A-LEVEL ART

Head of Department - Mr D. Reshad

- **EXAMINATION BOARD & SYLLABUS**
  OCR Art A Level
- **ENTRANCE REQUIREMENTS**
  GCSE Art, Grade 6 or above is recommended.
- **THE COURSE**

The course is designed to provide a bridge between the general and more structural nature of art at GCSE and the development of personally orientated, guided independent study, where students will be encouraged to develop a richer and deeper knowledge, understanding and competence as they progress towards Advanced Level status.

At A Level there are 2 components:

Personal Investigation *and* Relatedl Study	60%
Externally set task (15 hours)	40%

The lower sixth year is aimed at achieving breadth, extending skills, knowledge and understanding. The upper sixth year is intended to allow for work in 'greater depth'.

- **ASSESSMENT**

Assessment will be measured by the students' competence in four key areas: Developing, Experimenting, Recording and Presenting. All work is internally marked and externally moderated.

- **COURSE CONTENT**

COURSEWORK PORTFOLIO - Year 12

A wide variety of artistic experience is on offer in Year 12 including painting, drawing, ICT, print making and three dimensional studies. This is marked, displayed and moderated. Most work completed is linked with the study of artists, designers and architects.

PERSONAL INVESTIGATION - Year 13

This is a single unit or combination of units put together to form a single submission. Students are encouraged to work alongside staff to design an in-depth project that will form the basis of their A-Level presentation. This combined with a personal study will represent 60% of the Marks.

This component normally takes the form of a written and illustrated presentation, the subject of which is chosen by the student in an area of particular interest to him or her. An 'integrated' area of study is required, giving students a very wide range of individual choice. First hand experience of the artists/designers work is recommended.

- **EXAMINATIONS**

There is one examination in Year 13. This is an externally set paper and will represent 40% of the marks.

- **VISITS**

At least one visit but often two are organised to feed directly into the Personal Investigation and/or the set task. Barcelona and St Ives have both proved very popular and successful in recent years. These visits, although optional, provide very important experience of Art first hand and are highly recommended for students. (Venues may change from year to year).

- **FACILITIES**

The newly refurbished Manor art rooms offer space, light and the latest equipment providing a stimulating working environment. They offer a variety of possibilities for work in 3D and 2D including painting, drawing, sculpture, graphics, digital work and photography. We aim to allow students to have a wide choice of techniques and processes. Staff are highly qualified teachers and experienced practitioners in their own right.

- **EQUIPMENT**

All students must provide their own basic supply of personal art equipment for the course. Cut price equipment is normally made available through the department and the School Shop.

- **EXAMINATION RESULTS**

Results are excellent and well above the national average.

- **CAREERS**

Art provides a pathway to a very wide range of occupations and careers. Students have gone on to successfully study Architecture; Graphic Design; Interior Design, Furniture Design; Fine art; Painting; Sculpture; Contemporary Crafts; Fashion; Film-making; Animation and Art History as well as Art/Technology and Art/Media courses.

A-LEVEL BIOLOGY

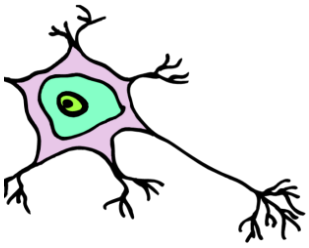
Head of Department - Dr S. Maudling

Examination Board and Syllabus: OCR
Entrance Requirements: GCSE Combined Science grade 7 or GCSE Biology grade 7.

Course aims and objectives
The OCR Biology course is a content-led approach, which aims to provide students with a thorough grounding in a wide range of biological fields, allowing students to progress onto a broad variety of biological degree courses. During this enjoyable and motivational course, students engage with Biology in a range of theoretical and practical contexts which develop the skills and understanding to the standard required by universities, with a particular emphasis on developing the mathematical skills required for further study. Students gain an appreciation of the interconnected nature of Biology as a subject and how different fields support each other. Biology leads into a number of careers including scientific journalism, various types of research, pharmacology, the medical and veterinary sciences, dentistry, conservation and education.

Course content
Students will study the following modules during the two-year course:

1) Development of practical skills in Biology
2) Foundations in Biology
3) Exchange and Transport
4) Biodiversity, Evolution and Disease
5) Communication, Homeostasis and Energy
6) Genetics, Evolution and Ecosystems



Teaching
A range of teaching styles and strategies are employed on the A Level course and there is an expectation that students will become independent learners as the course progresses. Students will be increasingly required to take more responsibility for their own learning and make full use of the resources available in school to consolidate their work in class. Students will be expected to organise their notes and keep effective records of their practical activities as evidence for the Practical Endorsement component of the A-Level course. Students should try and engage in in wider reading to support their studies. Deadlines for the submission of work to be marked must be strictly adhered to.

Assessment
All content on the A Level course is externally assessed in written examinations taken at the end of year 13.

Students will sit three papers which will each assess all of the A Level content.

Paper 1 (37%) will contain multiple choice and structured questions covering theory and practical skills (modules 1, 2, 3 & 5 only)

Paper 2 (37%) will contain multiple choice and structured questions covering theory and practical skills (modules 1, 2, 4 & 6 only).

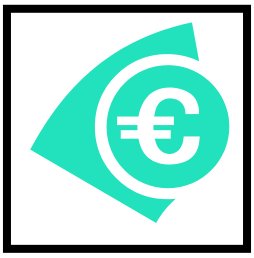
Paper 3 (26%) will contain structured questions and extended response questions covering theory and practical skills (modules 1-6).

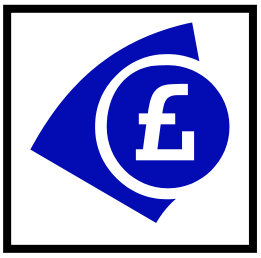
All assessment of practical skills is carried out in the written papers. Questions on practical skills will total at least 15% of the total marks available.

At least 10% of the questions in all papers will assess mathematical skills.

The Practical Endorsement
This is reported separately to the A Level grade as a Pass/Fail mark. During the course, students are trained in and develop competency in 12 key skill areas. Students are expected to maintain a laboratory notebook with detailed records of the evidence specified by OCR to demonstrate their competency. This will be required in the event of a moderation visit by OCR.

This is a non-examination assessment and does not contribute marks to the final A Level grade.



A-LEVEL BUSINESS STUDIES

Head of Department - Ms S. Aziz

EXAMINATION BOARD - Edexcel

ENTRANCE REQUIREMENTS

Previous examination is not required although candidates must have good numeracy and literacy skills.

THE COURSE

Business Studies aims to provide the student with some of the basic factual information surrounding businesses and their operations. It examines the objectives of business organisations and how these objectives are attained. The course is not intended to be vocational but aims to make candidates aware of all it involves in terms of strategy, workforce management and the wider world. It will enable the student to examine the aims, objectives and practices of business organisations from economic, environmental and social aspects, understanding the point of view of the nation, local community, industry, proprietors, management, employees and consumers.

