

Column B

BIOLOGY L3

Introduction/Course Objectives

Biology has made many breath-taking advances during the last decade. From the treatment of disease to the great steps made in genetic engineering. The Biology Advanced level and A.S. course has been designed to reflect these exciting advances in science.

The course provides a wide breadth of knowledge, which touches on many varied aspects of a range of topics. From the internal workings of organisms in physiology and the interdependence of living things in ecology, to social issues including man's influence on the environment and the ethical considerations of genetics.

Advanced Subsidiary (AS)

UNIT 1: BASIC BIOCHEMISTRY AND CELL ORGANISATION

Written examination: 1 hour 30 minutes

20% of qualification

This unit includes the following topics:

1. Chemical elements are joined together to form biological compounds
2. Cell structure and organisation
3. Cell membranes and transport
4. Biological reactions are regulated by enzymes
5. Nucleic acids and their functions
6. Genetic information is copied and passed on to daughter cells

UNIT 2: BIODIVERSITY AND PHYSIOLOGY OF BODY SYSTEMS

Written examination: 1 hour 30 minutes

20 % of qualification

This unit includes the following topics:

1. All organisms are related through their evolutionary history
2. Adaptations for gas exchange
3. Adaptations for transport
4. Adaptations for nutrition

Advanced Level (A2)

UNIT 3: ENERGY, HOMEOSTASIS AND THE ENVIRONMENT

Written examination: 2 hours

25 % of qualification

This unit includes the following topics:

1. Importance of ATP
2. Photosynthesis uses light energy to synthesise organic molecules
3. Respiration releases chemical energy in biological processes
4. Microbiology
5. Population size and ecosystems
6. Human impact on the environment
7. Homeostasis and the kidney
8. The nervous system

UNIT 4: VARIATION, INHERITANCE AND OPTIONS

Written examination: 2 hours

25 % of qualification

This unit includes the following topics:

1. Sexual reproduction in humans
2. Sexual reproduction in plants
3. Inheritance
4. Variation and evolution
5. Application of reproduction and genetics

Choice of one option from three:

A. Immunology and Disease

B. Human Musculoskeletal Anatomy

C. Neurobiology and Behaviour

UNIT 5: PRACTICAL EXAMINATION

10% of qualification

This unit gives learners the opportunity to demonstrate their ability to carry out an investigation and to analyse and evaluate experimental data. This will be carried out individually, under controlled conditions. The practical examination comprises of two tasks:

- Experimental Task (20 marks)
- Practical analysis Task (30 marks)

Assessment/Key Skills

Advanced Subsidiary: Candidates will need to sit 2 papers; unit 1 (20%) and 2 (20%)

Advanced level: Candidates will need to sit 2 papers; unit 3 (25%) and 4 (25%). Candidates will also sit a practical examination in year 13(105).

Candidates following Biology AS/A level will be offered opportunities to develop and generate evidence of achievement in all the Key Skills. These opportunities include; **I.T.C:** Plan and use different sources to search for and select information, present information including text, numbers and images; **Communication:** discussions and class presentations; **Application of Number:** interpret information and present findings.

Other

Candidates should have gained grade C or above in GCSE Biology or Additional Science. Practical work will be undertaken regularly throughout the AS and A2 level course and will be assessed internally. There will also be practical examinations during both years.

PUBLIC SERVICES BTEC – L3

Why BTEC Level 3 in Public Services?

The public services is the largest employer in the UK. The course will aim to teach you all you need to know and the skills required for a career in the Public Services and for further education. By joining us at the Public Services department we will provide you with a learning environment geared to promote skills and personal development that will result in achieving a worthwhile qualification.

BTEC Certificate	
Unit 1	Government, Policies and the Public Services
Unit 2	Leadership and Teamwork in the Public Services
Unit 11	Skills for Water-based Outdoor Adventurous Activities
BTEC Subsidiary Diploma (the above units plus those listed below)	
Unit 3	Citizenship, Diversity and the Public Services
Unit 9	Outdoor and Adventurous Expeditions

What will I study?

The BTEC Certificate is a Level 3 course equivalent to one GCE AS Level.
The BTEC Subsidiary Diploma is a Level 3 course equivalent to one GCE A Level.



What does the BTEC in Public Services Involve?

