

**MOUGINS
SCHOOL**

**SIXTH
FORM
GUIDE**

2016 - 2017



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Introduction

The Curriculum (based on a 2 year course in the Sixth Form)

It is an exciting time to be embarking on a Higher Education course. Reforms to some A-levels began to be phased in for students beginning their courses in September 2015, in which some A-Levels changed from being modular in approach to being linear; other subjects will remain modular. This means that students beginning their A-level courses in 2016 may take a combination of reformed and unreformed A-levels. At Mougins School the subjects chosen will either be CIE International, Pearson IAL, Edexcel Linear or BTEC Level 3 Higher.

CIE International

A Level certification is divided into 2 components, called AS (Advanced Subsidiary) and A2. C.I.E. board awards qualifications based on terminal exams taken at the end of Form12 (AS) and Form 13 (A2). The AS qualification is worth 50% of the A level, and the standard is based on the level that a student is expected to reach after one year of post-16 study (i.e. at the end of Form12) The second half of the course (usually taken in Form 13) is called the A2 and will reach the standard of Advanced level. The AS qualification counts as a complete qualification if a student does not wish to progress to the Advanced level course

Subjects offered: Art, Computing, History and Mathematics.

Pearson IAL

A Level certification is divided into 2 components, called AS (Advanced Subsidiary) and A2. In the case of qualifications offered by Pearson Examinations Board, each component consists of 2 or 3 modules that are available in 2 sessions per year (January and June). The AS qualification is worth 50% of the A level, and the standard is based on the level that a student is expected to reach after one year of post-16 study (i.e. at the end of Form12). The second half of the course (usually taken in Form 13) is called the A2 and will reach the standard of Advanced level. The AS qualification counts as a complete qualification if a student does not wish to progress to the Advanced level course

Subjects offered: Biology, Business Studies, Chemistry, Geography and Physics.

Edexcel Linear A-levels

The most significant change is that the AS (Advanced Subsidiary) and the full A level will be decoupled into separate qualifications. A level is therefore a two year course with all examinations and assessment at the end of the second year; there are no AS examinations offered that could form part of the A-level qualification.

Subjects offered: English Literature, French, Music and Spanish.

BTEC Level 3 Higher

This is a six unit course with both practical and theory elements, the completed units are the equivalent to one A-Level.

Subjects offered: Physical Education (Sports Science)

One year/IGCSE courses

These courses are designed for students who wish to improve on existing grades, or to gain a qualification in a second language.

French (GCSE)
French (Beginner)

English Language (IGCSE)
Maths(IGCSE)
English (2nd language)

Other subjects in which you wish to improve your grades can only be scheduled with existing Form 11 groups where the timetable permits. If there is a timetable clash, you will be advised by your tutor which subject(s) should have priority.

What will students be expected to study?

Most students will study **four** subjects to examination level in Form12 and will therefore have a considerable amount of contact time with their teachers. By Form13, however, more private study time will become available as the A2 part of the courses becomes more demanding. The sensible use of study time is also an important part of preparation for life after leaving school.

Most students will therefore choose:

- **Three** subjects which they plan to study to A2 level – they will take AS examinations in these subjects during or at the end of Form12
- **Plus two more** subjects which will be studied to AS level only – it is recommended that students choose contrasting subjects for these courses, in order to demonstrate a breadth of achievement
- **A few students** may choose to study **four full A levels**
- **Note:** students who have already started an **AS French course in Form 11** should, in most cases, consider this to be an **additional AS**

In addition to the academic course, students are expected to participate in Health and Fitness programmes and a variety of Community Service Activities (see the Sixth Form handbook for more details) spread over a two-year period.

Course Change Requests

Early in Form 12 or after the October Review, a student may wish to change courses. The procedure to do this is as follows:

1. Arrange to see the relevant Form Tutor, who will check to see if the proposed change is possible to timetable, and to discuss the academic implications.
2. If it is possible to timetable the proposed change and you still wish to have the request considered, you will be given a form which must be completed by
 - a) the subject co-ordinator affected by the change
 - b) your tutor
 - c) your parents
3. The final decision will be made by the Headmaster. If the course change is approved, the student and staff involved will be informed.
4. No student is allowed to change courses **unless this approval has been given.**

Enquiries

Summaries of all the courses on offer can be found later in this guide. Staff will be happy to provide any further information, and **students are strongly advised to talk with individual subject teachers before making final decisions about which options to choose.**

In addition, very helpful student guides can be found on the following websites:

Edexcel: www.edexcel.org.uk C.I.E.: www.cie.org.uk

TIMETABLE OF EVENTS

4th February 2016

Information for students

Tutor periods
Parents' information evening

**By Tuesday
23rd February**

Initial Choice of subjects

Deadline for return of choice forms to tutors
Discussion with students and parents, as necessary

APRIL 2015

Timetable blocks are devised to accommodate as many combinations of subjects as possible. Most students' three A level choices are usually possible in the timetable. You should be flexible about your choice of AS subjects

MID-JUNE

Provisional confirmation of courses by the school

Subjects can only be confirmed if there are sufficient numbers of students wishing to enroll in the course.
Some less popular combinations of subjects may not be possible to timetable.

