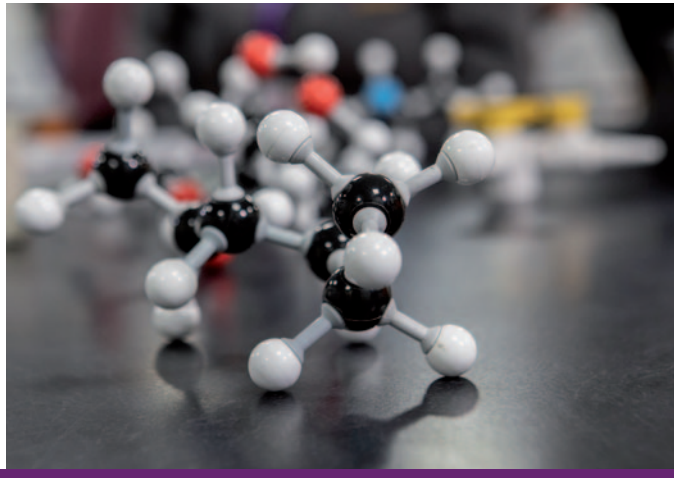
Biology - A Level

Biology literally means ‘the study of life’. Biology examines the structure, function, growth, origin, evolution, and distribution of living things. The course includes studies at the molecular level, through to the cellular level, on to whole organisms and finally ecology, investigating organisms’ interactions with their environment.

Saving threatened species, feeding people, genetically modified organisms, stem cell research, and curing diseases - the 21st Century offers many challenges to a biologist.

Biological knowledge is increasing at a prodigious rate. Studying Biology gives you the skills and opportunities to advance human knowledge and understanding in today’s world, in order to make a difference to tomorrow’s world.



Entrance requirements

Students who wish to study Biology you must have acquired a minimum of 5 GCSEs or equivalent at 4-9, including English Language and Maths at 6 or above and at least a Grade 66 in Combined Science (or at least Grade 6 in GCSE Biology).

Biology - A Level

How the course is taught

Biology is taught using a mixture of practical, group work, problem solving and whole class teaching, tailored to specific needs. You will be expected to read around the subject independently and complete regular homework.

Areas covered by the course

1 – Biological molecules
2 – Cells
3 – Organisms exchange substances with their environment
4 – Genetic information, variation and relationships between organisms
5 – Energy transfers in and between organisms (A Level only)
6 – Organisms respond to changes in their internal and external environments (A Level only)
7 – Genetics, populations, evolution and ecosystems (A Level only)
8 – The control of gene expression (A Level only)

Career opportunities

Whether you decide to go on to work in a hospital, laboratory, courtroom, ocean, zoo, classroom, TV Studio, boardroom or industry (to name a few), you can make a contribution as a biologist. A background in biology gives you transferable skills and increases your career options. Biology is always relevant to life! Biology combines well with other sciences such as Chemistry and Physics. The following also have close links: Physical Education, Geography, Psychology, Mathematics and Health and Social Care. However many students study Biology alongside completely unrelated subjects.

How the course is assessed

Paper 1: What is Assessed

- Any content from topics 1 – 4, including relevant practical skills.

Assessed

- Written exam: 2 hours
- 91 marks
- 35% of A-Level

Questions

- 76 marks: a mixture of short and long answer questions
- 15 marks: extended response questions

Paper 2: What is Assessed

- Any content from topics 5 – 8, including relevant practical skills.

Assessed

- Written exam: 2 hours
- 91 marks
- 35% of A-Level

Questions

- 76 marks: a mixture of short and long answer questions
- 15 marks: comprehension question

Paper 3: What is Assessed

- Any content from topics 1 – 8, including relevant practical skills.

Assessed

- Written exam: 2 hours
- 78 marks
- 30% of A-Level

Questions

- 38 marks: structured questions, including practical techniques
- 15 marks: critical analysis of given experimental data
- 25 marks: one essay from a choice of two titles

Chemistry - A Level

Ever wondered who was behind developing the latest shampoo or painkiller?

Ever thought about the people who discovered treatments for cancer or AIDS?

Well, chemists are behind these discoveries and developments and those that will shape our lives in the future. Chemistry is all around us; in the air we breathe, the food we eat and the 'stuff' that makes our lives easier.

Entrance requirements

Students who wish to study Chemistry you must have acquired a minimum of 5 GCSEs or equivalent at 4-9, including English Language and Maths at 6 or above and at least a Grade 66 in Combined Science (or at least Grade 6 in GCSE Chemistry).

Chemistry - A Level

How the course is taught

Chemistry is taught using a mixture of practical, group work, problem solving and whole class teaching, tailored to specific needs. You will be expected to read around the subject independently and complete regular homework. One to one sessions are offered to students requiring extra help.

Areas covered by the course

At A Level you will cover aspects of physical chemistry, inorganic chemistry and organic chemistry as
well as practical investigations.

Career opportunities

Chemists work in almost every industry and environment you could think of, from the food industry to drug research, working in the bleak landscapes of Antarctica to state-of the art laboratories in renowned universities. Even if you do not want to become a career chemist, an A Level Chemistry qualification gives you a set of skills that could help you to become a Vet, Doctor, Pharmacist, Engineer, Geneticist, Geologist or even a Space Scientist.

How the course is assessed

A Level Assessment

You will complete three papers covering physical, organic, inorganic chemistry and practical skills assessment.

