

# Subject: Motor Vehicle Studies

## Subject Leader

Damian Paine

## National Curriculum

Motor Vehicle Studies is used to bolster the National Curriculum at KS4 using the AP to introduce vocational training at an appropriate level to reengage learning. The qualifications are specifically designed for 14-16 learners with Ofqual approval and in line with schools funding and tables. The routes available are dependent on GLH and the Level 1 is split into three qualifications, Award (3 Units), Certificate (6 Units) & Diploma (10 Units). All routes prepare learners for further studies at Level 1 or moving on to Level 2 in various related Motor Vehicle disciplines, and embedded skills in Maths and English to support Functional Skills or GCSE.

## Curriculum Intent

Students will develop a detailed knowledge of, and master the skills required to successfully complete the course in which students may progress on to a Motor Vehicle college course, seek employment as an Apprentice in a garage or may work in other related industries.

We believe that through the successful implementation of our vision, our students:

- Enhance & further develop Maths & English to support wider studies and progression.
- Can demonstrate their skills and knowledge through both practical and theoretical settings.
- Attain a variety of transferable life skills such as problem-solving, logical thinking, resilience and independence.
- Learn the skills and knowledge of the Automotive to include different roles within the sector.
- Form a broader range and higher future level of further education, training, employment and career opportunities.

## Curriculum Implementation

| Term                               |   | Content/Topics                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | Assessment                                                                                                                                                                                                                                                                                                                                                                                                               |
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| Autumn<br>Term<br>26/27<br>14 wks. | 1 | Health & Safety for Motor Vehicle Studies H/501/7005 (40GLH)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Portfolio of evidence written answers.<br>Candidate Observations.                                                                                                                                                                                                                                                                                                                                                        |
|                                    |   | <ol style="list-style-type: none"> <li>1. Know health and safety procedures and the responsibilities of employers and employees</li> <li>2. Know about PPE</li> <li>3. Know about COSHH</li> <li>4. Know about safe manual handling</li> <li>5. Know about fire prevention and emergency procedures</li> </ol> <p>Assessed through 3 portfolio task and observation.</p> <p>Base-Line assessments, for practical skills and prior knowledge<br/>Centre devised for internal monitoring of development and progression.</p> <p>Basic equipment usage and safety in the workshop, knowing the area.</p> <p>Introduction to Vehicle Wheels &amp; Tyres H/501/7022 (20GLH)</p> | <p>'Show &amp; Tell' / Names and Uses / Identification<br/>Kahoot marked quiz on a variety of MV areas<br/>Practical use of basic tooling, observation</p> <p>Small task, wheel off / on, use of torque wrench.<br/>Demonstrations of basic equipment and tools.</p> <p>Portfolio of evidence written answers.<br/>Candidate Observations.<br/>Job Cards<br/>Quiz / Kahoot<br/>Research task for different vehicles.</p> |

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| Spring<br>Term<br>26/27<br>11 wks. |   |                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                               |
|                                    | 2 | <p>Health &amp; Safety for Motor Vehicle Studies H/501/7005 (40GLH) - Continued -</p> <ol style="list-style-type: none"> <li>1. Know health and safety procedures and the responsibilities of employers and employees</li> <li>2. Know about PPE</li> <li>3. Know about COSHH</li> <li>4. Know about safe manual handling</li> <li>5. Know about fire prevention and emergency procedures</li> </ol> <p>Assessed through 3 portfolio task and witness observation.</p> <p>Introduction to Vehicle Exhaust Systems M/501/7024 (20GLH)</p> <ol style="list-style-type: none"> <li>1. Work safely</li> <li>2. Know the main components of a vehicle exhaust system</li> <li>3. Know how to inspect a vehicle exhaust system</li> <li>4. Know how to replace a vehicle exhaust component</li> <li>5. Be aware of environmental considerations</li> </ol> <p>Assessed through 2 practicals, job cards &amp; portfolio knowledge task.</p> | <p>Portfolio of evidence written answers.<br/>Candidate Observations.</p> <p>Portfolio of evidence written answers.<br/>Candidate Observations.<br/>Job Cards<br/>Quiz / Kahoot<br/>Research task aftermarket performance</p> |
|                                    | 3 | <p>Introduction to Vehicle Braking Systems Y/501/7017 (40GLH)</p> <ol style="list-style-type: none"> <li>1. Work safely</li> <li>2. Know how to remove and replace wheels</li> <li>3. Know about braking systems</li> <li>4. Be aware of environmental considerations</li> </ol> <p>Assessed through 3 practicals, job cards &amp; portfolio knowledge task.</p> <p>-----<b>This Completes the Award</b>-----</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | <p>Portfolio of evidence written answers.<br/>Candidate Observations.<br/>Job Cards<br/>Quiz / Kahoot<br/>Research task aftermarket performance /<br/>Comparison to MC brakes</p>                                             |
|                                    | 4 | <p>Introduction to Engine Liquid Cooling &amp; Engine Lubrication Systems A/501/7012 (40GLH)</p> <ol style="list-style-type: none"> <li>1. Work safely</li> <li>2. Know about cooling systems</li> <li>3. Know how to use antifreeze</li> <li>4. Be able to pressure test a cooling system</li> <li>5. Know about engine lubrication systems</li> </ol>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | <p>Portfolio of evidence written answers.<br/>Candidate Observations.<br/>Job Cards<br/>Quiz / Kahoot<br/>Research task different oil grades and types.</p>                                                                   |