Unit 1 - Government, Policies and the Public Services

- 1 Know the different levels of government in the UK
- 2 Understand the democratic election process for each level of government in the UK
- 3 Know the impact of UK government policies on the public services
- 4 Be able to demonstrate how government policies are developed

Unit 2 - Leadership and Teamwork in the Public Services

- 1 Understand the styles of leadership and the role of a team leader
- 2 Be able to communicate effectively to brief and debrief teams
- 3 Be able to use appropriate skills and qualities to lead a team
- 4 Be able to participate in teamwork activities within the public services
- 5 Understand team development

Unit 3 - Citizenship, Diversity and the Public Services

- 1 Understand the meaning and benefits of citizenship and diversity
- 2 Know the legal and humanitarian rights that protect citizens and promote diversity
- 3 Understand the role of public services in enforcing diversity and providing equality of service
- 4 Be able to investigate current affairs, media and support

Unit 9 - Outdoor and Adventurous Expeditions

- 1 Know the types of expedition
- 2 Be able to plan expeditions
- 3 Be able to undertake expeditions
- 4 Be able to review their planning and undertaking of expeditions

Unit 11 - Skills for Water-based Outdoor Adventurous Activities

- 1 Know about different water-based outdoor and adventurous activities
- 2 Be able to manage risks in water-based outdoor and adventurous activities
- 3 Be able to participate in water-based outdoor and adventurous activities
- 4 Be able to review own skills development in water-based outdoor and adventurous activities.

What's in it for me?

The course will provide you an opportunity to progress to many of the A Level courses, for example Public services level 3 and further education.

“I really enjoyed this course - It was my favourite subject and I am now studying the level 3 course . It provided me with excellent hands on experiences and the skills that I have learnt have been excellent. The residential courses and expeditions where amazing” Jamie Bevan (2010)

GRAPHIC DESIGN L3

Art,Craft and Design

This is a broad-based course that provides flexibility in content and approach.

Learners can

choose this option if they want to explore and create work associated with:

- Fine Art
- Critical and Contextual Studies
- Textile Design
- Graphic Communication
- Three-Dimensional Design
- Photography.

This WJEC AS/A level specification in Art & Design is designed to enable learners to gain a sequential and incremental learning experience from a broad introductory foundation of art, craft and design related to option choice at AS, through to greater specialism and achievement at A level.

The AS represents the first year of a two year A level qualification but it can be studied separately.

AS UNIT 1

Personal Creative Enquiry – Non-exam assessment

40% of qualification (160marks)

An extended, exploratory portfolio and outcome/s based on themes and subject matter which are personal to the learner. The Enquiry must integrate critical, practical and theoretical work.

This work will be assessed holistically, using the assessment objectives. Learners will be required to select, evaluate and present their work for assessment.

A2 Unit 2

Personal Investigation – Non-exam assessment

36% of qualification (160marks)

Consists of **two** integrated constituent parts:

1. a major in-depth critical, practical and theoretical investigative portfolio and outcome/s based on themes and subject matter that have personal significance.
2. An extended written element of 1000 words minimum, which may contain images and texts and must clearly relate to practical and theoretical work using an appropriate working vocabulary and specialist terminology.

- Both the practical/theoretical work and the written element will be assessed together using the assessment objectives. Learners will be required to select, evaluate and present their work for assessment.

- The Personal Creative Enquiry and Personal Investigation will be determined by the learner and teacher, assessed by the teacher and externally moderated.

A2 Unit 2

Externally Set Assignment Non-exam assessment

24% of qualification (100 marks)

Part 1: Preparatory study period

- The externally set assignment materials are to be released to learners from 1 February (in the second year of the course) and will consist of a series of visual and written stimuli.
- One of the stimuli is to be selected by the learner and used as a starting point from which to elicit a personal response.
- Responses are developed during the preparatory study period. They should take the form of critical, practical and theoretical preparatory work/supporting studies which inform the resolution of ideas in the **15** hours sustained focus study.

Part 2: 15 hour period of sustained focus work

- The resolution of learners' ideas from the preparatory work must be completed during the designated **15** hours and they must show how their planning relates to the outcome/s.
- The period of sustained focus work must be completed under supervised conditions.

Both the preparatory work and sustained focus work will be assessed together, using the assessment objectives.

Learners will be required to select, evaluate and present their work for assessment.

The Externally Set Assignment will be set by WJEC, assessed by the teacher and externally moderated.

This course is suitable, but is not exclusively for pupils who wish to pursue a career in the visual arts or related fields. We encourage our pupils to apply for Foundation course in Art and Design or for degree courses.

