Western Cape Government

Education

Annual Teaching Plan

Adapted Curriculum and Assessment Policy Statement
for Schools of Skills and Schools with Skills Units

Automotive Spray Painting

Year 1, 2, 3 and 4

2013

PREFACE TO THE ANNUAL TEACHING PLAN FOR THE SKILLS CURRICULUM

The Curriculum and Assessment Policy Statement has been adapted to meet the needs of learners who experience barriers to learning and who have been placed in a School of Skills. It has been designed to enable learners who continue their schooling at a School of Skills to develop to their potential based on a curriculum that supports their cognitive ability. These learners are afforded the opportunity to achieve in areas where they can be successful, such as learning a skill.

The skills curriculum document provides the content and skills to be taught across the four years. It is based on the curriculum as developed with teachers and is aligned to the SAQA qualifications used for skills development in South Africa. This document unpacks the curriculum as an Annual Teaching Plan (ATP) that will act as an exemplar for the sequencing and pacing of your teaching, learning and assessment per term across the four years.

Year One is an orientation year and learners must be exposed to a minimum of two vocational skills so that they can select a skill they will continue from Year Two. The content in Year One could be spread over one or two terms. This will differ from school to school depending on the programme for the year. Where content for Year One is based on one term only, schools must expand on the work to cover two term's workload. Schools that offer more than the minimum two skills in Year One may adapt the Annual Teaching Plan for Year One to accommodate their rotation system to expose learners to more skills e.g. schools may offer a skill per term for Terms 1, 2 and 3 and learners then select the skill they will specialise in and start it in Term 4. It is important that learners in year one experience the core competencies of the skills so that an informed choice can be made.

Years Two, Three and Four are the critical years for learners in a School of Skills. It is important that learners are exposed to all the Exit Level Outcomes, Specific Outcomes and Assessment Criteria per selected vocational skill, acknowledging that not all learners will be successful in all of these. The certificate awarded in Year Four will indicate all Exit Level Outcomes and the learner's demonstrated level of competence.

It is envisaged that all learners in a School of Skills will exit the school with an appropriate Certificate of Attainment endorsed by the WCED. It is hoped that this certificate will enable them to access further or higher education or to be part of the world of work.

ACKNOWLEDGEMENT

A special word of appreciation and thanks go to all in the Western Cape Education Department and to the teaching staff in the Schools of Skills whose efforts made this document possible.

ANNUAL TEACHING PLAN FOR AUTOMOTIVE SPRAY PAINTING

CONTENT

YEAR 1- ANNUAL TEACHING PLAN

YEAR 1

WK	ELO: SO	CONTENT	ACTIVITY
1-2	**ELO: 2** Keep the work area safe and productive **SO 1** Discuss and explain the purpose of safety equipment and procedures	*The learner must be able to*: **AC 1:** Demonstrate an understanding of safety issues at work. **AC 2:** Establish procedures in a safe manner according to all work undertaken. **AC 3:** Keep work area in a neat and tidy condition **AC 4:** Report on safety issues as required.	• Practical • Demonstration • Research • Discussion • Poster
	SO2 Identify and explain the purpose of demarcated areas, emergency stops, exits and first aid stations	*The learner must be able to:* **AC 1:** Demonstrate an understanding of safety issues at work and in a workshop **AC 2:** Undertake all work in a safe manner according to established procedures. **AC 3:** Keep work area in a neat and tidy condition **AC 4:** Reports on safety issues as required.	• Discussion • Practical • Demonstration • Research

	SO3 Use personal protective equipment	*The learner must be able to*:: **AC 1:** Demonstrate an understanding of safety issues at work and in a workshop **AC 2:** Undertake all work in a safe manner according to established procedures. **AC 3:** Keep work area in a neat and tidy condition **AC 4:** Reports on safety issues as required.	• Discussion • Practical • Demonstration
	SO4 Perform housekeeping duties in work area	*The learner must be able to*: **AC 1:** Demonstrate an understanding of safety issues at work. **AC 2:** Establish procedures in a safe manner according to all work undertaken. **AC 3:** Keep work area in a neat and tidy condition **AC 4:** Report on safety issues as required.	• Discussion • Practical • Demonstration • Research
	SO5 Identify and respond to unsafe or potentially unsafe conditions, incidents or acts that may occur	*The learner must be able to*: **AC 1:** Demonstrate an understanding of safety issues at work. **AC 2:** Establish procedures in a safe manner according to all work undertaken. **AC 3:** Keep work area in a neat and tidy condition **AC 4:** Report on safety issues as required.	• Discussion • Practical • Demonstration • Research

3-4	**ELO3:** Apply fire fighting techniques **SO1** Identify different types of fires	*The learner must be able to*: **AC 1:** Identify the causes of fire in accordance with industry practice. **AC 2:** Explain the classes of fires according to industry practice	• Discussion • Research • Practical
	ELO4: Perform surface preparation on a body panel **SO1:** Clean the body panel.	*The learner must be able to*: **AC 1:** Demonstrate the various types of panels and their composition **AC 2:** Clean panels are in accordance with the workplace procedures	• Discussion • Practical • Demonstration • Research
	SO2 Prepare the body panel surface with abrasives	*The learner must be able to*: **AC 1:** Select the appropriate grit and type of abrasives in accordance with the job requirement. **AC 2:** Demonstrate and perform the sanding operation in accordance with the job requirement	• Practical • Demonstration • Discussion
	SO3: Identify, mix and apply fillers on the body panel in a safe and aware manner.	*The learner must be able to*: **AC1:** Identify and mix the filler in accordance with the job requirement **AC 2:** Apply the filler in accordance with the job requirement **AC 3:** Explain and demonstrate safe working practises	• Discussion • Practical • Demonstration • Research
	SO5: Restore the work area	*The learner must be able to*: **AC1:** Clean the work area, tools and equipment and store them	• Discussion • Practical • Demonstration

5-6	**ELO5:** Identify the various types of paint, primers, material and their uses **SO1:** Obtain and interpret all available information	*The learner must be able to*: **AC1:** Obtain and interpret all available information in accordance with the workplace procedures and specifications. **AC 2:** Give clear and appropriate examples. **AC 3:** Refer to appropriate literature when explanations are given.	• Practical • Discussion • Research
	SO3: Explain the different uses of paint, primer and materials	*The learner must be able to*: **AC1:** Explain the different uses of paint and materials in accordance with the suppliers and manufacturers manuals. **AC 2:** Explain and give clear and appropriate examples. **AC 3:** Refer to appropriate literature when explanations are given.	• Practical • Discussion • Research
7-8	**ELO6:** Perform masking and de-masking on a vehicle **SO1:** Identify the area to be masked.	*The learner must be able to*: **AC1:** Identify the area to be masked correctly. **AC 2:** Established procedures in a safe manner according to all work undertaken. **AC 3:** Determine the scope of the masking required in accordance with the workplace procedures. **AC 4:** Reports on safety issues as required.	• Practical • Discussion • Demonstration • Research

9-10	**FORMAL ASSESSMENT TASK (FAT)** **25%** 1. Identify and explain the purpose of demarcated areas, emergency stops, exits and first aid stations 2. Identify different types and the causes of fires 3. Identify the various types of paint, primers, material and their uses 4. **Group Task:** • Set up a safe and secure practice • Set up a demonstration to: o Show various types of panels and their composition. o Identify the area to be masked correctly. o Determine the scope of the masking required in accordance with the workplace procedures. o Set up a demonstration to show how to : - Clean panels in accordance with the workplace procedures - Perform the sanding operation in accordance with the job requirement - Identify, mix and apply the filler in accordance with the job requirement - Clean the work area, tools and equipment and store them	• Pen and paper Test • Practical / oral demonstration

YEAR 2- ANNUAL TEACHING PLAN

TERM 1

WK	ELO: SO	CONTENT	ACTIVITY
1	**ELO: 2** Keep the work area safe and productive **SO 1** Discuss and explain the purpose of safety equipment and procedures	*The learner must be able to*: **AC 1:** Demonstrate an understanding of safety issues at work. **AC 2:** Establish procedures in a safe manner according to all work undertaken. **AC 3:** Keep work area in a neat and tidy condition **AC 4:** Report on safety issues as required.	• Practical • Demonstration • Research • Discussion • Poster
	SO2 Identify and explain the purpose of demarcated areas, emergency stops, exits and first aid stations equipment	*The learner must be able to*:: **AC 1:** Demonstrate an understanding of safety issues at work and in a workshop **AC 2:** Undertake all work in a safe manner according to established procedures. **AC 3:** Keep work area in a neat and tidy condition **AC 4:** Report on safety issues as required.	• Discussion • Practical • Demonstration • Research
	SO3 Use personal protective	*The learner must be able to*:: **AC 1:** Demonstrate an understanding of safety issues at work and in a workshop **AC 2:** Undertake all work in a safe manner according to established procedures. **AC 3:** Keep work area in a neat and tidy condition	

		AC 4: Report on safety issues as required.	
	SO4 Perform housekeeping duties in work area	*The learner must be able to*: **AC 1:** Demonstrate an understanding of safety issues at work. **AC 2:** Establish procedures in a safe manner according to all work undertaken. **AC 3:** Keep work area in a neat and tidy condition **AC 4:** Report on safety issues as required.	• Discussion • Practical • Demonstration
	SO5 Identify and respond to unsafe or potentially unsafe conditions, incidents or acts that may occur	*The learner must be able to*: **AC 1:** Demonstrate an understanding of safety issues at work. **AC 2:** Establish procedures in a safe manner according to all work undertaken. **AC 3:** Keep work area in a neat and tidy condition **AC 4:** Report on safety issues as required.	
2	**ELO3:** Apply fire fighting techniques **SO1** Identify different types of fires	*The learner must be able to*: **AC 1:** Identify the causes of fire in accordance with industry practice. **AC 2:** Explain the classes of fires according to industry practice	• Discussion • Research • Practical
	SO2 Explain and practice fire prevention	*The learner must be able to*: **AC 1:** Explain the prevention of fires in relation to general/organizational housekeeping.	• Practical • Discussion • Demonstration • Research

		AC 2: Explain fire prevention in relation to industry safe practices (OHS Act) and company specific procedures **AC 3:** Explain the consequences of non-adherence to safe practices in relation to organizational procedures.	
	SO3 Operate basic fire fighting equipment	*The learner must be able to*: **AC 1:** Identify the basic fire fighting equipment as provided by the organization. **AC 2:** Demonstrate the operation of basic fire fighting equipment in accordance with organizational procedures. **AC 3:** Identify the type of fire fighting equipment in relation to specific types of fires.	• Discussion • Practical • Demonstration • Research
	SO 4: Perform basic fire fighting procedures.	*The learner must be able to*: **AC 1:** Explain and demonstrate the steps to be taken when fighting fires in accordance with organizational procedures. **AC 2:** Explain the precautions to be taken when fighting fires according to organizational procedures. **AC 3:** Describe the steps to be taken when containing fires in accordance with organizational procedures.	• Discussion • Practical • Demonstration • Research
3-4	**ELO4:** Perform surface preparation on a body panel	*The learner must be able to*: **AC 1:** Demonstrate the various types of panels and their composition	• Discussion • Practical • Demonstration • Research

	SO1: Clean the body panel.	**AC 2:** Clean panels are in accordance with the workplace procedures	
	SO2 Prepare the body panel surface with abrasives	*The learner must be able to show an understanding of*: **AC 1:** Select the appropriate grit and type of abrasives in accordance with the job requirement. **AC 2:** Demonstrate and perform the sanding operation in accordance with the job requirement	• Practical • Demonstration • Discussion
	SO3: Identify, mix and apply fillers on the body panel in a safe and aware manner.	*The learner must be able to*: **AC1:** Identify and mix the filler in accordance with the job requirement **AC 2:** Apply the filler in accordance with the job requirement **AC 3:** Explain and demonstrate safe working practises	• Discussion • Practical • Demonstration • Research
	SO5: Restore the work area	*The learner must be able to*: **AC1:** Clean the work area, tools and equipment and store them	• Discussion • Practical • Demonstration
5-6	**ELO5:** Identify the various types of paint, primers, material and their uses **SO1:** Obtain and interpret all available information	*The learner must be able to show an understanding of*: **AC1:** Obtain and interpret all available information in accordance with the workplace procedures and specifications. **AC 2:** Give clear and appropriate examples. **AC 3:** Refer to appropriate literature when explanations are given.	• Practical • Discussion • Demonstration • Research

