



# WIRRAL GRAMMAR SCHOOL

A Foundation Business and Enterprise School for Boys

## Course Guide for Years 10 and 11



2011-2012

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## **Purpose of the Course Guide**

This guidance is intended to provide boys and their parents with details of all the courses that are available for study in Years 10 and 11. The guide contains information about both 'compulsory' courses that all pupils are required to study and 'option' courses that pupils are required to choose from. The guide also explains how you go about selecting a course and the arrangement for returning the selection form.

## **The General Certificate of Secondary Education**

The General Certificate of Secondary Education (GCSE) is the national qualification that is used to assess attainment in each of the main subjects.

GCSE courses comprise of a mixture of assessment methods and these include examinations at the end of the two years; controlled assessments, which permit varying degrees of teacher guidance and preparatory work; modular examinations which are taken at set intervals during the two years. Subjects differ in how pupils are assessed and it is important to read the separate subject information carefully.

GCSE grades extend from A\* to G. Grades A\* to C are recognised as the 'upper pass' grades and it is grades in this upper range that are recognised in school performance tables, by most employers and universities. All pupils at Wirral Grammar School are expected to perform at the higher GCSE grades in all subjects.

## **The iGCSE**

The iGCSE is the 'International General Certificate of Secondary Education' and is now a recognised alternative to the GCSE. The iGCSE has become established as the main qualification in a growing number of selective schools and some Grammar Schools. The main difference between the GCSE and the iGCSE is the method of assessment with the iGCSE placing greater emphasis on an end of course assessment by examination; the actual syllabus content is very similar to that of GCSE courses. At present some subjects are considering the introduction of the iGCSE to replace the GCSE.

It could be that some of the subject details enclosed in this guide may change if the iGCSE is considered to be a more appropriate qualification in specific subjects. Until the approved syllabuses are published, we are not in a position to arrive at a decision.

## **The English Baccalaureate**

The English Baccalaureate (EBacc) was introduced for the first time in January 2011. This is not a new qualification; it is a certificate that is awarded to pupils who gain grades C and above in all of the following subjects:

- English Language
- Mathematics
- Two Science subjects
- A Humanities subject (Geography or History)
- And a Languages Subject (French or Spanish)

At Wirral Grammar School, all boys are able to gain the English Baccalaureate because these subjects are a compulsory part of our curriculum. As with all of the courses they study, we expect all pupils to gain the highest grades possible.

## Challenge Target Statements

In October/November of the Autumn Term all parents are issued with a Statement that details the grades at GCSE (Year 10 and 11) that each boy is capable of achieving. All pupils are provided with this information to stick inside their Planners.

These targets are estimates based upon national analysis of student achievement using prior attainment data. The grade estimates are based on prior performance at both Key Stage 2 and Key Stage 3. Providing parents and pupils with this information ensures that there is absolute clarity regarding what we are aiming for in terms of examination attainment.

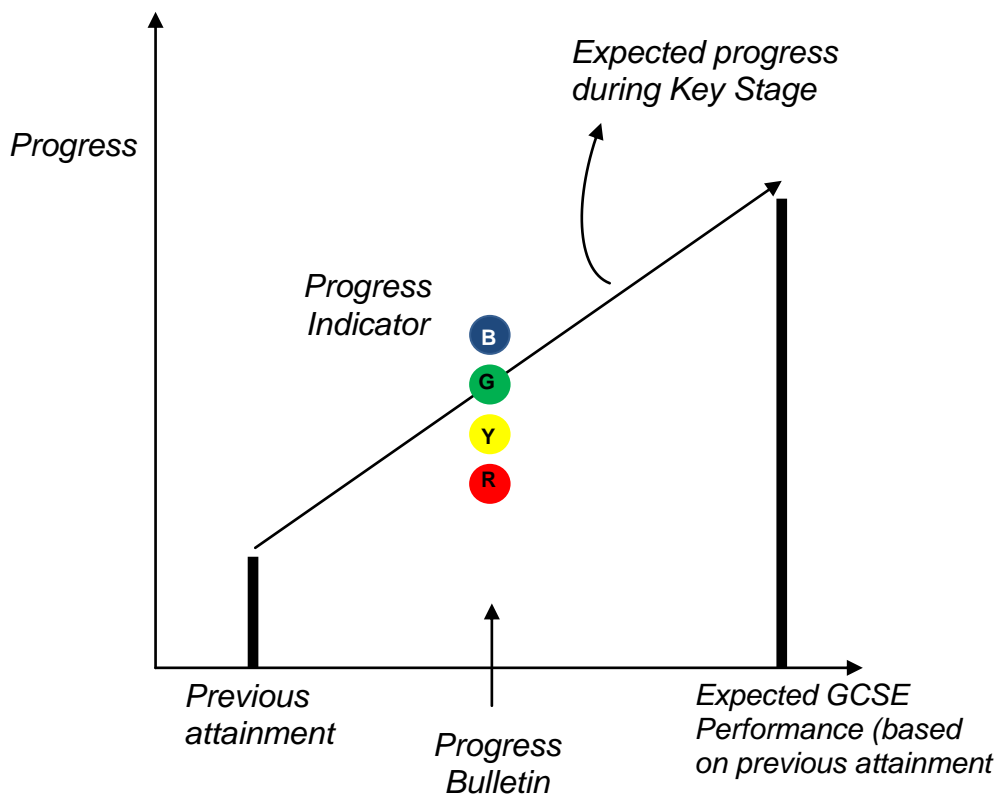
We ask parents to discuss target grades with their sons and work with us in seeking to maximise each boy's potential. Over the last few years we have seen a significant increase in the proportion of passes that are at the highest grades of A\*/A because of this collective approach.