This is a course that offers a creative challenge for pupils. They will be expected to work regularly at home and within the art rooms developing skills and ideas. A lot of enjoyment and satisfaction may be gained from the practical and creative work with an opportunity to exhibit the highlights of their efforts in the school at the end of the academic year.



DRAMA L3

Introduction/Course Objectives

Drama and Theatre Studies has proved to be a very popular course for a number of years and the results are among the best in the school each year. Its main objective is to develop an appreciation, an understanding and an enjoyment of the subject based on an informed personal response to a range of dramatic experiences and opportunities. It concentrates on developing performance, technical, directing and production, creative and critical written skills. It is an interesting and varied course and offers a firm grounding towards a career in many different spheres

Advanced Subsidiary (AS)

AS Unit 1: Theatre Workshop Non-exam assessment: internally assessed, externally moderated 24% of qualification 60 marks

- *Learners will be assessed on either acting or design.*
- *Learners participate in the creation, development and performance of a piece of theatre based on a reinterpretation of an extract from a text chosen from a list supplied by WJEC. The piece must be developed using the techniques and working methods of either an influential theatre practitioner or a recognised theatre company.*
- *Learners must produce: a realisation of the performance or design, a creative log , an evaluation.*

The text we will study for this section is John Godber's 'TWO'

*We will use the physical theatre methods of the company **Frantic Assembly**.*

AS Unit 2: Text in Theatre Written examination: 1 hour 30 minutes 16% of qualification 60 marks

Open book: Clean copies (no annotation) of the complete text chosen must be taken into the examination.

A series of questions based on 'A View From the Bridge' Arthur Miller.

It is expected that pupils make every effort to attend live performances with the department and of their own volition.

Advanced (A2)

U2 Uned 4: Testun mewn Perfformiad Arholiad ysgrifenedig: 2 awr 30 munud 24% o'r cymhwyster 95 marc

Llyfr agored: Rhaid mynd â chopi glân (heb ei anodi) o'r ddau destun cyflawn a ddewiswyd i mewn i'r arholiad.

Dau gwestiwn, yn seiliedig ar ddau destun gwahanol o'r rhestr ganlynol:
Two questions, based on two different texts from the following list:

A Day in the Death of Joe Egg, Peter Nichols

Sweeney Todd, Stephen Sondheim

The Absence of War, David Hare

Mametz, Owen Sheers

*The Radicalisation of Bradley Manning, Tim Price

Un Nos Ola Leuad, Caradog Prichard, addasiad Bara Caws.

***This text contains language and content of an adult nature.**

Pupils are expected to make every effort to attend live performances with the department as well as of their own volition.

Key Skills

Obviously, Drama and Theatre Studies provides considerable Key Skills opportunities. The rehearsals and typical developments of a Drama and Theatre Studies programme of study require and promote a variety of essential key skills particularly in communication, information technology, problem-solving, working with others and improving own learning and performance

Extra Curricular Activities

Hopefully students will chose to benefit from the department's wide range of activities and excursions which offer an opportunity for pupils to develop their practical, creative and critical skills.



RELIGIOUS STUDIES



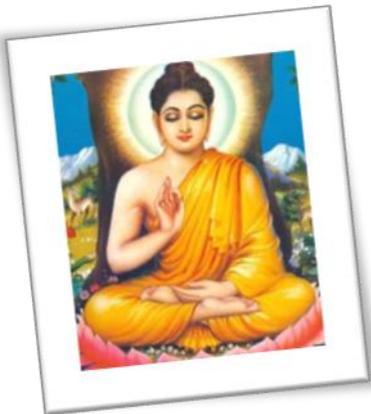
Introduction/Course Objectives

It is a pleasure to offer an exciting, challenging and contemporary Religious Studies course for Year 12 students who decide to continue their studies at school. The course is suited to those who studied the Religious Studies GCSE Full Course and also those who have gained a good grade in the short course examination in the subject. Here is an option that supplements many other fields of study for example the Humanities, Psychology and Sociology. This course is ideal for students who enjoy debates, questions and research into the meaning of life and who wish to understand the way others lead their lives.

Three modules are studied in the first year to complete an Advanced Subsidiary Award, then three further modules in the second year to attain a full Advanced Level Award.

Advanced Subsidiary (AS) Course

Unit 1 : Introduction to Buddhism (15% of qualification)



During the first unit candidates will study four main themes. These include life and importance of the Buddha, Buddhist sacred texts, Buddhist concepts, religious life and practices.