	SO2: Identify the different types of paint and materials.	*The learner must be able to show an understanding of*: **AC1:** Identify the different types of paint and materials in accordance with the suppliers and manufacturers manuals. **AC 2:** Explain clear and appropriate examples. **AC 3:** Refer to appropriate literature when explanations are given.	• Practical • Discussion • Demonstration • Research
	SO3: Explain the different uses of paint, primer and materials	*The learner must be able to show an understanding of*: **AC1:** Explain the different uses of paint and materials in accordance with the suppliers and manufacturers manuals. **AC 2:** Explain and give clear and appropriate examples. **AC 3:** Refer to appropriate literature when explanations are given.	• Practical • Discussion • Demonstration • Research
7-8	**ELO6:** Perform masking and de-masking on a vehicle **SO1:** Identify the area to be masked.	*The learner must be able to show an understanding of*: **AC1:** Identify the area to be masked correctly. **AC 2:** Established procedures in a safe manner according to all work undertaken. **AC 3:** Determine the scope of the masking required in accordance with the workplace procedures. **AC 4:** Reports on safety issues as required.	• Practical • Discussion • Demonstration • Research

	SO2: Prepare the vehicle for cleaning and masking.	*The learner must be able to show an understanding of*: **AC1:** Follow the appropriate workplace procedures to position, prepared and cleaned the vehicle prior to masking. **AC 2:** Identify the appropriate masking material obtained in accordance with the workplace.	• Practical • Discussion • Demonstration • Research
	SO3: Mask the identified area on the vehicle.	*The learner must be able to*: **AC1:** Apply the appropriate masking material and techniques for the specific area. **AC 2:** Mask the area in accordance with the job requirement.	• Discussion • Practical • Demonstration • Research
	SO4: Restore the vehicle after the paint application in a safe and aware manner	*The learner must be able to*: **AC1:** De-mask the vehicle without damaging the paint application. **AC 2:** Perform the removing of the overspray and cleaning of the vehicle in accordance with the workplace procedures. **AC 3:** Identify and adhere to safety precautionary measures to be taken during the process **AC 4:** Reports on safety issues as required.	• Discussion • Practical • Demonstration • Research
	SO6: Deliver the repairs and restore the work area.	*The learner must be able to*: **AC1:** Demonstrate the knowledge of delivering the repairs and the completion of the documentation in accordance with the workplace procedures.	• Discussion • Practical • Demonstration • Research

9-10	**FORMAL ASSESSMENT TASK (FAT)** **25%** 1. Identify and explain the purpose of demarcated areas, emergency stops, exits and first aid stations 2. Identify different types and the causes of fires 3. Identify the type of fire fighting equipment in relation to specific types of fires. 4. Explain fire prevention in relation to industry safe practices (OHS Act) and company specific procedures 5. Describe the steps to be taken when containing fires in accordance with organizational procedures. 6. Explain the consequences of non-adherence to safe practices in relation to organizational procedures. 7. Identify the various types of paint, primers, material and their uses 8. **Group Task:** • Set up a safe and secure practice • Set up a demonstration to: o Show various types of panels and their composition. o Identify the area to be masked correctly. o Determine the scope of the masking required in accordance with the workplace procedures. o De-mask the vehicle without damaging the paint application o Perform the removing of the overspray and cleaning of the vehicle in accordance with the workplace procedures. o Show the knowledge of delivering the repairs and the completion of the documentation in accordance with the workplace procedures. o Set up a demonstration to show how to : - Operate basic fire fighting equipment in accordance with organizational procedures - Clean panels in accordance with the workplace procedures - Perform the sanding operation in accordance with the job requirement - Identify, mix and apply the filler in accordance with the job requirement - Clean the work area, tools and equipment and store them	• Pen and paper Test • Practical / oral demonstration

YEAR 2- ANNUAL TEACHING PLAN

TERM 2

WK	ELO: SO	CONTENT	ACTIVITY
1	**ELO7:** Select, use and care for engineering hand tools **SO1:** Select and use Engineering hand tools.	*The learner must be able to*: **AC1:** Identify and explain all the engineering hand tools and their uses. **AC 2:** Give clear and appropriate examples and explanations. **AC 3:** Refer to appropriate literature when explanations are given. **AC 4:** Demonstrate the ability to apply the various engineering hand tools in their different applications.	• Practical • Demonstration • Discussion • *Research*
2	**SO2:** Care for and maintain engineering hand tools.	*The learner must be able to*: **AC 1:** Carry out the maintenance of engineering hand tools in accordance with the applicable requirements and workplace procedures. **AC 2:** Confirm the understanding of the maintenance process by responding accurately to task related questions. **AC 3:** Recognise and report problems, changes and/or malfunctions while working with engineering hand tools.	• Discussion • Practical • Demonstration
3	**SO3:** Work safely with due care for self, fellow workers, equipment, materials and the environment.	*The learner must be able to*: **AC1:** Explain and demonstrate safe working practises. **AC 2:** Demonstrate an understanding of SHE procedures.	• Discussion • Practical • Demonstration • Research

4	**ELO8:** Select and use vehicle lifting equipment **SO1** Discuss the basic operation of automobile lifting equipment.	*The learner must be able to*: **AC 1:** Demonstrate how to successfully operate a hoist. **AC 2:** Position and operate lifting equipment correctly. **AC 3:** Position safety stands correctly. **AC 4:** Position jacks and place safety stands in the correct manner.	• Discussion • Practical • Demonstration
5	**SO3** Carry out precautionary measures before operating a hoist.	*The learner must be able to*: **AC 1:** Carry out precautionary measures before operating a hoist. **AC 2:** Determine how and where to position jacks and safety stands.	• Discussion • Practical • Demonstration
6	**SO5** Use a jack.	*The learner must be able to*: **AC1:** Demonstrate the use of a jack including the inspection of the jack before use; determine load carrying capacity and the correct positioning of the jack to eliminate risk of damage.	• Discussion • Practical • Demonstration
7	**SO6** Use safety stands.	*The learner must be able to*: <u>Results achieved</u> • Hoist is operated successfully • Jack is positioned and operated correctly • Safety stands are positioned and used correctly • Creepers are used in a safe manner <u>Indicators</u> • Pre-inspections on lifting equipment are carried out	• Discussion • Practical • Demonstration

		• Safety precautions are adhered to • Automobile is correctly secured when lifted and lowered • Lifting equipment is used in accordance to pre-scribed procedures <u>Understanding confirmed</u> • Respond to "what if" and "why" questions covering: • Positioning of jacks and safety stands • Ground surface level • Specified tonnages • Procedures for lifting and lowering	
8	**SO7** Use creeper.	*The learner must be able to*: <u>Results achieved</u> • Hoist is operated successfully • Jack is positioned and operated correctly • Safety stands are positioned and used correctly • Creepers are used in a safe manner <u>Indicators</u> - Pre-inspections on lifting equipment are carried out - Safety precautions are adhered to - Automobile is correctly secured when lifted and lowered - Lifting equipment is used in accordance to pre-scribed procedures <u>Understanding confirmed</u> - Respond to "what if" and "why" questions covering: - Positioning of jacks and safety stands - Ground surface level - Specified tonnages - Procedures for lifting and lowering	• Discussion • Practical • Demonstration

9-10	**FORMAL ASSESSMENT TASK (FAT)** **25%** 1. **Group Task** Set up a demonstration to show how to: - Use various engineering hand tools in their different applications - Carry out the maintenance of engineering hand tools in accordance with the applicable requirements and workplace procedures. - Recognise and report problems, changes and/or malfunctions while working with engineering hand tools - Successfully operate a hoist. - Use of a jack including the inspection of the jack before use; determine load carrying capacity and the correct positioning of the jack to eliminate risk of damage - Use a creepers in a safe manner 2. Identify and explain all the engineering hand tools and their uses.	• Pen and paper Test • Practical / oral demonstration

YEAR 2- ANNUAL TEACHING PLAN

TERM 3

WK	ELO: SO	CONTENT	ACTIVITY
1-2	**ELO9:** Apply sealers and cavity fillers on vehicles **SO1:** Demonstrate knowledge of application of sealers and cavity fillers.	*The learner must be able to*: **AC1:** Explained the purpose of using sealers and cavity fillers is in terms of the manufacturer's design. **AC 2:** Explain where and how to position sealer in terms of the function to be performed **AC 3:** Explain the importance of accurate masking in relation to achieving the required finished in a specific area and not causing contamination of other areas. **AC 4:** Explain the consequences of not applying sealer correctly in terms of effectiveness of the application and resultant problems. **AC 5:** Explain the methods of removing old sealer in accordance with accepted workshop practices. **AC 6:** Explain the consequences of applying heat to body panels in relation to the effect on composite structure and rust protection.	• Practical • Demonstration • Discussion • Research
3	**SO2:** Prepare for application of sealers and cavity fillers	*The learner must be able to*: **AC 1:** Remove the existing sealer in accordance with manufacturer specifications. **AC 2:** Prepared the surfaces in accordance with workplace instructions.	• Discussion • Practical • Demonstration

		AC 3: Ensure that masking provides adequate protection to surrounding areas and sufficient access to required application area. **AC 4:** Cover all vehicles in close proximity for protection in accordance with workplace requirements. **AC 5:** Identify and check tools and equipment required to apply the sealer and cavity filler for functionality prior to commencing with the task.	
4	**SO3:** Apply sealers and cavity fillers.	*The learner must be able to*: **AC1:** Confirm the application area against relevant documentation. **AC 2:** Identify and match the required texture to existing work on the vehicle. **AC 3:** Apply sealer according to manufacturer specifications. **AC 4:** Demonstrate different methods of applying sealer are according to the given situation. **AC 5:** Remove masking tape at a suitable time to ensure ease of removal and quality of edge.	• Discussion • Practical • Demonstration
5	**SO4** Apply safety procedures during the application process	*The learner must be able to*: **AC 1:** Apply sealer without incident, accident or injury. **AC 2:** Use equipment and tools in accordance with workplace and manufacturer requirements.	• Discussion • Practical • Demonstration

		AC 3: Adhered to all workplace safety warnings and required actions before, during and after applying sealer. **AC 4:** Dispose hazardous materials in accordance with workplace and legislative requirements **AC 5:** Follow applicable SHE procedures during the preparation and application processes.	
6	**SO5** Restore work area, complete and process documentation.	*The learner must be able to*: **AC 1:** Restore the work area in accordance with workplace and SHE requirements. **AC 2:** Clean and store tools and equipment in accordance with workplace and SHE requirements. **AC 3:** Explain consequences of not leaving the workplace in the appropriate state in terms of safety hazards and production.	• Discussion • Practical • Demonstration
7	**ELO10:** Perform basic spray painting **SO1** Prepare to apply a paint application on a part.	*The learner must be able to*: **AC 1:** Prepare the part in accordance with the workplace procedures to receive the applicable paint application **AC 2:** Demonstrate the ability to select and use the appropriate tools and equipment to perform the paint application. **AC 3:** Confirm the understanding of the process by responding accurately to task related questions.	• Discussion • Practical • Demonstration

8	**SO2** Perform spray painting techniques on the part in a safe and aware manner.	*The learner must be able to*: **AC1:** Demonstrate the appropriate spray paint techniques in accordance with the part construction. **AC 2:** Ensure that the finished paint application is in accordance with the standards required for the paint and the part. **AC 3:** Identify and clearly explain the safety precautionary measures to be taken.	• Discussion • Practical • Demonstration

9-10	**FORMAL ASSESSMENT TASK (FAT)** **25%** 1. **Group Task** Set up a demonstration to show: - How to remove the existing sealer in accordance with manufacturer specifications. - Different methods of applying sealer according to the given situation. - How to clean and store tools and equipment in accordance with workplace and SHE requirements. - The ability to select and use the appropriate tools and equipment to perform the paint application. - The appropriate spray paint techniques in accordance with the part construction. 2. Explained the purpose of using sealers and cavity fillers is in terms of the manufacturer's design. 3. Explain the importance of accurate masking in relation to achieving the required finished in a specific area and not causing contamination of other areas. 4. Explain the methods of removing old sealer in accordance with accepted workshop practices. 5. Explain the consequences of applying heat to body panels in relation to the effect on composite structure and rust protection. 6. Identify tools and equipment required to apply the sealer and cavity filler for functionality prior to commencing with the task. 7. Explain consequences of not leaving the workplace in the appropriate state in terms of safety hazards and production. 8. Identify and clearly explain the safety precautionary measures to be taken when performing spray painting techniques.	• Pen and paper Test • Practical / oral demonstration