## Reporting on Progress

These are the ways in which we monitor and report on your son's progress:

- A full written report is issued for each boy in each academic year. The annual report is written by subject teachers, form tutor and Head of Year.
- Progress Bulletins are issued each term. This records each boy's current level of attainment in relation to his target grades using a progress indicator. Grades for effort and behaviour are also included.

*The Progress Indicator shows your son's current performance with respect to his overall Challenge Target. This is illustrated in the diagram below.*



The colour scale enables you to see at a glance whether your son is on course to reach his challenge target. The key for the progress indicator is as follows;

value	description
<b>blue</b>	Exceptional performance
<b>green</b>	On or above target
<b>yellow</b>	Slightly below target
<b>red</b>	Below target

A single red indicator should not be a concern if the trend over the year shows improvement.

Parents will be contacted by Heads of Years to celebrate success or when concerns arise.

- Tutors and Head of Year monitor progress carefully and intervene where necessary to help boys get back on track. This support can take the form of extra study sessions, regular mentoring and meetings with parents.
- Parents' Evenings take place each year and this is an opportunity for parents to meet individual subject staff. We are conscious that Parents' Evenings can be busy occasions and keeping to the time allocation can be a challenge. We do expect all parents to attend as this helps to ensure that each boy is supported by both school and home. Many boys attend along with their parents. Please be aware that it may not be possible to see all the subject teachers during a parents' evening.
- Whenever parents feel that they would like an "up-date" on their son's progress we are happy to provide this. Weekly monitoring is arranged for every lesson when we feel there is a need to do so.

For pupils who are considered to be performing significantly "below target", intervention meetings are arranged with the Headteacher and Head of Year. Where it is considered necessary, parents may also be asked to attend these meetings so that there is a unified approach to supporting those individuals concerned.

### **Making The Right Choice**

For the most part, the choices that you have to make are guided ones and there are a number of courses that you are required to study.

Where you do have to make your own choice, you should consider two questions:

1. Am I good at the subject? (consider your attainment and progress so far in the subject)
2. Do I enjoy the subject and do I like the look of the course at GCSE from the information I have read?

There are some courses that you have not studied before. For example, Business Studies, Geology and Media Studies. If you are considering one of these it is especially important to

talk to the relevant teachers who will be able to tell you about the content of the subject in more detail.

Bear in mind that as far as university courses are concerned, the main requirement is for high grades across all subjects.

### **The GCSE Curriculum in Years 10 and 11**

You will see from the curriculum plan on the next page that some subjects are compulsory and others are optional.

All boys follow "**core subjects**" in English, Mathematics, Science (Biology, Chemistry and Physics), Physical Education, Religious Education, Personal, Health & Social Education (including Careers Education), Information Technology and Citizenship, French or Spanish and History or Geography.

Boys are able to select two "**option subjects**" from: History, Geography, Spanish, Music, Business Studies, Geology, Design and Technology, Electronics, Information Technology and Media Studies.

With the exception of Physical Education, Citizenship, Personal Health and Social Education and Religious Education as part of the "core subjects", all subjects lead to a full GCSE qualification.

Some boys are entered for the Science Dual Award, which is worth two GCSEs instead of studying the three separate sciences and this decision will be taken during the course of Year 10 based on progress in individual science subjects.

**Extension Courses** are also available for study on an independent basis. These courses include: GCSE Astronomy, GCSE General Studies and AS Critical Thinking. 'Fast track' routes are available to more able pupils in some subjects. This involves the pupils taking their GCSE exams a year early at the end of Year 10 allowing them to broaden their studies with extra courses in Year 11.

### **Course Selection Forms**

You have been given a separate course selection form to complete and return to Dr Randell. Once we have received all of the forms, the process of creating the timetable for the next academic year will start. **It is important that your form is returned by the specified date, Friday 18<sup>th</sup> March 2011.** The following two pages contain a copy of the form.

### **Extension Courses**

There are courses that you may study as extras in Years 10 and 11. Details of these courses are contained in the course booklet and on the last page of the application. **You do not need to select from these at this stage.** Teachers will talk to you about them separately. All of these extra courses require a high degree of motivation and independent learning.

# GCSE

## Course Selection Form

*(All pupils have been given a separate copy of this form to return)*

### Introduction

You should make reference to the Course Selection Booklet as you complete this form. The Booklet contains all of the details about the individual courses. You also need to speak with your teachers; this is especially important if you are considering a course that you have not studied previously.

### **The Compulsory Subjects**

There is nothing for you to select here, as all boys study the following compulsory subjects. The subjects marked \* are ones that are studied to GCSE level.

English Language\*, English Literature\*, Mathematics\* PE / Games, PSHE / Citizenship, ICT, Religious Education, Physics\*, Chemistry\*, Biology\*.

### **Your Humanities Selection**

All boys are required to study either Geography or History. You should indicate your selection with **a tick in one** of the boxes below:

- Geography
- History

### **Your Languages Selection**

All boys are required to study a Modern Foreign Language; either French or Spanish. You should indicate your selection with **a tick in one** of the boxes below:

- French
- Spanish

## Open Selection

All Pupils are required to select **TWO** subjects from the open selection list below. You are also required to specify a 'reserve' subject. Our aim is to provide all pupils with their preferred choice, but occasionally, timetable restrictions mean that we have to make use of reserve subjects.