A brief summary of some of the major areas covered in the Business Studies course are as follows:-

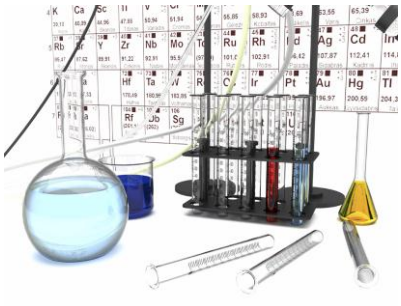
- The problems of setting up a business, including location and management structures.
- The need for effective communication and the uses of new technology.
- The study of how firms organise efficient production to satisfy customers. This will include stock control, quality management, capacity utilisation and lean production methods.
- Interpreting accounting reports and financial reports, to be able to say whether a firm is doing well or badly from the published accounts of that firm.
- Marketing, including price, quality, packaging, advertising, distribution and transportation.
- Manpower, including recruitment, training, bargaining and motivation.
- Economic considerations and international trading.
- Government policy.
- Legal and social considerations.

ASSESSMENT A-Level

June Year 13 **Paper 1** (2 hours 33.3% of A-Level)	Business 1
June Year 13 **Paper 2** (2 hours 33.3% of A-Level)	Business 2
June Year 13 **Paper 3** (2 hours 33.3% of A-Level)	Business 3

ORGANISATION OF WORK

Although regular weekly assignments are set throughout the course, dedicated students must be keen to supplement specific class and homework activities with individual research from books, journals, newspapers, computer based resources, television reports and DVDs. Case studies will be used where possible and visits to business organisations or from visiting speakers will be arranged. A lively interest in current business affairs is important.



A-LEVEL CHEMISTRY

Head of Department - Dr S.B. Marr

- **EXAMINATION BOARD** - OCR

- **ENTRANCE REQUIREMENTS**

GCSE Chemistry Grade 7 or Combined Science Grade 7

- **COURSE AIMS AND OBJECTIVES**

The aims of the course are to encourage students to:

- develop an interest in, and an enthusiasm for chemistry, including developing an interest in further study and careers in chemistry.
- develop essential knowledge and understanding of different areas of chemistry and how they relate to each other;
- appreciate how society makes decisions about scientific issues and how the sciences contribute to the success of the economy and society.

An A Level in Chemistry is highly regarded for the analytical thinking skills it encourages. A high grade is likely to be regarded as evidence for a student's intellectual ability to work with abstract ideas to solve problems of a challenging nature. This is a valuable transferable skill.

Chemistry university graduates usually go on to high status employment or further education. 30% undergo postgraduate training for a higher degree, for example a doctorate. Of those taking employment, 70% enter a professional role in science or in other disciplines such as management, business, law or education.

- **COURSE CONTENT**

Board – OCR Syllabus - Chemistry A

The course will comprise of six modules. These modules cover major disciplines of chemistry, namely physical, inorganic and organic. This involves studying chemical reactions and why they happen, primarily looking for patterns of structure and behaviour.

Module 1	Development of Practical Skills
Module 2	Foundations in Chemistry
Module 3	Periodic Table and Energy
Module 4	Core Organic Chemistry
Module 5	Physical Chemistry and Transition Elements
Module 6	Organic Chemistry and Analysis

- **STYLE OF TEACHING / DETAILS OF ASSESSMENT**

Students will be examined on all modules at the end of the course. They will also be expected to qualify for an endorsement of their practical skills developed over the two-year course.

Students are required to study conscientiously and independently; they take upon themselves responsibility for maintaining high standards of classwork and homework and asking for help when necessary. They need to be able to keep structured notes with only a little guidance, to take an active part in class activities and to organise their practical work taking possible risks into account.

A-LEVEL COMPUTER SCIENCE

Head of Department - Ms A. McFarlane

- **EXAMINATION BOARD** - WJEC, Syllabus A500QSL Advanced GCE

- **ENTRANCE REQUIREMENTS**

As not all students have the opportunity to study computer science at GCSE we do not require a qualification in this subject; although if you have taken GCSE we would expect a grade 6 or above. What is essential is an ability to think logically. Can you follow flow charts? Understand non-linear sequences of instructions? In order to succeed in this subject, you need to be able to think clearly and communicate effectively. Perseverance is vital in order to solve problems independently and grasp theoretical concepts. Perhaps the most important requirement is that you have an interest in the subject. This will give you the motivation required to work hard and will result in enjoyment of the course.

- **COURSE AIMS AND OBJECTIVES**

The aim of the course is to develop the capacity to think creatively, analytically and logically and to apply these skills to create programming solutions to problems. The course also aims to develop an understanding of hardware and communications, software, applications and the effects of computers on society; as well as skills in analysis, design, implementation, evaluation and project and time management.

As this is a practical subject there will be a large element of practical work in which you will learn how to write your own code.

- **COURSE CONTENT**

This course is made up of three modules one of which is coursework. Each theory module makes up 40% of the total marks and the coursework project makes up the remaining 20% of the marks.

- **MODULES**

Component 1 – Programming and System Development

This module covers programs, data structures, algorithms, logical operations, programming methodologies, systems analysis and design, software engineering and the impact of computer science on society.

Component 2 – Computer Architecture, Data, Communication and Applications

Computing Project

This is the coursework element in which you will discuss, investigate, design, develop a prototype, refine and implement, test and evaluate a computerised solution to a problem of your own choice.

This is a substantial piece of work started towards the end of year 12 and completed by Easter of year 13.

Careers

Almost every career involves some aspects of computing and having knowledge and skills in this area is essential to all. It also offers the opportunity to pursue new and exciting careers such as artificial intelligence, nano-technology, games design, web design and many more.

The computing industry is one of the fastest growing sections of the economy and this will only increase as more traditional jobs are replaced by AI systems which need computer science specialists to develop them. There is already a major shortage of people with the right skills. This could benefit students taking Computer Science as they will be in a much less competitive market and the shortage of people with the right skills is driving up salaries.

TOP 6 REASONS TO STUDY COMPUTING

1. Computing is part of everything we do!
2. Expertise in computing enables you to solve complex, challenging problems.
3. Computing enables you to make a positive difference in the world.
4. Computing offers many types of lucrative careers.
5. Computing jobs are here to stay.
6. Expertise in computing helps you even if your primary career choice is something else.

A-LEVEL DESIGN & TECHNOLOGY

Head of Department - Mr S. Stockley

Design Engineering / Product Design

Examination board **- OCR**
Course reference **– H404 / H406**

What do designers actually do?

How do things move or work?

How can you design products to be good to the environment?

How does a product stay popular in the market place?

How are products designed with the user in mind?

The new OCR A' Level content reflects authentic practice, giving an insight into the way that creative, engineering and/or manufacturing industries function. The OCR specifications also require you to apply mathematical and scientific knowledge, understanding and skills and reflects the importance of Design and Technology as a pivotal STEM subject.

Design Engineering:

The content of this title is focused towards engineered and electronic products and systems; the analysis of these in respect of function, operation, components and materials, in order to understand their application and uses in engineered products/systems that have commercial viability.

Product Design:

The subject content of this title is focused towards consumer products and applications; their analysis in respect of materials, components, and marketability to understand their selection and uses in industrial and commercial practices of product development.