YEAR 2- ANNUAL TEACHING PLAN

TERM 4

WK	ELO: SO	CONTENT	ACTIVITY
1-2	**ELO11:** Maintain spray painting equipment **SO1:** Demonstrate knowledge of maintaining spray painting equipment.	*The learner must be able to*: **AC1:** Identify the types of equipment that require maintenance from a maintenance schedule. **AC 2:** Identify the extent of maintenance that can be performed on equipment from manufacturer specifications. **AC 3:** Describe the point at which maintenance must be conducted according to manufacturer specifications and workplace requirements. **AC 4:** Explain methods of maintaining equipment in terms of the type of equipment and function to perform. **AC 5:** Identify cleanable and replacement parts in accordance with manufacturer specifications and workplace procedures. **AC 6:** Describe the consequences of not maintaining equipment in the correct state in terms of the impact on the consistency of application of paint.	• Practical • Demonstration • *Discussion*
3-4	**SO2:** Prepare to maintain spray painting equipment.	*The learner must be able to*: **AC 1:** Identify equipment to be maintained from given documentation.	• Discussion • Practical • Demonstration

		AC 2: Identify the type and extent of maintenance required in accordance with manufacturer specifications and workplace requirements. **AC 3:** Identify tools and equipment required for the maintenance task and checked for functionality prior to commencing the task. **AC 4:** Inform relevant personnel of the planned maintenance and downtime of specific equipment in accordance with workplace procedures. **AC 5:** Make the equipment to be maintained safe to work on in accordance with manufacturer specifications and workplace requirements.	
5-6	**SO3:** Conduct maintenance of spray painting equipment.	*The learner must be able to*: **AC1:** Clean equipment according to workplace requirements. Use solvents and cleaning agents that are appropriate to the component. **AC 2:** Dismantle components and reassemble in accordance with manufacturer specifications. **AC 3:** Identify damage or wear and report it in accordance with workplace procedures. **AC 4:** Replace replacement parts with suitable parts in accordance with manufacturer specifications. **AC 5:** Confirm fluid levels to be in accordance with manufacturer specifications.	• Discussion • Practical • Demonstration • Research

		AC 6: Check maintained equipment for functionality in accordance with workplace procedures.	
7	**SO4** Apply safety procedures during the maintenance process.	*The learner must be able to*: **AC 1:** Conduct maintenance without incident, accident or injury. **AC 2:** Use equipment and tools in accordance with workplace and manufacturer requirements. **AC 3:** Adhere to all workplace safety warnings and required actions before, during and after maintenance. **AC 4:** Dispose hazardous materials in accordance with workplace and legislative requirements. **AC 5:** Follow applicable SHE procedures during the preparation and application processes.	• Discussion • Practical • Demonstration
8	**SO5** Restore work area, complete and process documentation.	*The learner must be able to*: **AC 1:** Restore the work area in accordance with workplace and SHE requirements. **AC 2:** Clean and store tools and equipment in accordance with workplace and SHE requirements. **AC 3:** Explained in terms of safety hazards and production the consequences of not leaving the workplace in an appropriate state.	• Discussion • Practical • Demonstration • Research

		AC 4: Complete and process documentation in accordance with workplace procedures. **AC 5:** Explain the reasons for various documents in terms of their main functions.	

9-10	**FORMAL ASSESSMENT TASK (FAT)** **25%** 1. **Group Task** Set up a demonstration to show how to: - Select, use and care for equipment and tools - Dismantle components and reassemble in accordance with manufacturer specifications. - Identify damage or wear and report it in accordance with workplace procedures. - Replace parts with suitable parts in accordance with manufacturer specifications. - Check maintained equipment for functionality in accordance with workplace procedures. - Dispose hazardous materials in accordance with workplace and legislative requirements. - Clean equipment according to workplace requirements. 2. Identify the types of equipment that require maintenance from a maintenance schedule. 3. Explain methods of maintaining equipment in terms of the type of equipment and function to perform. 4. Identify cleanable and replacement parts in accordance with manufacturer specifications and workplace procedures. Describe the 5. Describe the consequences of not maintaining equipment in the correct state in terms of the impact on the consistency of application of paint.	• Pen and paper Test • Practical / oral demonstration

YEAR 3- ANNUAL TEACHING PLAN

TERM 1

WK	ELO: SO	CONTENT	ACTIVITY
1	**ELO: 1** Repair ferrous and non-ferrous metal body components **SO 1** Demonstrate knowledge of repair procedures for ferrous and non-ferrous auto body components.	*The learner must be able to*: **AC 1:** Explain the different types of repair processes in terms of their advantages and disadvantages for each type of material. **AC 2:** Explain when to use each type of repair process in consistent with industry requirements. **AC 3:** Describe procedures for each repair process in accordance with manufacturer specifications.	• Practical • Demonstration • Research • Discussion • Poster
	SO 2 Assess the damage and determine the scope of repair.	*The learner must be able to*: **AC 1:** Visually inspect the damaged area to determine accessibility for repair, cleaning and stripping requirements. **AC 2:** Identify the correct tools, equipment and material requirements for the repair process.	• Practical • Demonstration • Research • Discussion • Poster
	SO 4 Perform a quality evaluation of the repaired panel	*The learner must be able to*: **AC 1:** Identify and correct any deviations from standards and specifications in accordance with workplace procedures **AC 2:** Establish if the repaired panel is in accordance with manufacturer specifications and customer requirements. **AC 3:** Identify blemishes and correct in accordance with finished product specifications.	• Practical • Demonstration • Research • Discussion • Poster

2	**ELO: 2** Keep the work area safe and productive **SO 1** Discuss and explain the purpose of safety equipment and procedures	*The learner must be able to*: **AC 1:** Demonstrate an understanding of safety issues at work. **AC 2:** Establish procedures in a safe manner according to all work undertaken. **AC 3:** Keep work area in a neat and tidy condition **AC 4:** Report on safety issues as required.	• Practical • Demonstration • Research • Discussion • Poster
	SO2 Identify and explain the purpose of demarcated areas, emergency stops, exits and first aid stations	*The learner must be able to*:: **AC 1:** Demonstrate an understanding of safety issues at work and in a workshop **AC 2:** Undertake all work in a safe manner according to established procedures. **AC 3:** Keep work area in a neat and tidy condition **AC 4:** Reports on safety issues as required.	• Discussion • Practical • Demonstration • Research
	SO3 Use personal protective equipment	*The learner must be able to*:: **AC 1:** Demonstrate an understanding of safety issues in a workshop **AC 2:** Undertake all work in a safe manner according to established procedures. **AC 3:** Keep work area in a neat and tidy condition **AC 4:** Reports on safety issues as required.	• Discussion • Practical • Demonstration • Research

	SO4 Perform housekeeping duties in work area	*The learner must be able to*: **AC 1:** Demonstrate an understanding of safety issues at work. **AC 2:** Establish procedures in a safe manner according to all work undertaken. **AC 3:** Keep work area in a neat and tidy condition **AC 4:** Report on safety issues as required.	• Discussion • Practical • Demonstration
	SO5 Identify and respond to unsafe or potentially unsafe conditions, incidents or acts that may occur	*The learner must be able to*: **AC 1:** Demonstrate an understanding of safety issues at work. **AC 2:** Establish procedures in a safe manner according to all work undertaken. **AC 3:** Keep work area in a neat and tidy condition **AC 4:** Report on safety issues as required.	• Discussion • Practical • Demonstration
3	**ELO3:** Apply fire fighting techniques **SO1** Identify different types of fires	*The learner must be able to*: **AC 1:** Identify the causes of fire in accordance with industry practice. **AC 2:** Explain the classes of fires according to industry practice	• Discussion • Research • Practical
	SO2 Explain and practice fire prevention	*The learner must be able to*: **AC 1:** Explain the prevention of fires in relation to general/organizational housekeeping.	• Practical • Discussion • Demonstration • Research

		AC 2: Explain fire prevention in relation to industry safe practices (OHS Act) and company specific procedures **AC 3:** Explain the consequences of non-adherence to safe practices in relation to organizational procedures.	
	SO3 Operate basic fire fighting equipment	*The learner must be able to*: **AC 1:** Identify the basic fire fighting equipment as provided by the organization. **AC 2:** Demonstrate the operation of basic fire fighting equipment in accordance with organizational procedures. **AC 3:** Identify the type of fire fighting equipment in relation to specific types of fires.	• Discussion • Practical • Demonstration • Research
	SO 4: Perform basic fire fighting procedures.	*The learner must be able to*: **AC 1:** Explain and demonstrate the steps to be taken when fighting fires in accordance with organizational procedures. **AC 2:** Explain the precautions to be taken when fighting fires according to organizational procedures. **AC 3:** Describe the steps to be taken when containing fires in accordance with organizational procedures.	• Discussion • Practical • Demonstration • Research
4	**ELO4:** Perform surface preparation on body panel **SO2** Prepare the body panel surface with abrasives	*The learner must be able to*: **AC 1:** Select the appropriate grit and type of abrasives in accordance with the job requirement. **AC 2:** Demonstrate and perform the sanding operation in accordance with the job requirement	• Practical • Demonstration • Discussion

	SO3: Identify, mix and apply fillers on the body panel in a safe and aware manner.	*The learner must be able to*: **AC1:** Identify and mix the filler in accordance with the job requirement **AC 2:** Apply the filler in accordance with the job requirement **AC 3:** Explain and demonstrate safe working practises	• Discussion • Practical • Demonstration • Research
	SO4: Interact with others to perform a quality check on the surfaced prepared area	*The learner must be able to*: **AC1:** Inspect the prepared surface in accordance with the workplace procedures. **AC 2:** Identify and explain flaws in the surface preparation and their cause	• Discussion • Practical • Demonstration • Research
	SO5: Restore the work area	*The learner must be able to*: **AC1:** Clean the work area, tools and equipment and store them	• Discussion • Practical • Demonstration
5-6	**ELO5:** Identify the various types of paint, primers, material and their uses **SO1:** Obtain and interpret all available information	*The learner must be able to show an understanding of*: **AC1:** Obtain and interpret all available information in accordance with the workplace procedures and specifications. **AC 2:** Give clear and appropriate examples. **AC 3:** Refer to appropriate literature when explanations are given.	• Practical • Discussion • Demonstration • Research
	SO2: Identify the different types of paint and materials.	*The learner must be able to*: **AC1:** Identify the different types of paint and materials in accordance with the suppliers and manufacturers manuals.	• Practical • Discussion • Demonstration • Research

		AC 2: Explain clear and appropriate examples. **AC 3:** Refer to appropriate literature when explanations are given.	
	SO3: Explain the different uses of paint, primer and materials	*The learner must be able to*: **AC1:** Explain the different uses of paint and materials in accordance with the suppliers and manufacturers manuals. **AC 2:** Explain and give clear and appropriate examples. **AC 3:** Refer to appropriate literature when explanations are given.	• Practical • Discussion • Demonstration • Research
	SO4: Discuss and explain reasons for product storage and durability processes.	*The learner must be able to*: **AC1:** Give clear and appropriate examples and explanations. **AC 2:** Refer to appropriate literature when explanations are given.	• Discussion • Practical • Demonstration • Research
7-8	**ELO6:** Perform masking and de-masking on a vehicle **SO1:** Identify the area to be masked.	*The learner must be able to*: **AC1:** Identify the area to be masked correctly. **AC 2:** Established procedures in a safe manner according to all work undertaken. **AC 3:** Determine the scope of the masking required in accordance with the workplace procedures. **AC 4:** Reports on safety issues as required.	• Practical • Discussion • Demonstration • Research

	SO2: Prepare the vehicle for cleaning and masking.	*The learner must be able to show an understanding of*: **AC1:** Follow the appropriate workplace procedures to position, prepared and cleaned the vehicle prior to masking. **AC 2:** Identify the appropriate masking material obtained in accordance with the workplace.	• Practical • Discussion • Demonstration • Research
	SO3: Mask the identified area on the vehicle.	*The learner must be able to*: **AC1:** Apply the appropriate masking material and techniques for the specific area. **AC 2:** Mask the area in accordance with the job requirement.	• Discussion • Practical • Demonstration • Research
	SO4: Restore the vehicle after the paint application in a safe and aware manner	*The learner must be able to*: **AC1:** De-mask the vehicle without damaging the paint application. **AC 2:** Perform the removing of the overspray and cleaning of the vehicle in accordance with the workplace procedures. **AC 3:** Identify and adhere to safety precautionary measures to be taken during the process **AC 4:** Reports on safety issues as required.	• Discussion • Practical • Demonstration • Research
	SO5: Interact with others to quality assure the masking process.	*The learner must be able to*: **AC1:** Perform quality assurance with the assistance of a competent person. **AC 2:** Evaluate the benefits and difficulties of team work within the learner own work context.	• Discussion • Practical • Demonstration • Research

		AC 3: Give explanations in a clear manner using appropriate examples from learner's own experience.	