Select your choice of subjects from the list below. \*Please note that you can only choose one Design & Technology option (Resistant Materials OR Graphic Products – not both).

Notice that you can opt to do an extra Humanities subject (History/ Geography) and an extra Languages subject (French / Spanish) as you have already chosen one from each area as part of the compulsory selections. You should only choose to study an additional Humanities/Languages subject if you have real strengths in these areas.

- |   |  |
|---|--|
| <input type="checkbox"/> Art & Design                 | <input type="checkbox"/> D & T (Graphic Products)* |
| <input type="checkbox"/> Business Studies             | <input type="checkbox"/> Geography                 |
| <input type="checkbox"/> D & T (Resistant Materials)* | <input type="checkbox"/> History                   |
| <input type="checkbox"/> Geology                      | <input type="checkbox"/> Music                     |
| <input type="checkbox"/> Information Technology       |  |
| <input type="checkbox"/> Media Studies                |  |
| <input type="checkbox"/> Spanish                      |  |

My reserve choice is: \_\_\_\_\_

## Career Choices

Careers Education and Guidance (CEG) is taught as part of the Personal Social and Health Education syllabus (PSHE) as a six week module (this format is followed by subsequent year groups.)

Topics covered include:

- self- awareness
- choosing options in years 10
- using computer programmes such as 'fast tomato' which stimulate thought
- an awareness of gender equality and
- to introduce new ideas to developing minds

Literature from the DFES and the Careers Service are distributed. The Link Careers Officer attends the Year 9 Parents Evening. Mr I F Davies is also available on this evening.

All pupils have the opportunity of meeting the link careers officer through an introductory talk from Mrs C Rimmer (Connexions). These talks take place in PSHE lessons. In turn, this can lead to one to one interviews for the pupils if they want one. Also, for pupils who are having academic problems and may not meet the levels required to join the sixth form, meetings are set up with an interview with the Link Careers Officer.

The general advice for Year 9 pupils who are choosing their options is: Take the subject that you enjoy and are best at. However, if you have issues with this advice please see either Mrs C Rimmer or I F Davies on the night of the parents evening or at some later stage.

The School organises a Biennial Careers Convention and the next one will be in October or November 2011. It would benefit your son to attend this very popular event.

There is now a (CEG) section in the Learning Resource Centre (LRC) devoted to careers advice which is easily accessible to all pupils. Please tell your son to make use of this resource.

## The Subjects

The following pages contain brief summaries of all the subjects, together with an indication of some career implications, but it is important to remember the following points:-

- 1 With very few exceptions, your choice should not affect your career plans significantly, since the range is so comprehensive.
- 2 No single subject should be considered in isolation when thinking of future careers - keep as many options open as possible.
- 3 Discuss your ideas with your teachers and/or careers staff and start to use the Careers Library.
- 4 Remember that at Wirral Grammar School we place an emphasis on the balance of subjects as this prepares the way for successful University entry and career prospects.

# **THE COMPULSORY GCSE SUBJECTS**

## **SUMMARIES**

## **GCSE ENGLISH LANGUAGE AND GCSE ENGLISH LITERATURE**

All pupils will follow the dual qualification route which will allow them to achieve two full GCSE grades; one in English Language and one in English Literature.

### **GCSE English Language**

In total the boys will be set two examinations

1. Reading paper (1hr) – worth 20% of the final GCSE  
This will involve pupils reading two non-fiction texts (e.g. letters, extracts, adverts etc) and answering questions on how the language has been used to create an effect
2. Writing paper (1hr) – worth 20% of the final GCSE  
This will involve students writing two different texts (e.g. letters, articles, leaflet etc)

They will also complete coursework under controlled conditions in the classroom.  
This element of the course is worth 30% of the final GCSE grade

1. Reading coursework – candidates explore the language of a book or Shakespeare play in a written assessment
2. Writing coursework – candidates will be required to write one description and one short story.

Candidates will also receive 30% of their final GCSE for their ability to speak coherently for a wide range of different purposes and audiences and for their ability to evaluate spoken English.

### **GCSE English Literature**

In total they will be set two examinations which will each last 2 hours in duration and are collectively worth 75% of the final GCSE grade. The examinations will assess candidate knowledge on plays and novels studied in class and their ability to analyse unseen poetry which pupils will not have studied prior to the examination.

They will also complete coursework under controlled conditions in examination conditions. This element of the course is worth 25% of the final GCSE grade. The coursework will consist of one assignment comparing a Shakespeare play with a poem.

It is hoped that throughout the course the students will become critical readers, fluent writers and confident public speakers thus giving them a broad spectrum of skills for further study and work environments.

## GCSE MATHEMATICS

All students study the Edexcel GCSE in Mathematics Specification A. This is a linear course, with all assessment being at the end of the course. There is no coursework element.

The course for Sets 2-6 is taught through three internal modules, Stages 1 to 3. Each module contains topics for all four of the Attainment Targets Ma1 – Ma4.

Throughout Year 10 there will be internal module tests. At the end of Year 10, students sit an internal examination. For the majority of students, this is the final time that movement between sets is possible (see later for details for some Sets 5 and 6 students).