Both Design and Engineering and Product Design share the same assessment and will be taught alongside each other. Students will be given assignments relevant to their chosen area of study.

Key Features

- identifying requirements
- learning from existing products and practice
- implications of wider issues
- design thinking and communication
- material considerations
- technical understanding
- manufacturing processes and techniques
- viability of design solutions
- health and safety

Assessment

This specification has 3 assessments;

- **Non-examined 'Iterative Design Project** – a substantial design, make and evaluate project worth 50% of the A Level.
- **Principles examination paper** - assesses analysis of existing products, technical knowledge and understanding of materials, product functionality, manufacturing processes and techniques and allows you to demonstrate your understanding of design thinking and wider social, moral and environmental issues. 25% of the A Level.
- **Unseen Challenge** - focuses on the application your knowledge, understanding and skills of designing and manufacturing prototypes and products through a set design task, then reflecting on your design solution in relation to wider factors and other theoretical knowledge. 25% of the A Level

WHY CHOOSE DESIGN AND TECHNOLOGY

Design and Technology is an inspiring, rigorous and practical subject that supports progression beyond A level.

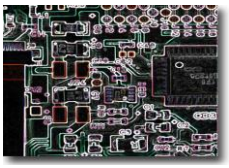
You will gain skills that are useful in a wide range of careers, in further study of design or engineering and in your personal life develop decision making skills, including the organisation of time and resources when managing a project.

SUPPORTING A LEVEL SUBJECTS

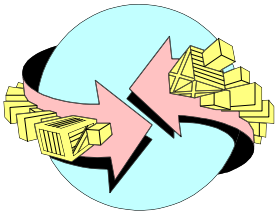
Mathematics, Physics, Computing and Art. *Students studying Maths and physics along with design and technology may be eligible for the prestigious Arkwright Scholarship.*

CAREERS

Electrical , Electronic & Mechanical engineering, (in fields such as; aerospace; medical; armed forces; transport; computing; energy), consumer product design, engineering product design, marketing, industrial design consultancy, production engineering, project planning, furniture design, interior/exhibition design, advertising, display design.



The UK energy sector is estimated to need 15,000 engineering graduates over the next two decades
Martin Grant, managing directorof Atkins' Energy business



A-LEVEL ECONOMICS

Head of Department – Ms S. Aziz

- **EXAMINATION BOARD - AQA**
- **ENTRANCE REQUIREMENTS**

Previous examination is not required although candidates must have good numeracy and literacy skills.

- **THE COURSE**

Economics seeks to provide its students with a greater insight into economic activities ranging from global events like the Eurozone crisis to micro issues like the ricing price of food. It is hoped that the student will develop skills allowing them to analyse socio-economic phenomenon and evaluate possible repercussions.
Major areas of the course are:

- The Market system, price determination and market failure
- Business Economics –oligopolies, monopolies and competition.
- Wage determination, trade unions and labour market failure
- The Macro-economy- the UK and its interaction with the global economy.

- **ORGANISATION OF WORK**

Although regular weekly assignments are set throughout the course, dedicated students must be keen to supplement specific class and homework activities with individual research and investigation from books, journals, newspapers, computer based resources, television reports and video tapes. A lively interest in current affairs is essential.

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can be combined with a variety of subjects at A Level according to students' aptitudes and inclinations.

- **ASSESSMENT - A-LEVEL**

June Year 13 - Paper 1 (2hrs / 33.3% of A-Level)	Markets & Market failure
June Year 13 - Paper 2 (2hrs / 33.3% of A-Level	National & International Economy
June Year 13 - Paper 3 (2 hrs / 33.3% of A-Level	Economic Principles and Issues

A-LEVEL ENGLISH LITERATURE

Head of Department - Mr J. Hunt

- **EXAMINATION BOARD – *Edexcel***

- **ENTRANCE REQUIREMENTS**

You will need at least one grade 7 and a grade 6 in GCSE English Language and English Literature.

- **COURSE AIMS & OBJECTIVES**

An A Level in English is highly regarded by universities and employers alike; its traditional, academic nature gives students invaluable experience and skills in analysis, research, critical thinking and argument as well as improved written and oral techniques. It combines easily with every subject, both Arts and Sciences.

English is a facilitating subject, highly regarded by Russell Group universities.

Studying English offers excellent preparation for a very wide range of careers:

- Obvious ones include advertising, journalism, scriptwriting, film studies, publishing, business, communication, and English Language and/or Literature;
- University Admission Tutors for Law have stated their enthusiasm for ability in English;
- Many medical schools prefer an A Level in a traditional non-science subject such as English.

Success in English is proven, with many students achieving outstanding results. Last year 90% of students achieved a top grade.

- **COURSE CONTENT**

The new A-Level specification has only a few texts to read, with a focus on the depth of knowledge of these chosen texts.

At A Level
3 exams in year 13 based on:

1. *The Picture of Dorian Gray* and *Dracula*;
2. *The Pitmen Painters* and *King Lear;*
3. A collection of modern poetry, and Chaucer's *The Wife of Bath's tale;*

+ 1 coursework essay on two texts of your choice.

You will research the background of writers, allowing you to set texts in their historical context, as well as appreciate their modern-day appeal. There may be opportunities to see performances at Stratford and local theatres, as well as take part in workshops. We also offer additional 'extension' lessons which allow students to explore aspects of English beyond the A-level syllabus.

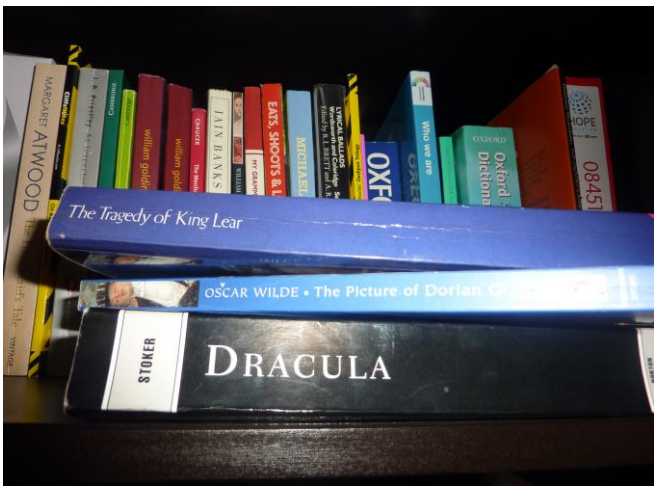
- **STYLE OF TEACHING / DETAILS OF ASSESSMENT**

Lessons: are currently in groups of 10-20 allowing for an interactive and lively approach to the appreciation of literature. This friendly environment allows for a variety of viewpoints to be shared and valued in discussions. Improvisation and dramatised readings, DVDs, and analysis of various texts and extracts also feature in the course. Classes are taught jointly by two teachers.

- **ASSESSMENT**

May/June year 13: exams

November year 13: coursework



A-LEVEL GEOGRAPHY

Head of Department - Dr H. Fyfe

- **EXAMINATION BOARD** - AQA

- **ENTRANCE REQUIREMENTS**

Grade 6 at GCSE is normally required but candidates with no previous examination experience in Geography will be considered.