	SO6: Deliver the repairs and restore the work area.	*The learner must be able to*: **AC1:** Demonstrate the knowledge of delivering the repairs and the completion of the documentation in accordance with the workplace procedures.	• Discussion • Practical • Demonstration • Research
9-10	**FORMAL ASSESSMENT TASK (FAT)** **25%** 1. Explain the different types of repair processes in terms of their advantages and disadvantages for each type of material. 2. Identify the correct tools, equipment and material requirements for the repair process. 3. Identify and explain the purpose of demarcated areas, emergency stops, exits and first aid stations 4. Identify different types and the causes of fires 5. Identify the type of fire fighting equipment in relation to specific types of fires. 6. Identify the type of fire fighting equipment in relation to specific types of fires. 7. Explain fire prevention in relation to industry safe practices (OHS Act) and company specific procedures 8. Explain fire prevention in relation to industry safe practices (OHS Act) and company specific procedures 9. Describe the steps to be taken when containing fires in accordance with organizational procedures. 10. Explain the consequences of non-adherence to safe practices in relation to organizational procedures. 11. Identify the various types of paint, primers, material and their uses 12. **Group Task:** Set up a demonstration to:		• Pen and paper Test • Practical / oral demonstration

	o Show various types of panels and their composition. o Identify the area to be masked correctly. o Determine the scope of the masking required in accordance with the workplace procedures. o De-mask the vehicle without damaging the paint application o Perform the removing of the overspray and cleaning of the vehicle in accordance with the workplace procedures. o The knowledge of delivering the repairs and the completion of the documentation in accordance with the workplace procedures. o Set up a demonstration to show how to: - Visually inspect the damaged area to determine accessibility for repair, cleaning and stripping requirements. - Operate basic fire fighting equipment in accordance with organizational procedures - Clean panels in accordance with the workplace procedures - Perform the sanding operation in accordance with the job requirement - Identify, mix and apply the filler in accordance with the job requirement - Clean the work area, tools and equipment and store them	

YEAR 3- ANNUAL TEACHING PLAN

TERM 2

WK	ELO: SO	CONTENT	ACTIVITY
1-2	**ELO7:** Select, use and care for engineering hand tools **SO1:** Select and use Engineering hand tools.	*The learner must be able to*: **AC1:** Identify and explain all the engineering hand tools and their uses. **AC 2:** Give clear and appropriate examples and explanations. **AC 3:** Refer to appropriate literature when explanations are given. **AC 4:** Demonstrate the ability to apply the various engineering hand tools in their different applications.	• Discussion • Practical • Demonstration • Research
	SO2: Care for and maintain engineering hand tools.	*The learner must be able to*: **AC 1:** Carry out the maintenance of engineering hand tools in accordance with the applicable requirements and workplace procedures. **AC 2:** Confirm the understanding of the maintenance process by responding accurately to task related questions. **AC 3:** Recognise and report problems, changes and/or malfunctions while working with engineering hand tools.	• Discussion • Practical • Demonstration • Research
	SO3: Work safely with due care for self, fellow workers, equipment, materials and the environment.	*The learner must be able to*: **AC1:** Explain and demonstrate safe working practises. **AC 2:** Demonstrate an understanding of SHE procedures.	• Discussion • Practical • Demonstration • Research

3-4	**ELO8:** Select and use vehicle lifting equipment **SO1** Discuss the basic operation of automobile lifting equipment.	*The learner must be able to*: **AC 1:** Demonstrate how to successfully operate a hoist. **AC 2:** Position and operate lifting equipment correctly. **AC 3:** Position safety stands correctly. **AC 4:** Position jacks and place safety stands in the correct manner.	• Discussion • Practical • Demonstration • Research
	SO2 Identify and explain the function of various components related to hoists.	*The learner must be able to*: **AC 1:** Perform pre-inspection of lifting equipment before work is carried out for safety reasons. **AC 2:** Adhere to safety precautions.	• Discussion • Practical • Demonstration • Research
	SO3 Carry out precautionary measures before operating a hoist.	*The learner must be able to*: **AC 1:** Carry out precautionary measures before operating a hoist. **AC 2:** Determine how and where to position jacks and safety stands.	• Discussion • Practical • Demonstration • Research
	SO4 Operate hoist.	*The learner must be able to*: **AC1:** Operate electrical hoist and trolley jack. **AC 2:** Operate hoist successfully, position jack and safety stands correctly. **AC 3:** Secure that the stands and jacks are positioned safely under the vehicle when lifted or lowering.	• Discussion • Practical • Demonstration • Research

	SO5 Use a jack.	*The learner must be able to*: **AC1:** Demonstrate the use of a jack including the inspection of the jack before use; determine load carrying capacity and the correct positioning of the jack to eliminate risk of damage.	• Discussion • Practical • Demonstration • Research
	SO6 Use safety stands.	*The learner must be able to*: <u>Results achieved</u> • Hoist is operated successfully • Jack is positioned and operated correctly • Safety stands are positioned and used correctly • Creepers are used in a safe manner <u>Indicators</u> • Pre-inspections on lifting equipment are carried out • Safety precautions are adhered to • Automobile is correctly secured when lifted and lowered • Lifting equipment is used in accordance to pre-scribed procedures <u>Understanding confirmed</u> • Respond to "what if" and "why" questions covering: • Positioning of jacks and safety stands • Ground surface level • Specified tonnages • Procedures for lifting and lowering	• Discussion • Practical • Demonstration • Research
	SO7 Use creeper.	*The learner must be able to*: <u>Results achieved</u> • Hoist is operated successfully • Jack is positioned and operated correctly • Safety stands are positioned and used correctly • Creepers are used in a safe manner	• Discussion • Practical • Demonstration • Research

		Indicators - Pre-inspections on lifting equipment are carried out - Safety precautions are adhered to - Automobile is correctly secured when lifted and lowered - Lifting equipment is used in accordance to pre-scribed procedures Understanding confirmed 6. Respond to "what if" and "why" questions covering: 7. Positioning of jacks and safety stands 8. Ground surface level 9. Specified tonnages 10. Procedures for lifting and lowering	
5-6	**ELO9:** Apply sealers and cavity fillers on vehicles **SO1:** Demonstrate knowledge of application of sealers and cavity fillers.	*The learner must be able to*: **AC1:** Explained the purpose of using sealers and cavity fillers is in terms of the manufacturer's design. **AC 2:** Explain where and how to position sealer in terms of the function to be performed **AC 3:** Explain the importance of accurate masking in relation to achieving the required finished in a specific area and not causing contamination of other areas. **AC 4:** Explain the consequences of not applying sealer correctly in terms of effectiveness of the application and resultant problems. **AC 5:** Explain the methods of removing old sealer in accordance with accepted workshop practices.	• Discussion • Practical • Demonstration • Research

		AC 6: Explain the consequences of applying heat to body panels in relation to the effect on composite structure and rust protection.	
	SO2: Prepare for application of sealers and cavity fillers	*The learner must be able to*: **AC 1:** Remove the existing sealer in accordance with manufacturer specifications. **AC 2:** Prepared the surfaces in accordance with workplace instructions. **AC 3:** Ensure that masking provides adequate protection to surrounding areas and sufficient access to required application area. **AC 4:** Cover all vehicles in close proximity for protection in accordance with workplace requirements. **AC 5:** Identify and check tools and equipment required to apply the sealer and cavity filler for functionality prior to commencing with the task.	• Discussion • Practical • Demonstration • Research
	SO3: Apply sealers and cavity fillers.	*The learner must be able to*: **AC1:** Confirm the application area against relevant documentation. **AC 2:** Identify and match the required texture to existing work on the vehicle. **AC 3:** Apply sealer according to manufacturer specifications.	• Discussion • Practical • Demonstration • Research

		AC 4: Demonstrate different methods of applying sealer are according to the given situation. **AC 5:** Remove masking tape at a suitable time to ensure ease of removal and quality of edge.	

7-8	**SO4** Apply safety procedures during the application process	*The learner must be able to*: **AC 1:** Apply sealer without incident, accident or injury. **AC 2:** Use equipment and tools in accordance with workplace and manufacturer requirements. **AC 3:** Adhered to all workplace safety warnings and required actions before, during and after applying sealer. **AC 4:** Dispose hazardous materials in accordance with workplace and legislative requirements **AC 5:** Follow applicable SHE procedures during the preparation and application processes.	• Discussion • Practical • Demonstration • Research
	SO5 Restore work area, complete and process documentation.	*The learner must be able to*: **AC 1:** Restore the work area in accordance with workplace and SHE requirements. **AC 2:** Clean and store tools and equipment in accordance with workplace and SHE requirements. **AC 3:** Explain consequences of not leaving the workplace in the appropriate state in terms of safety hazards and production.	• Discussion • Practical • Demonstration • Research

9-10	**FORMAL ASSESSMENT TASK (FAT)** **25%** 1. **Group Task** Set up a demonstration to show how to: - Use various engineering hand tools in their different applications - Successfully operate a hoist. - Perform pre-inspection of lifting equipment before work is carried out for safety reasons. - Use of a jack including the inspection of the jack before use; determine load carrying capacity and the correct positioning of the jack to eliminate risk of damage. - Use a creepers in a safe manner - Identify and check tools and equipment required to apply the sealer and cavity filler for functionality prior to commencing with the task. - Remove the existing sealer in accordance with manufacturer specifications. - Apply different methods of sealer are according to the manufacturer specifications and given situation. - Dispose hazardous materials in accordance with workplace and legislative requirements - Clean and store tools and equipment in accordance with workplace and SHE requirements. 2. Identify and explain all the engineering hand tools and their uses. 3. Identify and explain the function of various components related to hoists. 4. Explained the purpose of using sealers and cavity fillers is in terms of the manufacturer's design. 5. Explain the importance of accurate masking in relation to achieving the required finished in a specific area and not causing contamination of other areas.	• Pen and paper Test • Practical / oral demonstration

YEAR 3- ANNUAL TEACHING PLAN

TERM 3

WK	ELO: SO	CONTENT	ACTIVITY
1-2	**ELO10:** Perform basic spray painting **SO1** Prepare to apply a paint application on a part.	*The learner must be able to*: **AC 1:** Prepare the part in accordance with the workplace procedures to receive the applicable paint application. **AC 2:** Demonstrate the ability to select and use the appropriate tools and equipment to perform the paint application. **AC 3:** Confirm the understanding of the process by responding accurately to task related questions.	• Discussion • Practical • Demonstration • Research
	SO2 Perform spray painting techniques on the part in a safe and aware manner.	*The learner must be able to*: **AC1:** Demonstrate the appropriate spray paint techniques in accordance with the part construction. **AC 2:** Ensure that the finished paint application is in accordance with the standards required for the paint and the part. **AC 3:** Identify and clearly explain the safety precautionary measures to be taken.	• Discussion • Practical • Demonstration • Research
	SO3: Interact with others to identify paint defects and understand their causes.	*The learner must be able to*: **AC1:** Demonstrate the knowledge and understanding of paint defects and their causes. **AC 2:** Give clear and appropriate explanations and examples.	• Discussion • Practical • Demonstration • Research

