

**MOUGINS  
SCHOOL**

**SIXTH  
FORM  
GUIDE**

**2017 - 2019**



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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, Geography, 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) and Music**

### **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 (2<sup>nd</sup> 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](http://www.edexcel.org.uk)      C.I.E.: [www.cie.org.uk](http://www.cie.org.uk)

## **Timetable of Events**

2nd February 2017

### **Information for students**

Tutor periods

Parents' information evening

By Monday

13th February

### **Initial Choice of subjects**

Deadline for return of choice forms to tutors

Discussion with students and parents, as necessary

APRIL 2017

**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 CCS Examinations**

Thursday 10th AUGUST

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

Thursday 17th and 24th

Probable date for receipt of Edexcel GCE, followed by GCSE Examination Results, although some results may be

AUGUST

available online before this date.

**MONDAY 4th SEPTEMBER 2017 - 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 X BIO1 International Subsidiary Level**

**A2 EDEXCEL Y BIO1 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?**

<b>A2 %</b>	<b>AS Modules</b>	<b>AS%</b>
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
<b>A2 %</b>	<b>A2 Modules</b>	
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**

**A2 UNITS**

**Unit 1** Business Enterprise

**Unit 3** Strategic Business

**Unit 2** Business Structure and Processes

**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 1 hour and 30 minutes

### **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.<sup>1</sup>

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 Grade '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 and explore, as well as possessing an ability to respond to texts thoughtfully, are also vital skills, as well as the ability to write to a suitably high academic standard.

### **Qualifications, aims and objectives**

- Read a wide range of set texts, as well as some that students have selected for themselves, with independence and vigour
- Engage critically and creatively with texts, and explore different ways of responding to them, producing responses written with style, imagination and detail
- Develop and effectively apply knowledge of literary analysis and evaluation
- Analyse the craft of a writer and how they have shaped the meaning of a text through their literary choices
- Explore the contexts of the texts they are reading and alternative interpretations through further independent research

### **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 widely considered as desirable preparation for the study of a range of higher-level arts or humanities courses, both at colleges and universities.

### **Year 12 Texts Studied**

Contemporary poetry  
Drama – The Importance of Being Earnest (by Oscar Wilde)  
Prose – A Thousand Splendid Sons (by Khaled Hosseini)  
Prose – Wuthering Heights (by Emily Bronte)

### **Year 13 Texts Studied**

Modernist Poetry  
Drama – King Lear (by William Shakespeare)  
Independent Comparative Coursework  
Revision of all AS Texts

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

3 \* A2 Exams at the end of the 2-year course: Drama (30%), Poetry (30%), and Prose (20%)

Coursework (due at the end of the 2-year course): 20%

### **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 at developing 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**

## **Cambridge International AS and A Level Geography 9686**

### **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
- appreciate the interrelationships operating in a globalised world
- gain a greater knowledge of the local environment

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

### **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 tropical storms, 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?**

Candidates for the CIA A Level in Geography study the following topics:

### **Core Physical Geography**

Hydrology and fluvial geomorphology  
Atmosphere and weather  
Rocks and weathering

### **Core Human Geography**

Population  
Migration  
Settlement dynamics

### **Advanced Physical Geography**

Coastal Environments  
Hazardous Environments

### **Advanced Human Geography**

Environmental management  
Global Interdependence

Candidates will take two core exams and two advanced exams, each worth 25% of the A Level. All exams are 1 hour 30 minutes. Candidates may take only the Core Physical and Core Human Geography exams to attain the AS qualification. The core papers contain data response questions and structured questions. The advanced papers contain structured questions and essay questions.

### **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-base 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.

## **The General Topic Areas studies at IAS Level are:**

Youth matters, Lifestyle, Health and Fitness; Travel and Environment; Education and Employment.

## **The General Topics Areas studied at IA2 level are:**

All the IAS themes and Technology, Society and Ethics in the target language speaking world.

## **What examinations will I take?**

The International Advanced Subsidiary and International Advanced Level in French and Spanish are structured into 4 units, externally marked.