Completion of (I)GCSE and GCSE Examinations

Thursday 11th AUGUST

Probable date for receipt of all CIE Examination results, although some results may be available online before this date.

**Thursday 18th and 25th
AUGUST**

Probable date for receipt of Edexcel GCE, followed by GCSE Examination Results, although some results may be available online before this date.

MONDAY 5th SEPTEMBER 2016 - FORM 12 and 13 COURSES BEGIN

ART & DESIGN

AS Cambridge International Examinations 9704

A2 Cambridge International Examinations 9704

What do I need to know or be able to do before taking this course?

It is not essential that you have studied Art at GCSE level, but your talents in this creative subject will already have been demonstrated if you have followed a previous course. You will be expected to devote a large amount of time out of lessons to individual research and project work, and to show that you are able to work independently. Your interest should extend beyond the syllabus and into your everyday life if you are to be truly successful in this subject.

What will I learn?

The main purpose of any course in art and design is to develop your ability to appreciate the visual world, and to respond to it in a personal and creative way.

The skills you develop will be varied and will include:

- interpreting your ideas and feelings using art and design
- developing your imagination and creative powers
- improving your experimental, analytical and documenting skills
- learning the specialist vocabulary
- increasing your knowledge and understanding of the place of art and design in history and contemporary society
- discovering and extending your sensitivity, powers of personal expression and imagination

What kind of student is this course suitable for?

You will enjoy this course and complete it successfully if:

- you are interested in careers for which art and design are supportive
- you have an interest and aptitude for the subject, but do not wish to follow your study of it beyond AS/A level
- you wish to undertake further studies in art, usually at art college or in further education

What examination will I take?

AS Component 1 (30%): Controlled Test

This consists of an assignment set and assessed by the examination board (CIE). You will be given a choice of stimulus material four weeks prior to the exam date in order to enable you to make preparatory studies. The time allowed for the exam is 15 hours during which you will produce your work for submission.

AS Component 2 (20%): Coursework

You will be required to produce a coursework project on a theme you have chosen. Five sheets of work must be submitted on which a number of smaller works can be mounted.

A2 Component 3 (30%): Coursework

Students must produce a coursework project, a folder of supporting work and a sketchbook.

A2 Component 4 (20%): Related Study

This requires a detailed visual and written study of 3500 words on an aspect of the visual arts relating to Components 2 and 3.

What could I go on to do at the end of the course?

You could follow a Foundation course in Art and Design, or a degree course at university in such fields as architecture, media studies, arts management or history of art.

BIOLOGY

AS EDEXCEL XBIO1 International Subsidiary Level

A2 EDEXCEL YBIO1 International Advanced Level

What do I need to know or be able to do before taking this course?

This course builds on the knowledge and understanding of IGCSE Double Science Award. It is expected that you will have achieved at least a Grade C in the Biology and Chemistry components and, as you will need to handle and interpret data, a Grade C in Mathematics would be helpful. During the course, you will also be expected to be able to communicate effectively and research information from a variety of sources.

What will I learn?

You will have opportunities to:

- develop essential knowledge and understanding of different areas of biology and how they relate to each other
- develop and demonstrate a deeper appreciation of the skills, knowledge and understanding of *How Science Works*
- extend your personal interest in the study of living systems
- appreciate how society makes decisions about biology-related issues and how biology contributes to the success of the economy and society
- be aware of the very latest developments at the forefront of biological research
- consider why male mammals have nipples!

You may also undertake project work in the local environment and be given the opportunity for a more intensive ecological study to support the A2 component.

What kind of student is this course suitable for?

This course will appeal to students who:

- are intrigued by the behaviour of living organisms
- enjoy carrying out investigations in the laboratory and in the field
- are interested in the development of “new” biology topics, such as Genetic Engineering, and their impact on the world we live in

- are looking towards careers in the health related sector, biotechnology, the environment and so on
- would like to follow a personal interest in the subject as an accompaniment to an Arts or Language course

What examinations will I take?