In December of Year 11 students sit a mock examination which encompasses topics from both Stages 1 and 2.

All sets will study the Higher Tier material, giving access to Grades D to A\*. However, Sets 5 and 6 will study the course with less intensity than Sets 2 to 4. This policy is used to maximise the potential of all students.

At the end of January the decision will be made for Set 5 and 6 students as to which tier they will sit. Although it is the aim of the department that all students sit the Higher Tier papers, it may be necessary in exceptional circumstances for a student in Set 6 to sit the Foundation Tier, which has Grade C as its maximum possible award.

Set 1 will study the full course in one year, sitting the external examination at the end of Year 10. In December of Year 10 Set 1 students sit a mock examination which encompasses topics from both Stages 1 and 2. In Year 11 Set 1 study the Edexcel AS Mathematics Core 1 module. Assessment is at the end of the course and there is no coursework element.

In addition to this, in the Autumn Term of Year 11, Set 1 students will study the MEI Free-Standing Mathematics Qualification - Foundations of Advanced Mathematics. They will sit a mock Foundations of Mathematics test in December of Year 11 and sit the external examination at the end of January in Year 11. There is no coursework element.

Students receive board-awarded certificates and UCAS points for their performance on the Foundations of Advanced Mathematics module. The Set 1 students sit a mock C1 examination in the second half of the Spring Term. They sit the external C1 examination at the end of Year 11.

## MODERN FOREIGN LANGUAGES

### GCSE French

Students who follow a course in GCSE French should derive enjoyment and benefit from language learning and be inspired, moved and changed by following a broad, coherent, satisfying and worthwhile course of study. Learners should recognise that their linguistic knowledge, understanding and skills help them to take their place in a multilingual global society and also provide them with a suitable basis for further study and practical use of the language. The GCSE French specification should prepare learners to make informed decisions about further learning opportunities and career choices.

The GCSE specification in French will enable learners to:

- develop understanding of the language in a variety of contexts
- develop knowledge of the language and language learning skills
- develop the ability to communicate effectively in the language
- develop awareness and understanding of countries and communities where the language is spoken

Candidates will be required to:

- listen and respond to different types of language
- communicate in speech for a variety of purposes
- read and respond to different types of written language
- communicate in writing for a variety of purposes
- use and understand a range of vocabulary and structures
- understand and apply the grammar of the language, as detailed in the specification

The content that will be studied will cover the following broad contexts:

- Personal and Social Life
- The Local Community
- The World of Work
- The Wider World
- External Assessment

The examination consists of alternative papers in two tiers in the reading and listening sections, i.e. Foundation and Higher. There is no coursework element. Unit 1, the listening section, is worth 20% of the overall marks with verbal and non-verbal responses in English. Unit 2, the speaking section (untiered) is worth 30% of the overall examination and consists of two tasks (a structured conversation, presentation and discussion). Unit 3, the reading section is worth 20% of the overall marks, consisting of reading comprehensions with verbal and non-verbal responses in English. Finally Unit 4, the writing section/controlled assessment (untiered) is worth 30% of the overall marks consisting of two written tasks from different contexts.

GCSE French builds on what you have already learnt in years 7, 8 and 9 and you probably know more than you think. Language classes are still fun and interactive and you cover things at a slightly quicker pace, but this is good as you will easily notice the improvements that you make in your foreign language. Plus by taking a language GCSE you don't just learn the language, you get to find out about other people, countries and cultures so it really is an interesting and varied subject.

## GCSE Spanish

Students who follow a course in GCSE Spanish should derive enjoyment and benefit from language learning, and be inspired, moved and changed by following a broad, coherent, satisfying and worthwhile course of study. Learners should recognise that their linguistic knowledge, understanding and skills help them to take their place in a multilingual global society and also provide them with a suitable basis for further study and practical use of the language. The GCSE Spanish specification should prepare learners to make informed decisions about further learning opportunities and career choices.

The GCSE specification in Spanish will enable learners to:

- develop understanding of the language in a variety of contexts
- develop knowledge of the language and language learning skills
- develop the ability to communicate effectively in the language
- develop awareness and understanding of countries and communities where the language is spoken

Candidates will be required to:

- listen and respond to different types of language
- communicate in speech for a variety of purposes
- read and respond to different types of written languages
- communicate in writing for a variety of purposes
- use and understand a range of vocabulary and structures
- understand and apply the grammar of the language, as detailed in the specification

The content that will be studied will cover the following broad contexts:

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- The Local Community
- The World of Work
- The Wider World
- Personal and Social Life
- External Assessment

The examination consists of alternative papers in two tiers in the reading and listening sections, i.e. Foundation and Higher. There is no coursework element. Unit 1, the listening section, is worth 20% of the overall marks, with verbal and non-verbal responses in English. Unit 2, the speaking section (untiered), is worth 30% of the overall examination and consists of two tasks (a structured conversation, presentation and discussion). Unit 3, the reading section, is worth 20% of the overall marks, consisting of reading comprehensions, with verbal and non-verbal responses in English. Finally, Unit 4, the writing section/controlled assessment (untiered), is worth 30% of the overall marks, consisting of two written tasks from different context.

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Spanish is a growing language that is spoken widely throughout Latin America and Spain. It is also the fastest growing language in the United States.

