



RIPON GRAMMAR SCHOOL



SIXTH FORM COURSE GUIDE 2020

Helping shape the future since 1555



WELCOME FROM THE HEAD OF SIXTH FORM

Sixth Form is undoubtedly the most exciting and dynamic phase of a student's education, as they prepare themselves for the bright futures that await them. The opportunity to study favourite subjects in ever greater depth and sophistication offers students the chance to push beyond their comfort zone, and to become a specialist in a field which may one day become their career.

Students who join the Sixth Form at Ripon Grammar School will enjoy an environment which is both academically stimulating, and extremely welcoming. Our students are curious, proactive and independent thinkers who enjoy challenge, and who aspire highly. They are also wholehearted in their engagement in the very wide range of co-curricular activities and opportunities that they encounter during their time in our Sixth Form, and they are expected to be leaders within our school community from their very first day in the Sixth Form. At the same time, we will help students to understand the huge range of options that are open to them beyond school, and to make the choices that are right for them with the support of our dedicated Careers and pastoral teams.

This subject guide will give you specific details about the courses that we offer in our Sixth Form, and if you would like any further information, or to visit the school, please do not hesitate to contact us.

Mr T Fell
Head of Sixth Form

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INTRODUCTION

To provide our students with the very best opportunities for success, and to help them make the best individual academic choices, we will offer a choice of curriculum pathways in terms of the two year A Level courses that students will undertake. Advice will be available to students at any stage during the process.

Pathway 1:

- Students will start on **3 A Level** subjects, all of which they will study across two years. They will also undertake a 'Plus One' programme alongside these (*see below*).
Should a student find that they wish to switch one of these subjects in the first half term of their courses, they will be allowed to do so provided that there is space in the new subject choice.

Pathway 2:

- Where students wish to, or where they are studying Maths and Further Maths together, they may start on **4 A Level subjects**.
 - Students may do so in the full expectation of taking the **4 subjects** through to completion.
 - Students may do so with the intention of making a decision to **drop one subject** after the first term, and then to undertake the 'Plus One' programme alongside the remaining three.
This allows a degree of flexibility, and retains the chance for students to try a new subject, and make decisions based upon their experience.

All students, whichever pathway they choose, will be able to undertake an EPQ if they wish (see below), and will be expected to complete a **minimum** of three A Levels in addition to any EPQ qualification.

PLUS ONE PROGRAMME

Our 'Plus One' programme to accompany A Level studies is designed to offer a range of enrichment strands to enhance a student's timetable, including:

- AS Mathematics
- co-curricular and leadership opportunities
- super-curricular academic elements such as the EPQ and university online courses (MOOCs)
- a programme of wider reading around subjects.

This programme is a new development and will evolve over the course of the two years - more details will be available throughout the first term.

MAKING YOUR OPTION CHOICES

Consultation regarding option choice combinations will be held with current Fifth Form students and used to construct four 'option blocks'.

Students must choose one A Level subject from each option block if starting on 4 A Level courses,

or

one A Level subject from each of three option blocks and the 'Plus One' programme in the fourth if starting on 3 A Level courses.

OPTION BLOCKS

These option blocks will be finalised by January and published on our website. If problems with your option choices are identified by us, then we will contact you to discuss the situation.

It is advised that if students wish to study both Mathematics and Further Mathematics A Levels, this should be as part of a '4 A Level' programme of study. Similarly if students wish to take Economics and Business Studies A Levels, then it should be as part of a '4 A Level' programme of study. The rationale for this advice is that it is generally inadvisable to have too narrow a range of A Level subjects, as this could restrict option choices at a later stage in education or employment.

Before you make any decisions about which subject courses you wish to take it is important to study the information in this guide carefully and to talk to subject teachers. **Some careers and university degree courses require you to have studied specific subjects in the Sixth Form, so you may need to check these with your Careers Advisor.**

When you have made your decision, you must complete the online Sixth Form Application Form (and Sixth Form Suitability for Boarding form if relevant) and return it to Mrs Griffiths, Sixth Form Co-ordinator, by 3 February 2020.

There will be further information available at the **Sixth Form Open Evening on 20 January 2020** and all information relating to sixth form and boarding can be found on our website. If you have any queries relating to life in the sixth form or the application process, please contact Mrs Griffiths.

Mr T Fell
Head of Sixth Form

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ART

Why choose Art?

Creativity is a quality that enables you to stand out from your peers. Art A Level allows you to explore and develop your creative processes and thoughts. The pupils who have taken the subject at A Level have gone on to study a wide variety of degrees and art has enhanced their chances of success. The subject allows you to:

- explore your intellectual, imaginative, creative and intuitive capabilities;
- investigative, analytical, experimental, practical, technical and expressive skills;
- gain an aesthetic understanding and critical judgement;
- enhance independence of mind in developing, refining and communicating your own ideas, and own intentions and your own personal outcomes;
- develop an interest in, enthusiasm for and enjoyment of art.

Possible careers and courses that link to Art

Everything that is man-made has been designed: from the building you are in to the clothes that you wear to the cars you drive to the programmes you watch, the career opportunities are endless. The range of art and design career opportunities is vast, including: advertising, architecture, computer aided design, interior design, product and industrial design, fine art, graphic design, television, exhibition design, fashion, conservation and restoration, theatre design, education, textile design and museum work.

Course details

Examination board: Edexcel

Syllabus Code: A: 9FA0

Course Content

First year of A level

Coursework is based on the theme Environment

A residential study visit enables students to access and experience the visual elements first hand and are an essential component of the course work. The visits help students to experience how artists have responded to the environment.

The range of concepts, techniques, materials and strategies looked at develop knowledge and understanding beyond GCSE Level. Students utilise a range of strategies based upon the work of credible artists and find their own artistic sensitivities, developing final pieces using personnel themes. We develop work in 2-D, painting, collage, etc. and 3-D sculpture in mixed media and clay.

Second year of A LEVEL

Along with exams and coursework, there is an emphasis on a 3000 word essay running in conjunction with an annotated sketchbook. As art history is an integral component of the course, there is a study visit to Paris to ensure students are supported with this aspect of the syllabus. Students select artists, pieces and imagery personal to them and undertake a structured analysis through a work journal un-wrapping each core visual concept in terms of studies analysis and interpretation. Students carry out visual research relating to their own emerging theme based on art seen in the city, from Impressionism, Modernism, Abstraction and Cubism.

Method of Assessment

A Level: 60% course work 40% exam

Overview of assessment

A Level

Coursework is internally set, assessed by the teacher and externally moderated. This component allows students opportunities to generate and develop ideas, research primary and contextual sources, record practical and written observations, experiment with media and processes, and refine ideas towards producing personal resolved outcome(s). Students are required to address each of the Assessment Objectives which incorporate three major elements: supporting studies, practical work, and a personal study. Supporting studies and practical work will comprise a portfolio of development work and outcomes based on themes and ideas developed from personal starting points.

The personal study will be evidenced through critical written communication showing contextual research and understanding in a 3000 words of continuous prose, which may contain integrated images. The personal study comprises 12% of the total qualification and is marked out of 18.

Exams incorporate two major elements: preparatory studies and the 12-hour period of sustained focus. Preparatory studies will comprise a portfolio of practical and written development work based on the Externally Set Assignment. During the 12-hour period of sustained focus under examination conditions, students will produce final outcome(s) extending from their preparatory studies in response to the Externally Set Assignment.

The Externally Set Assignment is released on 1 February and contains a theme and suggested starting points. Students have from 1 February until the commencement of the final 12-hour period of sustained focus to develop preparatory studies. The 12-hour period of sustained focus under examination conditions may take place over multiple sessions (a maximum of five, within three consecutive weeks)

Student perspective

“Exercise your creative side as well as your academic, by taking this challenging and exciting course. You’ll develop ideas, try new techniques and enjoy the experience”

Further information

<http://www.edexcel.org.uk/home/>

http://www.brainyquote.com/quotes/topics/topic_art.html

<http://www.bbc.co.uk/timelines/zp7bgk7>

<http://www.tate.org.uk/whats-on>

http://www.theartstory.org/section_movements_timeline.htm

BIOLOGY

Why choose Biology?

Biology is the scientific study of life. It involves the investigation of living organisms and life processes from the molecular, through cells and individual organisms to populations and whole communities of animals and plants.

Possible careers and courses that link to Biology

Many students who choose Biology enjoy the subject so much they eventually choose a biologically related degree course, including medicine, dentistry and veterinary science. Others go on to careers in law, computing, accounting or teaching. It is a rewarding and challenging course, which develops many of skills essential for a successful and potential very diverse career.