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| Summer<br>Term<br>26/27<br>14 wks. |   | <p>6. Be aware of environmental considerations</p> <p>Assessed through 3 practicals, job cards &amp; portfolio knowledge task.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            |                                                                                                                                                                                                                                                                                                                 |
|                                    | 5 | <p>Introduction to Engine Liquid Cooling &amp; Engine Lubrication Systems A/501/7012 (40GLH) - Continued -</p> <ol style="list-style-type: none"> <li>1. Work safely</li> <li>2. Know about cooling systems</li> <li>3. Know how to use antifreeze</li> <li>4. Be able to pressure test a cooling system</li> <li>5. Know about engine lubrication systems</li> <li>6. Be aware of environmental considerations</li> </ol> <p>Assessed through 3 practicals, job cards &amp; portfolio knowledge task.</p> <p>Introduction to Steering &amp; Suspension R/501/7016 (40GLH)</p> <ol style="list-style-type: none"> <li>1. Work safely</li> <li>2. Know how to remove and replace road wheels</li> <li>3. Know about steering systems</li> <li>4. Know about suspension systems</li> <li>5. Be aware of environmental considerations</li> </ol> <p>Assessed through 3 practicals, job cards &amp; portfolio knowledge task.</p> | <p>Portfolio of evidence written answers.<br/>Candidate Observations.<br/>Job Cards<br/>Quiz / Kahoot<br/>Research task different oil grades and types.</p> <p>Portfolio of evidence written answers.<br/>Candidate Observations.<br/>Job Cards<br/>Quiz / Kahoot<br/>Research task aftermarket suspension.</p> |
|                                    | 6 | <p>Introduction to Battery &amp; Lighting Systems L/501/7015</p> <ol style="list-style-type: none"> <li>1. Work safely</li> <li>2. Know about vehicle batteries</li> <li>3. Know about external vehicle lighting systems</li> <li>4. Know about internal vehicle lighting systems</li> <li>5. Know about driver information warning lights</li> <li>6. Know about vehicle circuit protection</li> <li>7. Be aware of environmental considerations</li> </ol> <p>Assessed through 4 practicals, job cards &amp; portfolio knowledge task.</p> <p>-----This Completes the Certificate-----</p>                                                                                                                                                                                                                                                                                                                                  | <p>Portfolio of evidence written answers.<br/>Candidate Observations.<br/>Job Cards<br/>Quiz / Kahoot<br/>Research task different cars bulbs.</p>                                                                                                                                                               |

# Curriculum Implementation

| Term |                         |   | Content/Topics | Assessment |
|------|-------------------------|---|----------------|------------|
|      | Autumn<br>Term<br>27/28 | 1 |                |            |
|      |                         | 2 |                |            |
|      | Spring<br>Term<br>27/28 | 3 |                |            |
|      |                         | 4 |                |            |
|      | Summer<br>Term<br>27/28 | 5 |                |            |
|      |                         | 6 |                |            |