Paper 1: What is assessed

- Relevant physical chemistry topics (sections 3.1.1 to 3.1.4, 3.1.6 to 3.1.8 and 3.1.10 to 3.1.12)
- Inorganic chemistry 9 section 3.2)
- Relevant practical skills

How it is assessed

- 2 hour written exam

Paper 2: What is assessed

- Relevant physical chemistry topics (sections 3.1.2. to 3.1.6 and 3.1.9)
- Organic chemistry (section 3.3)
- Relevant practical skills

How is it assessed

- 2 hour written exam

Paper 3 What is assessed:

- Any content
- Any practical skills

How it is assessed:

- 2 hour written exam.

The A level is designed as a two year course – students would be expected to sit all of the exams at the end of Year 13.

Computer Science - A Level

Computer Science is a practical subject where students can apply the academic principles learned in the classroom to real-world systems.

It is an intensely creative subject that combines invention and excitement, that can look at the natural world through a digital prism.

Entrance requirements

Students who wish to study Computer Science must meet the following entry requirements:

- They must hold a GCSE computing or ICT equivalent qualification at grade 4 or above.
- A grade 6 or higher in Mathematics is preferable.

They also must have acquired a minimum of 5 GCSEs or equivalent at grades 4-9, including English Language and Mathematics.

Computer Science - A Level

How the course is taught

The course is taught through a number of practical and theory sessions utilizing various hardware and software resources. This will build on existing knowledge and skills. Students will be expected to supplement this through independent study and research in college and at home.

Areas covered by the course

A2 content includes:

- The characteristics of contemporary processors, input, output and storage devices
- Software and software development
- Programming
- Exchanging data
- Data types, data structures and algorithms
- Legal, moral, ethical and cultural issues
- Elements of computational issues
- Problem solving and programming
- Algorithms
- Computer networks

How the course is assessed

Overall there are three separate units of work;

Computer systems (01) worth 40% of qualification

This is assessed by an external examination at the end of the course in year 13. Within this unit students will be assessed on data types, data structures, databases exchanging data and encryption methods.

Algorithms and Programming (02) worth 40% of qualification

This is assessed by an external examination at the end of the course in year 13. Within this unit students will be assessed on abstraction, thinking logically, computational methods and algorithms.

Programming Project (03) worth 20% of qualification

This is a practical coursework unit. Within this unit students will be assessed on their ability to analyse a problem, design, develop a solution, test and evaluate the product that they have developed.

Career opportunities

This qualification is suitable for learners intending to pursue any career in which an understanding of technology is needed such as computer games designers, software engineering and for learners who wish to further develop skills at university. The problem solving skills and analysis skills developed within this course are highly transferable skills therefore the qualification is also suitable for any further study as part of a course of general education.

English Literature - A Level

A Level English Literature is a linear course which involves the academic study of poetry, prose and drama. Students will learn how to analyse texts by paying close attention to the details of form, structure and language to understand how writers shape meaning. Perspective English students need to enjoy reading and relish academic debate.

The ability to conduct independent research is vital and students must be able to read set texts in their own time. Students will develop a working knowledge of various critical approaches to English Literature such as Feminist and Marxist Theory. The most important critical tool will be Historicism which seeks to place literary texts within the important cultural, religious and social contexts at the time the texts were written.

Entrance requirements

Students must have aquired a minimum of 5 GCSEs or equivalent at grade 4 or above, including Maths and English.

English Literature - A Level

How the course is taught

The teaching on the English Literature A Level course aims to develop the skills of analysis, understanding, insight and critical thinking. Students need to read independently and critically and they are supported in class by discussions about texts, their contexts and possible meanings as well as being taught how to develop and structure cohesive responses to a wide variety of material.

Areas covered by the course

(AQA A Level English Literature – Specification A)

Paper 1: Love through the ages

The study of three texts: one poetry anthology and one prose text, of which one must be written pre – 1900, and one Shakespeare play. The examination will include two unseen poems.

Paper 2: Texts in Shared Contexts: World War 1 and its Aftermath

The study of three texts: one poetry anthology, one prose and one drama, of which one must be written post – 2000. The examination will include an unseen prose extract.

Independent critical study: texts across time

A comparative critical study of two texts, one of which will have been written pre-1900.

How the course is assessed

This is a two year course. Students will sit all external exam at the end of Year 13.

Paper 1 – External examination (40% of A Level qualification)

Paper 2 – External examination (40% of A Level qualification)

Independent Critical Study – non-examined assessment (20% of A Level qualification) – assessed by teachers and moderated by AQA.

Career opportunities

English Literature A Level is accepted as a valid qualification in a range of higher educational courses. It can lead to an open-ended range of options for both higher education and career prospects. This course is a facilitating subject for the Russell group universities. It naturally leads to a degree in English however some students have used it to provide access to careers in Arts, Law, Ethics, Journalism, Public Relations and Teaching. It is dynamic, challenging and creative course, during which students are encouraged to develop critical and independent thinking. This course is an excellent foundation on which to build the necessary skills for your future career.

Geography - A Level

The focus of the course is to encourage an enthusiasm for Competence in Geography by using contemporary real-world contexts, from a range of specified spatial scales, and through engagement with the practical application of geographical skills and techniques in the field.

This specification draws on both physical and human geography, explores people-environment interactions and encourages development of fieldwork at the local level to enable learners to pose enquiry questions.

Entrance requirements

Students who wish to study Geography must have acquired a minimum of 5 GCSEs, or equivalent at 4-9, including Maths and English Language. It is usual for students to have reached at least a 5 grade in Geography Higher entry at GCSE but other talented Geographers who didn't opt for Geography at KS4 may also be considered. There will be a compulsory residential field visit for Unit 2 of the AS course. The students will be asked to pay for the cost of this trip

Geography - A Level

How the course is taught

Teaching will be in a variety of styles including group work, seminars and debating. E.g. Students will be expected to work independently and read around the topics covered. You will be expected to keep up to date with current issues by following current affairs on the television and internet and by reading quality newspapers.