Course details

Examination board: OCR

Syllabus Code: A: H420

Course Content

- | | | |
|---|--|--|
| 1 | Development of practical skills in biology | 1.1 Practical skills assessed in a written examination
1.2 Practical skills assessed in the practical endorsement |
| 2 | Foundations in biology | 2.1.1 Cell structure
2.1.2 Biological molecules
2.1.3 Nucleotides and nucleic acids
2.1.4 Enzymes
2.1.5 Biological membranes
2.1.6 Cell division, cell diversity and cellular organisation |
| 3 | Exchange and transport | 3.1.1 Exchange surfaces
3.1.2 Transport in animals
3.1.3 Transport in plants |
| 4 | Biodiversity, evolution and disease | 4.1.1 Communicable diseases, disease prevention and the immune system
4.2.1 Biodiversity
4.2.2 Classification and evolution |
| 5 | Communication, homeostasis and energy | 5.1.1 Communication and homeostasis
5.1.2 Excretion as an example of homeostatic control
5.1.3 Neuronal communication
5.1.4 Hormonal communication
5.1.5 Plant and animal responses
5.2.1 Photosynthesis
5.2.2 Respiration |
| 6 | Genetics, evolution and ecosystems | 6.1.1 Cellular control
6.1.2 Patterns of inheritance
6.1.3 Manipulating genomes
6.2.1 Cloning and biotechnology
6.3.1 Ecosystems
6.3.2 Populations and sustainability. |

Method of Assessment

All three externally assessed components (01–03) contain some synoptic assessment, some extended response questions and some stretch and challenge questions.

Paper 1:

This component is worth 100 marks, is split into two sections and assesses content from teaching modules 1, 2, 3 and 5. Learners answer all the questions.

Section A contains multiple choice questions. This section of the paper is worth 15 marks.

Section B includes short answer question styles (structured questions, problem solving, calculations, practical) and extended response questions. This section of the paper is worth 85 marks.

Paper 2:

This component is worth 100 marks, is split into two sections and assesses content from teaching modules 1, 2, 4 and 6. Learners answer all the questions.

Section A contains multiple choice questions. This section of the paper is worth 15 marks.

Section B includes short answer question styles (structured questions, problem solving, calculations, practical) and extended response questions. This section of the paper is worth 85 marks.

Paper 3:

This component assesses content from across all teaching modules 1 to 6.

Learners answer all the questions. This component is worth 70 marks. Question styles include short answer (structured questions, problem solving, calculations, practical) and extended response questions.

Student perspective

“As an aspiring medic, A Level Biology has developed my research and problem-solving skills whilst also furthering my knowledge of human systems. The course has been interesting and challenging and I have thoroughly enjoyed it.”

“Studying Biology has given me an insight into the fundamental aspects of human life. The topics are interesting and lessons are engaged.”

“The wide range of topics covered in Biology has helped me narrow down which topics I particularly enjoy and want to study at university. It gives you such a broad range of knowledge but also lets you study topics in detail.”

Recommended reading/references/useful links

A wider reading list will be provided at the start of the course. A good place to start is reading journals such as Scientific American and Nature, or the works of Nick Lane and Steve Jones. Good libraries have a wealth of titles.

BUSINESS

Why choose Business?

Business is about understanding how businesses are structured and how they make successful decisions in a changing business environment. All of us are affected by the decisions businesses make and in this course we learn about many aspects of business and business decision-making including how important it is to: control costs and maximise sales; employ the right people; make excellent products; ensure we know our markets and make our customers aware of our products.

From the beginning of a business start-up, to the challenges faced by large multinational corporations, this course is applied to the real world today and the products we buy.

Possible careers and courses that link to Business

Business graduates normally do well in the jobs market. Many go into graduate schemes focused on management. It is quite common for business graduates to go into jobs such as accountancy, marketing / public relations, management consultancy, human resource management and production management.

Course details

Examination board: AQA

Syllabus Code: A: 7132

Course Content

The AS and A Level courses require students to study:

- Business in a variety of contexts (e.g. large/small, UK focused/global, service/manufacturing)
- The importance of the context of business in relation to decision making
- The competitive environment and the markets in which businesses operate
- The influences on functional decisions and plans including ethical and environmental issues
- Factors that determine whether a decision is successful e.g. data quality / the degree of uncertainty
- How technology is changing the way decisions are made and how businesses compete
- Non-quantitative and quantitative data in decision making (including the interpretation of index numbers and calculations such as ratios and percentages)
- Strategic decision making (A Level only)

Students will study:

- The impact of technology on strategic decision making
- Corporate Social Responsibility, ethical and environmental issues on strategic decisions
- Difficulties in forecasting future trends
- The importance of assessing feasibility and risk when making strategic decisions
- The impact on stakeholders of strategic decisions and their response to such decisions

Method of Assessment

Assessment in AS and A Level Business includes questions that allow students to demonstrate their ability to draw together knowledge, skills and understanding from across the full course of study and provide extended responses. AS and A Level units are examined in the summer

A Level

For A Level there are three written papers worth 100 marks each. All three papers are equally weighted.

Paper 1 has three compulsory sections:

- Section A: 15 multiple choice questions (MCQs) worth 15 marks.
- Section B: short answer questions worth 35 marks.
- Section C: two essay questions (choice of one from two and one from two) each 25 marks.

Paper 2 has three data response compulsory questions worth approximately 33 marks each made up of three or four part questions (some short and some long answer).

Paper 3: one compulsory case study and approximately six long answer questions.

Student perspective

“It is a subject which will help me in whatever I do when I leave school.”

“Business is a good subject for someone who likes to deal with real situations.”

Recommended reading/references/useful links

AQA A Level Business (textbook)

<http://www.aqa.org.uk/subjects>

www.graduate-jobs.com/degree/business

CHEMISTRY

Why choose Chemistry?

Chemistry is at the heart of life. All life processes such as respiration and digestion involve chemical reactions. Most substances that we depend on, such as plastics, alloys, detergents, clothing fibres, solvents, medicines, fertilisers, explosives, etc. have been developed by chemists. Many students find that Chemistry becomes even more fascinating and fulfilling as they study it at A Level.

The main reasons for choosing Chemistry are enjoyment of the subject and the ability to do it. However, Chemistry is also a very highly respected subject with university admission tutors and employers. The subject brings together a wide range of skills in a unique way, including for example problem-solving, practical, theoretical, conceptual and mathematical skills.

Many students take Chemistry as their one and only science and are very successful indeed. However, with Chemistry being the central science, many students take Chemistry alongside Biology and/or Physics. Many also study some Mathematics, which is helpful but by no means essential.

We run a 6th Form Chemical Society designed to go beyond and take Chemistry deeper. This looks at fascinating areas of everyday Chemistry such as how non-stick Tefal sticks to a frying pan, how self-cleaning glass works, what causes fluorescence, etc.

Possible careers and courses that link to Chemistry

Chemistry is an essential entry requirement for some courses, including medicine, veterinary science, dentistry, life sciences, pharmacy, environmental sciences, chemical engineering and food science. Many of our students also go on to study Chemistry and related courses at university.

However, a qualification in Chemistry is one of the most valuable around, opening many doors due to the skills it develops. Many of our students use these skills to help entry to a wide range of course in areas such as law, the humanities, languages, computing, business and management, maths, etc.

Course details

Examination Board: AQA

Syllabus Code: 7405

Course content

There are three main areas:

- | | |
|----------------------------|---|
| <i>Physical chemistry</i> | this is the study of the underlying principles and concepts (e.g. structure & bonding, amount of substance, redox) |
| <i>Organic chemistry</i> | this is the study of compounds containing carbon (e.g. alkanes, alkenes, alcohols) |
| <i>Inorganic chemistry</i> | this is the study of other substances and is focused around the Periodic Table (e.g. group 2, group 7, transition metals) |

Chemistry is a practical subject and the RGS course contains much practical work. Students usually work individually and we teach you a wide range of skills. We cover the core practicals but do much more practical work in addition. This is to ensure you are well trained as a practical chemist and to prepare you for the significant amount of questions on practical work in the written exams.

Method of Assessment

A level: There are three examinations with a mixture of multiple choice, short and long answer questions.

Practical endorsement: Teachers assess your ability carry out, analyse and evaluate practicals while you do them. This leads to the practical endorsement, which is graded as pass/fail.

Student perspective

“Chemistry is a challenging and rewarding subject. The practicals bring the topic to life. If you found the GCSE course interesting then you will find the A Level course even more so.”

Recommended reading/references/useful links

www.chemguide.co.uk

<http://www.rsc.org/learn-chemistry>

CLASSICAL CIVILISATION

Why choose Classical Civilisation?

We study the civilisation, history, culture and mythology of ancient Greece and Rome. On this course, we cover a fascinating range of sources from the great epics of Virgil and Homer to the tragic plays of Euripides, Sophocles and the comedies of Aristophanes or the wonderful sculptures of such artists as Polykleitos and Praxiteles. To complete our studies we will study Classical views on love and relationships. If you enjoy challenging but stimulating discussion, reading and writing, then this is an ideal subject.

Possible careers and courses that link to Classical Civilisation

Classical Civilisation A Level is obviously highly valued by Classics Departments at university but also by a range of other departments such as Drama, English, History, History of Art, Philosophy and Politics. Classical Civilisation is listed by several major universities, such as UCL as a preferred A Level subject or on the list of generally suitable arts subjects at Trinity College Cambridge. It is also listed as a suitable subject for those studying Classical subjects and Philosophy at Russell Group universities. Students who studied A Level Classics go on to study a very diverse list of subjects such as medicine, veterinary science and even Chemistry. In terms of employment the highly useful skills of being able to write a well-structured extended response, to appreciate the views of others and cultural sensitivity, as well as the ability to think creatively and to clearly articulate those ideas, is highly valued by many employers.