A2 %	AS Modules	AS%
20	Unit 1 Lifestyle, transport, Genes and Health	40
20	Unit 2 Development, Plants and the Environment	40
10	Unit 3 Practical Biology and Research Skills tested in a written paper	20
A2 %	A2 Modules	
20	Unit 4 The Natural Environment and Special Survival	
20	Unit 5 Energy, Exercise and Coordination	
10	Unit 6 Practical Biology and Investigative Skills tested in a written paper	

What could I go on to do at the end of the course?

Follow a degree course or Higher National program in biology, environmental science, medicine/paramedical studies, psychology, sports science, engineering, pharmacy, biotechnology, animal husbandry/agricultural science, teaching/child care, library studies and many others.

BUSINESS STUDIES

AS EDEXCEL International Advanced XBS01

A2 EDEXCEL International Advanced YBS01

What do I need to know or be able to do before taking this course?

It is preferable to have followed the IGCSE course in Business Studies and to have gained at least a Grade C in the examinations. You may however have developed the abilities and skills in the handling and interpretation of data from a variety of sources that will enable you to succeed in AS and A2 Level Business Studies.

What will I learn?

- Awareness that Business can be studied from the perspectives of a range of stakeholders, including customers, owner/shareholder, manager, employee
- To acquire a range of skills including decision-making and problem-solving in the light of evaluation.
- To develop a critical understanding of organisations and the markets they serve

What kind of student is this course suitable for?

There are so many aspects to business and Business Studies:

- Analysing, planning, organising, evaluating;
- Leading, developing, enabling;
- Marketing, designing, making, selling;
- Counting (money) forecasting (weather? No, but it does have an effect on business);
- Managing, strategy, human resources, finance, production.

All these require a wide range of abilities and personalities, the pick and mix.

CAN YOU SEE A MIXTURE THAT YOU CAN PICK?

What will the course be like?

A mixture of theory and practice with an emphasis, building throughout the course, on the application of business studies to real life situations.

What examinations will I take?

AS UNITS

Unit 1 Business Enterprise

Unit 2 Business Structure
and Processes

A2 UNITS

Unit 3 Strategic Business
Decisions

Unit 4 Business in a Global
context

What could I do at the end of the course?

Students who study AS/A2 have access to a wide range of career and higher education opportunities. They are obviously related to many opportunities in the world of business, but also in the pursuit of many professions, where the abilities to analyse and evaluate circumstances and the skills to manage them are required.

CHEMISTRY

AS Edexcel XCH01

A2 Edexcel YCH01

Why Study Advanced Level Chemistry?

This course will try to give you the skills and understanding to make decisions about the way chemistry affects your everyday life by applying concepts into contemporary areas of chemistry including: • climate change • green chemistry • pharmaceuticals • chemistry research. In addition, an Advanced Level in Chemistry allows you to develop a range of generic skills requested by both employers and universities. For instance, a successful GCE level chemist will be an effective problem-solver and be able to communicate efficiently both orally and with the written word. Handling data will be a key part of your work, allowing you to demonstrate information retrieval skills as well as use of numeracy and ICT. You will build up a range of practical skills that require creativity and accuracy as well as developing a firm understanding of health and safety issues. As chemistry is a subject in which much learning stems from experimental work it is likely that you will need to work effectively as part of a group, developing team participation and leadership skills.

What do I need to know, or be able to do, before taking this course?

The qualification builds on the knowledge, understanding and process skills that you achieved in IGCSE Science. It is expected that you should have at least the equivalent of an IGCSE grade C or better in double award science and an IGCSE grade C in Mathematics. In chemistry you will need to be able to communicate effectively, be able to carry out research, work independently and critically think about problems. Good practical skills are also important as chemistry is a very practical subject.

What will I learn?

Advanced Level Chemistry gives you the opportunity to study a core of key concepts in greater detail. Many of the ideas first covered at GCSE will be revisited but with a greater emphasis on explaining rather than simply describing the behaviour of molecules. While studying Advanced Level Chemistry you will develop practical skills that include making observations, collecting data, analysing experimental results and formulating conclusions. 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.

Is this the right subject for me?

AS or A level Chemistry is suitable if you:

- have an interest in, and enjoy chemistry
- want to find out about how things work in the real world
- enjoy applying your mind to solving problems
- want to use chemistry to progress onto further studies in Higher Education or support other qualifications or enter chemistry-based employment.

How will I be assessed?

AS Level

You will complete a written exam that lasts for 90 minutes for each of Units 1 and 2. The papers will contain objective questions, short answer questions and extended answer questions. For Unit 3 you will have a chemistry laboratory skills examination paper (75 mins) covering areas of physical, organic and inorganic chemistry.

A2 Level

You will complete a written exam that lasts for 100 minutes for each of Units 4 and 5. The papers will contain objective questions, short answer questions and extended answer questions. For Unit 6 you have a chemistry laboratory skills examination (75 mins) covering areas of physical, organic and inorganic chemistry.