Areas covered by the course

Component 1 – Physical Geography
Section A – Changing Landscapes
Section B – Changing Places

Component 2 – Human Geography
Section A – Global systems
Section B – Global Governance
Section C – 21st Century Challenges

Component 3 – Contemporary Themes in Geography
Section A – Tectonic Hazards
Section B – Economic Challenges in India and Weather and Climate

Component 4 – NEA

Career opportunities

Geography equips you to move in several career directions, often combining your knowledge of human and environmental activity to work in areas such as town planning, travel and tourism or aspects of environmental protection. Logistics and distribution and international aid and development are also relevant career options. Others include working within local government departments responsible for transport and tourism, housing, environmental services and recycling, sustainability, regeneration and economic development. Jobs that utilize the analytical and research skills of human geographers include market research, law, finance and accounting.

How the course is assessed

Component 1 – written exam, 1 hour 45 minutes, 20.5%of the qualification.

Component 2 – written exam, 2 hours, 27.5% of the qualification.

Component 3 – written exam, 2 hours 15 minutes, 32% of the qualification.

How the course is assessed

Students complete an individual investigation which must include data collected in the field. The individual investigation must be based on a question or issue defined and developed by the student relating to any part of the specification content.

3,000 – 4,000 words
60 marks
20% of A Level – marked by teachers moderated by EDUCAS

History - A Level

History at A level involves an in-depth study of aspects of British, European and World History during the 16th, 19th and 20th Centuries. As such it has a broad and fascinating appeal and provides a sound basis for an understanding of the world in which we live.

Entrance requirements

Students who wish to study History must have acquired a minimum of 5 GCSEs or equivalent at 4-9, including Maths and English Language. Achievement of a 5 grade or above in one of the Humanities subjects is also required. Most students who opt for this subject have already studied History at GCSE but it is not essential to have done so. Indeed many students who have not studied History before have been very successful at A Level. A love of reading and the ability to carry out independent research is essential.

History - A Level

How the course is taught

History lessons are taught in a number of ways including the use of Power Points, structured notes, debates, thinking skills activities, group and paired presentations. As well as directed learning, students are also expected to read and make their own notes from a variety of texts.

Areas covered by the course

YEAR 12

Unit 1

Exam is 25% of A Level - 1 hour 30 minutes
Unit Y107: England 1547 – 1603: The Later Tudors

Key topics

- The stability of the monarchy
- Religious changes
- Rebellion and unrest
- Elizabeth and religion
- The nature of the Elizabethan Monarchy, Government and Parliament
- Elizabeth's management of financial, economic and social affairs.
- Elizabeth's later years 1588 – 1603.

The assessment for this unit has two sections. The second section, dealing with the period study, gives students the chance to demonstrate their extended writing skills by providing a choice of questions, from which they answer one. The first section is a document study, giving students the chance to demonstrate their source skills.

Unit 2

Exam is 15% of A Level – 1 hour
Unit Y221: Democracy and Dictatorships in Germany 1919-1963

Key topics

The development and establishment of the Weimar Republic
The establishment of the Nazi Dictatorship
Defeat of Germany 1939-1949
Divided Germany 1949-1963

Students are given a choice of questions, from which they must choose one and answer both parts in the A Level.

YEAR 13

Unit 3

Exam is 40% of A Level – 2 hours 30 minutes
Unit Y319: Civil Rights in the USA – 1865-1992

Key topics

- African Americans
- Trade Unions
- Native American Indians
- Women
- Civil Rights in the Gilded Age 1875-95
- Civil Rights and the New Deal
- Malcolm X and Black Power

The thematic essay, which requires students to consider developments over approximately 100 years (you answer two from a choice of three). The in-depth interpretations element where students use their detailed knowledge of specified events, individuals or issues to comprehend, analyse and evaluate the ways in which the past has been interpreted by historians.

Unit 4

Coursework: Personal study – 20% of A Level

German responsibility for the outbreak of World War One.
This is the internally assessed element of the course and provides students with the opportunity to explore a topic of personal interest through coursework. The A level is designed as a two year course – students would be expected to sit all of the exams at the end of Year 13.

How the course is assessed

Unit groups 1-3 are assessed entirely through written examinations that are externally marked. All examinations take place at the end of the course available every June. Unit group 4 is assessed internally, then moderated externally and submitted before the examinations begin, in May.

Career opportunities

History provides a route to a wide variety of Higher Educationopportunities and ultimately can lead to careers such as Accountancy, Law, Journalism, Business, Politics, Teaching, Archivist and many more. Indeed it is fair to say that many of the world's great thinkers are or were historians.

Mathematics - A Level

An A Level in Mathematics is highly regarded by the majority of employers and universities, precisely because of the demands it makes and the skills it develops.

The course, for example, will help you to develop the techniques required for science-based disciplines as well as providing a solid foundation for further mathematical study.

Entrance requirements

Students who wish to study Maths must have studied the Higher Paper at GCSE in Maths, achieving at least a grade 6. Students will also be expected to have achieved a high point score in their GCSEs overall.

Mathematics - A Level

How the course is taught

Students are taught for 5 one hour periods per week and are expected to study independently for at least an extra 4 hours per week.

Students will be involved in problem solving and discussion which is aimed to develop an analytical understanding of the mathematical concepts required. This will be done through a combination of task- focused teaching and practice using both text book and ICT sources.