Course details

Examination Board OCR

Syllabus Code: A: H408

Course content

Year 12

Unit 1 The World of the Hero (H408/11)

This is an in-depth study of Homer's *Odyssey*, one of the first great works of literature. This Epic poem tells of the homeward journey of Odysseus from the Trojan War and the adventures and challenges he faces in returning home.

This is a component focused solely on literature in translation.

Unit 2 Culture and the Arts

We will study either Greek Theatre (H408/21) or Greek Art (H408/24)

Greek Theatre. This is a component that will involve the study of visual and material culture combined with the study of literature. In this course, we will study Sophocles' *Oedipus the King*, Euripides' *Bacchae* and Aristophanes' *Frogs*. We will also study the buildings and festivals at which these plays were performed and how they were performed.

Greek Art. In this course, we will study the development of freestanding and architectural sculpture and vase painting in ancient Greece. This is a course based entirely on visual sources and includes some of the most famous works of Greek art.

Year 13

Unit 1 The World of the Hero (H408/11)

This is an in-depth study of Homer's *Odyssey* and Virgil's *Aeneid*. This course will compare the *Odyssey* with its Roman counterpart. The *Aeneid* is the story of Aeneas and his destiny to escape Troy and found the Roman race.

This is a component focused solely on literature in translation

Unit 3 Beliefs and Ideas (H408/32)

We will study the topic of Love and Relationships in the Classical World.

This is a component, which involves the study of an area of Classical thought in combination with either the study of literature in translation or visual/material culture.

Method of Assessment

Two written exams of 1 hour and 45 minutes and 1 written exam of 2 hours and 20 minutes.

Student perspective

"Despite not taking Classics at GCSE I achieved an A at A Level. This is all due to the Classics Department and their enthusiasm and commitment to helping students. In depth discussion and encouraged participation make lessons easy to engage with. Personally, I have found the course incredibly interesting and the wide variety of content means there is something for everyone." Helen A Level student

"The best lesson of the week" Lucy A Level student

'Classics is fun as well as being an interesting and rewarding subject.' Anna A Level student

DESIGN TECHNOLOGY – PRODUCT DESIGN

Why choose Design Technology?

Almost everything we use has been designed, developed and manufactured: the transport we choose, the clothes we wear, the technology we use, and the furniture we select, has all been designed by someone, somewhere. Product Design will continue your journey from GCSE Design Technology towards enhanced and sophisticated products at A Level.

You will have a creative or technical side and enjoy practical tasks with a variety of materials; you will enjoy challenging accepted norms, and have a desire to improve products with which you interact. You might be a 'button presser' or just enjoy 'nice things' or question why things are the way they are.

Possible careers and courses that link to Design Technology

Product design can lead to many career paths such as: Engineering, Architecture, Design, Fashion, Graphic Design, Product Design, Industrial Design, Automotive Design, Aeronautic Design and Interior Design. Product Design prepares you with transferable skills of work ethic, ability to work independently, problem solving, research skills, evaluations methods, communication skills, practical ability, and health and safety awareness.

Course details

Examination board: AQA - DT: Product Design

Syllabus Code: A: 7552

Course Content

During the Lower 6th year we will undertake a variety of mini projects. These projects will be selected to be suitable to the candidates who has elected to undertake the course. Projects might include furniture design, CAD / CAM, technical, client-centered, anthropometrics, materials, graphics etc. This year will be the opportunity for all students to explore the subject area and improve their design and making abilities. We will deliver the theory mainly through project work throughout the year. Students will be encouraged to 'open their eyes' to the world around and to start to appreciate more fully the impact design has on society and our lives.

A Level

Paper 1

Core technical principles and core designing and making principles. 30% of A Level.
Mixture of short answers and extended response

Materials and applications

Design communication

Efficient use of materials

Feasibility studies

Intellectual property

Design theory

Tools techniques and processes

Project management

Requirements of product design

Digital design and manufacture

Health and safety

Manufacture, maintenance and repair

Enterprise and marketing

Design processes

Accuracy

Design for manufacture

Paper 2

Specialist knowledge, technical, and designing and making principles. 20% of A Level

Short answers based on visual stimulus

Mixture of short answers and extended response

Material characteristics

Adhesives

Forming processes

Material properties

Finishing techniques

Industrial / commercial processes

Non-Examined Assessment (NEA), 45 Hours, 50% of A Level.

Practical application of technical principles, designing and making principles and specialist knowledge

A – Paper 1	2.5 hour written paper - 30% of A Level
A – Paper 2	1.5 hour written paper 20% of A Level
A - NEA	Controlled assessment – 50% of A Level

Student perspective

"I have found Design Technology constantly engaging due to the wide range of materials, techniques and products used and made, throughout the school"

"I like how you can tailor a project to show your own skills"

"I like the atmosphere of DT; it is a very independent and varied subject."

"I have found design technology constantly engaging due to the wide range of materials, techniques and products used and made throughout the school. My favourite part of DT is the relaxed atmosphere and the encouragement of independent learning."

"I like how you can tailor a project to show your own skills."

"Knowledgeable and fun teachers make the DT experience very enjoyable."

Recommended reading/references/useful links

Grand Designs (Channel 4 on demand)

The Design of Everyday things

Emotional Design

100 things every Designer needs to know

TED Talks

YouTube: - Think like a designer

Technologystudent.com

Open your eyes and 'look'

ECONOMICS

Why choose Economics?

Although the course requires no previous knowledge, Economics is recognised as a challenging A-Level. Students should follow economic developments and think critically about contemporary economic issues. Economics will help you to understand current affairs relating to the economy and some of the forces that act upon us all as consumers, producers and citizens. It will enable you to offer informed comment on economic problems and government economic policies.

The course will provide you with a good knowledge of developments in the UK economy and government policies over the past 25 years. Students will develop the knowledge and skills needed to understand and analyse data, think critically about issues and make informed decisions.

Students will also develop their quantitative skills and appreciate that, when evaluating arguments, both qualitative and quantitative evidence are important. The course places emphasis on analysing problems and alternative solutions, rather than merely describing them. Our approach to Economics is to apply economic theory to support the analysis of current economic problems. Questions we deal with include:

- Why is the financial sector so important to the UK economy? What causes financial crises?
- Is Microsoft a monopoly, and if so, how does this affect us?
- What are the economic consequences of Brexit?
- Why is the Bank of England so worried about inflation and deflation?
- What is the best way to tackle the budget deficit? Will this lead to higher taxes and less government spending?
- How can economics help us explain why pollution occurs and what we can do about it?

Possible careers and courses that link to Economics

Economics graduates normally do well in the jobs market. Many economic graduates go into banking and finance. It is quite common for economics graduates to go into jobs such as accountancy, actuarial science, and management consultancy.

Nine of the top ten occupations held by economics graduates employed in the UK are business, finance or HR professions, with more than 500 graduates in the top occupation of finance and investment analyst/adviser. However, many economics graduates work in the civil service or as economists for the Bank of England, news agencies or organisations in the non-profit sectors.

Course details

Examination board: AQA

Syllabus Code: A: 7136

Course Content

Year two builds on the knowledge and skills learned in Year one.

The operation of markets, market failure and the national and international economy are the main themes.

Topics include:

- Price determination in a competitive market and concentrated markets
- The market mechanism, market failure and government intervention in markets
- How the macro economy works : the circular flow of income and AD/AS analysis
- Macroeconomic policy: including economic growth; inflation and international trade
- The measurement of macroeconomic performance and the international economy
- Financial markets and monetary policy. Fiscal policy and supply-side policies
- Perfect competition, imperfectly competitive markets and monopoly
- The labour market and the distribution of income and wealth: poverty and inequality

Method of Assessment

A Level: Three two-hour papers: all equally weighted. No coursework.

External examination – three written papers

Paper 1: Markets and Market Failure

Paper 2: The National and International Economy

Paper 3: Economic principles and Issues

Student perspective

“Hard work, but fun and interesting.”

“Doing economics has allowed me to get into the university of my choice.”

Recommended reading/references/useful links

AQA A Level Economics (textbook)

www.aqa.org.uk/subjects

<http://www.bankofengland.co.uk/Pages/home.aspx>

www.graduate-jobs.com/degree/economics

ENGLISH LITERATURE

Why choose English Literature?

English Literature is a rich and varied subject which will allow students to develop a set of extremely valuable and highly transferrable skills while studying a range of challenging, enjoyable texts that will give them a better understanding of themselves, the world and their place in it. The texts themselves draw upon a range of genres and time periods, are all of canonical value and include the best of both English and American literature (including the plays of Tennessee Williams and novels such as Margaret Atwood's *The Handmaid's Tale*.)