### IAS Level XFR01; XSP01

- |         |  |                  |
|---------|--|------------------|
| Unit 1: | Spoken Expression and response<br>Examination 8 – 10 minutes             | 30% of IAS marks |
| Unit 2: | Understanding and written response<br>Examination 2 hours and 30 minutes | 70% OF IAS marks |

### IA2 Level YFR01; YSP01

- |         |   |                  |
|---------|---|------------------|
| Unit 3: | Understanding and spoken response<br>Examination 11 – 13 minutes                      | 30% of IA2 marks |
| Unit 4: | Research, Understanding and Written<br>Response<br>Examination 2 hours and 30 minutes | 70% of IA2 marks |

## **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 IAdvanced Subsidiary XFR01**

### **Edexcel IAdvanced YFR01**

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 “*Edexcel AS French*” and “*Edexcel A2 French*”.

## **SPANISH**

### **Edexcel IAdvanced Subsidiary XSP01**

### **Edexcel IAdvanced YSP01**

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 4 1/2 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.....

## **MUSIC BTEC**

### **LEVEL 3 SUBSIDIARY DIPLOMA - 60 CREDITS**

(EQUIVALENT TO 1 A-LEVEL)

MUSIC PERFORMING XHE10 (EDEXCEL)

#### **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 / Trinity / RockSchool Grade 5 level and have theory skills of an ABRSM Grade 5 level, minimum. You should be able to read and write music with ease. You will be expected to devote a large amount of time out of lessons to practising and performing on your chosen instrument(s) and to composing original music, 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 units offered in Year 12 are:*

#### **UNIT 7: Composing Music**

On completion of this unit a learner should:

1. Be able to originate compositional idea
2. Know how to extend, develop and manipulate musical material
3. Be able to appreciate the role and the importance of the structural elements of composition
4. Be able to present a portfolio of compositions in an appropriate format

#### **UNIT 17: Marketing and Promotion in the Music Industry**

On completion of this unit a learner should:

1. Know about marketing techniques used by music businesses
2. Be able to produce a marketing strategy for a music project or event
3. Be able to contribute to a marketing campaign for a music project or event
4. Understand the success of a marketing campaign

### **UNIT 23: Music Performance Techniques**

On completion of this unit a learner should:

1. Know effective instrumental or vocal technique through a structured practice routine
2. Be able to apply effective instrumental or vocal technique in solo performance
3. Be able to apply effective instrumental or vocal technique in group performance

*The units offered in Year 13 are: (Students will choose 3 units)*

### **UNIT 33: Solo Music Performance Skills**

On completion of this unit a learner should:

1. Know how to choose appropriate pieces for an extended programme of music
2. Be able to perform an extended programme of music to an audience
3. Know the processes required in preparation for the performance of an extended programme of music

### **UNIT 40: Working and Developing as a Musical Ensemble**

On completion of this unit a learner should:

1. Understand the elements of musical ensembles
2. Be able to plan as a musical ensemble
3. Be able to develop as a musical ensemble
4. Be able to perform as a musical ensemble

### **UNIT 6: Classical Music in Practice**

On completion of this unit a learner should:

1. Know how classical music developed
2. Know how to create programme notes
3. Be able to perform classical music as a soloist
4. Be able to perform classical music as part of an ensemble

### **UNIT 24: Music Project**

On completion of this unit a learner should:

1. Be able to prepare and work as a member of a team towards a successful live event
2. Be able to prepare individually for the delivery of a successful live event, undertaking appropriate responsibilities throughout the project
3. Be able to contribute a performance to a technically acceptable level appropriate to the content



4. Understand the complete process when preparing for and delivering a live music event.

### **UNIT 28: Musical Theatre Performance**

On completion of this unit a learner should:

1. Understand a role or roles in musical theatre work
2. Be able to apply the appropriate performance skills
3. Be able to rehearse for a role in a musical
4. Be able to perform a role in a musical

### **UNIT 43: Special Subject Investigation**

On completion of this unit a learner should:

1. Know how to identify an appropriate subject area for investigation
2. Be able to plan a research project
3. Be able to carry out research
4. Be able to produce and present results of an investigation

### **What examinations will I take?**

There are no formal examinations. All work is produced and assessed during the course.

### **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 how they 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) [www.iop.org](http://www.iop.org) for further information on careers in Physics
- visit [www.brightrecruits.com](http://www.brightrecruits.com) for ideas and jobs in Physics and Engineering, and the website [www.myphysicscourse.org](http://www.myphysicscourse.org) to order a copy of a careers booklet