- **COURSE AIMS AND OBJECTIVES**

Contemporary Geography is a subject which explicitly engages with the relationship of human populations to each other and their relationship with the physical environment. Geographers look at issues from a wide perspective and develop a range of skills that are attractive to a very broad range of future employers. Specific skills include field work, research and report writing, preparing maps and diagrams, and using social survey and interpretative methods. Geographers are also adept in recognising the moral and ethical issues involved in debates and enquiries.

The aim of Geography at A level is to provide you with an appreciation of the complexities of decision-making in the real world; a variety of skills to analyse data and draw conclusions, and a desire to tackle urgent environmental and social issues in the UK and around the world.

- **COURSE CONTENT**

This qualification is linear and students will sit all their exams at the end of the course in Year 13. The following topics will be covered:

Water and carbon cycles: The water and carbon cycle are major elements in the natural environment. Students will study their global distribution and size and look at the ways in which they support life on Earth.

Glacial systems and landscapes: The global distribution of "cold" environments and the study of how ice has shaped the land. The topic will also look at the exploitation and development in tundra areas, Antarctica and the Southern Ocean.

Hazards: The nature, form and impacts of natural hazards including volcanoes, earthquakes and storm hazards. Students will study short and long term responses and focus on recent examples around the world.

Global systems and global governance: This topic focuses on globalisation – the economic, political and social changes associated with technological and other driving forces which have been a key feature of the global economy and society in recent decades.

Changing Places: This section focuses on people's engagement with places, their experiences of them and the factors and processes which affect them. Students will engage in qualitative and quantitative investigative techniques focusing on the social and economic Characteristics of Torquay and comparing these to the east end of London

Contemporary urban environments: Students will study the changing nature of 21st century cities, the processes and challenges which affect them and moves towards greater environmental sustainability and social cohesion.

- **FIELDWORK**

A series of day fieldtrips to cover the physical topics and a two day trip to London in the Summer term of Year 12 focusing on place and contemporary urban issues. One-day fieldtrip to Plymouth in the Autumn term of Year 13. The department runs a six-day residential trip to Iceland every two years.

- **STYLE OF TEACHING / DETAILS OF ASSESSMENT**

You will build up a portfolio from your lesson notes, private reading, short assignments and from field study. Students are encouraged to attend the South Devon Geographical Association termly lectures and there are a number of external speakers who come in to give talks on their specific areas of expertise.

- **EXTRA-CURRICULAR ACTIVITIES**

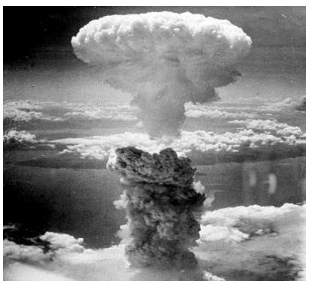
Geography students have a strong tradition of participating in local and national Geography-related activities. In recent years, we have had success in the Young Geographer of the Year competition, South West Geology competition and the South West Planning competition. Such activities are enriching and enjoyable.

- **A LEVEL EXAMINATIONS**

Component 1: Physical Geography – 2 hour 30 minute written examination with structured questions of varying length (40% of A-level).

Component 2: Human Geography – 2 hour 30 minute written examination with structured questions of varying length (40% of A-level).

Component 3: Geographical Investigation – students complete an individual investigation which must include data collected in the field. The investigation must be based on a question or issue defined and developed by the student relating to any part of the specification content. The investigation will be 3000-4000 words in length, it will be marked by the teacher and moderated by AQA (20% of A level).


A-LEVEL HISTORY

Head of Department – Miss J. Bradbury

ENTRANCE REQUIREMENTS

A grade 6 at GCSE, although candidates with no previous examination experience in History will be considered.

COURSE AIMS AND OBJECTIVES

To attain an in-depth understanding of the historical themes covered and to foster a passion for History, and through this a more sophisticated understanding of some of the issues in the world today. As well as detailed understanding of the historical issues covered, students will leave with a set of valuable transferable skills. Historians are critical thinkers and skilled analysts who are able to use data to solve a problem: highly prized skills in any challenging higher education course or career.

COURSE CONTENT - Year 12

Consolidation of the Tudor Dynasty: England, 1485-1547: students will gain a broad understanding of how Henry Tudor and Henry VIII created and consolidated royal supremacy in England. Themes included will be their relationship with parliament, economic and foreign policies, the nature of English society and religion.

Revolution and Dictatorship in Russia: The Rise of Stalin 1917-1929: an in-depth study of the Russia under the last Tsar and the conditions that created his downfall. Students will examine the Provisional Government's attempts to manage the transition from autocracy to democracy, and its defeat by a Bolshevik coup

COURSE CONTENT - Year 13

England: Turmoil and Triumph, 1547-1603: building on from the AS unit on the Tudor dynasty, students will extend their knowledge to look at the crisis under Edward and Mary I and the triumph of England in the Elizabethan age. Aspects covered will include an examination of religious persecution under 'Bloody' Mary, plots to usurp the throne, the execution of Mary Queen of Scots and the political and economic rivalry with Spain.

Revolution and Dictatorship in Russia: Stalin's Rule, 1929-1953: this study extends your knowledge from the AS content on the rise of Stalin to look at his policies once in power. Aspects studied include the use of terror to remove his rivals, his transformation of Russia into an industrialised superpower, the wartime pact with Hitler and his relationship with the USA in the first years of the Cold War.

STYLE OF TEACHING / DETAILS OF ASSESSMENT

In History lessons you will take part in a wide variety of learning activities, such as debates, group presentations and seminar-style discussions. It is vital that you also read widely using the course reading lists and are prepared to keep an organised folder of detailed revision notes.

INTERNAL ASSESSMENT IN YEAR 12

	Form
Consolidation of the Tudor Dynasty: England, 1485-1547	**1 hour 30 examination**
Revolution and Dictatorship in Russia: The Rise of Stalin 1917-1929	**1 hour 30 examination**

ASSESSMENT IN YEAR 13

	Form	Weight
The Tudors: England 1485 - 1603	**2 hour 30 examination**	**40%**
Revolution and Dictatorship in Russia: 1917 - 1953	**2 hour 30 examination**	**40%**
Historical Investigation	**Max 3,500 word essay.**	**20%**

HISTORY AND CAREERS

There will always be jobs for people who can apply the lessons of the past to the problems of the present: many of those at the top of politics and the civil service are History graduates. History teaches a number of desirable skills, such as clarity of written and oral expression, putting forward complex arguments concisely, gathering and assessing data, reaching conclusions and ideas for progress on the basis of critical assessment of information. A considerable number of history graduates therefore enter the legal profession, jobs in media, journalism as well as the business and banking sector.

A-LEVEL MATHEMATICS/ FURTHER MATHEMATICS

A Level Co-ordinator - Mr C. Price

ENTRANCE REQUIREMENTS

A Level Mathematics – GCSE Mathematics level 7
A Level Further Mathematics - GCSE Mathematics level 8

COURSE AIMS AND OBJECTIVES

The A-level Mathematics courses offered at TBGS are designed to enable students to develop mathematical knowledge and understanding in a way which both increases their confidence to solve problems in the real world and their appreciation of Mathematics for its own sake. Emphasis is placed upon the ability to reason logically, develop mathematical proofs and use Mathematics as an effective means of communication. At this level, students should expect to experience Mathematics as a form of enjoyment in relation to its practical, aesthetic and creative aspects.