A Level English classes are dominated by discussion and debate and this helps to develop students' confidence and their communication skills. Teachers will share their own specialist knowledge and insight into texts, but they will also expect students to be ready to explore their own creative interpretations and ideas. This is a subject where we aim to develop independent thinkers and where the voice of each individual student is important. As well as these vital qualities of independence, creativity and intellectual confidence, the subject will also develop some key transferrable skills, such as the skills of analysis, close reading, debate, research and of course the ability to write a finely structured, nuanced literary essay.

Possible careers and courses that link to English Literature

English Literature is a highly respected course, perhaps because of the wide range of high-level skills it helps to develop, but also because of the level of emotional and intellectual maturity, it helps to develop. As such, a good grade in English Literature can open many doors with both employers and university admissions tutors. Courses and careers in law, publishing, journalism, the media, education, advertising, marketing and public relations are popular options, but in truth, English graduates can be found in more or less every industry. Careers in the civil service, finance and business would also be career routes where an English degree would be of great value.

Course details

Examination Board: AQA

Syllabus Code: A: 7712

Course content

At the start of the course, students embark on a crash course in literary criticism as they are introduced to different modes of reading literary texts, including Marxist, feminist and psychoanalytical approaches. In exploring these different critical theories, students will encounter a range of texts that will stretch their experience beyond the confines of the list of set texts while developing some of the fundamental skills that will underpin much of their work in the coming two years. Throughout the course, students will regularly engage with a range of supplementary literary texts that will help revise these skills and prepare students for the unseen analysis required in the final examinations.

Three of the set texts will be studied in the first year of the course; including the Shakespearean drama for the Love through the Ages paper, (usually this is Shakespeare's battle of the sexes *The Taming of the Shrew*). Students also study two texts from the Modern Times paper: Margaret Atwood's *The Handmaid's Tale* and Owen Sheers' 2005 collection of verse *Skirrid Hill*. All of these texts are studied against the wider social, cultural, political and literary history in which they were produced and are received: for the Modern Times paper, this means reflecting on the rapid social, cultural and political changes which have shaped the modern world since the end of the Second World War.

Towards the end of the first year, students begin to work on their Non-Examined Assessment (coursework) essay. Students must write a 2500 word essay on two texts, one of which must have been written before 1900. Students are given support and guidance and detailed reading lists, but they are encouraged to embrace the freedom and independence this element of the course affords. This is the part of the course where the students can select the texts they wish to study and the precise focus of their essays. The reading and research for the NEA continues over the summer so that students can return in the U6th ready to draft and complete their final essays in the autumn term.

As well as seeing students complete their NEA essays, the second year of the course also sees them engage with some of the more challenging set texts, including Bronte's *Wuthering Heights* and the AQA anthology of Post-1900 Love Poetry (both studied for the Love Through the Ages course), as well as Tennessee Williams' *A Streetcar Named Desire* (the final text on the Modern Times paper).

In the final stages of the course, all of the set texts are thoroughly revised and there is a concerted effort on the exam skills and technique required to ensure students' success in the summer.

Method of Assessment

Paper 1 – Love through the ages (40% of A Level course, 3 hours, open book in section C)

Paper 2 – Modern Times (40% of A Level course, 2½ hours, open book)

Non-Examined Assessment (20% of A Level course, 2500 word comparative essay)

Student perspective

'It develops skills that will be important throughout life.'

'It has remained interesting and exciting throughout A Level.'

'It really is so much fun. Everyone always gets really involved in all the discussions.'

Recommended reading/references/useful links

Apart from reading some of the set texts listed above, students would be well served to read more widely around the key thematic areas upon which the course focuses upon: 'Love through the Ages' and 'Modern Times'.

FRENCH

Why choose French?

French is not just one of the world's top ten most spoken languages; it is the language of our closest neighbours and one of the official languages of organisations such as the UN and EU. The French A Level course equips students to communicate at a high Level with native speakers, not only day-to-day matters, but regarding issues such as social justice, the environment, democracy, and francophone music. An exciting element of the new curriculum is the chance to study a French film during the Lower Sixth and a literary text during the Upper Sixth.

Possible careers and courses that link to French

A Level French is very well-regarded by universities, even for students going on to study non-linguistic courses, due to the range of disciplines entailed. The ability to teach French is also valued highly by primary schools, while the UK's secondary schools face a potential shortage of language teachers in the future. A knowledge of French can open doors in the world of business and politics like almost no other language can. For this reason, graduates who have language skills stand a higher chance of getting jobs than those without.

Course details

Examination board: AQA

Syllabus Code: 7652

Course content

The course, updated in 2016, involves language learning alongside topic areas that are thoroughly relevant and are specific to French-speaking societies around the world, particularly France. In the Lower Sixth, students focus on topics such as the changing nature of family, technology and work, while also looking in detail at cultural issues such as heritage, francophone music and cinema. In the Upper Sixth, students address highly topical and sometimes, controversial issues: cultural diversity, marginalisation, justice, democracy, politics and immigration; an enthusiasm for current affairs and debate is useful. Alongside these topics, students study a film in the Lower Sixth and a novel in the Upper Sixth. Recently, we have studied the films *La Haine* and *Un long dimanche de fiançailles*. The novels studied in recent years have included *L'Étranger*, by Albert Camus, *Bonjour Tristesse*, by Françoise Sagan, and Delphine de Vigan's *No et Moi*.

Method of Assessment

Paper 1. 40% of A Level

Listening

Reading

Translation into English

Translation into target language (with a short accompanying passage on the same topic area to provide support)

Paper 2. 30% of A Level

2 essays – one on a film and one on a text, or two on a texts
Requirement to answer both analytically and critically
Grammar is assessed

Paper 3 is a speaking exam. 30% of A Level

Exam starts with student receiving stimulus card relating to one of the four subthemes studied. Only five minutes preparation allowed on this
Discussion of the issue on the stimulus card
Student speaks on individual research project (must not be the same as the studied text/ film)

Student perspective

“...more demanding than GCSE... a lot more focus on French culture and literature, which is very interesting.”

“The French exchange is a great opportunity to improve French skills”

“We found the teaching very enthusiastic.”

Recommended reading/references/useful links

<http://www.aqa.org.uk/subjects/languages/as-and-a-level>

FURTHER MATHEMATICS

Why choose Further Mathematics?

Further Mathematics is for those students who have a natural affinity and love for mathematics. The course broadens students' exposure to a variety of areas of mathematics by introducing new concepts as diverse as complex numbers and decision mathematics. The course encourages students to apply new methods and techniques in a range of different contexts and, as a result, they will broaden their mathematical experience.

Possible careers and courses that link to Further Mathematics

Further Mathematics is useful for students who plan to study Mathematics, or another subject with high mathematical content (including engineering and computer science), at one of the best universities.

Course details

Examination board: OCR

Syllabus Code: AS: H235

A: H245

Course content

AS LEVEL

Students cover the following modules:

Pure – roots of polynomial equations, complex numbers and matrices, vectors.

Statistics – permutations and combinations, probability distribution, chi-squared tests, correlation, linear regression.

Mechanics – dimension analysis, work/energy/power/momentum, centre of mass.

A Level

Students study:

Pure – polar co-ordinates, hyperbolic functions, differentiation, volume of revolution, summation of series, modelling, integration, differential equations, vectors, complex numbers.

Mechanics – motion in a circle, further dynamics and kinetics, rigid bodies

Statistics – continuous random variables, linear combinations of random variables, hypothesis testing and confidence intervals

Method of Assessment

AS Level: Three exam papers, 1hr 15min each

A Level: Four exam papers, 1hr 30min each

N.B. There is no coursework.

Student perspective

“It doesn’t feel like you have too much maths in the week! All the lessons are very different and require different skills.”

“Further maths makes normal maths far easier in comparison and the maths skills learnt in further maths are so broad that they can be applied in many subjects.”

“I would recommend anyone who truly enjoys learning and especially taking and enjoying the sciences to seriously consider doing further maths.”

Further information

The SharePoint page for current students includes a link to a reading list (click on ‘Reading List’ at the top of the maths homepage) where a full and up-to-date list can be found.

In addition, interesting books to read include:

1089 and All That: A Journey into Mathematics - David Acheson

Fermat's Last Theorem - Simon Singh

Any book by Ian Stewart.

GEOGRAPHY

Why choose Geography?

Geography is all about exploring the dynamic and changing world around us. It gives students the opportunity to learn about diverse landscape, understand threats to these environments and try to find solutions to manage global issues.

Possible careers and courses that link to Geography

Cartographer	Transport planner
Commercial/residential surveyor	Tourism officer
Environmental consultant	Nature conservation officer
Geographical information systems officer	Market researcher
Planning and development surveyor	Logistics and distribution manager
Secondary school teacher	Landscape architect
Town planner	International aid/development worker

Course details

Examination Board Edexcel

Syllabus Code: A: 9GEO

Course content

A Level: Over the two-year period, students will explore and study four different units of study; two physical and human topics. In the first year the content includes; Globalisation, Regenerating Places, Coastal Landscapes and Change and Tectonic Processes and Hazards. In the second year, the additional topics covered are the water cycle and the causes and consequences of water insecurity. The carbon cycle and energy insecurity are also covered in preparation for the Physical Paper 1. Superpowers and global development and connections are investigated for Human Paper 2 along with the topic of migration, identify and sovereignty.