Areas covered by the course

The Core Mathematics topics extend the students' mathematical knowledge from GCSE. We revise and build on such topics as Graphs, Sequences and Trigonometry while introducing Calculus, which is the foundation of most advanced topics. The techniques introduced here form the basic mathematical knowledge required for science, engineering, economics and many business higher education courses.

The Statistics topics develop GCSE Data Handling and introduce new areas such as hypothesis testing and linear regression. The study of probability is taken to a much greater depth than at GCSE. An ability to use the ideas from this module is important in the fields of management, accountancy, medical research and psychology.

The Mechanics topics cover forces, projectiles, Newton's Law of Motion, energy, work and power. This makes links with the Physics A Level (although there is no requirement to have taken Physics). The topics covered here apply to the fields of Science and Engineering.

How the course is assessed

Exam board – Edexcel

This is a 2 year A Level with exams taking place in June of Year 13.

3 Papers each – 2 hours.

2 Papers cover - Pure Mathematics

1 Paper covers – Statistics and Mechanics

Career opportunities

'A' level mathematics is a valuable qualification and can lead to a wide variety of career paths for example in science, engineering accountancy or commerce. This A-level can be taken with a variety of other possible courses.

Modern Languages (Spanish) - A Level

"A different language is a different vision of life"
Federico Fellini

"If you talk to a man in a language he understands, that goes to his head. If you talk to him in his own language, that goes to his heart"
Nelson Mandela.

The ability to speak a foreign language is more important than ever in our globalised society and can enrich your life both socially and economically. Spanish is a global language, with over 400 million native speakers. As well as being the official language of Spain and most of Latin America, it is also the second language of the United States.

If you enjoy using language creatively, communicating opinions and ideas on social, moral and ethical issues, and learning about other cultures and ways of life then Spanish A-Level is for you.

Entrance requirements
Students who wish to study Spanish must have achieved a 6 in GCSE Spanish.

Modern Languages (Spanish) - A Level

How the course is taught

This is a two-year course which is mainly classroom based, with some trips to Tyneside Cinema in Newcastle to view Hipanic films. You will follow the new AQA specification. The topics taught build on the foundations laid at GCSE and develop the four core skills of reading, writing, speaking and listening to a higher degree of proficiency. You will also develop new skills such as translation and analysis of a work of literature or a Film.

Areas covered by the course

1) Social issues and trends

- Aspects of Hispanic society (modern and traditional values, the internet, equal rights)
- Multiculturalism in Hispanic society (immigration, integration, racism)

2) Political and artistic culture

- Artistic culture in the Hispanic world (modern day idols, Spanish regional identity, cultural heritage)
- Aspects of political life in the Spanish speaking world (today's youth, monarchies and dictatorships, popular movements)

3) Grammar

4) Literary texts and films

- You will study two literacy texts or one film and one literacy text. Teachers and students can discuss choices. For a full list of texts and films, please see the AQA website.

5) Individual research project

- You will identify a subject or a key question which is of interest to you and which relates to a country or countries where Spanish is spoken.

How the course is assessed

Paper 1 - (2 hours 30 mins, 50% of A level) Listening, reading and writing

- Listening, reading and responding to texts/recordings (you will have control of the recordings)
- Translation from Spanish to English and from English to Spanish.

The texts, recordings and translations will all be based on the first two topic areas (social issues and trends and political and artistic culture).

Paper 2 - (2 hours 20% of A level) Writing

- A critical appreciation of the text(s) and film studied

Paper 3 - (21-23 mins, 30% of A level) Speaking

- Presentation and discussion of individual research project

No dictionaries or electronic devices are allowed in the exams.

Career opportunities

An A-level in Spanish leads to an exciting range of options in higher education and is highly prized by employers. There are a range of University courses on offer, from traditional language degrees (many allow you to start another language from scratch) to combined honours degrees, which allow you to combine a language with another subject, for example, Biology, History or Law. These courses usually offer the chance to spend a year abroad.

Past Byron students have gone on to study Spanish with other languages and subjects at Sheffield and Liverpool Universities. Whatever your future career plans, your language skills and culture knowledge will be an invaluable asset to you.

Philosophy And Ethics - A Level

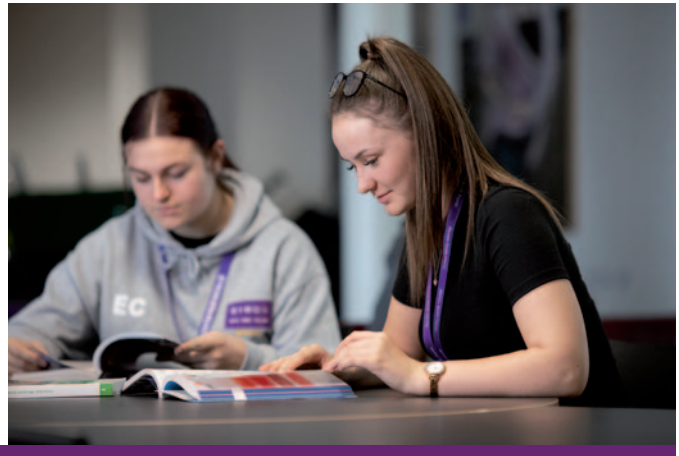
This R.E Qualification contains 3 components:

For the Ethics component students will engage with different ways of moral decision making examining whether happiness or love could ever be the “right” basis for resolving ethical dilemmas such as abortion, euthanasia and the creation of “designer” babies.

Ethical theories include Utilitarianism, Situation Ethics, and Natural Law.

The Philosophy component includes the origin and nature of the universe, the problem of evil, and implications for the existence of God.

