

Year 12 Applied Science

This course will allow students to apply their skills, knowledge and understanding to tasks or activities that are relevant to how science is used in industry. It will give students scientific principles and practical techniques to enable them to carry out experiments safely and accurately. Students will be able to evaluate the analytical techniques to improve the quality and collection of data. Students will become more confident in many areas including team working, independent enquiry and time management.

Methods of deepening and securing knowledge:

Interleaving	Starter tasks are designed to check knowledge from not only the previous lesson but also lessons earlier in the topic and sometimes even other topics within physics which students will have covered previously.
Checkpoints/ mini plenaries	These are used within lessons to check understanding and address any misconceptions before moving on.
Independent study	Past exam questions are set to assess subject knowledge and the ability to apply it in exam questions. Educake questions are used as a means of low-stakes testing to consolidate learning and check understanding.
Coursework feedback	An opportunity to discuss coursework and feedback in order to improve understanding and grades.
Practical work	In order to secure knowledge in applied science, practical work is completed to visualise the concepts being taught.

	Autumn term 1	Autumn term 2	Spring term 1
Topic(s)	Unit 1 Fundamentals of Science - Chemistry, Biology & Physics	Unit 1 Fundamentals of Science - Chemistry, Biology & Physics	Unit 2 - Analytical Techniques
Assessment	LO1, 3, & 6 Assessment 1.	LO2, 4, 5 & 6 Assessment 2. Unit 1 exam January 2020.	LO1, 2, 3 Assessment 1.

CEIAG (Careers that are linked to that topic)

Higher education in many fields, e.g. laboratory assistant, paediatric and adult nursing, criminology, radiology, teaching, sports science, paramedic and army.

	Spring term 2	Summer term 1	Summer term 2
Topic(s)	Unit 2 - Analytical Techniques	Unit 6 Hazards in the Lab coursework Unit 18 Microbiology coursework	Unit 6 Hazards in the Lab coursework Unit 18 Microbiology coursework
Assessment	LO4, 5 Assessment 2. Unit 2 exam May 2020.	Coursework.	Coursework.
CEIAG (Careers that are linked to that topic)	Higher education in many fields, e.g. laboratory assistant, paediatric and adult nursing, criminology, radiology, teaching, sports science, paramedic and army.	Microbiologist, food scientist, research scientist.	

Independent Study

For examined unit revision students will be taught different ways to revise independently, along with past papers to help them. Exams will be held in January 2021 and May 2021. An opportunity to re-sit both Unit 1 and 2 exams are available. There is a considerable amount of independent study with coursework. Teaching will initially take place then students are required to follow an assignment brief which requires them to complete coursework independently and submit to the teacher for review. Independent study can come from classwork, internet research, write-up and conclusions of practical work.