The course covers contemporary issues and Paper 3 focuses on actions and futures in connection to a core unit of study from either the AS or A Level course. An information booklet is provided in the examination as stimulus material for analysis and interpretation.

Coursework: The A Level course requires students to produce an independent investigation based around the four fieldwork days on offer to students across the two years of study. Students will be supported to come up with a research title and then will complete this element independently.

Method of Assessment

A Level: 80% examination including a mixture of short and long questions ranging from multiple choice to 18 marks plus the extended independent investigation (20%). Three written papers.

Coursework - Non- Examined Assessment (NEA) worth 20% of the final grade.

Four days of fieldwork are carried out over the two years, 2 days in the first year and 2 days in the second year in contrasting environments.

Student perspective

- “I thoroughly enjoy geography and I love learning about the diversity of life on our planet.”
- “A level geography has much more detail and you investigate more scientific areas in physical geography than at GCSE.”
- “Human geography is really interesting because it investigates political and historical aspects of numerous countries.”

Recommended reading/references/useful links

www.theeconomist.com

Geography Review magazine

TED talks

Worldmapper

Geofactsheets

BBC News

GERMAN

Why choose German?

A higher qualification will be a useful skill for the future, allowing students to develop their communication skills, learn more about German-speaking cultures, widen their general knowledge and increase possible job opportunities in the future.

Possible careers and courses that link to German

German is a highly respected subject qualification when applying for any course at university. Those who go on to study German hold a niche language, which has far fewer UK graduates than Spanish or French. As a result, where language abilities are required (in business, politics, translation or journalism, for example), German speakers are very highly valued.

Course details

Examination board: AQA

Syllabus Code: 7662

Course content

The course involves language learning alongside topic areas that are thoroughly relevant and are specific to German-speaking countries. In the Lower Sixth, students focus on topics such as the changing nature of family, the digital world, youth culture, festivals and traditions, art and architecture, and there is a detailed look at Berlin and its cultural history. In the Upper Sixth, students address highly topical and sometimes, controversial issues: immigration, integration, racism, Germany's relationship with the European Union, politics and youth, and German re-unification and its consequences; an enthusiasm for current affairs and debate is useful. Alongside these topics, students study a film in the Lower Sixth and a novel in the Upper Sixth. Recently, we have studied the film *Goodbye Lenin!* Students in the Upper Sixth are currently studying the novel *Der Besuch der alten Dame* by Dürrenmat.

Method of Assessment

Paper 1. 40% of A Level

Listening

Reading

Translation into English

Translation into target language (with a short accompanying passage on the same topic area to provide support)

Paper 2. 30% of A Level

Two essays – one on a film and one on a text, or two on texts

Requirement to answer both analytically and critically

Grammar is assessed

Paper 3 is a speaking exam. 16-18 minutes. 30% of A Level

Exam starts with student receiving stimulus card relating to one of the four subthemes studied. Only five minutes preparation allowed on this

Discussion of the issue on the stimulus card

Student perspective

“You are taught in friendly groups and you do lots of interesting activities”

“German is brilliant: it is very interesting and also fun at the same time”

“German is not easy, but it’s a fun language to learn and lessons are always entertaining”.

Recommended reading/references/useful links

www.aqa.org.uk/subjects/languages/as-and-a-level

HISTORY

Why choose History?

A Level history affords students the opportunity to broaden their understanding of the past through an examination of some truly fascinating topics. The British history unit develops the understanding of parliamentary democracy in Britain, examining the impact of some of our most famous politicians including Disraeli, Gladstone, Asquith, Lloyd-George, Churchill and Atlee. Students will assess the impact of both world wars and the changing face of British politics. The Cold War unit examines the 1945-1991 period from the post-war consensus to the development of the hydrogen bomb and the eventual fall of Communist regimes in Europe. Students assess the impact of the Korean War, Vietnam War, Sino-Soviet relations and many more areas. With a clear link to present day concerns in international relations, the Cold War remains one of the most important topics covered in modern history. The third unit is a coursework unit and entails an examination of slavery and abolition in the first hundred years of the United States' history.

Possible careers and courses that link to History

Careers include but are not limited to: Business (for example the current CEOs of YouTube and Chipotle are history graduates), The Civil Service, the diplomatic service and the Foreign and Commonwealth Office, law, research, archival work, academic posts, and teaching.

Course details

Examination board: AQA

Syllabus Code: A: 7042

Course Content

Unit content for British History

This option allows students to study in breadth issues of change, continuity, cause and consequence in this period through the following key questions:

How did democracy and political organisations develop in Britain?

How important were ideas and ideologies?

How and with what effects did the economy develop?

How and with what effects did society and social policy develop?

How and why did Britain's relationship with Ireland change?

How important was the role of key individuals and groups and how were they affected by developments?

Timescale: You will study from Gladstone and Disraeli to the Labour election victory of 1964

Unit content for World History

This option studies in depth the evolving course of international relations during an era of tension between communist and capitalist powers, which threatened nuclear armageddon. It explores concepts such as communism and anti-communism, aggression and détente and also encourages students to reflect on the power of modern military technology, what hastens confrontation and what forces promote peace in the modern world.

How did the Cold War start?
Why was Berlin such an important city during the period?
How did the Cold War turn hot in Asia?
How close was the world to Armageddon during the Cuban Missile Crisis?
Why was there a period of détente?
Why did Communism collapse in Eastern Europe?

Timescale: You will study from the Yalta agreement to the collapse of communism in the USSR in 1991

Unit content for Unit 3: Coursework

A personal study based on a topic of student's choice. This should take the form of a question in the context of approximately 100 years. Our research topic is US Slavery and Abolition and a list of appropriate questions will be given to you. You will examine the changing nature of US politics and the efforts that ultimately resulted in slavery's abolition in 1865, studying key figures such as Lincoln, Washington, Douglass, Tubman and Jefferson.

Method of Assessment

Two examinations at the end of the two-year course including source and non-source questions plus coursework.

Student perspective

"The course is really fascinating, especially the Cold War, and because of this it has inspired me to study politics and international relations at university"

"Through studying history I have been able to appreciate how events such as the political pragmatism between JFK and Khrushchev during the Cuban missile crisis are still influential in the modern world"

"History has led me to direct my curiosities in a way which makes me desire to pursue a related course at degree level"

MATHEMATICS

Why choose Mathematics?

Mathematics is a great subject for making you think as well as providing you with plenty of personal challenge that will allow your character to grow. The opportunities to explore different approaches to a range of problems are evident throughout the course and the strategies that students develop will have many benefits to their learning in other areas: finding the right answer can be a highly rewarding and enjoyable experience.

Mathematics can be studied with any combination of subjects to enhance a student's learning experience and it is highly regarded by universities and employers alike – it is the most popular A Level in the country. In addition, mathematics is one of the few subjects comfortable working with words, numbers, diagrams, tables, graphs and equations it is great training in communication.

Possible careers and courses that link to Mathematics

Mathematics is necessary for most careers in engineering, finance and science but it is highly regarded by any university for any course.

Course details

Examination board: OCR

Syllabus Code: AS: H230
A: H240

Course Content

AS Level

Students cover the following modules:

Pure - indices and surds, polynomials, coordinate geometry and graphs and differentiation, logarithms, integration, trigonometry, binomial theorem, proof, vectors in 2-D, modelling.

Statistics - probability, representation of data, discrete probability distributions, correlation/regression, sampling, hypothesis testing, study of large data sets.

Mechanics – equations of motion, kinetics, Newton's Laws.

A Level

Students study:

Pure – trigonometry, functions, differentiation, integration and numerical methods, sequences, algebra and graphs, differentiation, integrations, vectors in 3-D and first order differential equations.

Mechanics – force as a vector, equilibrium of a particle, Newton's laws of motion, functional forces.

Statistics – normal distribution, hypothesis testing, conditional probability.

Method of Assessment

AS: two papers, 1h 30m each
A Level: three papers, 2 hours each

N.B. There is no coursework.

Student perspective

“Very challenging subject from which you gain a lot of reward from for your efforts. It takes time to understand but after a while it comes together.”

“A very interesting subject but be prepared for the step up in both difficulty and workload.”

“Maths can be hard but the sense of achievement you get when your answer to a tough question is right is unbelievable.”

“The jump from GCSE to A Level was surprising but I have enjoyed maths as it has been challenging and rewarding.”

“Really challenging but one of the most satisfying A Level because you can usually tell or work out if you’ve done it right!”

“A Level maths is my favourite subject because it is challenging yet very enjoyable.”

Further information

For current RGS students the SharePoint page for mathematics includes a link to a reading list (click on ‘Reading List’ at the top of the maths homepage) where a full and up-to-date list can be found.

