

AAQ Applied Science

Exam board & Specification Number	Pearson: 6106/193/1		
Qualification Accreditation Number (QAN)	610/3965/2		
Link to Course Details Webpage	Click here		
Duration, Delivery and Study Mode	Two Years	Full Time	Day Time Study
Start Date (not flexible) and Campus	01 September from Stanley Avenue Campus		

Course Details: Who is this Course for?

This course is for students progressing from GCSE into Level 3 studies, with a view to study this/related subjects at degree level.

Course Details: What Will You Learn?

Year 1	Unit 1: Principles and Applications of Biology - Cell structure and function (prokaryotic and eukaryotic cells) - Biological molecules (carbohydrates, lipids, proteins, nucleic acids) - Enzymes and factors affecting enzyme activity - Cell division (mitosis and meiosis) - DNA, genes and protein synthesis - Genetics, inheritance and variation - Human body systems (circulatory, respiratory, digestive and immune systems) - Infectious disease, immunity and vaccination - Ecology, biodiversity and conservation	Unit 2: Principles and Applications of Chemistry - Atomic structure and electronic configuration - Bonding (ionic, covalent and metallic) - The periodic table and chemical trends - Quantitative chemistry (moles, equations and calculations) - Acids, bases and pH - Redox reactions - Organic chemistry (hydrocarbons, alcohols, carboxylic acids and polymers) - Rates of reaction and equilibrium - Instrumental analysis (e.g. chromatography and spectroscopy) - Chemistry in industrial and environmental contexts
Year 2	Unit 3 Principles and Applications of Physics - Motion, speed, velocity and acceleration - Forces and Newton's Laws - Work, energy and power - Electricity (current, voltage, resistance and circuits) - Waves and electromagnetic radiation - Light and optics - Radioactivity and nuclear physics - Heat transfer and thermodynamics - Medical and industrial applications of physics	Unit 3: Practical Scientific Procedures and Techniques: - Laboratory health and safety - Risk assessments - Accurate measurement and use of scientific apparatus - Preparation of solutions and dilutions - Titration techniques - Microscopy - Chromatography - Data collection, processing and presentation - Evaluating accuracy, precision, reliability and validity - Writing scientific reports and communicating results

Course Details: How will you be Assessed?

These are the Units and their percentage weighting at A Level:

Unit 1	An external examination set and marked by Pearson. • 50 marks.
Unit 2	An external examination set and marked by Pearson. • 50 marks.
Unit 3	An external examination set and marked by Pearson. • 50 marks.

Course Details: Entry Requirements

Please see our [webpage](#) for details of our course entry requirements. **Students must achieve a D grade or higher (or Merit in Vocational Courses) at the end of Year 12 in order to progress into Year 2 of this course.**

Progression Information and Useful Links on Page 2

Additional Course Information

Course Details: How will you Learn?

Delivery Mode:

- ☐ Classroom based teaching
- ☐ Classroom based laboratory experiments
- ☐ Flipped Learning based independent study
- ☐ Independent assignments

Course Details: Equipment / Materials you will need

- ☐ ActiveHub Digital Textbook: Provided to you by the school
- ☐ Scientific Calculator
- ☐ Writing Paper and Stationary including Ruler
- ☐ All other equipment will be provided to you by the school

How can I prepare for and explore this course further?

- ☐ Glossary of Technical Terminology
- ☐ Recommended Text Books
- ☐ Past Exam Papers
- ☐ Related Articles

Careers & Progression (Where Next)?

Career ideas and Progression route:

Level 3 qualifications will enable students to enter degree courses related to science. You can research these [here](#)