What can I do after I've completed the course?

Whilst many job opportunities specifically using chemistry require higher qualifications, most laboratory-based jobs benefit from a chemistry qualification, for instance dental assistant or veterinary assistant. Many employers view success at Advanced Level Chemistry as a clear indication of sound academic ability.

Many university courses have a significant proportion of chemistry content and this course is excellent preparation for such further study. UK HE institutions currently offer over 200 courses where chemistry is the primary subject. Often these courses can include an additional year's study, either in industry or at a university abroad. Some courses can include study in other related areas including • chemistry with medicinal chemistry •

Computer Science

CIE 9608

Why choose Cambridge International AS and A Level Computer Science?

Cambridge International AS Level and A Level Computer Science are accepted by universities and employers as proof of essential knowledge and ability.

This syllabus is designed to give greater flexibility both to teachers and to learners. It is envisaged that learners will use the skills and knowledge of computer science acquired through this course in one of three ways:

- to provide a general understanding and perspective of the development of computer technology and systems, which will inform their decisions and support their participation in an increasingly technologically dependent society
- to provide the necessary skills and knowledge to seek employment in areas that use computer science
- to develop their knowledge and understanding of computer science through entry to higher education, where this qualification will provide a useful foundation for further study of computer science or more specialist aspects of computer science.

Syllabus aims

The aims of a course based on Cambridge International AS and AL Computer Science, whether leading to an AS or A Level qualification are:

- to develop computational thinking
- to develop an understanding of the main principles of solving problems using computers
- to develop an understanding that every computer system is made up of subsystems, which in turn consist of further subsystems
- to develop an understanding of the component parts of computer systems and how they interrelate, including software, data, hardware, communications and people

- to acquire the skills necessary to apply this understanding to develop computer-based solutions to problems.

Computer science is the study of the foundational principles and practices of computation and computational thinking and their application in the design and development of computer systems. This syllabus aims to encourage the development of computational thinking, that is thinking about what can be computed and how by the use of abstraction and decomposition. It includes consideration of the data required. Learning computational thinking involves learning to program, by writing computer code, because this is the means by which computational thinking is expressed.

Assessment objectives

Cambridge International AS and A Level Computer Science has two assessment objectives:

AO1 Knowledge with understanding

- show understanding of the characteristics and methods of operation of component parts of computer systems (hardware, software, communication)
- describe, explain and use various different methods of representing data for use in computer systems
- comment critically on ethical issues arising from the use of computer solutions.

AO2 Skills

- apply knowledge with understanding to computational problems
- select, justify and apply appropriate techniques and principles to develop data structures and algorithms for the solutions of computational problems
- design, implement, document and evaluate an effective solution using appropriate hardware, software and programming languages.

Syllabus content at a glance

Section 1	Theory Fundamentals
Section 2	Fundamental Problem-solving and Programming
Section 3	Advanced Theory
Section 4	Further Problem-solving and Programming Skills

Assessment at a glance

Paper 1

This written paper contains short-answer and structured questions.

There is no choice of questions.

Topics will include those given in the pre-release material.

75 marks

Externally assessed 2 hours

Paper 2 Fundamental Problem-solving and Programming Skills

This written paper contains short-answer and structured questions.

There is no choice of questions.

Topics will include those given in the pre-release material.

75 marks

Externally assessed 2 hours

Paper 3 Advanced Theory

This written paper contains short-answer and structured questions.

There is no choice of questions.

75 marks

Externally assessed 1 hour 30 minutes

Paper 4 Further Problem-solving and Programming Skills

This written paper contains short-answer and structured questions.

There is no choice of questions.

Topics will include those given in the pre-release material.¹

75 marks

Externally assessed 2 hours

Advanced Subsidiary (AS) forms 50% of the assessment weighting of the full Advanced (A) Level.

ENGLISH LITERATURE

A Level 9ETO Pearson Edexcel

What do I need to be able to study this course?

A 'B' or above in both English Language and Literature is highly recommended. Above all, a genuine ability and interest in Literature is the key to success in this subject. The desire to read, explore, as well as possessing an ability to respond to texts thoughtfully will provide you with a distinct advantage.

Qualifications, aims and objectives

- Read widely and independent set texts and others that students have selected for themselves
- Engage critically and creatively with a substantial body of texts and ways of responding to them
- Develop and effectively apply their knowledge of literary analysis and evaluation
- Explore the contexts of the texts they are reading and others' interpretations of them.

What kind of student is the course suitable for?