In addition, interesting books to read include:

1089 and All That: A Journey into Mathematics - David Acheson

Fermat's Last Theorem - Simon Singh

Any book by Ian Stewart.

MUSIC

Why choose Music?

A Level Music is a highly academic subject that develops skills in analysis, logic and source evaluation. That being said, it is a highly creative subject allowing students to discover and develop new ways of expressing a range of emotion through composition and performance. It develops confidence in their own ability and encourages them to assert their own authority in their research. The skills acquired in A Level Music equip the student not only for studying Music at university, but also for many other subjects at degree Level.

Possible careers and courses that directly link to Music

Professional Performer/Artist
Sound Engineering/Producing
Academia/Musicologist

Teaching
Publishing
Arts Admin

TV/Radio/Media
Professional Composer/Arranger
Music Therapy

Course details

Examination board: WJEC/EDUQAS

Syllabus Code: A: 601/8146/1

Course content

A Level

EDUQAS has refined the way in which the A Level can be assessed. Students follow one of two pathways depending on their strengths; Performance or Composition

Composition Pathway

Performance 25%:

6-8 minute recital (Visiting Examiner)

Composition 35%:

3 Compositions totalling eight minutes

Listening and Analysis 40%

Performance Pathway

Performance 35%:

10-12 minute recital (Visiting Examiner)

Composition 25%:

2 Compositions totalling 4 minutes

Listening and Analysis 40%

Three areas of Study are taught in preparation for the examination:

1. Western Classical Tradition – 17560 – 1900 (This included the detailed study of 1 symphony)
2. A choice of :
 - a. Rock and Pop
 - b. Musical Theatre
 - c. Jazz
3. Either
 - a. Contemporary Music of 20th Century (2 Set detailed study pieces)
 - b. Or Contemporary Music of the 21st Century (2 set detailed study pieces)

MUSIC

Other Information:

It is essential that A Level music students take an active role in the extra-curricular life of the music department; it is important that students immerse themselves in ensemble performance in order to complement their studies of such music and prepare them for assessed performance. There are opportunities for Sixth Form students to develop skills in leading and directing ensembles according to their instrumental/vocal experience. A Level music students will make regular trips to concerts and productions to support their learning.

Student perspective

“Music has always been a passion of mine and studying it at A Level has let me explore this diverse subject further.”

“The A Level works well for musicians who have the ability in performance and composition. The A Level course gives more flexibility to candidates, enabling them to choose an area of study appropriate to their interests.”

“Music offers a diverse set of study options at university and is highly valued by employers.”

Recommended reading/references/useful links

<https://www.eduqas.co.uk/qualifications/music/as-a-level/>

PHYSICAL EDUCATION

Why choose Physical Education?

Studying A Level Physical Education will give you an insight into the world of sports performance. The combination of physical performance and academic challenge provides an exciting and stimulating opportunity for students. Have you ever wondered?

- Why some people can run faster than others?
- How your personality affects your performance?
- Why people take drugs?
- How technology can help you?
- What the physiological effects of playing sport has on your body?
- How force and motion act on the body and how they can be used in physical activity to our advantage?
- How the media and big business influence sport?
- How sport has evolved into its present day format?
- The impact politics has on sport and major games?

Possible careers and courses that link to Physical Education

The course provides a pathway into careers such as Physiotherapy, Sports Journalism, Sports Psychology, PE teaching, Sports coaching, performance analysis and Sports science courses.

Course details

Examination Board: OCR

Syllabus Code: H555

Course content

A Level

Component 1: Physiological factors affecting performance: applied anatomy & physiology, exercise physiology, biomechanics

Component 2: Psychological factors affecting performance: skill acquisition, sports psychology

Component 3: Socio-cultural issues in physical activity and sports: sport and society, contemporary issues in physical activity and sport.

Component 4: Performance in physical activity (non-examined unit) Students are assessed in their chosen sport (either performing or coaching). Learners will also be assessed in the Evaluation & Analysis of Performance for Improvement.

Method of Assessment

Three externally assessed written papers:

Component 1 (30%), component 2 (20%), component 3 (20%)

A Non-Exam Assessment: one practical performance, as performer or coach and one synoptic interview (30% of total A Level)

Student perspective

'I chose to study A Level PE because I enjoy both performing and coaching in a variety of sports. Taking A Level PE has given me a greater understanding of the theory behind sports performance and coaching. It's great that we have the opportunity to apply our learning to practical situations.'

'I chose A Level PE because I enjoy learning about the human body in great depth and having a greater understanding of the processes taking place when performing in sport. I also find A Level PE compliments my other subject areas really well'.

Recommended reading/references/useful links

PE Review, My PE Exam (the everlearner), OCR PE Physical Education

www.brianmac.co.uk/psych.htm

www.ocr.org.uk/

PHYSICS

Why choose Physics?

Physics is unique. No other subject allows you to gain such a deep understanding of the way the world works. You will learn how both the ordinary and extraordinary can be explained with ideas that are profound, imaginative and beautifully simple. Physics will give you the ability to communicate complex ideas, a hunger to make sense of patterns, the capacity to look past the superficial, and fluency with mathematics that will allow you to make predictions and solve problems.

Possible careers and courses that link to Physics

Physics leads on to a very wide range of courses and careers. These include astrophysics, banking, computer programming, electronics, energy industries, engineering, geophysics, law, medical physics, meteorology, research, teaching, science journalism and the space industry to name but a few.

Course details

Examination board: Edexcel

Syllabus Code: A: 9PH0

Course content

Topic 1 – Working as a Physicist

This unit underpins all the others as it develops the skills required when carrying out practicals and using equations to solve problems.

Topic 2 - Mechanics

You will build upon your understanding of forces and motion as well as learn about projectile motion.

Topic 3 – Electric Circuits

You will build upon your knowledge on electricity and introduce EMF and internal resistance.

Topic 4 Materials

You will develop your understanding of Hooke's Law and strain energy as well as introduce Stress, Strain, Young Modulus and Viscosity.

Topic 5 – Waves and the Particle Nature of Light

You will build upon your knowledge of waves as well as introduce polarisation, superposition, stationary waves, refractive index, the lens equation, diffraction, the photoelectric effect and wave-particle duality.

Topic 6 – Further Mechanics

You will develop your understanding of both momentum and circular motion.

Topic 7 – Electric and Magnetic Fields

You will learn more about electric and magnetic fields and forces, electromagnetic induction and A.C. as well as introducing capacitors.

Topic 8 – Nuclear and Particle Physics

You will build upon your knowledge of atomic structure and introduce particle accelerators, particle detectors and the standard model of sub-atomic particles.

Topic 9 – Thermodynamics

You will develop your ideas regarding temperature, kinetic theory and black body radiation as well as introducing ideal gases.

Topic 10 – Space

You will build upon your knowledge of the Doppler Effect and the life cycle of stars as well as introducing methods of determining astronomical distances, the H-R diagram and the fate of the universe.

Topic 11 – Nuclear Radiation

You will learn more about radioactive decay, fission and fusion.

Topic 12 – Gravitational Fields

You will be introduced to the gravitational fields around masses.

Topic 13 - Oscillations

You will learn about Simple Harmonic Motion as well as free and forced oscillations

While studying these units you will develop practical skills that include planning experiments, collecting data, analysing experimental results and making conclusions. These skills are assessed throughout the course via 16 core practicals, which you write up in a practical book. Your teachers mark these, allowing you to see which areas require more development in the next experiment. Each skill must show a competency by the end of the course. It is a requirement of the A level that you carry out all 16 practicals and show competency in all five skill areas.

You will also gain an appreciation of how scientific models are developed and evolve, the applications and implications of science, the benefits and risks that science brings, and the ways in which society uses science to make decisions.

Method of Assessment

The course is assessed solely through the final 3 exams at the end of the course.

A LEVEL	Paper	PAPER 1	PAPER 2	PAPER 3
	Timing	June of U6th	June of U6th	June of U6th
	Weighting	30%	30%	40%
	Content	Short & long answer on half the topics and practicals.	Short & long answer on half the topics and practicals.	Multiple choice, short & long answer on whole course and practicals.

PRACTICAL ENDORESMENT	You will receive a practical endorsement alongside your A Level grade – this will be recorded as PASS/FAIL on your certificate from the exam board. You will need to complete the 16 core practicals and keep evidence your competency in all five skill areas in your practical book.
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Student perspective

“There are less facts to learn in physics than in most other subjects, but more concepts to understand. This makes it easier if you do understand the concepts but harder if you do not.”

Recommended reading/references/useful links

Visit the Edexcel website, <http://qualifications.pearson.com/en/qualifications/edexcel-a-Levels/physics-2015.html> to obtain a copy of the Edexcel GCE in Physics specification.

Visit: <http://www.iop.org/careers/i-am-at-school-college/index.html> for information on careers in physics.

Discuss the suitability of studying this subject with your Physics teacher.

Read through your GCSE physics notes and make sure you understand them.

Read “A Briefer History of Time” by Stephen Hawking – a physics book with only 1 equation in!