		AC 3: Referrer to appropriate literature when giving explanations. **AC 4:** Evaluate the benefits and difficulties of team work within one's own work context. **AC 5:** Confirm the understanding of the process by responding accurately to task related questions.	
3-4	**ELO11:** Maintain spray painting equipment **SO1:** Demonstrate knowledge of maintaining spray painting equipment.	*The learner must be able to*: **AC1:** Identify the types of equipment that require maintenance from a maintenance schedule. **AC 2:** Identify the extent of maintenance that can be performed on equipment from manufacturer specifications. **AC 3:** Describe the point at which maintenance must be conducted according to manufacturer specifications and workplace requirements. **AC 4:** Explain methods of maintaining equipment in terms of the type of equipment and function to perform. **AC 5:** Identify cleanable and replacement parts in accordance with manufacturer specifications and workplace procedures. **AC 6:** Describe the consequences of not maintaining equipment in the correct state in terms of the impact on the consistency of application of paint.	• Discussion • Practical • Demonstration • Research

	SO2: Prepare to maintain spray painting equipment.	*The learner must be able to*: **AC 1:** Identify equipment to be maintained from given documentation. **AC 2:** Identify the type and extent of maintenance required in accordance with manufacturer specifications and workplace requirements. **AC 3:** Identify tools and equipment required for the maintenance task and checked for functionality prior to commencing the task. **AC 4:** Inform relevant personnel of the planned maintenance and downtime of specific equipment in accordance with workplace procedures. **AC 5:** Make the equipment to be maintained safe to work on in accordance with manufacturer specifications and workplace requirements.	• Discussion • Practical • Demonstration • Research
5-6	**SO3:** Conduct maintenance of spray painting equipment.	*The learner must be able to*: **AC1:** Clean equipment according to workplace requirements. Use solvents and cleaning agents that are appropriate to the component. **AC 2:** Dismantle components and reassemble in accordance with manufacturer specifications. **AC 3:** Identify damage or wear and report it in accordance with workplace procedures.	• Discussion • Practical • Demonstration • Research

		AC 4: Replace replacement parts with suitable parts in accordance with manufacturer specifications. **AC 5:** Confirm fluid levels to be in accordance with manufacturer specifications. **AC 6:** Check maintained equipment for functionality in accordance with workplace procedures.	
	SO4 Apply safety procedures during the maintenance process.	*The learner must be able to*: **AC 1:** Conduct maintenance without incident, accident or injury. **AC 2:** Use equipment and tools in accordance with workplace and manufacturer requirements. **AC 3:** Adhere to all workplace safety warnings and required actions before, during and after maintenance. **AC 4:** Dispose hazardous materials in accordance with workplace and legislative requirements. **AC 5:** Follow applicable SHE procedures during the preparation and application processes.	• Discussion • Practical • Demonstration • Research
	SO5 Restore work area, complete and process documentation.	*The learner must be able to*: **AC 1:** Restore the work area in accordance with workplace and SHE requirements. **AC 2:** Clean and store tools and equipment in accordance with workplace and SHE requirements.	• Discussion • Practical • Demonstration • Research

		AC 3: Explained in terms of safety hazards and production the consequences of not leaving the workplace in an appropriate state. **AC 4:** Complete and process documentation in accordance with workplace procedures. **AC 5:** Explain the reasons for various documents in terms of their main functions.	
7-8	**ELO12:** Polish automotive painted panels **SO3:** Demonstrate knowledge of polishing painted panels.	*The learner must be able to*: **AC1:** Explain the purpose of polishing painted panels in terms of improving gloss or eliminating paint imperfections. **AC 2:** Identify which polishing conditions will achieve the required result. **AC 3:** Identify different polishing materials according to their intended use. **AC 4:** Identify methods of polishing and the type of equipment for the required improvement. **AC 5:** Explain the consequences of not using the correct type of polishing equipment in terms of time spent on the job and the required final finish. **AC 6:** Explain consequences of applying polish to non-painted areas in terms of appearance and efficiency or cleaning time.	• Discussion • Practical • Demonstration • Research

	SO2: Prepare to polish painted panels.	*The learner must be able to*: **AC1:** Identify paint imperfections that will be rectified through polishing. Refer imperfections that cannot be repaired by polishing back to the workshop for rework. **AC 2:** Select polishing materials and equipment appropriate for the required task. **AC 3:** Select attachments and accessories appropriate to the required task. **AC 4:** Confirm that the condition of the paint is ready for polishing. **AC 5:** Mask off high points to minimise the risk of polishing through. **AC 6:** Divide the panel into relevant sections for different polishing methods.	• Discussion • Practical • Demonstration • Research
	SO3: Polish painted panels.	*The learner must be able to*: **AC1:** Use the correct method of polishing that is appropriate to the size and type of panel being polished. **AC 2:** Apply appropriate polishing techniques to achieve the required finish. **AC 3:** Clean polishing pads as necessary to ensure efficiency of the polishing process. **AC 4:** Remove polishing dust from adjoining panels to ensure a consistent appearance. **AC 5:** Confirm paint imperfections to be removed through the polishing process.	• Discussion • Practical • Demonstration • Research

		AC 6: Polish surfaces without leaving swirl marks or hologram effects. **AC 7:** Remove masking tape when required to ensure consistency of the polished panel.	
	SO4: Apply safety procedures during the application process.	*The learner must be able to*: **AC1:** Polish the panel without incident, accident or injury. **AC 2:** Use equipment and tools in accordance with workplace and manufacturer requirements. **AC 3:** Adhere to all workplace safety warnings and required actions before, during and after polishing. **AC 4:** Dispose hazardous materials in accordance with workplace and legislative requirements. **AC 5:** Follow applicable SHE procedures during the polishing processes.	• Discussion • Practical • Demonstration • Research

	SO5: Restore work area, complete and process documentation.	*The learner must be able to*: **AC1:** Restore the work area in accordance with workplace and SHE requirements. **AC 2:** Clean and store tools and equipment in accordance with workplace and SHE requirements. **AC 3:** Explain in terms of safety hazards and production the consequences of not leaving the workplace in an appropriate state.	• Discussion • Practical • Demonstration • Research

		AC 4: Complete and process documentation in accordance with workplace procedures. **AC 5:** Explain the reasons for various documents in terms of their main functions.	

9-10	**FORMAL ASSESSMENT TASK (FAT)** **25%** 1. **Group Task** Set up a demonstration to show: - The ability to select and use the appropriate tools and equipment to perform the paint application. - The appropriate spray paint techniques in accordance with the part construction. - How to dismantle components and reassemble in accordance with manufacturer specifications. - To identify damage or wear and report it in accordance with workplace procedures. - How to replace replacement parts with suitable parts in accordance with manufacturer specifications. - How to use the correct method of polishing that is appropriate to the size and type of panel being polished without leaving swirl marks or hologram effects. - How to remove polishing dust from adjoining panels to ensure a consistent appearance. - How to complete and process documentation in accordance with workplace procedures. 2. Explain methods of maintaining equipment in terms of the type of equipment and function to perform. 3. Explain the purpose of polishing painted panels in terms of improving gloss or eliminating paint imperfections. 4. Identify different polishing materials according to their intended use. 5. Explain consequences of not using the correct type of polishing equipment in terms of time spent on the job and the required final finish. 6. Explain in terms of safety hazards and production the consequences of not leaving the workplace in an appropriate state.	• Pen and paper Test • Practical / oral demonstration

YEAR 3- ANNUAL TEACHING PLAN

TERM 4

WK	ELO: SO	CONTENT	ACTIVITY
1-2	**ELO13:** Conduct an inspection **SO1:** Plan and prepare for a service ability and condition inspection.	*The learner must be able to show an understanding of*: **AC1:** Prepare the work area and plan the inspection. **AC 2:** Adhere to all safety requirements according to manufacturer's recommendations. **AC 3:** Obtain the appropriate inspection checklist. **AC 4:** Select the appropriate tools and equipment for use during inspection. **AC 5:** Understand the value and importance of the preparation process prior to inspection. **AC 6:** Explain the impact on productivity and efficiency through effective task planning and correct equipment selection.	• Practical • Demonstration
	SO2: Inspect a static system for defects.	*The learner must be able to*: **AC 1:** Conduct a proper inspection on a static system. **AC 2:** Adhere to all safety requirements to according to manufacturer's recommendations. **AC 3:** Inspect that appropriate checklist is used. **AC 4:** Check and correct system fluid levels where necessary.	• Discussion • Practical • Demonstration

		AC 5: Inspect static system according to service inspection checklist. **AC 6:** Explain the reason/s for inspecting static system. **AC7:** Form understanding of the importance of checking system fluid levels. **AC 8:** Explain defects that could be encountered during a static system inspection (includes audible, smell and feel senses). **AC 9:** Understand the importance of doing a static inspection before doing a functional inspection.	
	SO3: Master inspection of a functional (operational) system.	*The learner must be able to*: **AC1:** Conduct an inspection on an operational system. **AC 2:** Follow recommended manufacturers procedures during the process of making system operational. **AC 3:** Check all fluid levels of operational system in accordance with recommended manufacturers procedures **AC 4:** Test whether equipment is attached in a proper and safe manner. **AC 5:** Where applicable, check pressures in accordance with recommended manufacturers procedures. **AC 6:** Check operational system for leaks, unusual vibrations and noises.	• Discussion • Practical • Demonstration • Research

		AC 7: Conduct functional inspections through all temperature ranges until normal operating conditions were obtained. **AC 8:** Explain the important post operational system checks **AC 9:** Recall reason/s why the system must be inspected at low and high temperatures **AC 10:** Explain what is meant by normal operating conditions. **AC 11:** Explain the procedures that must be followed should an abnormal noise, vibration or leak be detected.	
3-4	**SO4** Apply safety procedures during automotive system inspection.	*The learner must be able to*: **AC 1:** Select appropriate personal protective equipment and apply safe practices and recommended manufacturer procedures during the inspection. **AC 2:** Adhered to all safety requirements according to manufacturer's recommendations **AC 3:** Follow applicable SHE procedures during the inspection task. **AC 4:** Explain reason/s for using personal safety equipment. **AC 5:** Explain how to recognise potentially unsafe practices. **AC 6:** Explain the steps to be followed in maintaining a safe working environment	• Discussion • Practical • Demonstration

	SO5 Restore work area, complete and process documentation.	*The learner must be able to*: **AC 1:** Restore work area, complete and process documentation. **AC 2:** Inspect that appropriate checklist have been used and properly completed. **AC 3:** Complete variance reports. **AC 4:** Complete documentation and check whether they have been processed in accordance with company procedures **AC 5:** Explain the importance of keeping accurate records. **AC 6:** Recall how long the records are kept.	• Discussion • Practical • Demonstration • Research
5-6	**ELO14:** Select, use and care for engineering power tools **SO1** Select and use engineering power tools	*The learner must be able to*: <u>Achieve results</u> 1. Use power tools as recommended by the manufacturer to meet job/task requirements 2. Identify unsafe/faulty power tools and take corrective action 3. Clean, service, maintain power tools <u>Indicators</u> 1. Take correct safety precautions while using power tools 2. Select appropriate power tools for job 3. Select appropriate attachments for particular application 4. Report problems timeously to appropriate personnel 5. Maintain a clean and tidy work environment <u>Confirm understanding</u> Explain and discuss consequences of:	• Discussion • Practical • Demonstration • Research

		1. Incorrectly using power tools, e.g. injuries 2. Choice of particular tools for job/task 3. Safety hazards associated with the use of power tools 4. Risks and hazards related to the various power supply sources	
	SO2 Care for and maintain engineering power tools	*The learner must be able to*: <u>Achieve results</u> 1. Use power tools as recommended by the manufacturer to meet job/task requirements 2. Identify unsafe/faulty power tools and take corrective action 3. Clean, service, maintain power tools <u>Indicators</u> 1. Take correct safety precautions while using power tools 2. Select appropriate power tools for job 3. Select appropriate attachments for particular application 4. Report problems timeously to appropriate personnel 5. Maintain a clean and tidy work environment <u>Confirm understanding</u> Explain and discuss: 1. Consequences of incorrectly using power tools, e.g. injuries 2. Choice of particular tools for job/task 3. Safety hazards associated with the use of power tools 4. Risks and hazards related to the various power supply sources	• Discussion • Practical • Demonstration • Research
	SO3 Check on power supply connections to equipment	*The learner must be able to*: <u>Achieve results</u> 1. Use power tools as recommended by the manufacturer to meet job/task requirements 2. Identify unsafe/faulty power tools and take corrective action	