## **10 reasons why languages are great:**

1. English is not enough! Not everyone speaks or wants to speak English.
2. A language will always be useful, no matter what you do.
3. In class, you get to study a wide range of topics all about different people and cultures, not just how to speak.
4. You can read books, watch films and listen to songs in their native language - and understand them too.
5. Languages mean business - being able to speak a language will make you really stand out.
6. They are good for you! Speaking more than one language increases your brain capacity and improves your memory.
7. It's really impressive to be able to speak a foreign language. It's a real achievement that your friends will envy and employers will love.
8. You can understand and talk to lots more people when you go abroad.
9. Using a language at work could raise your salary from 8-20%.
10. Learning languages really improves your communication skills.

## HUMANITIES

### GCSE History

This course is designed to achieve a two-fold purpose: to promote an understanding of the problems which face our world in their historical context, and to develop an analytical approach to the comprehension of cause and consequence, continuity and change and one-sidedness and objectivity. To this end the course covers the following themes:

#### **Unit 1: International Relations (first examined at the end of Year 10)**

- Peace making in 1918-1919 and the League of Nations.
- Hitler's foreign policy and the origins of the Second World War.
- The origins of the Cold War 1945-1955.

#### **Unit 2: Twentieth Century Depth Studies (first examined in Year 11)**

- Weimar Germany 1919-1929.
- The Roaring Twenties: USA 1919-1929.

#### **Unit 3: Historical Enquiry (examined by an assignment of 2000 words)**

- Britain at War.

All Units will be taught in formal lessons. There is extensive use of source materials and other forms of historical evidence, such as video, audio and pictorial archives, with an ever-deepening use of the resources available via Information and Communication Technology. Study is further supported by visits to leading museums and relevant sites overseas. In recent years these have included the Imperial War Museum (North), a nuclear bunker, the Normandy Beachheads, Auschwitz/Birkenau, Berlin, Moscow and the WW1 and WW2 battlefields in Belgium and the Netherlands. Use is also made of activities which require practical engagement, e.g. 'Hitler on Trial' and an interview day with World War 2 veterans.

History has long been recognised as a demanding academic discipline. As such it is respected by prospective employers. It is departmental policy to make the delivery of the subject as stimulating and as interesting as possible. This is in order to promote an interest in, and a thoughtful approach to, our common heritage. The History Department has a track record of good levels of success where students apply themselves correctly.

### Careers In Which The Subject Has A Direct/Indirect Bearing

Education, Archaeology, Museum work, Antiques, Librarianship, Legal Professions, Business and Commerce, Civil Service, Journalism, Tourism.

## HUMANITIES

### GCSE Geography

#### What do I need to be successful if I choose this course?

**Skills** – Students must be good listeners and be prepared to work individually and within a group. Students will also benefit from reading on a regular basis and this will help them analyse various types of text that make up parts of case studies. Students must also be prepared to become an independent learner and take responsibility for their own learning by completing all class work, attempting extension tasks and meeting homework deadlines.

**Interests** – Students must display an interest in the wider world and the events that take place in it. Students must appreciate the environment and the physical processes that shape it, and ways that humans can live within it in a sustainable way.

**Personal Attributes** – Students must be hard working and be prepared to listen to the views of others. Students must also be organised and show good attendance and punctuality to lessons. It would be beneficial for students to show interest in studying geography in the field by attending a field trip in Year 10.

#### What will I be studying?

- Paper 1 – Physical Geography  
Topics will include: Rocks, Resources and Scenery, Water on the Land and Ice on the Land.
- Paper 2 – Human Geography  
Topics will include Tourism, Population and Managing Rural Environments.
- Paper 3 – Local Fieldwork Investigation  
An investigation and study of the a local river and how the river changes from source to mouth.

#### How will I be assessed?

- Paper 1 is worth 37.5% of the total marks and is examined from a 1½ hour exam.
- Paper 2 is worth 37.5% of the total marks and is examined from a 1½ hour exam.

The two papers consist of short structured questions which are commonly resource based.

- The Local Fieldwork Investigation is approximately 2,000 words and is worth 25% of the total marks.

The boys will sit Paper 1 in the Summer of Year 10. This paper is only available for re-sit in June the following year.

#### How could I use this course in the future?

Geography is one of the most sought after qualifications that employers look for. The reason for this is that Geography enables people to engage in enquiry based learning, using a variety of skills. Successful students have gained entry into further education where they have studied subjects ranging from Geography, Geology, Sociology and Earth Sciences. A

qualification in Geography is ideal for students with an interest in Teaching, Working with the Environment, Engineering, Architecture, Business, Tourism, Journalism and the Armed Forces.

### **Homework/Independent Learning**

Homework will be set every week and students are expected to complete every piece. Homework tasks will range from exam style questions to research projects, and assessed tasks will include elements of independent learning.

## **INFORMATION AND COMMUNICATION TECHNOLOGY** **(studied by all pupils as a core subject)**

The core element in ICT (Information and Communication Technology) offers an exciting new course from OCR. OCR is an established examination board running GCSE and A Level courses for many subjects. The course concentrates on Microsoft Office skills and is completely separate to the GCSE course offered which concentrates on creating projects and systems using standard applications.

During Years 10 and 11 your son will study 3 units. The three compulsory units are Integrated e-Document Production, Manipulating Spreadsheets and Graphs and e-Presentation.

With all three units passed, your son will hold a qualification equivalent to a Grade B at GCSE. If your son makes excellent progress and completes the 3 units early, then he will be able to study the remaining 2 units and, therefore, acquire a qualification equivalent to 2 B grades at GCSE.