This course will appeal to students who:

- Have a genuine interest in literature of all kinds
- Are fascinated by the work of authors, poets and dramatists throughout the ages
- Want to learn through discussions and the exchanging of ideas
- Wish to keep their options open by taking a course, which is an acceptable and indeed, desirable preparation for the study of a wide range of higher-level courses, both at colleges and universities.

AS Texts Studied

Contemporary poetry

Drama – The Importance of Being Earnest (by Oscar Wilde)

Prose – Dracula (by Bram Stoker)

Prose – Beloved (by Toni Morrison)

A2 Texts Studied

Shakespeare – A Midsummer Night’s Dream

Poetry Movement – Victorian Poetry

Revision of all AS Texts

What examinations will I take and what coursework will I complete?

AS Exam

A2 Exam

Coursework

What could I go on to study?

The study of Literature is appropriate for a wide range of higher education and career opportunities. It is aimed to develop analytical and critical skills, improving the ability to communicate effectively, both in spoken and written responses.

At university, it can be taken as a complete subject or combined with a large range of others and is a sound basis for studies in all areas, especially Humanities, Media, Philosophy, Law and Politics.

GEOGRAPHY

AS EDEXCEL 8GE01

A2 EDEXCEL 9GE01

*** Current syllabus – may be subject to change due to A-Level reform in the UK.**

What do I need to know or be able to do before taking this course?

The Advanced level course builds on the skills and concepts developed in the IGCSE course, so you will need to have gained at least a grade C at this level. You will also be required to demonstrate abilities in continuous prose writing and to use skills in data handling and interpretation, including the application of statistics.

What will I learn?

The course will enable you to:

- improve your analytical abilities in the interpretation of geographical systems
- apply statistical and graphical methods
- interpret maps and other cartographic data
- use a variety of sources, such as newspapers, magazines, websites, DVDs and television programmes
- appreciate the interrelationships operating in the modern world
- gain a greater knowledge of the local environment

You will also learn fieldwork techniques during field trips to the Camargue, Marseille, the Hautes Alpes and St Cézaire-sur-Siagne.

What kind of student is the course suitable for?

The course will appeal to you if you find the Earth a fascinating, dynamic place in which you live. You will need to be curious about a wide range of natural phenomena, such as volcanoes, earthquakes, tsunamis, floods and hurricanes, as well as how humans interact with each other and their environment. If you want to make sense of issues in the media, such as climate change, globalization and immigration, and have strong opinions on how our planet should be managed, then this is the course for you.

What form does the course take?

The Edexcel GCE in Geography consists of a four-unit specification that allows a balance between students' own particular physical, human and/or environmental interests and key geographical topics.

Unit 1, Global Challenges, consists of two compulsory topics, World at Risk and Going Global; Unit 2, Geographical Investigations, contains the Physical topic of Crowded Coasts and the Human topic of Rebranding Places. Together, these two units form the AS course.

Unit 3 contains six compulsory topics, Energy Security, Water Conflicts, Biodiversity Under Threat, Superpower Geographies, Bridging the Development Gap and The Technological Fix. Unit 4 consists of Geographical Research into the topic of Cold Environments – Landscapes and Change. Together, these two units form the A2 part of the course.

What could I go on to do at the end of the course?

Geography combines elements of the social sciences, practical sciences such as Biology, and Mathematics and, as such, provides excellent support for a large number of higher education courses. It can also be studied to provide a sound basis for a career in Environmental Studies, Natural Sciences, Economics and Politics, Business Studies, Leisure and Tourism, Air Traffic control, Meteorology, Publishing, Farming, Architecture, Journalism and many more.

HISTORY

AS Cambridge International Examinations 9389

A2 Cambridge International Examinations 9389

What do I need to know or be able to do before taking this course?

The study of History at advanced level requires a love of reading and an inquiring mind. Many of the skills will have been gained in the GCSE course and these will be extended and developed over the following two years. A fluency in both written and spoken English is essential, and the ability to formulate and present an argument to others is an integral requirement.

What will I learn?

During the course you will learn:

- about the significance of events, individuals, issues and societies in history
- the theories of historians and the language that they use to discuss their ideas
- to understand the nature of historical evidence and the methods used by historians to analyse and evaluate it
- to develop an understanding of how the past has been interpreted and presented
- to express your own historical ideas confidently and effectively

What kind of student is this course suitable for?

The course will appeal to students who:

- have an interest in the way that the world has developed through the ages
- enjoy investigation and discovery
- enjoy debate and like putting forward a well argued case
- want to improve their analytical skills
- want to study a subject which encourages them to consider evidence and make up their own minds
- want to broaden their studies or keep their options open

What examinations will I take?

AS level Unit : The History of the U.S.A., 1840 – 1941

A2 level Unit : International History, 1945 – 1991

There is one 1 ½ hour written paper, and one 1 hour source paper at the end of the AS course plus one 1 ½ hour A2 paper, and one 1 hour source paper for those continuing to the end of the Advanced level course.