A-level Further Mathematics is particularly suitable for those who enjoy Mathematics and wish to accept the challenges it offers to extend them fully.

Whilst Mathematics is good preparation for university subjects which include significant mathematical content, Further Mathematics is regarded by universities as a thorough preparation for a vast and varied range of subjects where Mathematics plays a fundamental part. It is strongly recommended for those students wishing to study Mathematics at university.

We also offer an AS-level course in Further Mathematics, further details of which can be found in the extension options section of the prospectus.

COURSE CONTENT

A-level Mathematics consists of three modules, two modules of Pure Mathematics and one Applied Mathematics module containing both Mechanics and Statistics.

Students studying A-level Further Mathematics will complete the full A-level in Year 12. They then build upon their knowledge and experiences in Year 13 by studying two Further Pure Mathematics modules and two Applied Mathematics Module, one in Mechanics and one in Statistics.

Pure Mathematics involves the continued study of algebra and functions, trigonometry and co-ordinate geometry. In addition, students are introduced to calculus and are able to develop techniques to solve a variety of different problems in this area.

Mechanics illustrates the application of Mathematics to physical problems. Emphasis is placed on the ability to model a real problem mathematically, solve it, and then interpret the resulting solution back in terms of the original problem.

Statistics applies the concepts of mathematical probability to make inferences from data. Again, emphasis is placed upon experimentation, modelling and the analysis of real data.

Further Pure Mathematics extends and develops skills within the Pure Mathematics modules and introduces students to complex numbers, numerical methods and differential equations, as well as extending calculus techniques and applying them to hyperbolic functions. There is an emphasis on constructing rigorous mathematical arguments and logical deductions.

STYLE OF TEACHING / DETAILS OF ASSESSMENT

A-level Mathematics is delivered by two subject teachers with 9 hours of Mathematics lessons per fortnight. A-level Further Mathematics is delivered by three teachers with 18 hours of Mathematics lessons per fortnight. Individual teachers will use a variety of teaching techniques involving the use of ICT where appropriate, experiments, group work and whole class teaching.

Assessment of all the units studied is by examination only. Unit examinations take place in the Summer term of 13.

A-LEVEL MEDIA STUDIES

Head of Department - Ms N. Moore

ENTRANCE REQUIREMENTS

You do not have to have previously studied Media Studies in opting for A-Level. You should, however, have at least a GCSE Grade 6 in English Language. Grade 6 or higher in Media Studies is favourable if you took this subject at GCSE.

Enthusiasm and interest are the main requirements. Together with the determination and initiative to complete major production assignments and research. Very able students will find that the course offers strong academic challenges. Many students join the course who have never studies Media before – and go on to do very well. Students also relish the freedom of self-directed case studies and gain an importance sense of autonomy and ownership over their course of study and production.

COURSE AIMS AND OBJECTIVES

Now housed in the spacious facilities in The Manor, Media Studies offers an enviable working environment purpose-designed for digital recording and editing facilities with Apple Mac computers.

As the course progresses, it is hoped that the students develop critical understanding of the media concepts through the engagement with media products and concepts and through the creative application of practical skills. The depth of work will give students a sense of expertise in the topic areas of:

Television – Film – Radio – Newspapers – Magazine – Advertising & Marketing – Online, Social and Participatory Media – Video games – Music Videos

Students are encouraged to integrate their learning of theory into media production units as well as engage in new media technologies such as blogging, video diaries, interactive multimedia presentations, web-design as well as more traditional digital video editing.

Course Content

Examination Board – OCR

Unit 1 – Media Messages (Exam - 35%)

Section A: News. two linked in-depth studies of newspapers selected by the Exam Board that focus on contemporary news in the UK. Example texts this year include *The Guardian* and *The Daily Mail*

Section B: Magazines, Music Videos and Advertising. Students will explore media language and representation, through media products set by the Exam Board. Example texts this year include *The Big Issue; Radiohead, Fatboy Slim; Old Spice, Lucozade.*

Unit 2 – Evolving Media (Exam – 35%)

Section A: Media Industries and Audiences

Students will explore media industries and audiences, through media products set by the Exam Board for:

- radio (*Radio 1 Breakfast Show*)
- video games (*Minecraft*)
- film (*The Jungle Book*)

Section B: Long Form Television Drama

Learners will engage in **one in-depth study** of television as an evolving, global media form. Learners must study one complete episode of a contemporary English language long form TV drama and one complete episode of a non-English language long form TV drama to inform their study. Learners must select from examples that could include *Mr Robot, Stranger Things* and *The Killing, Borgen* and *Deutschland 83*

Unit 3: Non-Examined Assessment (Coursework – 30%)

Students will practically explore the creation of three linked media products in a cross-media production from a choice of set briefs* that could include:

- Music Video – Promotional video, website, press kit
- Television magazine programme – two trailers, website, press kit
- Soap Opera – two trailers, website, press kit

**NEA Briefs are subject to change each year*

Style of Teaching/Details of Assessment

Initially, classroom-based seminar lessons will concentrate on encouraging debate and analysis of media texts. Students are required to participate in all aspects of discussion – including online blog commenting using a department-administered blog hub.

Classwork is assessed primarily through multi-media blogging, video commentaries, Prezi, Soundcloud podcasts as well as more traditional essay-based written exam responses to practice exam skills.

In the practical units, study will gradually become independently led in terms of research and group-based planning, filming and editing with teacher guidance throughout all stages of production.

A-LEVEL MUSIC

Head of Department - Mr C. Eastman

- **EXAMINATION BOARD: Eduqas**

- **"THE GREATEST SCIENTISTS ARE ARTISTS AS WELL" (ALBERT EINSTEIN).**

Einstein may well have been thinking of the creativity that sets the greatest scientists (and politicians, sports-people, engineers or teachers) apart, but he could equally have been referring to the problem solving, research, planning, analytical and critical thinking skills and, of course, teamwork skills that are developed so well through music. Not only does A Level music nurture these academic skills superbly, but it is highly valued by universities and opens up increasingly diverse career opportunities.

*We also offer an AS level course in Music, further details of which can be found in the Extension Options section of this prospectus***.**

- **ENTRANCE REQUIREMENTS**

GCSE Grade 7 and grade 5 standard on any instrument/voice OR GCSE grade 6 and Grade 6 on any instrument/voice. *In exceptional circumstances it may be possible for advanced performers without GCSE, but with grade 5 theory, to join the course after interview with Head of Department.*

- **COURSE AIMS & OBJECTIVES**

To develop students' musical skills, knowledge and understanding through the practical and academic study of a broad range of musical genres, engendering a passion for the subject. Students are encouraged to make links between the disciplines of composing, performing and appraising, becoming independent, reflective and enquiring musicians.

- **COURSE CONTENT**

Performing

Skills are developed throughout the course leading to a recital of at least six minutes. The music can be in any style and on any instrument or voice, played from notation or improvised. Students can perform as soloists or as part of an ensemble.