PSYCHOLOGY

Why choose Psychology?

Psychology is the scientific study of the human mind and human behaviour. We aim to give students an insight into the explanations underlying a diverse range of human behaviours and processes. It is a new subject for students at A Level but shares some similarities in terms of skills and content with Biology, Mathematics and Geography. Psychology complements most other subjects, as a wide range of skills will be developed in the areas of scientific enquiry, mathematical analysis and evaluative essay writing. The exam involves a mixture of question types that assess the students' knowledge of theories and research in Psychology.

Possible careers and courses that link to Psychology

The Psychology A Level is wide ranging and appropriate preparation for many degree courses and careers, from Psychology specific options, like becoming a counsellor or child psychologist, to other fields such as medicine, business and almost everything in-between. This is because the topics in Psychology are based around understanding people. Increasingly Psychology is viewed as a 'science' subject by universities and many medicine courses are excepting it as one of the two compulsory science A Level subjects.

Course details

Examination board: AQA

Syllabus Code: 7182

Course content

Paper One: Introductory Topics in Psychology

Memory – Learning about the models psychologists have developed to try to explain how memory works and looking at the research they conduct to test their models. Considering how an understanding of memory can be used by the police when questioning witnesses to crime.

Attachment – Discovering the impact of early childhood experience and the long-term social and emotional consequences of failing to form loving relationships in infancy. Assessing how much childhood experiences impact the ability of a person to form confident adult relationships in later life.

Social Influence – Finding out why people automatically conform to group behaviour and obey authority figures. Establishing how can we learn from people who stay independent or from those who bring about social change.

Psychopathology – Examining the nature of mental illness in society and assessing a range of psychological approaches to explaining and treating OCD, phobias and depression.

Paper Two: Psychology in Context

Approaches in Psychology – Exploring a variety of different ways to approach, explain, study and treat human behaviour.

Biopsychology – Finding out how biological processes in the brain and other parts of the nervous system influence our behaviour. Developing an understanding of sophisticated ways of studying the brain and how the brain functions.

Research Methods – learning how to conduct research, assessing the relative strengths and weaknesses of different techniques and analysing data using statistical analysis.

Paper 3: Issues and Options in Psychology

During Year 13 you will develop a working knowledge of areas in Psychology that are linked to key professions. As part of the '**Cognition and Development**' topic you will look at how we learn things like language, morals and the ability to reason; essential for the fields of education and parenting. Throughout the '**Schizophrenia**' topic you will consider how mentally unwell individuals are identified, how they are treated and what may have caused their condition; essential for the worlds of medicine and social care. During the '**Forensic Psychology**' topic, we focus on the causes of criminal behaviour and possible ways to deal with offenders; key background information for any legal based or political professions.

Method of Assessment

Three externally assessed examination papers, with a range of short answer questions and extended essay writing.

Student perspective

"I chose Psychology as it is a different subject to those I studied at GCSE and I was interested to find out about a new area. I also knew that it linked to lots of other subjects and would develop skills useful for lots of different degree options."

"I chose psychology because it has elements of Maths, Science and English within it. I wanted to keep improving all these skills into A Level."

"I enjoy psychology because we are learning about people so everything is relevant and interesting."

Recommended reading/references/useful links

The full course outline can be found on the AQA Website: <http://www.aqa.org.uk/subjects/psychology>

The BPS (British Psychological Society) 'Research Digest' provides summaries of interesting research: <http://www.bps-research-digest.blogspot.co.uk>

A monthly publication of The British Psychological Society has back issues freely available on its archive.

Information on many areas of psychology can be found at: <https://www.simplypsychology.org/>

RELIGIOUS STUDIES

Why choose Religious Studies?

At some point in our lives we are confronted with ultimate questions such as, 'Is there a God?' 'Where did the universe come from?' 'Is there a life after death?' 'How do I know what is right or wrong?' 'Is there a purpose to life?' 'Are we alone in the universe?' Reflecting on such questions is one of the things that make us human. Religious Studies is a unique subject that provides you with an opportunity to explore such questions in depth through philosophy, religion and ethics. As such, it involves thinking deeply, analysing and evaluating thought systems, religions, values and concepts and the chance to develop your own worldview. The subject's key skills are clear and coherent communication, the ability to understand and represent other people's points of view, the ability to present persuasive arguments and the skill of reading, analysing and synthesizing information, ideas and different types of literature. The subject can be combined with any other AS/A Level and is a useful qualification for a wide variety of university degree subjects, including economics, English, Geography, History, Law, Medicine, Philosophy, Politics, Psychology, sociology and Theology.

Possible careers and courses that link to Religious Studies

The skills involved in religious studies are relevant in any career which requires clear thinking, careful analysis, balanced evaluation, effective communication and good presentation of ideas, e.g: law, journalism, radio and television, police, social services, politics and public administration, teaching, the health service, working with children, tourism and advertising.

Course details

Examination board: OCR

Syllabus Code: H573

Course Content

1. Philosophy of Religion

The philosophy of Plato, Aristotle and Descartes with particular reference to existential reality and what it means to be human – the mind, body and soul debate. Arguments about the existence of God – Aquinas, Paley, Hume, Anselm and Kant. Religious experiences, e.g. mysticism, conversion – is God just a figment of our imagination? The problem of evil and suffering – how can an omnipotent, omnibenevolent God exist in the face of so much suffering in the world? Augustine, Irenaeus, Hick

2. Religion and Ethics

Aquinas' natural law theory; Fletcher's situation ethics; Kant's deontological ethics; Utilitarianism - Bentham and Mill. How these theories are applied to euthanasia and business ethics. Different theories about conscience. Sexual ethics – pre-marital sex, extra-marital sex and homosexuality.

3. Buddhism

The life of the Buddha and the religious, cultural and socio-economic background to the emergence of Buddhism in India. The central concepts of Buddhism such as the three marks of existence, the four noble truths, the eightfold path and the three refuges, samsara, nirvana and the practice of meditation. The development of Mahayana Buddhism – the Dalai Lama, Zen, Pure Land Buddhism – Buddhism in the West. Buddhism and political, social and environmental activism, including gender equality issues

Method of Assessment

There are three examinations– one for each of the three modules.

There are two **assessment objectives**:

AO1 - Demonstrate **knowledge and understanding** of religion and belief, including:

- religious, philosophical and/or ethical thought and teaching
- influence of beliefs, teachings and practices on individuals, communities and societies
- cause and significance of similarities and differences in belief, teaching and practice
- approaches to the study of religion and belief

AO2 - **Analyse and evaluate** aspects of, and approaches to, religion and belief, including their significance, influence and study.

AO1 is given 40% in the examination and AO2 60%

Student perspective

“I enjoy RE because it gives me the opportunity to think about some of the really big issues in life. It certainly stretches your mind.”

“RE gives you the chance to study some great thinkers and to discuss their ideas.”

“RE helps you to think and critically evaluate your own beliefs and those of others. It makes you think for yourself and not just accept what other people tell you.”

“It’s interesting, challenging and different from my other subjects.”

“RE has helped me to become a more confident and broad minded person.”

SPANISH

Why choose Spanish?

Alongside English, and Arabic, Spanish is one of the great 'world' languages. It is spoken by hundreds of millions across not only Spain, but also the South and North American continents, and was placed in first position in a 2017 British Council ranking of foreign languages by usefulness across a wide range of categories. The Spanish A Level course takes students to a very high level, equipping them for adventures such as studying abroad, holidays, work, and certainly for lively debate – the staple of any good Spanish conversation!

Possible careers and courses that link to Spanish

Spanish has long been associated with tourism, but there are many other sectors (for example Food, Energy and Construction) where a knowledge of Spanish often enables employees to be promoted to interesting and better paid positions more easily. Translation and interpreting offers some graduates opportunities, while the likely shortfall in Primary and Secondary language teachers in the UK will also provide many openings for future Spanish students. There are some superb business courses at Spanish universities, often taught in English, for which Spanish A Level would be an asset.

Course details

Examination board: AQA

Syllabus Code: 7692

Course content

The Spanish A Level course is modern in its scope, covering a great many relevant topics which promote debate on issues that affect cultures across the world. In the Lower Sixth, there are units on modern and traditional values, cyberspace, equal rights, the cult of celebrity, Spanish regional identity, and the cultural landscape of the wider Hispanic world. In the Upper Sixth, students study topical and sometimes controversial topics, such as immigration, racism, integration, political engagement amongst young people, and popular movements. There is also a historical unit looking at monarchies, republics and dictatorships across the Spanish-speaking world. In the Lower Sixth, pupils study a film, with Pedro Almodóvar's film *Volver* being a firm favourite over the last couple of years. At Upper Sixth level, students study a novel or play. García Márquez's *Crónica de una muerte anunciada*, and Lorca's *La Casa de Bernarda Alba* have both proven popular in recent years.