What could I go on to do at the end of the course?

Students who study A/AS History have access to a wide range of career and higher education opportunities. By the end of your course, you will have learned how to evaluate evidence and analyse information, how to weigh up evidence and how to communicate complex ideas effectively. These skills are recognised and valued by employers, universities and colleges.

History combines well with maths and science subjects to create an attractive portfolio of qualifications, enabling a student to move on to a university science-based course. Combined with English and a modern foreign language, it provides a good basis for an arts or language-based degree.

History provides an excellent foundation for a number of popular careers, including journalism, law and business.

MATHEMATICS

AS Cambridge International Examinations 9709

A2 Cambridge International Examinations 9709

AS Further Mathematics Edexcel 8372

What do I need to know or be able to do before taking this course?

Mathematics is not an easy option. You should not start on this course unless you are strong in algebraic manipulation, and have well developed logic and reasoning skills. You must have at least a grade B in the IGCSE extended course.

What will I learn?

The course will enable you to:

- develop the ideas of algebra, sequences and vectors
- learn more about calculus, logarithms and complex numbers
- appreciate the effects of forces on motion and equilibrium
- become proficient in data handling and probability

What kind of student is the course suitable for?

Mathematics is a subject, which you may enjoy and are good at, reasons in their own right for studying it to an advanced level, and even continuing it at university. You may also wish to study it as a support tool for other scientific, technological and related subjects. It will suit those students who have a passion for problem solving and enjoy the mental exercise associated with analysing and interpreting data.

What examinations will I take?

AS - Module P1: Pure Maths (algebra, sequences, vectors trigonometry, calculus)

- **Module S1:** Statistics (data handling and probability)

A2 - Module P3: Pure Maths (an extension of the concepts developed in P1, logarithms, complex numbers)

- **Module M1:** Mechanics (forces and motion)

All modules are examined by written papers at the end of Form 12 (AS) and Form 13 (A2).

AS Further Mathematics

This course is only offered to a select few in Form 13 at the discretion of their teachers and also if they have achieved more than 90% in their AS modules.

Students take 3 Modules.

Decision Mathematics (D1): Algorithms; algorithms on graphs; the route inspection problem; critical path analysis; linear programming; matchings.

Statistics 2 (S2): The Binomial and Poisson distributions; continuous random variables; continuous distributions; samples; hypothesis tests.

Further Pure 1 (FP1): Series; complex numbers; numerical solution of equations; coordinate systems, matrix algebra, proof.

What could I go on to do at the end of the course?

Everything and anything!

MODERN FOREIGN LANGUAGES

There is a common syllabus to French and Spanish and the examination structure at the bottom of the page is the same for all languages. Students taking Advanced Subsidiary level courses in languages should have a minimum of Grade C at (I)GCSE or equivalent examination.

What will I learn on this course?

The course will help you to develop your general study skills, but most of all you will learn to communicate at a higher level in the language you have chosen. You will also learn much more about a wider range of aspects of the societies in which the language is spoken. There will be literary texts and films to study.

Reading: You will be able to read, understand and extract information from written passages in the target language that are taken from authentic sources, such as magazines and newspapers, reports and books.

Listening: You will be able to listen to, and understand contemporary spoken language and answer questions on what you have heard. The passages that you will learn to listen to will be taken from a range of sources, such as news reports on the radio and television, weather forecasts, announcements, interviews and discussions.

Speaking and Writing: You will learn how to write essays or longer pieces, and to hold conversations and discussions in the target language. You will learn all the appropriate grammar, words and phrases that will help you to:

- translate into English
- present information
- organise your arguments
- provide opinions
- analyse your ideas

What kind of student is this course suitable for?

If you are interested in languages and communication, enjoy learning about other cultures and ways of life, a Modern Foreign Languages course could be suitable for you.

What examinations will I take?

The AS and A2 are stand alone examinations. However, we will be co-teaching AS and A2 – with a theme 1 and a theme 2 and one book and film in the 1st year, allowing you to be entered for the AS at the end of the year.

AS Level

		<u>AS</u>
Paper 1:	Listening, reading and translation	40%
Paper 2:	Written response to work, grammar and translation	30%
Paper 3:	Speaking	30%

A2 Level

		<u>A2</u>
Paper 1:	Listening, reading and translation	40%
Paper 2:	Written response to work and translation	30%
Paper 3:	Speaking	30%

What could I go on to do at the end of the course?

You could use your language(s) to follow a course in the business world, travel and tourism, or journalism and the media.