Composing

Students extend their compositional skills through the application of a range of methods which include traditional western melodic writing, jazz harmony and 20th and 21st century techniques. They complete two to three contrasting pieces inspired by their learning, one of which is to a brief set by the exam board.

Appraising

Students develop their listening and appraising skills through the study of music across a variety of styles and genres laid out in six areas of study. There are two set works taken from the *Western Classical Tradition*, in addition to which learners choose to study *Rock and Pop, Musical Theatre or Jazz* and *Into the Twentieth Century or Into the Twenty First Century.*

This component gives students the opportunity to use their growing musical understanding to reflect on, analyse and evaluate music in aural and/or written form using the musical vocabulary appropriate to the style.

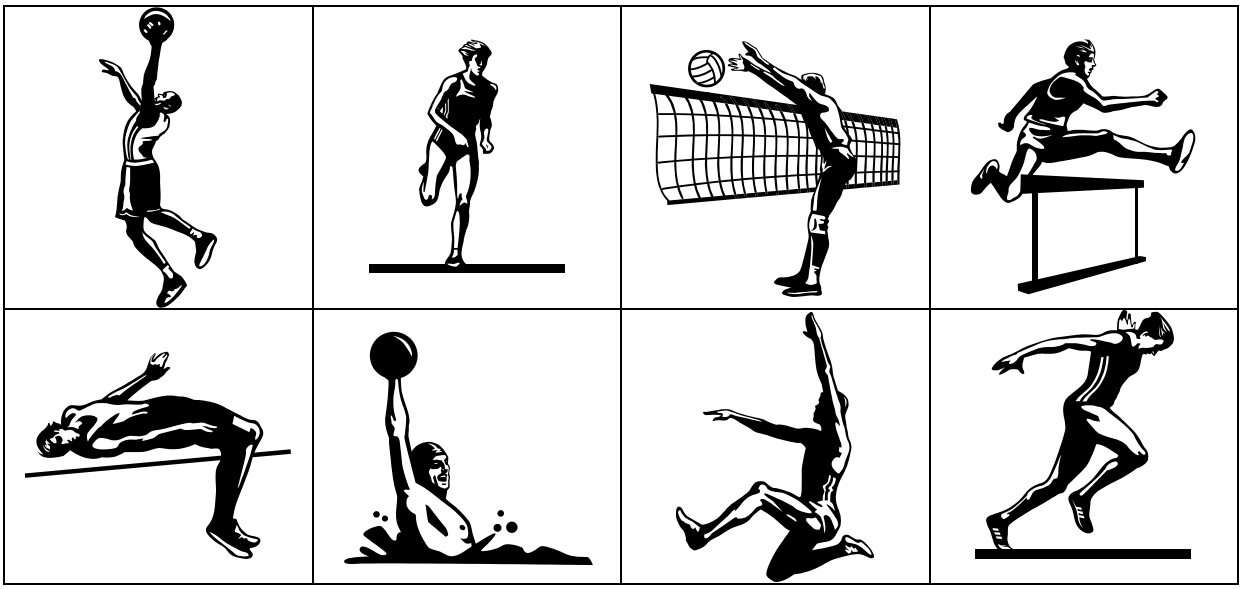
- **STYLE OF TEACHING/DETAILS OF ASSESSMENT**

An integrated approach is taken to teaching of the music A Level. Students take the opportunity to perform works from each area of study and to compose using the stylistic conventions of the relevant genre. Listening and appraising is used to support composition and performance work as well as develop the critical skills required for the examination.

Composition is completed and externally assessed in the final year of study.

Performance is assessed by a visiting examiner in the year of certification.

Appraising is assessed through an externally marked examination at the end of the course.



A-LEVEL PHYSICAL EDUCATION

Head of Department - Mr B.R. Passenger

EXAMINATION BOARD - OCR

ENTRANCE REQUIREMENTS

Students should have a strong practical background and understanding. Grade 6 in GCSE Science is expected. Grade 6 or above in GCSE Physical Education (if studied) would also be expected.

THE COURSE

This syllabus is offered as a multi-disciplinary approach to the participation in and study of man's movement, performance and behaviour in relation to play, institutionalised physical education, sport and recreation. Academic study within physical educationcan provide greater knowledge, insight and understanding of performance. This syllabus is based on an understanding of concepts and methods of enquiry drawn from a wide range of disciplines with the focal point being the performer and the performance.

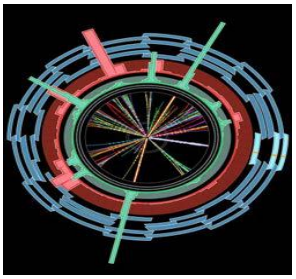
THE CONTENT

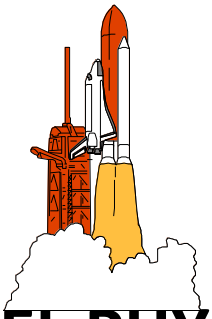
The content has been designed to allow learners to study Physical Education (PE) in an academic setting, enabling them to critically analyse and evaluate their physical performance and apply their experience of practical activity in developing their knowledge and understanding of the subject.

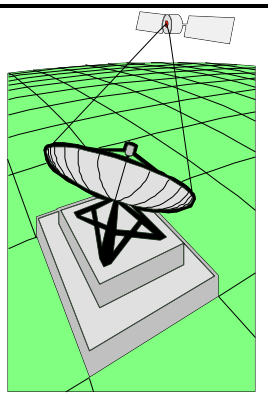
ASSESSMENT OVERVIEW

• Applied anatomy and physiology • Exercise physiology • Biomechanics	**Physiological** factors affecting performance (90 marks) 2 hr written paper	**30%**
• Skill acquisition • Sports psychology	**Psychological** factors affecting performance (60 marks) 1 hr written paper	**20%**
• Sport and society • Contemporary issues in physical activity and sport	**Socio-cultural** issues in physical activity and sport (60 marks) 1 hr written paper	**20%**
• Performance or Coaching in 1 sport • Evaluation and Analysis of Performance for Improvement	**Performance** in physical education (60 marks) Non-exam assessment/coursework	**30%**

USEFUL SUPPORTING GCSE AND A LEVEL SUBJECT – Biology.







A-LEVEL PHYSICS

Head of Department - Mr S. Dow

- **EXAMINATION BOARD AND SYLLABUS –** OCR AS (H156) and A (H556)
- **ENTRANCE REQUIREMENTS:** GCSE Physics Grade 7-9 or Core and Additional Science Grade 7-9

Physics is about unravelling the complexity of the universe to discover how and why it works. Physics forms the foundation of many technological advances and plays an important role in numerous scientific areas. It is an exciting and challenging field to study, requiring an adventurous and enquiring mind and good mathematical abilities. Its rewards include the deeper understanding of the world around us and the development of skills highly sought after throughout the employment spectrum.

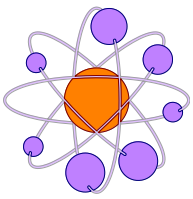
Career opportunities for physics graduates are wide ranging. Apart from moving into further research into physics, many have employment in IT industries and engineering, but also in the financial and business sector where analytical skills obtained in the subject are highly sought after.