		3. Clean, service, maintain power tools <u>Indicators</u> 1. Take correct safety precautions while using power tools 2. Select appropriate power tools for job 3. Select appropriate attachments for particular application 4. Report problems timeously to appropriate personnel 5. Maintain a clean and tidy work environment <u>Confirm understanding</u> Explain and discuss: 1. Consequences of incorrectly using power tools, e.g. injuries 2. Choice of particular tools for job/task 3. Safety hazards associated with the use of power tools 4. Risks and hazards related to the various power supply sources	
	SO4 Recognise and report problems, changes and/or malfunctions while working	*The learner must be able to*: <u>Achieve results</u> 1. Use power tools as recommended by the manufacturer to meet job/task requirements 2. Identify unsafe/faulty power tools and take corrective action 3. Clean, service, maintain power tools <u>Indicators</u> 1. Take correct safety precautions while using power tools 2. Select appropriate power tools for job 3. Select appropriate attachments for particular application 4. Report problems timeously to appropriate personnel 5. Maintain a clean and tidy work environment <u>Confirm understanding</u> Explain and discuss:	

		1. Consequences of incorrectly using power tools, e.g. injuries 2. Choice of particular tools for job/task 3. Safety hazards associated with the use of power tools 4. Risks and hazards related to the various power supply sources	
	SO5 Work safely with due care for self, fellow workers, machines, equipment, materials and environment	*The learner must be able to*: <u>Achieve results</u> 1. Use power tools as recommended by the manufacturer to meet job/task requirements 2. Identify unsafe/faulty power tools and take corrective action 3. Clean, service, maintain power tools <u>Indicators</u> 1. Take correct safety precautions while using power tools 2. Select appropriate power tools for job 3. Select appropriate attachments for particular application 4. Report problems timeously to appropriate personnel 5. Maintain a clean and tidy work environment <u>Confirm understanding</u> Explain and discuss: 1. Consequences of incorrectly using power tools, e.g. injuries 2. Choice of particular tools for job/task 3. Safety hazards associated with the use of power tools 4. Risks and hazards related to the various power supply sources	
7-8	**ELO15:** Maintain the stockroom **SO1** Select appropriate areas for storing stock	*The learner must be able to*: **AC 1:** Identify stockroom layout according to organizational requirements. **AC 2:** Demonstrate understanding of stockroom layout and explain in a drawing.	• Discussion • Practical • Demonstration • Research

		AC 3: Select areas for storing stock as per layout.	
	SO2 Pack stock in stock area	*The learner must be able to*: **AC 1:** Move stock by using appropriate equipment. **AC 2:** Select packing methods based on stock characteristics. **AC 3:** Minimize losses and damages by handling the products according to the characteristics of the stock. **AC 4:** Pack stock so that it can be accessed in the sequence required to meet stock rotation requirements.	• Discussion • Practical • Demonstration • Research
	SO3 Perform stockroom housekeeping functions	*The learner must be able to*: **AC 1:** Keep stockroom tidy and clean as required by hygiene, health, safety and organizational requirements. **AC 2:** Carry out disposal of waste according to legislation and/or manufacturer's and organizational procedures.	• Discussion • Practical • Demonstration • Research
	SO4 Prevent shrinkage and losses in stockroom	*The learner must be able to*: **AC 1:** Explain the concept of shrinkage within the context of its impact on the workshop **AC 2:** Explain ways in which shrinkage and losses occur in relation to the stockroom. **AC 3:** Implement shrinkage and loss prevention measures in the stockroom according to organizational requirements.	• Discussion • Practical • Demonstration • Research

	SO5 Maintain stock in the stockroom to enhance supply chain efficiency	*The learner must be able to*: **AC 1:** Explain the impact and functioning of the supply chain on organizational efficiency. **AC 2:** Explain the stock flow through the workshop as required. **AC 3:** Maintain stock as to enhance the supply chain following organizational procedures.	• Discussion • Practical • Demonstration • Research
9-10	**FORMAL ASSESSMENT TASK (FAT)** **25%** 1. **Group Task** Set up a demonstration to show: - How to conduct a proper inspection on a static system according to service inspection checklist. - An understanding of stockroom layout and explain in a drawing. - How to pack stock so that it can be accessed in the sequence required to meet stock rotation requirements. - How to keep - stockroom tidy and clean as required by hygiene, health, safety and organizational requirements. 2. Explain reason/s for inspecting static system. 3. Explain defects that could be encountered during a static system inspection (includes audible, smell and feel senses). 4. List reason/s why the system must be inspected at low and high temperatures. 5. Explain the procedures that must be followed should an abnormal noise, vibration or leak be detected. 6. Explain the concept of shrinkage within the context of its impact on the workshop. 7. Explain the impact and functioning of the supply chain on organizational efficiency.		• Pen and paper Test • Practical / oral demonstration

YEAR 4- ANNUAL TEACHING PLAN

TERM 1

WK	ELO: SO	CONTENT	ACTIVITY
1	**ELO: 1** Repair ferrous and non-ferrous metal body components **SO 1** Demonstrate knowledge of repair procedures for ferrous and non-ferrous auto body components.	*The learner must be able to*: **AC 2:** Explain the different types of repair processes in terms of their advantages and disadvantages for each type of material. **AC 3:** Explain when to use each type of repair process in consistent with industry requirements. **AC 4:** Describe procedures for each repair process in accordance with manufacturer specifications.	• Practical • Demonstration • Research • Discussion • Poster
	SO 2 Assess the damage and determine the scope of repair.	*The learner must be able to*: **AC 2:** Visually inspect the damaged area to determine accessibility for repair, cleaning and stripping requirements. **AC 3:** Identify the correct tools, equipment and material requirements for the repair process.	• Practical • Demonstration • Research • Discussion • Poster
	SO 4 Perform a quality evaluation of the repaired panel	*The learner must be able to*: **AC 1:** Identify and correct any deviations from standards and specifications in accordance with workplace procedures **AC 3:** Establish if the repaired panel is in accordance with manufacturer specifications and customer requirements. **AC 4:** Identify blemishes and correct in accordance with finished product specifications.	• Practical • Demonstration • Research • Discussion • Poster

2 -3	**ELO: 2** Keep the work area safe and productive **SO 1** Discuss and explain the purpose of safety equipment and procedures	*The learner must be able to*: **AC 1:** Demonstrate an understanding of safety issues at work. **AC 2:** Establish procedures in a safe manner according to all work undertaken. **AC 3:** Keep work area in a neat and tidy condition **AC 4:** Report on safety issues as required.	• Practical • Demonstration • Research • Discussion • Poster
	SO2 Identify and explain the purpose of demarcated areas, emergency stops, exits and first aid stations	*The learner must be able to*:: **AC 1:** Demonstrate an understanding of safety issues at work and in a workshop **AC 2:** Undertake all work in a safe manner according to established procedures. **AC 3:** Keep work area in a neat and tidy condition **AC 4:** Reports on safety issues as required.	• Discussion • Practical • Demonstration • Research
	SO3 Use personal protective equipment	*The learner must be able to*:: **AC 1:** Demonstrate an understanding of safety issues in a workshop **AC 2:** Undertake all work in a safe manner according to established procedures. **AC 3:** Keep work area in a neat and tidy condition **AC 4:** Reports on safety issues as required.	• Discussion • Practical • Demonstration • Research

	SO4 Perform housekeeping duties in work area	*The learner must be able to*: **AC 1:** Demonstrate an understanding of safety issues at work. **AC 2:** Establish procedures in a safe manner according to all work undertaken. **AC 3:** Keep work area in a neat and tidy condition **AC 4:** Report on safety issues as required.	• Discussion • Practical • Demonstration
	SO5 Identify and respond to unsafe or potentially unsafe conditions, incidents or acts that may occur	*The learner must be able to*: **AC 1:** Demonstrate an understanding of safety issues at work. **AC 2:** Establish procedures in a safe manner according to all work undertaken. **AC 3:** Keep work area in a neat and tidy condition **AC 4:** Report on safety issues as required.	• Discussion • Practical • Demonstration
4	**ELO4:** Perform surface preparation on a body panel **SO4:** Interact with others to perform a quality check on the surfaced prepared area	*The learner must be able to*: **AC1:** Inspect the prepared surface in accordance with the workplace procedures. **AC 2:** Identify and explain flaws in the surface preparation and their cause	• Discussion • Practical • Demonstration • Research

	SO5: Restore the work area	*The learner must be able to*: **AC1:** Clean the work area, tools and equipment and store them	• Discussion • Practical • Demonstration
5-6	**ELO5:** Identify the various types of paint, primers, material and their uses **SO1:** Obtain and interpret all available information	*The learner must be able to*: **AC1:** Obtain and interpret all available information in accordance with the workplace procedures and specifications. **AC 2:** Give clear and appropriate examples. **AC 3:** Refer to appropriate literature when explanations are given.	• Practical • Discussion • Demonstration • Research
	SO2: Identify the different types of paint and materials.	*The learner must be able to*: **AC1:** Identify the different types of paint and materials in accordance with the suppliers and manufacturers manuals. **AC 2:** Explain clear and appropriate examples. **AC 3:** Refer to appropriate literature when explanations are given.	• Practical • Discussion • Demonstration • Research
	SO3: Explain the different uses of paint, primer and materials	*The learner must be able to*: **AC1:** Explain the different uses of paint and materials in accordance with the suppliers and manufacturers manuals. **AC 2:** Explain and give clear and appropriate examples. **AC 3:** Refer to appropriate literature when explanations are given.	• Practical • Discussion • Demonstration • Research

	SO4: Discuss and explain reasons for product storage and durability processes.	*The learner must be able to*: **AC1:** Give clear and appropriate examples and explanations. **AC 2:** Refer to appropriate literature when explanations are given.	• Discussion • Practical • Demonstration • Research
7-8	**ELO6:** Perform masking and de-masking on a vehicle **SO4:** Restore the vehicle after the paint application in a safe and aware manner	*The learner must be able to*: **AC1:** De-mask the vehicle without damaging the paint application. **AC 2:** Perform the removing of the overspray and cleaning of the vehicle in accordance with the workplace procedures. **AC 3:** Identify and adhere to safety precautionary measures to be taken during the process **AC 4:** Reports on safety issues as required.	• Discussion • Practical • Demonstration • Research
	SO5: Interact with others to quality assure the masking process.	*The learner must be able to*: **AC1:** Perform quality assurance with the assistance of a competent person. **AC 2:** Evaluate the benefits and difficulties of team work within the learner own work context. **AC 3:** Give explanations in a clear manner using appropriate examples from learner's own experience.	• Discussion • Practical • Demonstration • Research
	SO6: Deliver the repairs and restore the work area.	*The learner must be able to*: **AC1:** Demonstrate the knowledge of delivering the repairs and the completion of the documentation in accordance with the workplace procedures.	• Discussion • Practical • Demonstration • Research

9-10	**FORMAL ASSESSMENT TASK (FAT)** **25%** 1. Explain the different types of repair processes in terms of their advantages and disadvantages for each type of material. 2. Identify the correct tools, equipment and material requirements for the repair process. 3. Identify and explain the purpose of demarcated areas, emergency stops, exits and first aid stations 4. Identify different types and the causes of fires 5. Describe the steps to be taken when containing fires in accordance with organizational procedures. 6. Explain the consequences of non-adherence to safe practices in relation to organizational procedures. 7. Identify the various types of paint, primers, material and their uses 8. **Group Task:** Set up a demonstration to: o Show various types of panels and their composition. o De-mask the vehicle without damaging the paint application o Perform the removing of the overspray and cleaning of the vehicle in accordance with the workplace procedures. o The knowledge of delivering the repairs and the completion of the documentation in accordance with the workplace procedures. o Set up a demonstration to show how to: - Visually inspect the damaged area to determine accessibility for repair, cleaning and stripping requirements. - Clean panels in accordance with the workplace procedures - Perform the sanding operation in accordance with the job requirement - Identify, mix and apply the filler in accordance with the job requirement. - Clean the work area, tools and equipment and store them	• Pen and paper Test • Practical / oral demonstration