Whether you want to use your language for work, for further study or for leisure, these courses will equip you with the necessary skills and knowledge.

Commercially, industrially, culturally and politically, a good knowledge of languages is an undisputed asset for tomorrow's citizens.

FRENCH

Edexcel Advanced Subsidiary GCE 8FR01

Edexcel Advanced GCE 9FR01

French is an international language widely used and spoken in Europe, Africa and even North America.

The teaching is almost exclusively in French with constant exposure to native speakers and authentic materials (newspapers such as *Le Figaro*, *Le Nouvel Observateur*, *L'Express*, textbooks, literature, films, television, CD ROMs), ensuring a high degree of "Frenchness".

The course books used are called "*Au Point*", "*Edexcel AS French*" and "*Edexcel A2 French*".

SPANISH

Edexcel Advanced Subsidiary GCE 8SP01

Edexcel Advanced GCE 9SP01

The course book for this relatively new advanced level subject is "Edexcel Spanish for A Level".

In addition, students are encouraged to read both popular and traditional literature in their study time. Great use is made of authentic materials, such as *El Pais* newspaper, Television Espanola, and the department now has an expanding video collection. This course caters for students who have followed the usual GCSE course as well as those who have a Spanish background.

OTHER LANGUAGES

If you would like to be entered for a language other than the one listed above, e.g. Italian, Russian, German ... please ask the MFL coordinator for information.

MUSIC

EDEXCEL 9MU01

What do I need to know or be able to do before taking this course?

It is highly recommended to have taken music at GCSE level, but in some special cases this may not be essential as long as you can play a musical instrument (including voice) to a minimum ABRSM Grade 5 level and have theory skills of a ABRSM Grade 5 level, minimum. You will be expected to devote a large amount of time out of lessons to practising and performing on your instrument, so your interest should extend beyond the syllabus and into your everyday life if you are to be successful in this subject.

What will I learn?

The course demands performing, composing, listening and analytical skills in almost equal measure. You will improve your skills in performing and composing in a range of styles. You will listen to a wide variety of music and develop a more informed appreciation of how and why it was written and/or performed.

What examinations will I take?

AS Component 1: Performing (30% NEA)

Total performance time of 6 minutes

Performance can be solo and/or ensemble

AS Component 2: Composing (30% NEA)

2 compositions

1 to set brief – min 2 minutes

1 free or to set brief – min 2 minutes Together total min of 4½ minutes

AS Component 3: Appraising (40% Exam)

6 Areas of Study with 2 set works in each • Vocal Music

- Instrumental Music
- Music for Film
- Popular Music and Jazz • Fusions
- New Directions

A-Level Component 1: Performing (30% NEA)

Total performance time of 8 minutes

Performance can be solo and/or ensemble

A-Level Component 2: Composing (30% NEA)

2 compositions

1 free or free choice brief – min 4 min

1 brief assessing technique – min 1 min Together total min of 6 minutes

A-Level Component 3: Appraising (40% Exam)

6 Areas of Study with 3 set works in each • Vocal Music

- Instrumental Music
- Music for Film
- Popular Music and Jazz • Fusions
- New Directions

What could I go on to do at the end of the course?

You could go on to study music or performing arts in higher education at degree level at university or Music College. This could lead to a career in the music industry as a performer, composer, sound technician, arts administrator, teacher, music therapist.....

Physical Education

BTEC Higher National Level 3 Subsidiary Diploma/ Certificate in Sport Edexcel

What is the course about?

This course provides an excellent preparation for careers within the sport and fitness industries and can support entry into higher education. It is a vocationally delivered course and develops the skills and knowledge students will need to thrive in a professional sports and fitness environment. Students complete a series of projects and assignments based upon real life sporting scenarios.

If you studied GCSE PE and wish to take your knowledge of the subject to a higher level then this is the course for you. BTEC Sport allows you to study principles of anatomy, physiology and fitness as well as develop other areas of practical sports such as sports leadership, sports coaching and improving/analysing performance in team or individual sports. This qualification is equivalent in UCAS points to an A level in PE. If you prefer coursework to exams and you can meet deadlines then this may be an appropriate course for you.

What will I study?

Year 12 Mandatory Units

Anatomy and Physiology
Physiology of Fitness
Assessing Risk in Sport
Principles of Fitness Testing

Year 13

3 units from a range of areas including:

Leadership In Sport
Sports Psychology
Practical Team Sports
Individual Sports
Outdoor Adventure Activities
Sports Coaching

Sports Nutrition
Sports Development
Current Issues in Sport
Sports Development
Exercise, Health and Lifestyle
(These 3 units will be determined according to group size and interests)

How is the course assessed?