The study of religion component covers Christianity addressing Themes such as religious figures, religious practices and identity and significant social and historical developments in religious thought.



Entrance requirements

Students who wish to study this subject must have acquired a minimum of 5 GCSEs or equivalent at 4-9, including Maths and English Language. The course is very different from GCSE Religious Studies, therefore no background knowledge is assumed. However students who have not achieved a grade 5 or higher in English will find the reading and essay writing requirements challenging.

Philosophy And Ethics - A Level

How the course is taught

This is a great subject choice for those who have an enquiring mind, an ability to analyse issues from a number of different perspectives and who are prepared to take part in lively discussions.

There are 5 lessons each week (5 hours) in Year 12 and 13.

How the course is assessed

On - going essay writing is a key feature of this course, with opportunities for continuous improvements following the detailed feedback you will receive.

A 2 hour exam on each of the components at the end of Year 13.

Areas covered by the course

Ethics:
Utilitarianism, capital punishment, situation ethics, torture, the nature and value of the human person in Christianity, cloning and "designer babies", medical trials on animals and humans, end of life issues.

Philosophy:
Ancient philosophical influences (Plato and .Aristotle), cosmological and teleological arguments, religious experiences, mind, body and soul, and the problem of evil and suffering.

Christianity:
The nature and existence of God, beliefs about self, death and afterlife. The challenges of secularization, science and the changing roles of men and women.

Career opportunities

This subject is a highly regarded academic subject at all universities and colleges of higher education, including the Russell Group. In a recent international survey, philosophy was ranked as the degree with the third highest graduate IQ levels, after maths and engineering.

Many graduates of theology go on to practice law since some universities offer shorter conversion courses to those with degrees in Theology, than those with degrees in other subjects, including English. This is testament to the high level of engagement Philosophy and Theology requires with logical and evaluative frameworks. Professional pathways include: doctor, lawyer, accountant, social worker, nurse and teacher.

Physics - A Level

Physics is the subject that provides you with the Theory of Everything and answers the most important question of all – **WHY?**

Physics will take you on a journey from fundamental building blocks of matter to the forces that hold galaxies and the whole universe together. It will give you a grounding in general physics concepts, dealing with forces and motion, plus the more abstract concepts involved with electricity, waves and WIMP's. It may delve deeper into the realms of Astrophysics or take you back in time to the important experiments that have enhanced our lives today.

Physics is the science that leads us to new technologies that will shape our future. Learning about important theories is backed up by a significant amount of practical work to develop your analytical skills and also provide further enjoyment.

Entrance requirements

Students who wish to study Physiscs you must have acquired a minimum of 5 GCSEs or equivalent at 4-9, including English Language and Maths at 6 or above and at least a Grade 66 in Combined Science (or at least Grade 6 in GCSE Physics) . It is also recommended that you study A level Maths alongside Physics.

Physics - A Level

How the course is taught

Physics is taught using a mixture of practical's, group work, problem solving and whole class teaching, tailored to specific needs. You will be expected to read around the subject and complete regular homework. One to one sessions are offered to students requiring extra help.

Areas covered by the course

Year 12

- Measurements and their errors
- Particles and radiation
- Waves
- Mechanics and materials
- Electricity

Year 13

- Further mechanics and thermal physics
- Fields and their consequences
- Nuclear Physics

Plus one option topic from:

Astrophysics, Medical physics, Engineering physics, Turning points in physics and Electronics.

How the course is assessed

A Level Assessment

Paper 1

34% of A2

Paper 2

34% of A2

Paper 3 Section A – 18% of A2

Paper 3 Section B (option topic) – 14% of A2

The A level is designed as a two year course – students would be expected to sit all of the exams at the end of Year 13.

Career opportunities

Physics is ideal if you are considering a career in the Physical Sciences, Engineering, Architecture, Medicine or even Archaeology. Physics is a traditional subject that is valued by academic institutions and employers due to the challenges it demands of its students.

Design And Technology (Product Design) - A Level

This creative and thought-provoking qualification gives students the practical skills, theoretical knowledge and confidence to succeed in a number of careers. Especially those in the creative industry.

You will investigate historical, social, cultural, environmental and economic influences on design and technology, whilst enjoying opportunities to put their learning in to practice by producing products of your choice.

Students will gain a real understanding of what it means to be a designer, alongside the knowledge and skills sought by higher education and employers.

Entrance requirements

Students who wish to study Product Design must have acquired a minimum of 5 GCSEs or equivalent at 4-9, including Maths, English Language and at least one other from the following: Product Design, Graphics, Resistant Materials, or other DT based courses.

Design And Technology (Product Design) - A Level

How the course is taught

The course is taught using both practical and theoretical activities to build on the skills already acquired in KS3 and KS4. You will receive 5 periods a week combining practical workshop activities, theory and design skills. You will be taught the Core technical principles, core designing and making principles and additional specialist knowledge.

Throughout years 12 and 13 you are given the opportunity to design a new product based on any theme of your choice and your final product may be entered into the national Science and Engineering competition which offers cash prizes and the opportunity to further develop your product.

Students may have to contribute towards the cost of their practical projects and purchase a range of design media.

Areas covered by the course

Product Design is intended to reflect the wide-ranging activities of professional designers and covers a range of materials. Written papers will be restricted to testing the core content, but other materials such as ceramics and textiles and other areas such as electronics and mechanisms can be incorporated to produce exciting coursework. The course meets the needs of students who wish to combine 3D Designing, workshop based manufacturing with cutting edge computer visualization and animation.

How the course is assessed

The exam board is AQA A level

Paper 1

Core technical principles and core designing and making principles.

An external examination which makes up 25% of the A level marks.