YEAR 4- ANNUAL TEACHING PLAN

TERM 2

WK	ELO: SO	CONTENT	ACTIVITY
1	**ELO7:** Select, use and care for engineering hand tools **SO3:** Work safely with due care for self, fellow workers, equipment, materials and the environment.	*The learner must be able to*: **AC1:** Explain and demonstrate safe working practises. **AC 2:** Demonstrate an understanding of SHE procedures.	• Discussion • Practical • Demonstration • Research
2-3	**ELO8:** Select and use vehicle lifting equipment **SO1** Discuss the basic operation of automobile lifting equipment.	*The learner must be able to*: **AC 1:** Demonstrate how to successfully operate a hoist. **AC 2:** Position and operate lifting equipment correctly. **AC 3:** Position safety stands correctly. **AC 4:** Position jacks and place safety stands in the correct manner.	• Discussion • Practical • Demonstration
	SO2 Identify and explain the function of various components related to hoists.	*The learner must be able to*: **AC 1:** Perform pre-inspection of lifting equipment before work is carried out for safety reasons. **AC 2:** Adhere to safety precautions.	• Discussion • Practical • Demonstration • Research
	SO3 Carry out precautionary measures before operating a hoist.	*The learner must be able to*: **AC 1:** Carry out precautionary measures before operating a hoist. **AC 2:** Determine how and where to position jacks and safety stands.	• Discussion • Practical • Demonstration • Research

	SO4 Operate hoist.	*The learner must be able to*: **AC1:** Operate electrical hoist and trolley jack. **AC 2:** Operate hoist successfully, position jack and safety stands correctly. **AC 3:** Secure that the stands and jacks are positioned safely under the vehicle when lifted or lowering.	• Discussion • Practical • Demonstration • Research
5-6	**SO5** Use a jack.	*The learner must be able to*: **AC1:** Demonstrate the use of a jack including the inspection of the jack before use; determine load carrying capacity and the correct positioning of the jack to eliminate risk of damage.	• Discussion • Practical • Demonstration • Research
	SO6 Use safety stands.	*The learner must be able to*: <u>Results achieved</u> • Hoist is operated successfully • Jack is positioned and operated correctly • Safety stands are positioned and used correctly • Creepers are used in a safe manner <u>Indicators</u> • Pre-inspections on lifting equipment are carried out • Safety precautions are adhered to • Automobile is correctly secured when lifted and lowered • Lifting equipment is used in accordance to pre-scribed procedures <u>Understanding confirmed</u> • Respond to "what if" and "why" questions covering: • Positioning of jacks and safety stands	• Discussion • Practical • Demonstration • Research

		• Ground surface level • Specified tonnages • Procedures for lifting and lowering	
	SO7 Use creeper.	*The learner must be able to*: <u>Results achieved</u> • Hoist is operated successfully • Jack is positioned and operated correctly • Safety stands are positioned and used correctly • Creepers are used in a safe manner <u>Indicators</u> - Pre-inspections on lifting equipment are carried out - Safety precautions are adhered to - Automobile is correctly secured when lifted and lowered - Lifting equipment is used in accordance to pre-scribed procedures <u>Understanding confirmed</u> - Respond to "what if" and "why" questions covering: - Positioning of jacks and safety stands - Ground surface level - Specified tonnages - Procedures for lifting and lowering	• Discussion • Practical • Demonstration • Research
7-8	**ELO9:** Apply sealers and cavity fillers on vehicles **SO3:** Apply sealers and cavity fillers.	*The learner must be able to*: **AC1:** Confirm the application area against relevant documentation. **AC 2:** Identify and match the required texture to existing work on the vehicle. **AC 3:** Apply sealer according to manufacturer specifications.	• Discussion • Practical • Demonstration • Research

		AC 4: Demonstrate different methods of applying sealer are according to the given situation. **AC 5:** Remove masking tape at a suitable time to ensure ease of removal and quality of edge.	
	SO4 Apply safety procedures during the application process	*The learner must be able to*: **AC 1:** Apply sealer without incident, accident or injury. **AC 2:** Use equipment and tools in accordance with workplace and manufacturer requirements. **AC 3:** Adhered to all workplace safety warnings and required actions before, during and after applying sealer. **AC 4:** Dispose hazardous materials in accordance with workplace and legislative requirements **AC 5:** Follow applicable SHE procedures during the preparation and application processes.	• Discussion • Practical • Demonstration
	SO5 Restore work area, complete and process documentation.	*The learner must be able to*: **AC 1:** Restore the work area in accordance with workplace and SHE requirements. **AC 2:** Clean and store tools and equipment in accordance with workplace and SHE requirements. **AC 3:** Explain consequences of not leaving the workplace in the appropriate state in terms of safety hazards and production.	• Discussion • Practical • Demonstration • Research

9-10	**FORMAL ASSESSMENT TASK (FAT)** **25%** 1. **Group Task** Set up a demonstration to show how to: - Successfully operate a hoist. - Perform pre-inspection of lifting equipment before work is carried out for safety reasons. - Use of a jack including the inspection of the jack before use; determine load carrying capacity and the correct positioning of the jack to eliminate risk of damage. - Use a creepers in a safe manner - Identify and check tools and equipment required to apply the sealer and cavity filler for functionality prior to commencing with the task. - Remove the existing sealer in accordance with manufacturer specifications. - Apply different methods of sealer are according to the manufacturer specifications and given situation. - Identify and match the required texture to existing work on the vehicle. - Dispose hazardous materials in accordance with workplace and legislative requirements - Clean and store tools and equipment in accordance with workplace and SHE requirements. 2. Identify and explain the function of various components related to hoists. 3. Explain consequences of not leaving the workplace in the appropriate state in terms of safety hazards and production.	• Pen and paper Test • Practical / oral demonstration

YEAR 4- ANNUAL TEACHING PLAN

TERM 3

WK	ELO: SO	CONTENT	ACTIVITY
1-2	**ELO10:** Perform basic spray painting **SO1** Prepare to apply a paint application on a part.	*The learner must be able to*: **AC 1:** Prepare the part in accordance with the workplace procedures to receive the applicable paint application **AC 2:** Demonstrate the ability to select and use the appropriate tools and equipment to perform the paint application. **AC 3:** Confirm the understanding of the process by responding accurately to task related questions.	• Discussion • Practical • Demonstration • Research
	SO2 Perform spray painting techniques on the part in a safe and aware manner.	*The learner must be able to*: **AC1:** Demonstrate the appropriate spray paint techniques in accordance with the part construction. **AC 2:** Ensure that the finished paint application is in accordance with the standards required for the paint and the part. **AC 3:** Identify and clearly explain the safety precautionary measures to be taken.	• Discussion • Practical • Demonstration • Research
	SO3: Interact with others to identify paint defects and understand their causes.	*The learner must be able to*: **AC1:** Demonstrate the knowledge and understanding of paint defects and their causes. **AC 2:** Give clear and appropriate explanations and examples.	• Discussion • Practical • Demonstration • Research

		AC 3: Referrer to appropriate literature when giving explanations. **AC 4:** Evaluate the benefits and difficulties of team work within one's own work context. **AC 5:** Confirm the understanding of the process by responding accurately to task related questions.	
3-4	**ELO11:** Maintain spray painting equipment **SO1:** Demonstrate knowledge of maintaining spray painting equipment.	*The learner must be able to*: **AC1:** Identify the types of equipment that require maintenance from a maintenance schedule. **AC 2:** Identify the extent of maintenance that can be performed on equipment from manufacturer specifications. **AC 3:** Describe the point at which maintenance must be conducted according to manufacturer specifications and workplace requirements. **AC 4:** Explain methods of maintaining equipment in terms of the type of equipment and function to perform. **AC 5:** Identify cleanable and replacement parts in accordance with manufacturer specifications and workplace procedures. **AC 6:** Describe the consequences of not maintaining equipment in the correct state in terms of the impact on the consistency of application of paint.	• Discussion • Practical • Demonstration • Research

	SO2: Prepare to maintain spray painting equipment.	*The learner must be able to*: **AC 1:** Identify equipment to be maintained from given documentation. **AC 2:** Identify the type and extent of maintenance required in accordance with manufacturer specifications and workplace requirements. **AC 3:** Identify tools and equipment required for the maintenance task and checked for functionality prior to commencing the task. **AC 4:** Inform relevant personnel of the planned maintenance and downtime of specific equipment in accordance with workplace procedures. **AC 5:** Make the equipment to be maintained safe to work on in accordance with manufacturer specifications and workplace requirements.	• Discussion • Practical • Demonstration • Research
5-6	**SO3:** Conduct maintenance of spray painting equipment.	*The learner must be able to*: **AC1:** Clean equipment according to workplace requirements. Use solvents and cleaning agents that are appropriate to the component. **AC 2:** Dismantle components and reassemble in accordance with manufacturer specifications. **AC 3:** Identify damage or wear and report it in accordance with workplace procedures.	• Discussion • Practical • Demonstration • Research

		AC 4: Replace replacement parts with suitable parts in accordance with manufacturer specifications. **AC 5:** Confirm fluid levels to be in accordance with manufacturer specifications. **AC 6:** Check maintained equipment for functionality in accordance with workplace procedures.	
	SO4 Apply safety procedures during the maintenance process.	*The learner must be able to*: **AC 1:** Conduct maintenance without incident, accident or injury. **AC 2:** Use equipment and tools in accordance with workplace and manufacturer requirements. **AC 3:** Adhere to all workplace safety warnings and required actions before, during and after maintenance. **AC 4:** Dispose hazardous materials in accordance with workplace and legislative requirements. **AC 5:** Follow applicable SHE procedures during the preparation and application processes.	• Discussion • Practical • Demonstration • Research
	SO5 Restore work area, complete and process documentation.	*The learner must be able to*: **AC 1:** Restore the work area in accordance with workplace and SHE requirements. **AC 2:** Clean and store tools and equipment in accordance with workplace and SHE requirements.	• Discussion • Practical • Demonstration • Research

		AC 3: Explained in terms of safety hazards and production the consequences of not leaving the workplace in an appropriate state. **AC 4:** Complete and process documentation in accordance with workplace procedures. **AC 5:** Explain the reasons for various documents in terms of their main functions.	
7-8	**ELO12:** Polish automotive painted panels **SO1:** Demonstrate knowledge of polishing painted panels.	*The learner must be able to*: **AC1:** Explain the purpose of polishing painted panels in terms of improving gloss or eliminating paint imperfections. **AC 2:** Identify which polishing conditions will achieve the required result. **AC 3:** Identify different polishing materials according to their intended use. **AC 4:** Identify methods of polishing and the type of equipment for the required improvement. . **AC 5:** Explain the consequences of not using the correct type of polishing equipment in terms of time spent on the job and the required final finish. **AC 6:** Explain consequences of applying polish to non-painted areas in terms of appearance and efficiency or cleaning time.	• Discussion • Practical • Demonstration • Research

	SO2: Prepare to polish painted panels.	*The learner must be able to*: **AC1:** Identify paint imperfections that will be rectified through polishing. Refer imperfections that cannot be repaired by polishing back to the workshop for rework. **AC 2:** Select polishing materials and equipment appropriate for the required task. **AC 3:** Select attachments and accessories appropriate to the required task. **AC 4:** Confirm that the condition of the paint is ready for polishing. **AC 5:** Mask off high points to minimise the risk of polishing through. **AC 6:** Divide the panel into relevant sections for different polishing methods.	• Discussion • Practical • Demonstration • Research
	SO3: Polish painted panels.	*The learner must be able to*: **AC1:** Use the correct method of polishing that is appropriate to the size and type of panel being polished. **AC 2:** Apply appropriate polishing techniques to achieve the required finish. **AC 3:** Clean polishing pads as necessary to ensure efficiency of the polishing process. **AC 4:** Remove polishing dust from adjoining panels to ensure a consistent appearance. **AC 5:** Confirm paint imperfections to be removed through the polishing process.	• Discussion • Practical • Demonstration • Research

