

Biology

Entry requirements: At least BB in Double Award Science and B grade in Mathematics

Exam board: WJEC

Teachers (Subject to change): Mrs R Haslock, Mrs A Foley, Mr J Wells

Link to Specification: https://www.wjec.co.uk/qualifications/biology-as-a-level/#tab_overview

Transition tasks: <https://hwb.gov.wales/classes/5070a515-03b1-4152-806f-a82a27062cfa>

Other useful links: [Online video of the WJEC Biology course](#) [WJEC AS Biology text book](#)

Head of Subject email: rhs@eirias.conwy.sch.uk

Science Faculty

Entry requirements:
GCSE Science Double Award
A*A*- B B at Higher Tier And
GCSE Mathematics A*- B at
Higher Tier



You will have the opportunity
to develop understanding of
Variation, Reproduction and
Inheritance in Unit 4



You will have a muscular
skeletal option as part of
unit 4



Biology A level

The Biology AS course consists of 2 theory units worth 20% each of the A2 qualification. Each theory module is assessed by a 90 minute examination. The A level course includes the AS level units, 2 theory units worth 25% each (2hr exam each) and a practical unit worth 10%.

Head of Dept: Mrs R Haslock



Unit 2
unit explores Biodiversity and
Physiology of body systems.



You will look at
Energy, Homeostasis and the
Environment
in Unit 3.



Unit 1 You will be studying
Basic Biochemistry and Cell
organization ensuring a
smooth transition from GCSE.

Chemistry

Entry requirements: At least BB in Double Award Science and B grade in Mathematics

Exam board: WJEC

Teachers (Subject to change): Dr Williams, Mr Thomas, Ms O'Leary, Mrs Rees

Link to Specification: https://www.wjec.co.uk/qualifications/chemistry-as-a-level/#tab_overview

Transition tasks: <https://hwb.gov.wales/classes/e3cd457e-9e7b-4e79-afba-72ab49ff142a>

Other useful links:

Head of Subject email: hws@eirias.conwy.sch.uk

Chemistry

The AS chemistry course is designed to enable a smooth transition from GCSE and builds on popular areas of the chemistry course from years 10 & 11. Right from the beginning of the course you will be given an opportunity to develop your practical skills in a variety of experiments including the testing of unknown compounds as well as the synthesis of new materials. If you continue onto the A2 course you will then move on to study the latest methods of drug design and structural analysis, in addition to looking at why chemical reactions happen on a fundamental level. Here again, the theoretical aspects of the course are always consolidated with interesting and appropriate practical tasks.

Chemistry is regarded as a discipline that requires logical thinking and a clear and organised mind. It uses and develops a host of skills which employers regard as being invaluable in the workplace, including problem solving, team working, numeracy, communication and practical skills. It is a subject which is at the heart of a variety of science-based careers such as medicine, veterinary sciences, dentistry and pharmacy. Alternatively, an A-level in chemistry can also be used as a steppingstone to a non-scientific career in fields as diverse as business, law, accounting and management. Chemistry is the middle ground science, linking the biochemistry of biology with the particle theory of physics. If you're unsure about which science to go for beyond GCSE, then chemistry is probably the one for you. It's certainly not a walk in the park though, with many students seeing a ramping in difficulty from year 11 to year 12. That said, it's regarded as a gold-standard qualification which is well received by universities and employers alike. So if you're up for a challenge and looking to go places, then chemistry may well be the right choice for you in the sixth form!



Interested in the sustainability of our planet? This A-level course is a contemporary qualification that has never been more relevant. It is a vast array of university courses and job opportunities in one of the largest growing employment sectors.

Contemporary qualification that has never been more relevant

a vast array of university courses and job opportunities in one of the largest growing employment sectors.

Course requirements – Science CC and Maths C

Contact Miss Bell for more details
sbl@eirias.conwy.sch.uk



Environmental Science

AQA AS and A-level

'Environmental science is an interdisciplinary academic field that integrates physical, biological and information sciences to the study of the environment, and the solution of environmental problems.'

In other words.....

.....it is how the theory of biology, chemistry and physics applies to the sustainability of our Earth's resources, and how that knowledge can be used to solve current and future environmental issues.





Want to progress to
education
in areas of medicine
such as
physiology
nursing
laboratory services

This course is a great
accompaniment to A-
level Biology and
Sports Diploma
courses

Interested
in areas related to
and
research?

but how do body
systems work
together?

Course requirements

Science CC, Maths C, English C

Contact Miss Bell for more details
sbl@eirias.conwy.sch.uk

Medical Science

WJEC 1 year Certificate / 2 year Diploma

'The science of dealing with the maintenance of health and the prevention and treatment of diseases.'

Medical scientists are at the forefront of healthcare services; they are vital in the diagnosis of disease, determining the effectiveness of treatments and searching for new cures.



Physics

Entry requirements: At least BB in Double Award Science and B grade in Mathematics

Teachers: Mr Bater, Miss Bayley, Dr Jones and Miss Taylor

Link to Specification: <https://www.wjec.co.uk/media/gxbl243/wjec-gce-physics-spec-from-2015-english.pdf>

Transition tasks: [Link to transition tasks](#)

Other useful links: [Online video about the Physics A level course](#) [Physics AS Study Guide](#)

Head of Subject email: slt@eiras.conwy.sch.uk

Science Faculty

Physics

Ever wondered what a 'quark' is? The AS Physics course is designed to provide you with a smooth transition from GCSE and builds on popular areas of GCSE work. You will look at areas of physics on a microscopic and macroscopic scale. The AS course visits areas of modern physics such as stellar physics: looking at the temperature of stars and colours of stars, as well as the more traditional topics of waves, photons and material physics. A2 Physics combines the fascinating areas of traditional and contemporary physics with a range of medical physics, the existence of dark matter, fields and vibrations.

A good physicist is someone who can communicate effectively, wants to find out how things in the physical world work, has good problem-solving skills and can carry out investigations with clear, logical thinking. The numeracy, communication, team working and problem-solving skills you develop will make you an attractive employee in a range of areas. Throughout the course you will be given the opportunity to develop your practical skills in a variety of experiments including calculating the speed of light, the wavelength of a laser or a value for the acceleration due to gravity.

An A level in Physics offers a good foundation for any higher scientific, medical or engineering study, or provides a base for non-scientific careers such as in mathematics, accountancy, architecture, radiotherapy and many more.

The course offers you more than just academic qualifications. Through trips, visiting speakers and competitions, your awareness of physics will rocket!

Science Faculty