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| Unit Number and Name: | Unit 2 – Working in the Science Industry | | |
| Unit Code: | H/502/5539 | Credit Value: | 10 |
| QCF Level: | BTEC National | Guided Learning Hours: | 60hrs |
| Assessor: |  | | |

Unit:Working in the Science Industry

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| Assignment Deadlines | | | |
| Assignment Deadline Date: | | Handed out | Due in |
| Assignment Hand in Dates | Assignment 1 - Work in the Science Industry | (Date) |  |
| Assignment 2 – Designing a Laboratory | (Date) |  |
| Assignment 3 – Data Storage | (Date) |  |
| Assignment 4 – Legislation in the Laboratory | (Date) |  |

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| Unit Context |
| The understanding and skills of laboratory science technicians and other professionals who work in a varietyof places and scientific disciplines contribute to find solutions to many scientific challenges society faces.  The knowledge, understanding and skills of laboratory technicians contribute to the success or failure oforganisation in which they work.  Laboratory technicians and other scientists need to have a good understanding of specialist laboratories and each laboratory has individual requirements and generic procedures and practices. An understanding of safety regulations, quality systems and the application of Laboratory Information Management Systems (LIMS) is  essential. The combination of these procedures, systems and regulations gives an appreciation of how to run an efficient, effective and safe laboratory. This unit is crucial in underpinning the training of science laboratory technicians. |

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| Learning Outcomes |
| **On completion of this unit a learner should:**  1 Know how procedures are followed and communicated in the scientific workplace  2 Be able to design a scientific laboratory  3 Know about laboratory information management systems  4 Be able to demonstrate safe working practices in the scientific workplace. |

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| Assessment and Grading Criteria | | |
| To achieve a PASS grade you must show that you are able to: | To achieve a MERIT grade you must show that, in addition to the pass criteria, you are able to: | To achieve a DISTINCTION grade you must show that, in addition to the pass and merit criteria, you are able to: |
| **P1** outline procedures in the  scientific workplace  [IE1,2] | **M1** explain why procedures and  practices are followed in the  scientific workplace | **D1** analyse why laboratory  procedures and  practices must be clearly  communicated |
| **P2** identify how information  is communicated in the  scientific workplace  [IE1,2] | **M2** explain how information  is communicated in the  scientific workplace |  |
| **P3** design a scientific laboratory,  identifying its individual key  features  [CT1,3,4, EP3,4] | **M3** justify key features in the  non-specialist and specialist  laboratory | **D2** analyse why good laboratory  design is important for  efficiency, effectiveness and  safety |
| **P4** describe the procedure for  storing scientific information  in a laboratory information  management system  [RL4,5] | **M4** explain the processes  involved in storing  information in a scientific  workplace | **D3** discuss the advantages gained  by keeping data and records  on a laboratory management  information system |
| **P5** demonstrate safe working  practices in a scientific  workplace.  [TW1, SM2,3] | **M5** explain the need for current  regulations and legislation in  safe working practices. | **D4** evaluate the regulation of  safe working practices in a  scientific workplace. |