Method of Assessment

Paper 1. 40% of A Level

Listening

Reading

Translation into English

Translation into target language (with a short accompanying passage on the same topic area to provide support)

Paper 2. 30% of A Level

2 essays – one on a film and one on a text, or two on a texts
Requirement to answer both analytically and critically
Grammar is assessed

Paper 3 is a speaking exam. 30% of A Level

Exam starts with student receiving stimulus card relating to one of the four subthemes studied. Only 5 minutes preparation allowed on this
Discussion of the issue on the stimulus card
Student speaks on individual research project (must not be the same as the studied text/ film)

Student perspective

“The topics, particularly the cultural topics at A Level, are very interesting and enjoyable.”

“The highlight of Lower Sixth Spanish was the trip to Madrid, which, as well as giving me the opportunity to practise the language, provided me with an opportunity to see some interesting Spanish culture.”

Recommended reading/references/useful links

www.aqa.org.uk/subjects/languages/as-and-a-level

EXTENDED PROJECT QUALIFICATION

Why choose to do an Extended Project?

An EPQ is a fantastic opportunity for students to explore a topic beyond their A Level subjects, as well as develop the skills which will help them be successful in higher level academic study. Past students have completed projects which range widely across the arts and sciences, which have often contributed to students achieving a place at their first-choice university. A selection of research areas undertaken by recent students include: writing a novel inspired by the folklore of the Yorkshire moors; investigating the ethics of the legal principle of 'joint responsibility'; determining whether the Russian invasion of the Ukraine was due to Putin; writing, performing and recording an Extended Playlist of 4 songs; assessing which of the organs of the human body is the most difficult to replicate artificially.

Where can an EPQ lead?

Universities place great value on the EPQ, since it demonstrates a range of undergraduate-level skills and experience, whilst demonstrating also the student's interest in their subject, and their ability to be self-motivated and independent learners. An EPQ is the equivalent of half an A Level and is taken into account as part of university applications.

Course Details

Examination Board: AQA

Syllabus Code: Level 3 EPQ (7993)

Course content

The EPQ is a qualification that offers the opportunity to gain up to an A* grade. It is an option available to all students, and is launched in the January of the Lower Sixth. It is a wonderful opportunity for students to engage in research and reading beyond the bounds of the curriculum, and to investigate a topic or theme of particular interest to them; the choice of options is boundless.

The project itself involves the completion of a 5000 word essay (or the completion of an artefact alongside a 1000 word commentary) followed by a presentation to an invited audience. The submission of a detailed logbook recording the student's progress and reflections during the project is also an essential requirement of this qualification.

There is a taught component, focusing on research skills, critical thinking and academic writing, but the final project is completed independently. This enables the students themselves to take responsibility for the management, timing and completion of the project. However each student has a supervisor to offer advice and support.

Method of Assessment:

The completed project will comprise of an essay of up to 5000 words, or an artefact accompanied by a 1000 word commentary **and** a completed Production Logbook and Assessment Record. The project, logbook and presentation will be assessed by the student's supervisor using the following assessment objectives.

Assessment Objectives

Manage

Identify, design, plan, and carry out a project, applying a range of skills, strategies and methods to achieve objectives.

Use Resources

Research, critically select, organise and use information, and select and use a range of resources. Analyse data apply relevantly and demonstrate understanding of any links, connections and complexities of the topic.

Develop and Realise

Select and use a range of skills, including, where appropriate, new technologies and problem-solving, to take decisions critically and achieve planned outcomes.

Review

Evaluate all aspects of the extended project, including outcomes in relation to stated objectives and own learning and performance. Select and use a range of communication skills and media to present evidenced outcomes and conclusions in an appropriate format.

The assessed project will be moderated within school by the EPQ co-ordinator, and then the school's marks will be sampled and moderated by the examination board to confirm the marks.

Student perspective

"My EPQ was the best preparation for university"

"This was the best part of my Sixth Form, because I really wanted to do it"

"I found my first undergraduate essay much easier than some of my friends – because of my EPQ"

Recommended reading/references/useful links

'What Makes a Standout Student: Why do an EPQ?': <https://www.youtube.com/watch?v=1kUmk20I74o>

ENRICHMENT PROGRAMME

As part of the sixth form programme of study, each student takes part in a selection of enrichment activities during the course of both Lower and Upper Sixth years.

Wednesday afternoons – extra-curricular enrichment

On Wednesday afternoons there is the opportunity to take a break from studies, and to engage in extra-curricular and recreational activities, ranging from **sport** or **music**, to **art** or the **Young Enterprise** and **Prince's Trust** projects.

There is also the opportunity to undertake voluntary work in a number of areas in the local community, which is particularly useful for those seeking to undertake university courses in medicine, veterinary medicine or teaching, for whom work experience is particularly important. However, it is open to all students and is a very rewarding way to meet people, to learn new skills, and to give something back to the community around you.

Students may opt for an activity from a broad range of options, and can then change options, if they so choose, each term.

Friday mornings - academic enrichment

Friday sessions are given over to a more academic focus. We arrange a wide programme of presentations and visiting speakers on topics relevant to sixth form students during the year. Such presentations range from information about universities, apprenticeships and gap years, to workshops on driving awareness, sexual health, assertiveness and dealing effectively with pressure.

Alongside these presentations we run an extensive programme of post-school choices workshops which will provide you with a wealth of information on the options open to you beyond school, and support in successfully making these choices, as well as a carousel of skill-based sessions on topics such as interview technique, debating, current affairs etc.

Societies

Student run societies are held on a weekly basis, e.g. **Medics, Law, Sports, Economics, Astronomy, Musical Theatre, Craft and Languages Societies**. Alternatively, students are encouraged to set up dedicated study-groups.

CAREERS DEPARTMENT

The aims of the Careers Department are to:

Equip students with the knowledge, skills and attributes needed to make informed decisions about learning through a variety of career opportunities, which are designed to cover the full range of career and educational pathways available.

Support students with personalised, impartial information, advice and guidance to help build up the confidence to take charge of personal career development and manage progression through learning and work. Students are encouraged to consider a broad and ambitious range of options and to move forward post-18 in order to achieve their full potential.

Careers Provision

The careers and work related learning activities cover the full range of post-18 options delivered through a combination of events, information, activities and classroom learning. Through Tutorials, students are offered support with decision making related to post-18 options and career management. Individual and personalised planning will be linked through student engagement with Start Profile, an online careers platform enabling the recording of all related activities and achievements within a portfolio.

All Lower Sixth students will take part in CV preparation and practice interviews with external providers in the Autumn term linked to a week of work experience in the summer term. Enterprise activities, including Young Enterprise or Prince's Trust, are offered to all students. These have been very successful in previous years and are student led with additional support.

Careers and Higher Education Evenings are organised annually with a large number of businesses and universities attending in order to offer advice and information to school leavers. In addition, a regular Careers Club is held over lunchtimes, with guest speakers from a wide range of industries e.g. medical, engineering, law, education and finance.

Careers notices are issued via the monthly Careers Bulletin and by email, giving details of courses, taster days and opportunities at universities and within industries, which students are actively encouraged to attend.

For those interested in medicine, volunteering opportunities are organised in local hospitals, in addition to other opportunities offered through Wednesday enrichment. Mock Medical Mini Interviews are also held for anyone interested in a medical career to help with this competitive application programme.

Advice and guidance can be given on the many university admissions tests e.g. UCAT, BMAT, LNAT, admissions tests

Careers Advice and Guidance

Impartial careers advice and guidance from professionally qualified staff is offered together with support from a range of external sources including independent careers advisers, employers, former students and university representatives.

Feedback and individual discussion are an important part of the careers programme. There is no formal assessment and it is up to each student to make the most of the information, advice and guidance which is available in order to explore and prepare for future opportunities matched to students' individual talents, interests and aspirations.

Further Information

The well-resourced Careers library is open daily from 8.30am-4.30pm. Students can drop in during free periods, lunchtime, break or after school to browse books and prospectuses, speak to Careers staff or arrange an individual careers guidance appointment.

Our website www.ripongrammar.co.uk/academic/careers is intended to be a starting point to research all your post 18 options. This contains sections on higher education, school leaver employment, study abroad, gap years and work experience as well as links to a wide range of other recommended on-line careers resources.

The Information page carries links to the Careers software used in school, including Start, Higher Ideas, Heap-Online, Venture UK, Eclips and Kudos. Students will require passwords in order to log-in to the software, available from the Careers Department and via their Tutors.

The Sixth Form Careers section of **Sharepoint** for current students, includes a good variety of resources relating to university and employment applications including a noticeboard giving details of high-quality school leaver employment opportunities.

Student Reflections :

"Research widely and be open minded to all opportunities"

"Start as early as possible and use the websites provided by the Careers Advisers"

"Talk to professionals in the field of work that interests you"

ADDITIONAL INFORMATION

For further information on the admissions process please see the Sixth Form section of our website <http://www.ripongrammar.co.uk/sixth-form/>

The website also has information on:

- Sixth form life
- Boarding
- Uniform
- Policies
- Governors and their Annual Report
- Previous newsletters
- Academic information by department
- Exam result statistics

For all enquiries please contact Mrs E Griffiths, Sixth Form Co-ordinator at griffithse@ripongrammar.com