		AC 6: Polish surfaces without leaving swirl marks or hologram effects. **AC 7:** Remove masking tape when required to ensure consistency of the polished panel.	
	SO4: Apply safety procedures during the application process.	*The learner must be able to*: **AC1:** Polish the panel without incident, accident or injury. **AC 2:** Use equipment and tools in accordance with workplace and manufacturer requirements. **AC 3:** Adhere to all workplace safety warnings and required actions before, during and after polishing. **AC 4:** Dispose hazardous materials in accordance with workplace and legislative requirements. **AC 5:** Follow applicable SHE procedures during the polishing processes.	• Discussion • Practical • Demonstration • Research
	SO5: Restore work area, complete and process documentation.	*The learner must be able to*: **AC1:** Restore the work area in accordance with workplace and SHE requirements. **AC 2:** Clean and store tools and equipment in accordance with workplace and SHE requirements. **AC 3:** Explain in terms of safety hazards and production the consequences of not leaving the workplace in an appropriate state.	• Discussion • Practical • Demonstration • Research

		AC 4: Complete and process documentation in accordance with workplace procedures. **AC 5:** Explain the reasons for various documents in terms of their main functions.	
9-10	**FORMAL ASSESSMENT TASK (FAT)** **25%** 1. **Group Task** Set up a demonstration to show: - The ability to select and use the appropriate tools and equipment to perform the paint application. - The appropriate spray paint techniques in accordance with the part construction. - How to dismantle components and reassemble in accordance with manufacturer specifications. - To identify damage or wear and report it in accordance with workplace procedures. - How to replace replacement parts with suitable parts in accordance with manufacturer specifications. - How to use the correct method of polishing that is appropriate to the size and type of panel being polished without leaving swirl marks or hologram effects. - How to remove polishing dust from adjoining panels to ensure a consistent appearance. - How to complete and process documentation in accordance with workplace procedures. 2. Explain methods of maintaining equipment in terms of the type of equipment and function to perform. 3. Explain the purpose of polishing painted panels in terms of improving gloss or eliminating paint imperfections. 4. Identify different polishing materials according to their intended use. 5. Explain consequences of not using the correct type of polishing equipment in terms of time spent on the job and the required final finish. 6. Explain in terms of safety hazards and production the consequences of not leaving the workplace in an appropriate state.		• Pen and paper Test • Practical / oral demonstration

YEAR 4- ANNUAL TEACHING PLAN

TERM 4

WK	ELO: SO	CONTENT	ACTIVITY
1-2	**ELO13:** Conduct an inspection **SO1:** Plan and prepare for a service ability and condition inspection.	*The learner must be able to*: **AC1:** Prepare the work area and plan the inspection. **AC 2:** Adhere to all safety requirements according to manufacturer's recommendations. **AC 3:** Obtain the appropriate inspection checklist. **AC 4:** Select the appropriate tools and equipment for use during inspection. **AC 5:** Understand the value and importance of the preparation process prior to inspection. **AC 6:** Explain the impact on productivity and efficiency through effective task planning and correct equipment selection.	• Practical • Demonstration
	SO2: Inspect a static system for defects.	*The learner must be able to*: **AC 1:** Conduct a proper inspection on a static system. **AC 2:** Adhere to all safety requirements to according to manufacturer's recommendations. **AC 3:** Inspect that appropriate checklist is used. **AC 4:** Check and correct system fluid levels where necessary.	• Discussion • Practical • Demonstration

		AC 5: Inspect static system according to service inspection checklist. **AC 6:** Explain the reason/s for inspecting static system. **AC7:** Form understanding of the importance of checking system fluid levels. **AC 8:** Explain defects that could be encountered during a static system inspection (includes audible, smell and feel senses). **AC 9:** Understand the importance of doing a static inspection before doing a functional inspection.	
	SO3: Master inspection of a functional (operational) system.	*The learner must be able to*: **AC1:** Conduct an inspection on an operational system. **AC 2:** Follow recommended manufacturers procedures during the process of making system operational. **AC 3:** Check all fluid levels of operational system in accordance with recommended manufacturers procedures **AC 4:** Test whether equipment is attached in a proper and safe manner. **AC 5:** Where applicable, check pressures in accordance with recommended manufacturers procedures. **AC 6:** Check operational system for leaks, unusual vibrations and noises.	• Discussion • Practical • Demonstration • Research

		AC 7: Conduct functional inspections through all temperature ranges until normal operating conditions were obtained. **AC 8:** Explain the important post operational system checks **AC 9:** Recall reason/s why the system must be inspected at low and high temperatures **AC 10:** Explain what is meant by normal operating conditions. **AC 11:** Explain the procedures that must be followed should an abnormal noise, vibration or leak be detected.	
	SO4 Apply safety procedures during automotive system inspection.	*The learner must be able to*: **AC 1:** Select appropriate personal protective equipment and apply safe practices and recommended manufacturer procedures during the inspection. **AC 2:** Adhered to all safety requirements according to manufacturer's recommendations **AC 3:** Follow applicable SHE procedures during the inspection task. **AC 4:** Explain reason/s for using personal safety equipment. **AC 5:** Explain how to recognise potentially unsafe practices. **AC 6:** Explain the steps to be followed in maintaining a safe working environment	• Discussion • Practical • Demonstration

	SO5 Restore work area, complete and process documentation.	*The learner must be able to*: **AC 1:** Restore work area, complete and process documentation. **AC 2:** Inspect that appropriate checklist have been used and properly completed. **AC 3:** Complete variance reports. **AC 4:** Complete documentation and check whether they have been processed in accordance with company procedures **AC 5:** Explain the importance of keeping accurate records. **AC 6:** Recall how long the records are kept.	• Discussion • Practical • Demonstration • Research
3-5	**ELO14:** Select, use and care for engineering power tools **SO1** Select and use engineering power tools	*The learner must be able to*: <u>Achieve results</u> 4. Use power tools as recommended by the manufacturer to meet job/task requirements 5. Identify unsafe/faulty power tools and take corrective action 6. Clean, service, maintain power tools <u>Indicators</u> 6. Take correct safety precautions while using power tools 7. Select appropriate power tools for job 8. Select appropriate attachments for particular application 9. Report problems timeously to appropriate personnel 10. Maintain a clean and tidy work environment	• Discussion • Practical • Demonstration • Research

		<u>Confirm understanding</u> Explain and discuss consequences of: 1. Incorrectly using power tools, e.g. injuries 2. Choice of particular tools for job/task 3. Safety hazards associated with the use of power tools 4. Risks and hazards related to the various power supply sources	
	SO2 Care for and maintain engineering power tools	*The learner must be able to*: <u>Achieve results</u> 4. Use power tools as recommended by the manufacturer to meet job/task requirements 5. Identify unsafe/faulty power tools and take corrective action 6. Clean, service, maintain power tools <u>Indicators</u> 6. Take correct safety precautions while using power tools 7. Select appropriate power tools for job 8. Select appropriate attachments for particular application 9. Report problems timeously to appropriate personnel 10. Maintain a clean and tidy work environment <u>Confirm understanding</u> Explain and discuss: 5. Consequences of incorrectly using power tools, e.g. injuries 6. Choice of particular tools for job/task 7. Safety hazards associated with the use of power tools 8. Risks and hazards related to the various power supply sources	• Discussion • Practical • Demonstration • Research

	SO3 Check on power supply connections to equipment	*The learner must be able to*: <u>Achieve results</u> 4. Use power tools as recommended by the manufacturer to meet job/task requirements 5. Identify unsafe/faulty power tools and take corrective action 6. Clean, service, maintain power tools <u>Indicators</u> 6. Take correct safety precautions while using power tools 7. Select appropriate power tools for job 8. Select appropriate attachments for particular application 9. Report problems timeously to appropriate personnel 10. Maintain a clean and tidy work environment <u>Confirm understanding</u> Explain and discuss: 4. Consequences of incorrectly using power tools, e.g. injuries 5. Choice of particular tools for job/task 6. Safety hazards associated with the use of power tools 7. Risks and hazards related to the various power supply sources	
	SO4 Recognise and report problems, changes and/or malfunctions while working	*The learner must be able to*: <u>Achieve results</u> 4. Use power tools as recommended by the manufacturer to meet job/task requirements 5. Identify unsafe/faulty power tools and take corrective action 6. Clean, service, maintain power tools <u>Indicators</u> 6. Take correct safety precautions while using power tools 7. Select appropriate power tools for job	

		8. Select appropriate attachments for particular application 9. Report problems timeously to appropriate personnel 10. Maintain a clean and tidy work environment <u>Confirm understanding</u> Explain and discuss: 5. Consequences of incorrectly using power tools, e.g. injuries 6. Choice of particular tools for job/task 7. Safety hazards associated with the use of power tools 8. Risks and hazards related to the various power supply sources	
	SO5 Work safely with due care for self, fellow workers, machines, equipment, materials and environment	*The learner must be able to*: <u>Achieve results</u> 4. Use power tools as recommended by the manufacturer to meet job/task requirements 5. Identify unsafe/faulty power tools and take corrective action 6. Clean, service, maintain power tools <u>Indicators</u> 6. Take correct safety precautions while using power tools 7. Select appropriate power tools for job 8. Select appropriate attachments for particular application 9. Report problems timeously to appropriate personnel 10. Maintain a clean and tidy work environment <u>Confirm understanding</u> Explain and discuss: 1. Consequences of incorrectly using power tools, e.g. injuries 2. Choice of particular tools for job/task 3. Safety hazards associated with the use of power tools 4. Risks and hazards related to the various power supply sources	

6-8	**ELO15:** Maintain the stockroom **SO1** Select appropriate areas for storing stock	*The learner must be able to*: **AC 1:** Identify stockroom layout according to organizational requirements. **AC 2:** Demonstrate understanding of stockroom layout and explain in a drawing. **AC 3:** Select areas for storing stock as per layout.	• Discussion • Practical • Demonstration • Research
	SO2 Pack stock in stock area	*The learner must be able to*: **AC 1:** Move stock by using appropriate equipment. **AC 2:** Select packing methods based on stock characteristics. **AC 3:** Minimize losses and damages by handling the products according to the characteristics of the stock. **AC 4:** Pack stock so that it can be accessed in the sequence required to meet stock rotation requirements.	• Discussion • Practical • Demonstration • Research
	SO3 Perform stockroom housekeeping functions	*The learner must be able to*: **AC 1:** Keep stockroom tidy and clean as required by hygiene, health, safety and organizational requirements. **AC 2:** Carry out disposal of waste according to legislation and/or manufacturer's and organizational procedures.	• Discussion • Practical • Demonstration • Research
	SO4 Prevent shrinkage and losses in stockroom	*The learner must be able to*: **AC 1:** Explain the concept of shrinkage within the context of its impact on the workshop	• Discussion • Practical • Demonstration • Research

		AC 2: Explain ways in which shrinkage and losses occur in relation to the stockroom. **AC 3:** Implement shrinkage and loss prevention measures in the stockroom according to organizational requirements.	
	SO5 Maintain stock in the stockroom to enhance supply chain efficiency	*The learner must be able to*: **AC 1:** Explain the impact and functioning of the supply chain on organizational efficiency. **AC 2:** Explain the stock flow through the workshop as required. **AC 3:** Maintain stock as to enhance the supply chain following organizational procedures.	• Discussion • Practical • Demonstration • Research
9-10	**FORMAL ASSESSMENT TASK (FAT)** **25%** 1. **Group Task** Set up a demonstration to show: - How to conduct a proper inspection on a static system according to service inspection checklist. - An understanding of stockroom layout and explain in a drawing. - How to pack stock so that it can be accessed in the sequence required to meet stock rotation requirements. - How to keep stockroom tidy and clean as required by hygiene, health, safety and organizational requirements. 2. Explain reason/s for inspecting static system. 3. Explain defects that could be encountered during a static system inspection (includes audible, smell and feel senses). 4. List reason/s why the system must be inspected at low and high temperatures. 5. Explain the procedures that must be followed should an abnormal noise, vibration or leak be detected. 6. Explain the concept of shrinkage within the context of its impact on the workshop. 7. Explain the impact and functioning of the supply chain on organizational efficiency.		• Pen and paper Test • Practical / oral demonstration