- **COURSE CONTENT:**

To a large extent the A Level Physics course covers much the same subject matter as the Physics content of GCSE courses, but the treatment is deeper, more rigorous and challenging. A study of this subject develops powers of analysis and numeracy, together with practical skills and an ability to apply conceptual understanding to novel situations. A good grade at A Level Physics implies a high degree of intellectual capability, of use to employers in many different fields, further education or employment both in terms of content and the level of self-discipline and organisation of work demanded of students.

Students study four modules in Year 12 for AS Physics:

1. Development of Practical Skills in Physics
2. Foundations in Physics
3. Forces and Motion
4. Electrons, Waves and Photons



- **TEACHING:**

A range of teaching styles and strategies are employed, including lecture-type lessons, sessions of individual study and research, practical demonstrations & student practical work. The use of ICT during lessons is commonplace, with students using apps on ipads, simulation software and data loggers during experimental procedures. Deadlines for the presentation of work to be marked must be strictly adhered to. Students will need at all times to have in their possession a reliable and sufficiently powerful electronic calculator, the use of which should be fully understood.

- **ASSESSMENT**

The AS Physics content used as a mock examination will be examined via two papers in June. Paper 1, 'Breadth of Physics', will be 70 minutes long and be 50% of the AS; Paper 2, 'Depth in Physics', will also be 70 minutes long, being 50% of the AS. Practical skills will be assessed in the written papers.

For the full A level, there will be an additional three papers. Paper 1, 'Modelling Physics', will be 2.5 hours long, and is 37%, Paper 2, 'Exploring Physics' is also 2.5 hours long, and is 37%. Paper 3, 'Unified Physics', is synoptic and will cover all six taught modules. It will be 1.5 hours long and comprise the remaining 26% of the A level.

Students will keep a laboratory notebook where a record of all investigations and write ups will be kept. This will be evidence for the Practical Endorsement in Physics which is either a Pass/Fail depending on whether students have been able to demonstrate a range of investigative techniques.

USEFUL SUPPORTING A LEVEL SUBJECTS:

Mathematics and Chemistry are useful supporting subjects, though neither is essential.

Non-mathematicians will not be necessarily disadvantaged, although it has to be noted that the attainment of a top grade is unlikely without the ability to perform calculations quickly and accurately.

A-LEVEL PHILOSOPHY

Head of Department - Mrs S. Godfrey

EXAMINATION BOARD AND SYLLABUS

AQA: Advanced Level in Philosophy (7172)

ENTRANCE REQUIREMENTS:

Grade 6 in English Language and/or grade 6 in Religious Studies. Also essential is an open and enquiring mind**.**

COURSE AIMS & OBJECTIVES

The aim of this course is to introduce students to the key methods and concepts in philosophy through the study of four broad themes: Epistemology; Moral philosophy; Metaphysics of God; and Metaphysics of Mind. Students will develop and refine a range of transferable skills, such as the ability to ask penetrating questions, to analyse and evaluate the arguments of others and to present their own arguments clearly and logically.

Critical analysis, coherent thought, careful decision-making and clear presentation are important skills for Philosophy but also in themselves. They serve as valuable preparation for many careers.

At the end of the course it is hoped that each student will be able to think independently and will have a respect for reasoned argument. Many employers value flexibility of thought and the capacity of marshalling arguments in a coherent and compelling manner which this course offers. Students tend to follow a career in the following areas:

Law, Medicine, Accountancy, Commerce and Industry, Business Management, Journalism, Civil Service, Teaching, Politics, Research.

Philosophy is welcomed and valued by many professions.

COURSE CONTENT

Paper 1

Section 1: Epistemology

- What is knowledge?
- Perception as a source of knowledge
- Reason as a source of knowledge
- The limits of knowledge

Section 2: Moral Philosophy

- Normative ethical theories
- Applied ethics
- Meta-ethics

Examination: 3 hours

100 marks50% of A Level

Paper 2

Section 3: Metaphysics of God

- The concept and nature of 'God'
- Arguments relating to the existence of God
- Religious language

Section 4: Metaphysics of Mind

- What do we mean by 'mind'?
- Dualist theories
- Physicalist theories
- Functionalism

Examination: 3 hours

100 marks 50% of A Level

STYLE OF TEACHING/DETAILS OF ASSESSMENT

The teaching and learning strategies used during the course are intended to develop students':

- knowledge of a range of philosophical and ethical topics and texts;
- understanding of the significance of the material studied, scholarship and experience, both past and present
- ability to express themselves clearly and logically in an intelligent argument and to make some attempt at critical evaluation.

This qualification is linear so students will sit all their exams at the end of the course.

EXTENSION OPTIONS

- **ARTS AWARD GOLD**
- **AS LEVEL FURTHER MATHEMATICS**
- **EXTENDED PROJECT**
- **GOLD D*of*E**
- **AS MUSIC**

- All Year 12 students should choose one of these options to supplement their A-level subjects.
- These options are taught for one lesson per week.
- Time permitting; students may be able to choose more than one option.
- It is compulsory for anyone studying 3 A levels, to take an extension option.

ARTS AWARD GOLD

Teacher in Charge – Mr J. Hunt

EXAMINATION BOARD - Trinity College

ENTRANCE REQUIREMENTS

There are no formal entrance requirements. You can pursue any area of the arts that is new to you, from visual art to music, theatre, poetry writing – the possibilities are endless!

COURSE AIMS AND OBJECTIVES

The purpose of the Arts Award Gold Level is to develop creativity, communication, planning, teamwork and leadership skills. It is recognised on the UCAS tariff too.

COURSE CONTENT

There are two units:

1. Personal arts development
   - You extend your knowledge and skills as an artist, explore the professional arts world and form a view on an arts issue.
   - There are four areas, which will be developed in core lecture sessions, and meetings with an arts award trained supervisor, as well as work in your own time.
     i. Arts practice
     ii. The wider arts sector
     iii. Research and review
     iv. Forming a view
2. Arts project leadership
   - Students take charge of an arts project, building leadership skills and projecting to a public audience. For example, you may run a workshop with a primary school, using the skills you've developed in unit 1. You will plan, implement and review.

STYLE OF TEACHING / DETAILS OF ASSESSMENT

The arts mark will be delivered in a weekly guided learning session, through online materials, mentoring through meeting your supervisor, and with 60 hours of independent learning. You will develop a portfolio and log of reflections as evidence of your project, in order to achieve certification.

AS LEVEL FURTHER MATHEMATICS

Teacher in Charge - Mr C. Price

ENTRANCE REQUIREMENTS

GCSE Mathematics level 8

COURSE AIMS AND OBJECTIVE:

The AS-level Further Mathematics is designed for students who have opted to study a single A-level in Mathematics and wish to extend their understanding of the subject further, without having to dedicate a second A-level option to the subject. This course is an excellent option for students who wish to study a university course which includes a large mathematical content.

COURSE CONTENT

AS-level Further Mathematics consists of a Further Pure Mathematics module and either a Decision Mathematics module or further modules in Mechanics or Statistics.