The Units available are described below.

### **Unit 1: Integrated e-Document Production**

This unit is designed to accredit vocational competencies in using a computer and its system software to create documents and integrate generic files, and files from different applications to produce integrated business documents. Candidates will develop a sound understanding of a computer's system and will keep health and safety risks to people and hardware at a minimum when using computers. They will appreciate why certain data may need to be protected and the importance of archiving data and will be able to perform these tasks. Candidates will produce a variety of business documents by integrating files of different types and will use a variety of formatting techniques to display documents effectively. Candidates will demonstrate skills in using mail merge facilities.

### **Unit 2: Manipulating Spreadsheets and Graphs**

The Unit is designed to accredit user competencies in using spreadsheet and graphs software, to use complex formulae and functions and to analyse and interpret data, producing a variety of charts and graphs from existing data. Candidates will extend familiarity with the software to be used and will demonstrate a sound understanding of the use and manipulation of complex formulae, numerical formatting and data presentation concepts for the correct use of graphing tools.

### **Unit 3: Design an e-Presentation**

This unit is designed to accredit user competencies in using presentation graphics software and to enable the use of complex layouts and designs. Candidates will extend familiarity with the software to be used, along with demonstrating a sound understanding of the use and manipulation of complex presentation techniques.

### **Unit 4: Creating and using a Database**

This unit is designed to accredit vocational competencies in using database software to create, maintain and interrogate a database file and generate output in a specified format. Candidates will be required to modify simple, non-relational databases, create queries using multiple section criteria and create reports. Candidates will develop proficiency with the software to be used, along with a sound understanding of database reporting and formatting features.

## **Unit 5: Electronic Communication**

This unit is designed to accredit basic competencies in using email and Personal Information Management (PIM) software to receive, transmit messages and attachments electronically, to organise messages and to set diary entries, create notices and to-do tasks. Candidates will develop familiarity with the software to be used and the concepts of network-based communications, along with an understanding of mailbox management and organiser features.

Due to the personalised nature of the course, the units can be completed when candidates are ready to take the assessment.

Much of the course can be self taught as the resources used to teach the pupils will all be online via the Microsoft Learning Academy and with this flexibility home study will be possible. There is a possibility of your son gaining an accredited Microsoft Certified Application Specialist (MCAS) certificate (a global industry standard qualification).

## SCIENCE SUBJECTS

At the time of preparing the Year 10 and 11 Course Guide the final decision on the choice of Chemistry / Biology / Physics syllabus had not been made. At present we are awaiting confirmation from the Examination Boards concerning syllabus details as these are changing for all Science subjects for GCSE courses starting in September 2011. While the content between syllabuses is broadly the same, methods of assessment do vary and we are keen to arrive at a choice that best suits the needs of our pupils. As soon as final details are available and a decision has been made, all parents and pupils will receive additional information. The information provided below is intended to give you an idea of the main areas of content that is common to all Chemistry /Biology/ Physics subjects.

It may be decided that the Double Award Science is a more appropriate qualification than the three separate sciences. Your teacher will discuss this with you.

### GCSE PHYSICS

Physics at GCSE builds on the foundations established at Key Stage 3. The course followed will provide a qualification at the end of year eleven. The content is sub-divided into seven parts.

- Section 1: Forces and motion
- Section 2: Electricity
- Section 3: Waves
- Section 4: Energy resources and energy transfer
- Section 5: Solids, liquids and gases
- Section 6: Magnetism and electromagnetism
- Section 7: Radioactivity and particles

#### **Key subject aims:**

- To impart a systematic body of scientific knowledge and the skills needed to apply this in new and changing situations in many domestic, industrial and environmental contexts;
- To foster an appreciation of the practical nature of physics, and develop experimental and investigative skills based on correct and safe laboratory techniques;
- To develop an appreciation of the importance of accurate experimental work and reporting to scientific method;
- To enable students to form hypotheses and design experiments to test them;
- To enable students to evaluate, in terms of their scientific knowledge and understanding, the benefits and drawbacks (including social, environmental and economic) of scientific and technological developments ;
- To enable students to select, organise and present information clearly and logically, using appropriate scientific terms and conventions.

#### **Careers In Which The Subject Has A Direct Or Indirect Bearing**

Physics at GCSE level is a requirement for the vast majority of careers involving any scientific, technological, engineering or medical discipline. It is the most useful basis for Advanced Level Physics, and a valuable foundation for further study in other scientific and technological subjects.

## **GCSE CHEMISTRY**

The course builds upon the Chemistry studied in Years 7, 8 and 9. It covers all the work required by the National Curriculum and provides a body of knowledge appropriate for all students whether, or not, they choose to study Chemistry at A Level.

Note: If pupils are not working to the standard expected towards the end of Year 11, it may be decided (across all three sciences) that the pupil should only be entered for the combined science qualification.

Chemistry content will be taught according to the following five major areas to be studied:

- Principles of Chemistry
- Chemistry of the Elements
- Organic Chemistry
- Physical Chemistry
- Chemistry in Society

Each term we will cover some aspects of this work. The aim is to develop pupil knowledge and understanding from fundamental concepts of atomic structure to the wider issues surrounding industrial processes, in a step by step manner. Practical work is an essential aspect of the course, enabling pupils to collect data and reflect upon its meaning. This opportunity to learn through experience will help pupils develop the ability to take responsibility for their learning and give them the confidence to make their own conclusions. Practical skills will be assessed during lessons as well as through test and examination questions.