Unit 2: An Introduction to Philosophy of Religion / Religion and Ethics (25% of qualification)

As part of the second unit candidates will explore cosmological and teleological arguments for the existence of God in addition to the non-existence of God - the

problem of evil and religious experience. Additionally as part of the 'Religion and Ethics' theme candidates will study ethical language and thought, Aquinas' Natural Law, Fletcher's Situation Ethics and Utilitarianism.

Advanced Level (A2) Course

Unit 3: A study of Buddhism (20% of qualification)

A further study of Buddhism will include looking at religious figures and sacred texts. We will study significant historical and social developments in religious thought in addition to religious practices that shape Buddhist identity.



Unit 4: Religion and Ethics (20% of qualification)

During this module candidates will study ethical language and thought. They will develop knowledge and understanding of Kant's Moral Theory, contemporary developments in ethical theory, freewill and determinism.

Unit 5: Philosophy of Religion (20% of qualification)

As part of the final unit candidates will explore ontological arguments for the existence of God, challenges to religious belief in addition to religious experience and religious language.

Visits

As there is such a great emphasis on "living religion" there will be frequent opportunities to visit places of worship and faith communities in Cardiff and across the United Kingdom. These visits are essential so that students gain a depth of understanding of religion.



HISTORY L3

Introduction

History is a subject that requires candidates to examine the actions of people in past societies, and thereby poses issues about the perspectives, motivation and reactions of people. Through the study of such past societies, both over a relatively long period of a hundred years or more in the period study, and in the in-depth study, candidates will have opportunities to reflect on a range of spiritual, moral, ethical, social and cultural issues. The History AS and A Level is an exciting and varied course for pupils who wish to continue with their studies or revisit History again.

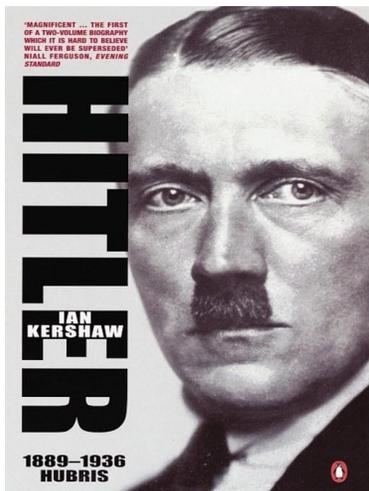
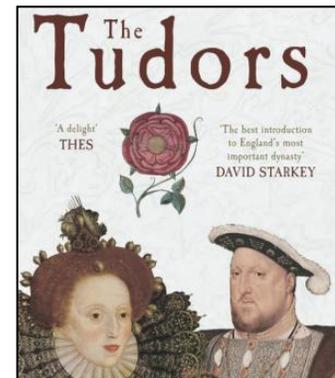
Course Objectives

Advanced Subsidiary (AS)

Unit 1:

Government, Rebellion and Society in Wales and England 1485-1603 (period study).

- A study of the political, religious, social and economic changes as well as protests and rebellions during the Tudor era.
- Written examination 1hr 30 minutes
- 20% of the qualification



Unit 2:

Germany: Democracy and Dictatorship 1918-45 (in depth study).

- Germany 1918-1933 – Weimar and its challenges.
- Written examination 1hr 45 minutes
- 20% of the qualification

Advanced Level (A2)

Unit 3:

THE AMERICAN CENTURY c.1890-1990 (breadth study).

- **The struggle for Civil Rights, c.1890-1990**

- **Making of a superpower, c.1890-1990**

- Thematic study of the political changes and the protests to ensure change.
- Written examination 1hr 45 minutes. 2 Open ended essays –one synoptic essay
- 20% of the qualification



Unit 4 (part 2):

Germany: Democracy and Dictatorship 1933-45 (in depth study)

- A study of the political, social, economic and foreign policies.
- Written examination 1hr 45 minutes
- 20% of the qualification

Unit 5:

Historical Interpretations

- An independent study of a theme based on an historical interpretation (3,000-4,000 words).
- Internal assessment
- 20% of the qualification - 60 marks

Extra-curricular

- A visit to the Parliament in Westminster and the Imperial War Museum in London.
- An opportunity for two students to attend the project 'Lessons from Auschwitz'.
- History trip to America in October 2016.
- Lectures and seminars on the subjects that are studied.
- A chance to lead school assemblies on Remembrance Day and the Holocaust Memorial Day.

Why study History?

