/or writing skills related to the workplace.</b>  | <b>15 K &amp; E-5 25 K &amp; E-5 35 K &amp;</b> |
| 33.1 understand information presented in a variety of forms, including text, videos, graphs, charts, diagrams, manuals   | X   |
| 33.2 understand occupation-related materials: use related occupational terms; identify occupation-related literature; interpret and follow written instructions                                | X   |
| 33.3 understand occupation-related materials e.g. health and safety documents; terms of employment documents; follow written instructions specific to an occupational area                     | X   |
| 33.4 select and create a text format to suit a purpose and audience, e.g., forms, letters, reports, memos, résumé  | X   |
| 33.5 create text for a specific purpose that clearly communicates information: e.g. résumé; job description; job application forms   | X   |
| 33.6 listen and present information in a clear, concise manner: listen attentively to organize and classify information and ideas of others; organize main ideas and key messages with clarity | X   |
| 33.7 communicate thoughts and ideas and listen to the thoughts and ideas of others to effectively complete a task; follow oral instructions; give effective oral instructions when necessary   | X   |

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| <b>34 AC - use research, creative thinking and effective problem solving strategies to solve problems.</b>  | <b>15 K &amp; E-5 25 K &amp; E-5 35 K &amp;</b> |
| 34.1 identify and define, and ask relevant questions to clarify, the problem  | X   |
| 34.2 apply a problem-solving model to identify the problem/issue: identify appropriate actions and develop several alternatives for each promising idea | X   |

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| 34.3 demonstrate an effective problem-solving model: identify the need for a solution to a problem/issue; identify why information is needed; e.g., make decisions, inform, persuade; identify appropriate actions and select and apply information that meets their purposes and needs | X |
| 34.4 evaluate the results in terms of expected outcomes   | X |
| 34.5 evaluate the results, in terms of expected outcomes related to the initial problem, and evaluate personal satisfaction with the outcome of the idea; e.g., product/process   | X |
| 34.6 evaluate the results in terms of expected outcomes and assess the impact of information on their purpose and audience  | X |

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| <b>35 AC - demonstrate mathematical operations to effectively solve problems in the workplace.</b>  | <b>15 K &amp; E-5 25 K &amp; E-5 35 K &amp;</b> |
| 35.1 apply arithmetic operations, e.g., addition, subtraction, multiplication or division, to whole numbers and decimals and use number operations when creating and solving money problems | X X X   |
| 35.2 use calculators or computers, to perform calculations when solving problems  | X X X   |
| 35.3 apply concepts of rate, ratio, percentage and proportion to solve problems in a meaningful context   | X X X   |
| 35.4 demonstrate a number sense for whole numbers 0 to 100 000 and explore proper fractions and decimals  | X X X   |
| 35.5 estimate, measure and compare, using decimal numbers and standard units of measure, to solve problems in everyday contexts; e.g., mass, length, volume, time, perimeter, surface area  | X X X   |
| 35.6 use metric and imperial units of measure   | X X X   |

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| <b>36 AC - familiarize and demonstrate effective use of information technology in daily workplace operations.</b> | <b>15 K &amp; E-5 25 K &amp; E-5 35 K &amp;</b> |
| 36.1 identify the most appropriate technology tool for the task; e.g., fax, e-mail, networks, telephone           | X   |
| 36.2 model and assume personal responsibility for the ethical use of information technologies                     | X X   |
| 36.3 demonstrate telephone operations within the workplace  | X X X   |

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| 36.4 demonstrate basic computer operations to complete a task; store, organize and retrieve information; locate and select information and ideas using appropriate technology and information systems | X | X | X |
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## Facilities or Equipment

### Facility

A standard high school industrial arts / automotive shop area is best suited for the implementation of this course.

### Equipment

Standard industrial / automotive equipment is recommended / required to teach this course. These items should include:

- Lifts
- Exhaust Hoses
- Air Compressors
- Reels (Electric & Light)
- Jacks
- Welding Machinery
- Frame Machines
- Sanders
- Paint Booths / Spray Cabinets / Powder Coating Systems
- Mechanic's tools and equipment

# Learning Resources

## 1) Textual Materials:

- a. -Collision Repair and Refinishing: A Foundation Course for Technicians (text)  
-Collision Repair Fundamentals (Student Text) Delmar Cengage Learning – Nelson Education Ltd. (2010)
- b. Motors Autobody Repair, Delman
- c. Autobody Repair and Refinishing, Hogg. McGraw Hill
- d. Total Autobody Repair, Boss. Merrill and Co.
- e. Collision Repair Guide, MacPherson. McGraw Hill

## 2) Manuals

- a. A B C of Spray Equipment, Devilbiss

## 3) Audio Visual Materials

- a. ALIS – Mechanics Video Clips – Autobody Technician
- b. "Take Ten" a movie available through Devilbiss
- c. "Good Enough... Not Enough", a video available from DuPont
- d. Microfiche Collision Estimating Guide, Mitchell

# Others

## Identification of Controversial or Sensitive Course Content

It is expected that all issues and texts that may be controversial or sensitive be discussed with the school administration prior to their coverage in class.