The format for assessment will be dependent upon which new specification is chosen, however there will be no multiple choice papers. All papers will be written and some questions will require extended answers.

Chemistry occupies a central position among the basic sciences; on the one hand it is linked with Mathematics, Physics and Geology through Physical Chemistry and on the other with Biology and Physiology through Biochemistry. It underlies many branches of technology such as metallurgy, fuels and Chemical Engineering. Chemistry also enters into every manufacturing industry as well as medicine and agriculture. Knowledge of Chemistry is also helpful in the building industry when considering materials and their structures.

### **Careers In Which The Subject Has A Direct or Indirect Bearing**

The Chemical industry is the fifth largest manufacturing industry in the country. In addition, Chemistry is a required subject for entry into many other careers such as:

- agricultural science
- medicine
- veterinary science
- chemical engineering
- forensic science
- pharmacy and pharmacology
- biochemistry
- dentistry
- food science
- environmental health
- metallurgy
- water science

It is also an important supporting subject in many other disciplines as well as being one of the major employers in this area.

## **GCSE BIOLOGY**

Biology is the study of living organisms and their environment. As animals and plants are interdependent, the study of Biology at GCSE concerns all living organisms and their life processes.

Note: If pupils are not working to the standard expected towards the end of Year 11, it may be decided (across all three sciences) that the pupil should only be entered for the combined science qualification.

Pupils will develop their knowledge and understanding of:

- Variety of Living Organisms (including Bacteria, Viruses, Fungi and Plants).
- Human Physiology
- Health, Lifestyle and Disease
- Variation and the Mechanisms of Inheritance and Evolution
- Human Influences on the Environment
- Energy and Nutrient Cycles within Ecosystems
- The Application of Genetics
- How Science Works

Emphasis in practical activities is placed on observation, designing experiments, making measurements, presenting data and identifying patterns. Societal aspects and limitations of scientific evidence are also discussed. Practical work is an integral part of the course and will be conducted regularly.

With the ever-widening influences of Genes and Genetic Engineering, the study of Biology offers a firm foundation for developing a career in a rapidly expanding industrial market, as well as being a useful qualification for entry into other occupations and providing information for future life developments.

### **Careers In Which The Subject Has A Direct or Indirect Bearing**

- Biochemistry
- Biotechnology
- Genetic Engineering
- Food Science and Manufacture
- Zoology
- Veterinary Medicine
- Husbandry
- Animal Welfare
- Botany
- Horticulture
- Forestry
- Physiotherapy
- Sports Science
- Medicine and Nursing
- Dentistry
- Marine Biology
- Teaching

It provides students with the skills to analyse, present and organise information and to challenge existing concepts. These are skills that are transferable to most careers.

## **DOUBLE AWARD SCIENCE:** ***Equivalent to two GCSEs***

**Please note: toward the end of Year 9 it will be decided if this is the appropriate route for your son. Parents will be contacted at this time.**

The course is subdivided into several units of work, taught throughout Y10 and Y11. Each unit of work will be followed by a test so that pupil progress is monitored regularly. Pupils will develop their knowledge and understanding of:

### ***Biology***

Variety of Living Organisms (including Bacteria, Viruses, Fungi and Plants)  
Human Physiology  
Health, Lifestyle and Disease  
Variation and the Mechanisms of Inheritance and Evolution  
Human Influences on the Environment  
Energy and Nutrient Cycles within Ecosystems  
The Application of Genetics  
How Science Works

### ***Chemistry***

Chemistry content will be taught according to the following five major areas to be studied:

- Principles of Chemistry
- Chemistry of the Elements
- Organic Chemistry
- Physical Chemistry
- Chemistry in Society

Each term we will cover some aspects of this work. The aim is develop pupil knowledge and understanding from fundamental concepts of atomic structure to the wider issues surrounding industrial processes in a step by step manner. Practical work will be integrated into this course and assessed during lessons as well as through test and examination questions.

### ***Physics***

- Energy and Electricity
- Radiation and the Universe

## **Careers In Which The Subject Has A Direct or Indirect Bearing**

Double Award Science courses are accepted by industry, commerce etc instead of separate sciences. This includes such careers as: the Forces, technician and engineering apprenticeships etc. It is possible to go on to Advanced Level study in the Sciences from this course providing pupils gain two A or A\* grades.

**PHYSICAL EDUCATION**  
**(Studied By all pupils as a core subject)**

In Year 10 pupils undertake courses in Basketball, Volleyball, Handball, Rugby Union, Hockey, Circuit Training and Badminton and are also inducted in the Fitness Suite during the Autumn and Spring terms. In the Summer term pupils continue with their courses in Athletics, Cricket and Softball.

In Year 11 pupils continue modules in Basketball, Volleyball, Handball, Badminton, Rugby Union, Hockey, Circuit Training and the Fitness Suite during the Autumn and Spring terms. In the Summer term, pupils are largely engaged in external examinations, but are still given regular opportunity to take part in a range of outdoor and indoor activities.

In addition the Physical Education Department offers a range of extra-curricular activities including Basketball, Badminton, Weight-Training, Rugby Union, Hockey, Badminton, Cricket and Athletics which all pupils are encouraged to attend.

