



# AS Level / A Level Biology (Full-Time/Part-Time)

The AS Level / A Level Biology is a Full-time Further Education course designed for students who are interested in becoming a Biologist, Scientist or learn more about science. This is located in the Sixth Form Academy (SFA). Many of the topics are relevant to everyday life. While learning the main principles and concepts of biology, you will also be developing many important and transferable skills. Students will cover Basic Biochemistry and Cell Organisation, Biodiversity and Physiology of Body Systems, Energy, Homeostasis and the Environment as well as Variation, Inheritance, and genetics. Students will have the opportunity to participate in competitions, such as SkillsWales and WorldSkills. Applying for AS Levels or A Levels? Click 'Apply Now' on any ONE of the subjects you are interested in studying. Complete the online application form, where you will be asked to specify your other two choices. Then book an Interview appointment to meet the tutors and discuss your preferred choices.

## Entry Requirements

A minimum of six GCSEs at grade C or above, including English. GCSE Maths Higher/ Intermediate Tier Grade B recommended and Higher Tier Core Science and Additional Science Double Award Science/Triple Science Grade B required.

## Career Prospects

The course provides a good foundation for university and the study of Biology and related subjects including Medicine, Dentistry, Physiotherapy, Environmental Conservation, Genetics, Microbiology and Biochemistry.

## Course Modules

AS Unit 1: Basic Biochemistry and Cell Organisation. Main topics include: Biological compounds, Cell structure and organisation, Cell membranes and transport, Biological reactions are regulated by enzymes, Nucleic acids and their function, Genetic information is copied and passed on to daughter cells. Unit 2: Biodiversity and Physiology of Body Systems. Main topics include: All organisms are linked through their evolutionary history, Adaptations for gas exchange, Adaptions for transport, Adaptations for nutrition. A2 Unit 3: Energy, Homeostasis and the Environment. Main topics include: Importance of ATP, Photosynthesis uses light energy to synthesise organic molecules, Respiration releases chemical energy in biological processes, Microbiology, Population size and ecosystems, Human impact on the environment, Homeostasis and the kidney, The nervous system. Unit 4:

Coleg Afan  
Coleg Bannau Brycheiniog  
Academi Chwaraeon Llandarcy  
Canolfan Ragoriaeth Adeiladwaith Maesteg  
Coleg Castell-nedd  
Coleg Y Drenewydd  
Coleg Pontardawe  
Canolfan Adeiladwaith Abertawe

Afan College  
Brecon Beacons College  
Llandarcy Academy of Sport  
Maesteg Construction Centre of Excellence  
Neath College  
Newtown College  
Pontardawe College  
Swansea Construction Centre





Variation, Inheritance and Options. Main topics include: Sexual reproduction in humans, Sexual reproduction in plants, Inheritance, Variation and Evolution, Applications of Reproduction and Genetics, Immunology, and Disease. Unit 5: Practical Examination.

## Assessment

AS Unit 1: This unit is assessed by a 1 hour 30 minutes written examination comprising a range of short and longer structured questions, some in a practical context and one essay. Unit 2: This unit is assessed in the same way as Unit 1. A2 Unit 3: This unit is assessed by a 2 hour written examination comprising a range of short and longer structured questions, some in a practical context and one essay. Unit 4: This unit is assessed in the same way as Unit 3. Unit 5: Practical Examination – This unit comprises two tasks: i. Experimental task: 2 hours ii. Practical analysis task: 1 hour written paper.

## Additional Costs

There will be additional course-related costs.

## STUDY MODE

FT

## LOCATION

Neath College - 0330 818 8100

## COURSE LENGTH

2Y

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Coleg Bannau Brycheiniog  
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