A Level Biology		
Exam board & Specification Number	AQA	
Qualification Accreditation Number (QAN)	60146254	
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 (A Level or Equivalent) studies, with a view to study this subject or related subjects at degree level.

### Course Details: What Will You Learn?

Year I **Biological Molecules:** Monomers and polymers, Carbohydrates, Lipids, Proteins, Nucleic acids, ATP, Water and Inorganic ions

**Cells:** Cell structure, All cells arise from other cells, Transport across cell membranes, and Cell recognition and the immune system

**Organisms Exchange Substances with their Environment:** Surface area to volume ratio, Gas exchange, Digestion and absorption, and Mass transport

**Genetic information, Variation and Relationships between Organisms:** DNA, genes, chromosomes, protein synthesis, Genetic diversity, mutation, meiosis and Adaptation. Species, taxonomy, Biodiversity within a community, and Investigating diversity.

Year 2 **Energy transfers in and between organisms:** As well as revision of Year 1 topics, you will study: Photosynthesis, Respiration, Energy and ecosystems, and Nutrient cycles.

Organisms respond to changes in their internal and external environments: Stimuli, both internal and external, and responses by the body, Nervous coordination, Skeletal muscles, and Homeostasis.

**Genetics, populations, evolution and ecosystems:**Inheritance, Populations, Evolution may lead to speciation, and Populations in ecosystems.

The control of gene expression: Alteration of the sequence of bases in DNA altering the structure of proteins Features that control gene expression, Using genome projects, and Gene technologies.

### Course Details: How will you be Assessed?

These are the Unit Codes and their percentage weighting at A Level:

Paper 1: 7402/1 [35%]	Assessed by a 2 hour internal examination in the Summer Term.
Paper 2: 7402/2 [35%]	Assessed by a 2 hour internal examination in the Summer Term
Paper 3: 7402/3 [30%]	Assessed by a 2 hour internal examination in the Summer Term

Throughout the course students complete the 'Practical Skills Endorsement' component as well, for which a pass/fail is awarded. The experiments chosen for this are closely related to the theoretical content of the specification and so reinforce learning as well as giving the students an opportunity to acquire valuable experimental and analytical skills.

# **Course Details: Entry Requirements**

Please see our webpage for details of our course entry requirements.

Students must achieve a D grade or higher at the end of Year 12 in order to progress into Year 2 of this course.

# **Additional Course Information**

### Course Details: How will you Learn?

#### Delivery Mode:

- Classroom based teaching
- Classroom based laboratory experiments
- Flipped Learning based independent study

### Course Details: Equipment / Materials you will need

- Kerboodle Digital Textbook: Provided to you by the school
- Scientific Calculator
- Writing Paper and Stationary including Ruler
- outdoor weather resistant clothing and equipment for Biology Field Trip Residential
- 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
- Biology Related Articles
- Biology VIP Zone

# Careers & Progression (Where Next)?

### Career ideas and Progression route:

Level 3 qualifications in Biology will enable students to enter degree & degree level courses that involve research, science and care based professions, including Medicine, Forensics, Technology and Nursing.

Click here for information on Careers in Biology