Paper 2

Specialist knowledge, technical and designing and making principles.

It is worth 25% of the A level marks.

Non-exam assessment (NEA)

This is a substantial Design and Make task based on a context set by AQA where you will Design and Manufacture a product that address the Context.

Career opportunities

The course, when combined with other qualifications, provides a route into a range of Product Design related degree and Diploma courses at University for example, Graphic Design, 3D Product Design, Furniture Design etc. Additional options include Design and Technology Education.

Psychology - A Level (A Linear Course)

Psychology involves the scientific study of behaviour. Psychologists attempt to explain why we behave and think the way we do. It is one of the most popular subjects to study at A level because students can relate their knowledge to all areas of life.

Psychology has recently been reclassified as a Science subject and this is reflected in the content at A Level.

Entrance requirements

You must have acquired a minimum of 5 GCSEs or equivalent at 4-9, including Maths and English Language. Psychology is a rigorous, academic subject requiring good skills in English, Maths and Science. Critical thinking and evaluative skills are essential.

Mathematical skills at Level 2 and above (calculations and problem solving skills) are a requirement and represent at least 10% of the overall assessment. Research methods represent at least 25-30% of the overall assessment.

Psychology - A Level (A Linear Course)

How the course is taught

We all learn best in different ways therefore a variety of teaching strategies are employed to support your different learning styles.

Teaching/learning methods include individual, group and class activities, debates, presentations, discussions, essays, hand-outs, worksheets, quizzes, white board tests, independent research, note making, flow charts and diagrams, video/YouTube clips and use of the Internet.

Areas covered by the course

First year of A-level

- Social influence
- Memory
- Attachment
- Psychopathology
- Approaches in Psychology
- Biopsychology
- Research methods

Second year of A-level

- Issues and debates in Psychology
- Gender
- Schizophrenia
- Aggression

How the course is assessed

Linear assessment – The A level is designed as a two year course – students would be expected to sit all of the exams at the end of Year 13.

There are three, 2 hour exams each worth 96 marks.

Career opportunities

- Careers in: clinical psychology, sports psychology, educational psychology, counselling, forensic psychology, industrial/occupational psychology, health psychology and neuropsychology
- Conducting research into many areas of Psychology (usually at a university)
- Applying research in areas such as health, business, crime and education
- Psychology graduates also go on to work in disciplines such as: marketing and Public Relations, business development, management and human resources, and public sector work including teaching, nursing and the police force.

Health And Social Care – Btec Level 3

The BTEC Level 3 in Health and Social Care is offered in two different sized qualifications. The National Diploma is equivalent in size to 2 A levels and the Extended Certificate is equivalent to 1 A level.

It is a course where students will gain a 'broad' understanding of the sector, designed to support students studying other BTEC or A Level qualifications.

Entrance requirements

Students who wish to study Health and Social Care must have acquired a minimum of 5 GCSEs or equivalent at 4-9, including Maths and English Language.

Health And Social Care – Btec Level 3

How the course is taught

The course is taught mainly through classroom learning, using 'vocational' examples and experience. Where possible external visits and speakers are used to enhance the vocational element of the course.

It is recommended that 'work experience' in Year 12 involve Health and Social Care as the experience that students can gather is invaluable. Keeping up to date with changes is also vital, therefore reading newspapers, using the internet or 'Apps' on phones are good techniques.

Areas covered by the course

Extended Certificate

- Unit 1 Human Lifespan Development.
- Unit 2Working in Health and Social Care.
- Unit 5Meeting Individual Care Support Needs.
- Unit 11Psychology Perspectives.

Diploma

The Diploma covers all units in the Extended Certificate with the addition of:

- Unit 7 Principles of Safe Practice.
- Unit 8 Promoting Public Health.
- Unit 4 Enquiries into Current Research in Health and Social Care.
- Unit 19 Nutritional Health.

How the course is assessed

Extended certificate

- 4 Units in Total
- 2 Written Exam Units
- 2 Coursework Units

Diploma

- 8 Units in Total
- 3 Written Exam Units
- 5 Coursework Units

Career opportunities

This qualification is accepted at University, in the Nursing profession and Social Care. Career opportunities and courses to study include: childcare, nursing, midwifery, teaching and similar careers, police service, probation service, health visiting and paramedics.

If you are interested in Midwifery you must also study A level Biology for the majority of Universities.

Business Studies - Btec Level 3

We currently offer the BTEC Business Studies option in the Sixth Form

- BTEC Level 3 National Diploma in Business which is equivalent to 2 A levels
- BTEC Level 3 National Extended Certificate in Business which is equivalent to 1 A level

You will enjoy this course if you would like to:

- Develop an understanding of how business works in the real world
- Discover the problems and opportunities faced by local, national and international businesses
- Have an opportunity to organise an enterprise activity - learn about how business functions such as marketing, finance, human and physical resources; work together as part of a whole business
- Take part in practical activities such as planning and running a business, organising an event, working in a team

The department will ensure that students have opportunities to visit and study Businesses in the UK to gain detailed evidence and information on a variety of Industries. There is also the potential opportunity to visit a European city and study some European business issues.

Entrance requirements

Students who wish to study Business Studies must have acquired a minimum of 5 GCSEs or equivalent at 4-9 preferably including English Language and Maths. However, students who don't have Maths and English Language at 4 but have passed a BTEC Diploma qualification at Merit or Distinction level will also be considered.

