## KS5 Curriculum Overview: BTEC Level 3 National Extended Diploma in Applied Science



BTEC Applied Science embodies a fundamentally learner-centred approach to the curriculum, with a flexible, unit-based structure and knowledge applied in project-based internally assessed assessments and externally assessed exams. They focus on the holistic development of the practical, interpersonal and thinking skills and along-side these skills students develop work ready-skills such as team working skills, experience of research, extended writing and meeting deadlines. These skills will help students to succeed in employment and higher education. The course that we are studying is Pearson BTEC Level 3 National Extended Diploma in Applied Science, Equivalent in size to three A Levels. 13 units of which 7 are mandatory and 4 are external. Mandatory content (67%). External assessment (42%).

|         | Autumn Term   | Spring Term  | Summer Term  |
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| Year 12 | Curriculum and Skills:<br>Skills<br>Students will develop interpersonal and thinking<br>skills, team working skills, experience of research,<br>application of numeracy, extended writing and<br>meeting deadlines.<br>Curriculum<br>Unit 1 Principles and Applications of Science I. This<br>unit includes many fundamental elements of<br>Biology, Chemistry and Physics.<br>Unit 3 Science Investigation Skills. This unit<br>prepares learners for the world of practical science,<br>planning, carrying out and evaluating experiments.<br>Assessment:<br>Unit 1: Principles and Applications of Science I<br>(externally assessed). It is assessed by a 1.5 hour<br>written paper, taken in year 12, worth 90 marks.<br>Unit 3 Science Investigation Skills (externally<br>assessed). Assessment is 2 supervised sessions in a<br>three-week period, 3 hours for the practical part A<br>and 1.5 hours for a Part B which is a written paper.<br>Submission of investigation notes and written<br>paper, worth 60 marks | Curriculum and Skills:<br>Skills:<br>Students will develop practical, interpersonal and<br>thinking skills, team working skills, experience of<br>research, application of numeracy and information<br>technologies, extended writing and meeting<br>deadlines.<br>Curriculum<br>Unit 5 Principles and Applications of Science II<br>(externally assessed). Additional fundamentals of<br>Biology, Chemistry and Physics are covered in this<br>unit.<br>Unit 2 Practical Scientific Procedures and<br>Techniques 4 Assignments (internally assessed)<br>Assessment:<br>Unit 5 Principles and Applications of Science II<br>(externally assessed). Assessment is in the form of a<br>two-hour paper, worth 120 marks.<br>Unit 2 Practical Scientific Procedures and<br>Techniques 4 Assignments (internally assessed). | Curriculum and Skills:<br>Skills:<br>Students will develop practical, interpersonal and<br>thinking skills, communication skills, team working<br>skills, experience of research, customer awareness,<br>extended writing and meeting deadlines.<br>Curriculum<br>Unit 21: Medical Physics Applications (internally<br>assessed) 3 Assignments (90 Guided Learning<br>Hours)<br>Unit 6 Investigative Project (internally assessed) 3<br>Assignments (90 Guided Learning Hours)<br>Assessment:<br>Unit 21: Medical Physics Applications (internally<br>assessed) 3 Assignments<br>Unit 6 Investigative Project (internally assessed) 4<br>assignments |

| Year 13 | Curriculum and Skills:<br>Skills: interpersonal and thinking skills, team<br>working skills, experience of research, application<br>of numeracy, extended writing and meeting<br>deadlines, self-management, teamworking,<br>customer awareness, problem solving,<br>communication and literacy, application of<br>numeracy and information technologies<br>Curriculum<br>Unit 12: Diseases and Infection (internally<br>assessed). 4 Assignments.<br>Unit 16: Astronomy and Space Science (internally<br>assessed) 4 Assignments.<br>Unit 4 Laboratory Techniques and their Application<br>(internally assessed). | Curriculum and Skills:<br>Skills: interpersonal and thinking skills, team<br>working skills, experience of research, application<br>of numeracy, extended writing and meeting<br>deadlines, self-management, teamworking,<br>customer awareness, problem solving,<br>communication and literacy, application of<br>numeracy and information technologies<br>Curriculum<br>Unit 23: Forensic Evidence, Collection and Analysis<br>(internally assessed) 4 Assignments.<br>Unit 15: Electrical Circuits and their Applications<br>(internally assessed) 4 Assignments.<br>Unit 8: Physiology of Human Body Systems<br>(internally assessed). | Curriculum and Skills:<br>Skills: interpersonal and thinking skills, team<br>working skills, experience of research, application<br>of numeracy, extended writing and meeting<br>deadlines, self-management, teamworking,<br>customer awareness, problem solving,<br>communication and literacy, application of<br>numeracy and information technologies<br><b>Curriculum:</b><br>Unit 7 Contemporary Issues in Science (externally<br>assessed). |
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|         | Assessment:<br>Unit 12: Diseases and Infection (internally<br>assessed). 4 Assignments<br>Unit 16: Astronomy and Space Science (internally<br>assessed). 4 Assignments.<br>Unit 4 Laboratory Techniques and their Application<br>(internally assessed). 4 Assignments  | Assessment:<br>Unit 23: Forensic Evidence, Collection and Analysis<br>(internally assessed) 4 Assignments<br>Unit 15: Electrical Circuits and their Applications<br>(internally assessed) 4 Assignments<br>Unit 8: Physiology of Human Body Systems<br>(internally assessed). 3 Assignments  | Assessment:<br>Unit 7 Contemporary Issues in Science (externally<br>assessed). Two weeks prior to a supervised<br>assessment of 2.5 hours, information on a topical<br>issue will be provided and supervised research time<br>is provided. The written paper is worth 50 marks.   |