The course is assessed by internal assessors marking your completed portfolios and awarding Pass, Merit or Distinction for every unit. The maximum grade is a Distinction *. An external moderator will then agree the grades given. For students wishing to complete the certificate only, they will be certificated at the end of year 12 and students wishing to complete the diploma will be certificated at the end of year 13. Coursework deadline dates for each of the units will, however be given to students at the start of the course and must be met within the time-scales set.

What are the entry requirements?

All BTEC qualifications require you to have achieved five GCSE grades A* - C including a C in English GCSE. It is preferred that you studied PE at GCSE level and achieved a **high** mark in the **theory** section of the exam as your portfolio work will be mainly theory based and relies heavily on your understanding of sports concepts as well as being a good sportsman/woman.

What skills do I need?

A passion for sport and exercise.
Punctuality and good attendance.
A capacity to be hard working.
An ability to be organised.
A dedication to self improvement.
An ability to meet deadlines.

How will I be taught

You will attend 3 x 75 min lessons per week. There are 3 teachers who deliver the subject Mr Hickmore, Mrs Glyde and Mrs Johnson. These

lessons will include taught content, learning activities and time set aside to complete portfolio work.

Where can this qualification lead me?

To higher education to study a sport based degree or to train as a PE teacher. To employment, either before or after a degree, in the sport and fitness industry or as a coach. It could be that you just simply wish to use the points and experience to access a related degree of your choice.

What are the enrichment opportunities?

Students will have the opportunity to engage in a range of recreational, developmental and competitive sporting activities through the school's sports programme.

PHYSICS

AS Edexcel XPH01

A2 Edexcel YPH01

What do I need to know, or be able to do, before taking this course?

The qualification builds on the knowledge, understanding and process skills that you achieved in IGCSE Science. You will need at least IGCSE grade CC in Double award Science (or equivalent). You should also have at least a grade C in GCSE Mathematics (or equivalent) as numerical and mathematical skills are important in physics. Communication is also important as you will need to be able to communicate effectively, carry out research and critically think about problems.

What will I learn?

Unit 1: Physics on the go

You will learn about motion, forces, energy, power, flow of liquids, viscosity and properties of materials. Applications that use these concepts include sports, the production of sweets and biscuits, and spare-part surgery.

Unit 2: Physics at work

The physics content of this unit is related to applications that include medical physics, music, technology in space and solar cells. You will learn about waves including standing waves, refraction, polarisation, diffraction and the nature of light. You will also learn about electric circuits, resistivity, thermistors, emf and internal resistance.

Unit 4: Physics on the move

The physics content of this unit is related to applications that include transport, communications and display techniques. It is also related to exciting, current research in the field of particle physics. You will learn about momentum, circular motion, electric and magnetic fields, evidence for a nuclear atom, particle accelerators, particle detectors and different types of sub-atomic particles.

Unit 5: Physics from creation to collapse

The physics content of this unit is related to applications that include the construction of buildings in earthquake zones and a detailed exploration of astrophysics and cosmology. You will learn about thermal energy, radioactive decay, simple harmonic motion, resonance, gravitation, the life cycle of stars, fission, fusion and the fate of the universe.

While studying these units you will develop practical skills that include planning experiments, collecting data, analysing experimental results and making conclusions. 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. Two other units (**3: Exploring physics** and **6: Experimental physics**) are not shown in the above table because they are assessments that are based on the practical skills you will develop while you are studying the above units.

Is this the right subject for me?

AS Physics is suitable if you:

- want to progress to the full A-level
- want a grounding in a relevant worthwhile qualification of recognised value
- want to broaden your educational experience before making a decision about which A-levels to take
- are taking A-levels in the other Sciences and/or Mathematics and want to take another course that will support your studies.

A2 Physics is suitable if you:

- have an interest in, and enjoy, physics
- want to find out about how things work in the physical world
- enjoy applying your mind to solving problems
- enjoy carrying out investigations by the application of imaginative, logical thinking
- want to use physics to move on to further studies in Higher Education, support other qualifications or enter physics-based employment.

What can I do after I've completed the course?

Physics leads on to a wide range of courses and careers. You could use Physics to support other qualifications or move on to further studies or employment, including:

- a degree course such as Physics, Astrophysics, Natural Sciences, Medicine, Metrology, various Engineering courses, Nano-Science, Biosciences or Geophysics
- employment in the field of, for example, nanotechnology, telecommunications, particle physics, aviation, radiography or biotechnology, in the space or energy industries, or, with skills developed in mathematical modeling work, in the stock market or banking services
- visit the website for the Institute of Physics (IOP) for further information on careers in Physics

- visit www.brightrecruits.com for ideas and jobs in Physics and Engineering, and the website www.myphysicscourse.org to order a copy of a careers booklet