Business Studies - Btec Level 3

How the course is taught

BTEC Business courses are highly interactive with students taking on considerable responsibility for their own learning. You will develop research and analytical skills that will enable you to achieve to the full limits of your potential. With guidance from the course team you will rapidly become independent and active learners. This course will suit learners with real strengths in coursework as well as those who seek to add a "vocational" element to their studies. All aspects and dimensions of Business and Business organisations are researched and evaluated on the course. Specific businesses have to be investigated and analysed in the coursework units. You should also have an interest in exploring the world of business in a highly practical way.

Areas covered by the course

The course is made up of 8 units for the Diploma and 4 units for the extended certificate.

Mandatory units:

- Exploring Business
- Developing a marketing campaign
- Personal and Business finance
- Managing an event (Diploma only)
- International business (Diploma only)
- Principles of management (Diploma only)

Optional units:

- Recruitment and selection
- Team building in business (Diploma only)

How the course is assessed

The course is assessed through both internal and external methods.

- The diploma consists of 3 external and 5 internally assessed units
- The extended certificate consists of 2 external and 2 internally assessed units

The external assessment includes one examination unit, the other units have an externally set and marked assignment. Resits are allowed with the external assessments and the assessments will take place throughout the two year course. The internal assessments are all marked by your teachers and are completed throughout the two year course.

Career opportunities

The course allows students to develop many skills in communication, presentation and team work, which can enhance a C.V. as well as skills needed for higher education and employment. The qualification gives students a wide choice of progression options into higher education, training or employment in the business sector.

This course qualifies for UCAS points equivalent to AS/A Level so you could move on to study for a degree or BTEC Higher National Diploma in, for example, Business Management. You could also go on to an Advanced Level Apprenticeship in related subjects such as Administration or Management. It is also a base for full time employment in many lines of business and can complement many other vocations.

Engineering - Btec Level 3

The BTEC Level 3 Courses in Engineering is designed to give students an understanding of different areas of Engineering.

Students can study either a 4 unit course (National Extended Certificate), equivalent to 1 A level) in Engineering.

Entrance requirements

Students who wish to study Engineering must have aquired a minimum of 5 GCSEs or equivalent at4-9, including English Language and Mathematics (6 Grade).

Engineering - Btec Level 3

How the course is taught

The course will be completed through a variety of approaches including:
Taught lessons, Practical and Coursework. You will be expected to work independently in lessons to ensure the work is your own and also work in teams as required.

Most of the necessary books are provided but students are expected to do their own research and must use all available sources of information e.g. the professionals – engineering industries, local businesses and neighborhood engineers.

Areas covered by the course

The 4 unit course is made up of 3 Mandatory units and 1 optional. 2 of the Mandatory units are externally assessed.

Unit 1 – All courses – Externally assessed
Engineering Principles (Double Unit)

Unit 2 – All courses – Internally assessed
Delivery of Engineering Processes Safety as a team

Unit 3 – All courses – Externally assessed
Engineering Product Design and Manufacture (Double Unit)

Optional Units – Internally assessed

Unit 9 – Work Experience in the Engineering Sector

How the course is assessed

Assessment is carried out through both externally and internally assessed assignments/exams. All internally set units are assessed through coursework and practical activities whichis spread throughout the 2 years of the course.

Career opportunities

University or employment within the engineering sector. There are many sectors of Engineering in which you can Progress including Automotive, Marine, Chemical, Mechanical, Electrical and Electronic.

The majority of Engineers who graduate from University can earn starting salaries in excess of £30,000.

English Language GCSE

English Language is offered as a re-sit to Sixth Form students.

Students have the opportunity to identify which areas of study they need to improve and to practice examination techniques.

Time is limited and students need to be prepared to be committed to the course, to work independently and to work within a tight time schedule.

Entrance requirements

Any student who has not yet achieved a GCSE Grade4 is eligible to enter. Students aiming for a Grade 4 or 5 will be entered for the 'Foundation tier'.

Any students wanting to improve their GCSE grade can resit in November or June.

English Language GCSE

How the course is assessed

The exam board is AQA

Examination: 100%

Career opportunities

All Higher Education courses and many careers, require GCSE in English at Grade 4/5 or above.

Maths GCSE

For students who have not yet achieved a grade 4 at GCSE, we offer a ‘re-sit’ course. There are a number of possibilities.

For students who may have been close to a grade 4, a November re-sit gives a chance to quickly upgrade.

For others, a year’s course, with an exam in June may be more appropriate.

Entrance requirements

Any student who has not yet achieved a GCSE Grade4 is eligible to enter. Students aiming for a Grade 4 or 5 will be entered for the ‘Foundation tier’.

Any students wanting to improve their GCSE grade can resit in November or June.

Maths GCSE

How the course is taught

The exam board is AQA

3 examination papers:

Paper 1
Non calculator paper; 1hour 30 mins

Papers 2 and 3
Calculator papers, both 1hour 30mins

Additional information

If you do not have a 4or above in GCSE Maths it is essential that you continue to re sit until you have achieved at this level. It is important that you attend all re –sit lessons and work independently and complete all homework if you are to make the vital improvement to your grade.

Career opportunities

Most higher education courses, and many careers, require GCSE in Maths at 4 or above.

Contemporary Studies

Whilst in the Sixth Form most students follow the Contemporary Studies course throughout years 12 and 13. This course provides students with the opportunity to consider a broad range of religious, philosophical, sociological and ethical issues to develop their own view-points and ideas.

This flexible programme promotes the development of key skills and caters for a variety of individual gifts and talents.

This course is something which Byron is uniquely able to offer alongside other subject choices and is a great opportunity to enhance your university or career application.

Entrance requirements
This is a fully inclusive course.

Contemporary Studies

How the course is taught

1 period per week in year 12 and 1 period per week in year 13. There are no formal exams or course work for contemporary studies.