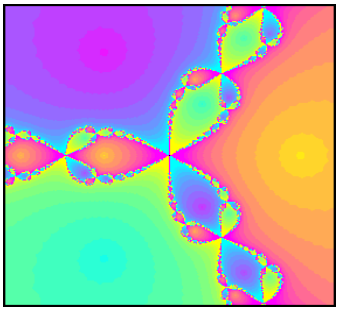
Further Pure Mathematics extends and develops skills within the Core Mathematics modules and introduces students to complex numbers, matrix algebra and proof by mathematical induction.

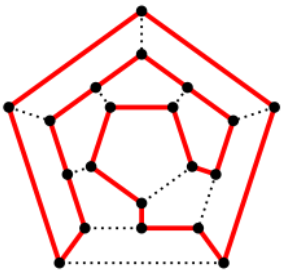
Decision Mathematics consists of sorting algorithms, linear programming, graph theory and critical path analysis.

STYLE OF TEACHING/DETAILS OF ASSESSMENT

AS-level Further Mathematics is delivered through 3 hours of Mathematics lessons per fortnight. Individual teachers will use a variety of teaching techniques involving the use of ICT where appropriate, experiments, group work and whole class teaching.

Assessment of all the units studied is by examination only. Unit examinations take place in the Summer term of Year 13.





EXTENDED PROJECT

Teacher in Charge – Mrs Y. Madge

EXAMINATION BOARD - AQA

ENTRANCE REQUIREMENTS

There are no formal entrance requirements – just a motivation to succeed and the ability to work independently.

COURSE AIMS AND OBJECTIVES

The purpose of the Extended Project Qualification (EPQ) is to provide additional stretch and challenge by offering students an opportunity to produce an extended piece of work in an area in which they have a particular interest. The course allows students to embark on largely self-directed projects, by taking responsibility for the choice and design of an individual project (or an individual role in a group project).

COURSE CONTENT

The EPQ will involve:

- A common core of lectures
- Mentoring with the coordinator to identify a viable project
- Meetings with your chosen supervisor
- Independent work to complete the project in the student's own time

STYLE OF TEACHING / DETAILS OF ASSESSMENT

The EPQ will take 120 hours to complete. Learners will be required to:

- Select a topic / area of interest
- Plan, research and carry out their project (including a written report of 1500 or 5000 words)
- Provide evidence of all stages of the project
- Deliver a presentation to a specified audience

Reports should be long enough to explore the relevant issues and use appropriate terminology, style and form of writing. Each one is likely to contain:

- References to a range of information sources
- Historical literature or some other background research
- Details of the design, knowledge, understanding and skills used
- A conclusion, including an evaluation of the outcomes of the Project.

The Extended Project Qualification is equivalent to an AS Level. Using a six grade scale from A* to E, it is internally assessed by the teaching Supervisor and standardised by the Centre Coordinator.

The EPQ also attracts extra UCAS points!

GOLD DUKE OF EDINBURGH'S AWARD

Teacher in Charge – Mr A Brown

To complete the Gold DofE you must volunteer time, take part in a physical activity, learn a skill, complete a residential activity of your choice as well as taking part in practice and qualifying four-day camping expeditions.

Volunteering is all about making a difference to other people's lives. Perhaps you're interested in animals or conservation? Or you might like to work with older people or raise money for a cause that means a lot to you? From teaching children cyber safety to starting a local recycling campaign, the Volunteering section of your DofE enables you to give your time to help others and change things for the better.

The Physical section is a chance for you to focus on your health and fitness and have fun along the way. As long as you pick something that requires a sustained level of energy and physical activity, the possibilities are endless. Improve your football, rock climbing or dance skills or try a completely new sport or activity. Join a team or do it on your own. You don't have to be super fit or world class – with the DofE, it's about setting your own challenges, giving 100% and being the very best you can be.

The Skills section is about discovering what you're really good at. Maybe you want to get better at something you already do, like playing a musical instrument, or learn something for the very first time, like how to design a website? By developing practical and social skills and nurturing your personal interests and talents, you'll boost your self-esteem and your CV.

You can choose from a range of residential activities – from helping at a National Trust site in the UK to working with children in India. You'll spend five days and four nights taking part in a shared, worthwhile activity with people you've never met before. A DofE residential will boost your independence and confidence and is a great way to leave a positive footprint on your life and other people's.

As part of a small Expedition team, you'll plan and complete a practice and final expedition that will truly stretch your horizons. You'll improve your communication and leadership skills and take a rucksack full of memories home with you. The school currently offers three opportunities for you to complete expeditions. These are Dartmoor over October half term, Brecon Beacons in the Easter holidays or Picos De Europa, Spain at the end of the Summer term.

THE DUKE OF EDINBURGH'S AWARD

AS MUSIC

Teacher in Charge – Mr C Eastman

- **ENTRANCE REQUIREMENTS**

GCSE Grade 7 and grade 5 standard on any instrument/voice OR GCSE grade 6 and Grade 6 on any instrument/voice.

- **COURSE AIMS & OBJECTIVES**

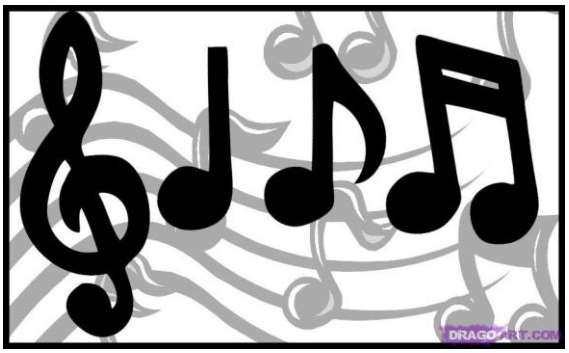
As Level music is offered to provide an extra opportunity for students to develop their creative and musical skills, knowledge and understanding through the practical and academic study of a broad range of musical genres.

- **COURSE CONTENT**

Performing (30%): Performance of two solo or ensemble pieces.
Composing (30%): One free composition and one to a brief set by the exam board.
Appraising (40%): Study of one large scale set work (Western Classical Tradition), a selection of shorter pieces (choice from Popular Music, Musical Theatre or Jazz) and a wide range of 'unfamiliar' music.

- **STYLE OF TEACHING/DETAILS OF ASSESSMENT**

AS Level music is a one-year course taught alongside A Level Music. Assessment of performance is by visiting examiner at the end of Year 12. Appraising is assessed through a listening exam at the end of Year 12.



A LEVELS

Students who opt for the A level curriculum should choose three or four of the following A level options. We cannot guarantee all combinations of subjects, although we strive to accommodate everyone. On the application form students are requested to nominate THREE / FOUR A levels in order of preference. They should also indicate which of the Extension Options they would prefer (if applicable).

- Art
- Biology
- Business Studies
- Chemistry
- Computer Science
- Design & Technology
- Economics
- English Literature
- Geography
- History
- Mathematics / Further Mathematics
- Media Studies
- Music
- Philosophy
- Physical Education
- Physics

Extension Options:

- Arts Award Gold
- AS Further Mathematics
- Extended Project
- GOLD Duke of Edinburgh's Award
- AS Music