A qualification in History will offer something to almost any job or employer because it promotes the skills required in working life. History is a distinct help for the following: Legal Profession, Library, Museum and Archive work, Teaching, Social Services, Armed Services, Police and Management.

FURTHER MATHEMATICS L3

Introduction/Course Objectives

The AS and A level courses provided by the school will encourage candidates to :

- develop their understanding of Mathematics and mathematical processes in a way that promotes confidence and fosters enjoyment;
- develop abilities to reason logically and recognise incorrect reasoning, to generalise and to construct mathematical proofs;
- extend their range of mathematical skills and techniques and use them in more difficult, unstructured problems;
- develop an understanding of coherence and progression in Mathematics and of how different areas of Mathematics can be connected;
- recognise how a situation may be represented mathematically and understand the relationship between 'real world' problems and standard other mathematical models and how these can be refined and improved;
- use Mathematics as an effective means of communication;
- read and comprehend mathematical arguments and articles concerning applications of Mathematics;
- use technology such as calculators and computers when appropriate, recognise when such use may be inappropriate and be aware of limitations;
- develop an awareness of the relevance of Mathematics to other fields of study, to the world of work and to society in general;
- take increasing responsibility for their own learning and the evaluation of their own mathematical development.

AS Unit 1 Further Pure Mathematics A (13 1/3%)

AS Unit 2 Further Statistics A (13 1/3%)

AS Unit 3 Further Mechanics A (13 1/3%)

A2 Unit 4 Further Pure Mathematics B (35%)

A2 Unit 5 Further Statistics B (25%)

OR

A2 Unit 6 Further Mechanics B (25%)

Background Knowledge

Students embarking on either an AS or full Advanced Level course will be expected to have achieved at least Grade B in GCSE Mathematics. They will be expected to be confident in the use of the majority of material covered in the Higher Tier of GCSE Mathematics. Students embarking on the Further Mathematics Advanced Level course will be expected to have achieved Grade A* in GCSE Mathematics.

Calculators

Will need a specific calculator for this course:

Casio Fx-991ex £25

or

Texas Ti-30xPro £14/£15

Useful Websites

www.mathscareers.org.uk

www.nrich.maths.org.uk

www.furthermaths.org.uk

www.wjec.co.uk

Introduction/Course Objectives

The purpose of the course is to offer a detailed study of the principles, properties and uses of computers. Computers are an essential, integral part of modern life and the course offers a detailed study of topics which will prove useful to a career where computers are used.

Recent developments in hardware, software and computer applications, together with the development of problem solving and technical writing skills will prove extremely useful as part of a wide range of academic subjects.

Advanced Subsidiary (AS)

Module IT1: Information Systems.

Section A: Data, information and knowledge; The value and importance of information; Quality of information; Validation and verification; Capabilities and limitations of ICT; Uses of ICT; Presenting Information; Networks; Human Computer Interface (HCI); Social Issues; Database Systems.

Section B: Modeling – Spreadsheet features and functions.

Module IT2: Presenting Information.

Task 1 **DTP** Design & produce a document of at least two A4 sides and containing at least 150 words.

Task 2 **Automated documents** Design & produce documents containing automated routines

Task 3 **Presentation** Design & produce a presentation of at least six slides / pages for an audience



Advanced Level (A2)

Module IT3: Use and Impact of ICT.

Networks choosing, types and components; The Internet - Impact upon Business, Connecting to, Moral, Social and Ethical Issues; Human

Computer Interface (HCI); Working with ICT Telecommuting, Codes of Conduct; Legal and Moral issues; ICT Security Policies; Database systems; Management of Change; Management Information Systems; System Development Life Cycle (SDLC)

Module IT4: Relational Database Project.

Tasks - User Requirement, Design Specification, Implementation, Testing, User Documentation, Evaluation, Project Planning.

Assessment Arrangements/Key Skills

Modules IT1 and IT3 are assessed via written examination of 2:15 and 2:30 respectively.

Modules IT2 and IT4 are internally assessed.

Advanced Subsidiary (AS)

IT1: 60% of AS Level, (30% of A Level)

IT2: 40% of AS Level, (20% of A Level)

Advanced Level (A2)

IT3: 30% of Advanced Level.

IT4: 20% of Advanced Level.

The ICT course enables students to develop and collect evidence of a wide variety of Key Skills at Level 3.

Other

The course is also open to those students who have not followed the full GCSE in Information and Communication Technology but evidence of appropriate performance in the GCSE IT Short Course OR Digital Creator must be demonstrated.