## Identification of Safety Components

All Chinook's Edge School Division No. 73 procedures will be followed if students are taken off campus (re: planning, parental permission, risk assessment, etc.).

- Chinook's Edge School Division No. 73 **Administrative Procedure 2-09** *Field Trips and Excursions*

## Significant Overlap with Provincial Curriculum

This course is a reauthorization and previously has been found by Alberta Education not to have any significant overlap with existing provincially developed courses.

The competencies listed in this program of studies effectively cover the content required for all three levels of this course, in the 2012 – 2015 contexts. In an integrated setting, this K and E Autobody course can align with the learning objectives that are contained in the CTS courses as listed below. Personalization of this course is required in meeting each student's learning needs in relation to projects in the shop.

Autobody 15:

Mechanics Tools and Materials

Structures and Materials

Mechanics Welding Fundamentals

Metal Forming and Finishing

Surface Preparation 1

Autobody 25:

Metal Repair and Finishing

Surface Preparation 2

Refinishing 1

Touch Up and Finishing

Vehicle Detailing

Autobody 35:

Body Repair and Estimation

Damage Repair 1

Refinishing 2

Plastics and Fiberglass

Refinishing 3

# Assessment

Assessment practices for this course should invite student participation in articulating learning targets and setting criteria for success, in providing evidence of understanding and in developing appropriate grading practices. Assessment and grading practices should also reflect the context of particular student, school and classroom learning needs.

Teachers will set specific criteria and grading practices, with students, as they assess student learning based on the learning outcomes from the course. These criteria form the basis for assessing, grading and reporting student progress. Communicating student progress is an ongoing conversation between the teacher, the student and the parent, throughout the course, with the goal of improving student learning.

The validity of assessment will be enhanced if evidence of student achievement, related to the general and specific outcomes, is gathered over time and through communication with students as they build understanding, revise misunderstandings and refine approaches to learning. Careful observation of students as they engage in learning tasks and critical examination of the work they produce allows teachers to build out a multi-dimensional picture of student learning.

Valid grading reflects a student's achievement towards the learning outcomes. The reporting of behavior, effort, attendance, neatness, group contribution, initiative etc. is reported separately (Webber, Aitken, Lupart, & Scott, 2009, Guskey, 2006, Reeves, 2004).

To be credible and defensible, assessment information that is used in grading a body of evidence, samples student performance, and is related to specified outcomes, based on professional judgment rather than being based on a calculated mean (average).

Assessment and grading practices should take into consideration the helical nature of learning - the recursive and increasingly complex skills and knowledge required of students



as they demonstrate what they know and can do in relation to each of the specific and general outcomes. As the complexity of learning outcomes increases within each level of the course evidence of a more comprehensive understanding is required.

Where a specific learner outcome spans all levels students are expected to show an increasing level of sophistication and refinement of skills in demonstrating the outcome. Overall, general and specific outcomes can be achieved and assessed concurrently rather than sequentially.

Teachers should adhere to the following assessment standards when determining appropriate assessment and grading practices for this Locally Developed Course.

Assessment practices should reflect the following principles:

- Assessment of student performance is explicitly tied to the learning outcomes of the course
- Students are involved in understanding and articulating learning targets and criteria of success
- Students have opportunities to receive feedback in non-graded and formative learning activities and assignments before submitting assignments or engaging in activities for summative evaluation
- Assessments are purposefully designed in ways that motivate and challenge students, and are respectful of student diversity
- Students are provided choice in how they demonstrate learning
- Assessment data is gathered from a broad range of assessment activities and includes information from student work products and performances, from teacher observations of student learning processes, and from student reflections/student-provided evidence of

success

- Assigned grades emphasize the most recent and most consistent evidence of student learning
  
- Assessment of Citizenship, Personal Development and Character is considered within all learning programs as included within the Calgary Board of Education Board of Trustees' Governance Policies.

## References

Guskey, T. R. (May, 2006). Making high school grades meaningful. Phi Delta Kappa International,

87(9), pp. 670-675. Retrieved from <http://www.jstor.org/stable/20442125>

Reeves, D.B. (Dec 2004). The case against zeros. Phi Delta Kappan 86 (4). Retrieved from

<http://schools.esu13.org/bannercounty/Documents/caseagainstzero.pdf>

Webber, C.F., Aitken, N. Lupart, J. & Scott, S. (2009). The Alberta student assessment study final report. Edmonton, Canada:

## **Course Evaluation and Monitoring**

The Associate Superintendent, Learning Services, in collaboration with the school Principal, will evaluate and monitor the course(s) to ensure that all requirements (by Alberta Education, by the developing school board, and by Chinook's Edge School Division No. 73) are met. The school Principal will supervise the course implementation at the school level.

Course pre-requisites, copyright privileges, and conditions listed by the developing board will be adhered to.

## **Appendix I**

## **Appendix II**

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