Areas covered by the course

Year 12:

Improving Own Learning and Performance Presentation based upon research into the life of the Amish community.

Working with Others
Group activity e.g. raising money for charity

Year 13:

- Attitudes to religious dress in today's society.
- Comparing the attitudes of 3 different world religions to a moral issue e.g. abortion.
- Different Christian attitudes to modern warfare.

How the course is assessed

Year 12:

A portfolio of evidence including a review of learning for each key skill

Year 13:

3 written assessments, learning logs and discussion

Career opportunities

Both courses are recognized Level 3 qualifications. Year 12 key skills are recognized and valued by both employers and universities. Some of the issues in year 13 prepare you for life in contemporary society and certainly enhance your debating skills.

Art And Design – A Level

The GCE A level Art and Design course provides our students with the opportunities to develop personal responses to ideas, observations, experiences, environments and cultures in practical, critical and contextual forms.

Students will be introduced to a variety of experiences employing a range of media, processes and techniques appropriate to the chosen area of study.

Practical skills underpin all aspects of the subject and the ability to make critical judgements is considered to be a vitally important part of the course.

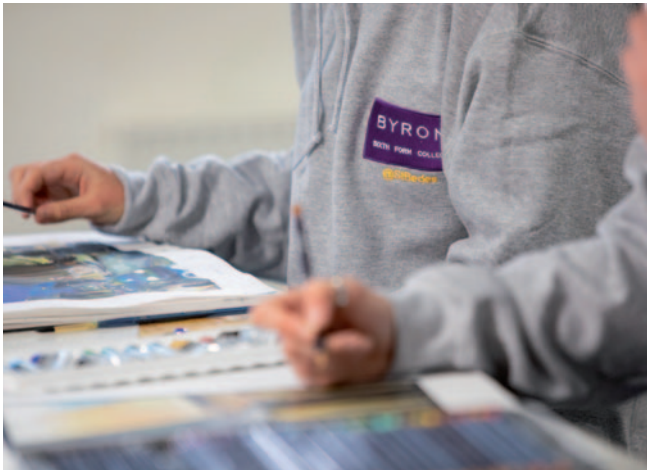
Entrance requirements

Students who wish to study Art must have acquired a minimum of 5 GCSEs or equivalent at 4-9 , including English Language and Maths. Students who choose to study Art have usually studied Art gaining at least a 5 grade at GCSE, but we will consider others who can demonstrate a keen interest in and aptitude for the subject.

Art And Design – A Level

How the course is taught

Students will be introduced to new and familiar media and techniques which are used as a vehicle to express their personal ideas and images. Contextual studies and research skills are an integral part of the program.



Areas covered by the course

The first year of the course program is designed to develop the student's knowledge and application of their visual language. They will experience a range of techniques and develop work based upon different themes. These include fine art drawing, painting, mixed media and graphic communication. The second year of the course is about personal development as a visual artist.

How the course is assessed

The course of will be marked internally by the subject teachers and then moderated externally by a visiting Moderator.

Career opportunities

Of those students who have studied Art and Design in the past, many have progressed to higher education and now have flourishing careers in Graphic Design, Illustration, Fashion Design, Photography, 3D Design, Fine Art painting and Teaching. Some students have enjoyed European and indeed world-wide travel as a reward for their success in this subject.

OxNet

OxNet is an “unashamedly academic” year 12 education programme run and administered by Pembroke College, Oxford with the intention of widening participation in elite universities.

Its sole purpose is to help more students from state schools gain access to Oxford, Cambridge and Russell Group Universities i.e. institutions which are highly prestigious and for which there is intense competition for places.

To be accepted onto the course, students have to make an application the most important part of which is a two page essay on a subject which requires Originality of Thought and Intellectual Curiosity.

OxNet

OxNet Options

1. The Ordered Universe – the unique multi-disciplinary research project which has as its centre-piece the life and works of English Scientist and Natural Philosopher Robert Grosseteste (1170 – 1253).

2. STEM – "Data Experiments and University Science". The main thrust of this option is "solving real world problems" with the emphasis on defining "the real world" and then attributing which problems most affect it before any meaningful solutions can be attempted.

3. Modern Languages is open to applicants who are studying French, German or Spanish in Sixth Form and has as its focus Identity, Politics, History, Gender, Literature and Colonialism.

4. Humanities and Social Sciences – 'Thinkers and Cultures" featuring threads from the academic disciplines of Literature, History, Politics, Economics and Philosophy

5. Philosophy and World Religions – "How to Change the World with Words". The focus here is: Religious Conversion, Conspiracy Theories, Political Rhetoric and Political Ideas.

How the course is taught

The tutorial programme begins in September and ends in November of Year 12. Successful students will be notified in January and are entitled to call themselves "Oxnet Scholars". The Oxnet course requires its scholars to:

- Attend SIX seminars with staff from the Universities of Oxford, Durham, York, Manchester and Lancaster.

- Attend an Academic Study Day at Durham University (or an online study day at Pembroke College, Oxford) where the students will be attend lectures given by the world's foremost academics in their fields.

- Attend a Residential Week at Pembroke College, Oxford during the Easter holidays. The Residential/Access Week will feature the world's leading academics who will act as seminar and project-leaders and the focus will be on key and essential skills and knowledge related to the students' options.

Why you should take part in OxNet

The whole is designed to make students feel more confident about applying to Oxbridge or other competitive universities and offers the best possible experience in terms of advice, guidance and education. Though only about 27 – 35% of national applicants will be accepted onto OxNet each year, St. Bede's has an excellent track record of success with 100% of formal applicants being accepted in 2019-20.