## **PERSONAL, SOCIAL AND HEALTH EDUCATION**

**(Studied by all pupils as a core subject)**

Personal, Social and Health Education (PSHE) enables pupils to become healthy, independent and responsible members of society. It promotes their spiritual, moral, social, cultural, mental, physical and emotional well-being. We encourage our students to develop a sense of their own and others' self worth and thereby help them to appreciate what it means to be a member of a diverse and multi-cultural society. PSHE complements the academic life of the school by giving pupils the skills and knowledge to lead healthy and independent lives and become responsible citizens in a rapidly changing world. The PSHE programme at our school gives the students the chance not only to acquire knowledge but also to develop and challenge their own attitudes and values.

Mixed form groups currently study a range of topics such as Careers, Cookery, Current Affairs, Health Education, Financial Capability and Citizenship. Specialist staff are used to deliver each module within the PSHE programme and where appropriate, outside speakers supplement this expertise. We also run activity days which complement and extend the existing programme.

## RELIGIOUS EDUCATION

(Studied By all pupils as a core subject)

**“God has no religion” Mahatma Ghandi (1869-1948)**

Religious Education is a relevant, bright and vibrant subject that is capable of inspiring those who study it at all levels. It is of fundamental importance that students have a clear understanding of the importance of learning about the diversity of religion and belief, in contemporary society, in addition to learning about themselves. This deep and cognate subject is well received by the students, regardless of their own belief system.

**This subject is not about the differences which can separate people from one another; it is about the similarities which bring us all together.**

It is fair to state that there are clear and universal moral truths which underpin human attitudes and it is these which will lead the aims of your son's programme of study:

*Students will focus on the key concepts and searching questions that shape people's motivations and behaviour. GCSE Religious Studies, for years ten and eleven, includes concepts which are peculiar to a single religion, such as 'Trinity' within Christianity or Buddhist 'Karma'; ones which are shared by religions, such as 'divine' or 'sacred'; those that are used by the boys during their enquiries, such as 'belief' or 'ritual' and ones which help to find meaning, such as 'love' and 'identity'.*

### The GCSE Examination and its requirements

Your son will study for the WJEC Short Course examination 'Religion and Life Issues'. This is divided into **four** modules over the two years. These are detailed further in the table below:

<b>Unit of Study</b>	<b>Summary of Content</b>	<b>Year of study</b>
Love and Relationships	<ul style="list-style-type: none"><li>• Types of love</li><li>• Sex, celibacy and contraception</li><li>• Marriage, cohabitation and same-sex relationships</li><li>• Divorce and remarriage</li></ul>	Year 10
Is it Fair?	<ul style="list-style-type: none"><li>• Human Dignity</li><li>• Racial, social and gender divisions</li><li>• Wealth and Charity</li></ul>	Year 10
Looking for Meaning	<ul style="list-style-type: none"><li>• The existence of God</li><li>• The nature of God and ideas about God</li><li>• Acts of Worship</li><li>• Death and the afterlife</li><li>• Funeral rites</li></ul>	Year 11
Our World	<ul style="list-style-type: none"><li>• The place of humankind in this world</li><li>• The purpose of humankind</li><li>• Care for the world, animal rights and the environment</li></ul>	Year 11

**The examination will take place at the end of year eleven, usually in the May  
Your son will be examined over one session of 1 hour and 30 minutes  
There is no coursework for this short course qualification**

### The exciting position of RE

Since this subject is not yet included in the English Baccalaureate, it presents an outstanding opportunity for your son to **actively choose** a programme of study which will reflect on him as an individual who appreciates his position as a global citizen.

### Your son's future

Potential employers are always keen to see a Religious Studies qualification on applicants' CVs, as it shows a **breadth of study** as well as a **breadth of mind** and **openness to the views of other people**. In short, studying RE can help to develop you into a 'people-person'. If you think that you have the potential to excel at personal enquiry, personal response and respectful evaluation, then this is the subject for you.

***The Department is always open to comments and enquiries: Should you wish to communicate either of these, please do not hesitate to contact Ms. R. Razbully.***

# **ADDITIONAL GCSE OPTION SUBJECTS**

## **COURSE INFORMATION**

## **GCSE ART AND DESIGN**

- This subject provides students with a wide range of creative, exciting and stimulating opportunities to explore their interests in Art and Design in ways that are personally relevant and truly developmental in nature.
- Pupils are engaged in study that genuinely reflects their values, enthusiasms, areas of expertise and their individual needs.
- The requirements of the specification allow for the study of Art and Design in both breadth and depth.
- It provides progression from Key Stage 3, a strong and appropriate foundation for further progression to Art and Design at A Level and career pathways within the creative industries.

### **Portfolio of Work (Coursework)**

- Controlled assessment
- 60% of the total marks
- Marked out of 80

The portfolio should be selected from work undertaken during the course of study and must include more than one project. It is recommended that the total portfolio submission will comprise of approximately 45 hours of work.

A response to all assessment objectives is required in the portfolio as a whole. Work presented is marked by the Centre and moderated by the Examination Board.

### **Externally Set Task (Examination)**

- External assessment
- 40% of the total marks
- Marked out of 80
- 10 hours of sustained focused study
- Students respond to their chosen starting point
- Question papers can be issued to students from 1 January in the year of the exam.
- Unlimited preparation time and 10 hours of supervised time.

A response to all assessment objectives is required. Work presented is marked by the Centre and moderated by the Examination Board.

- 60% weighting for the Portfolio of Work and 40% weighting for the Externally Set Task.

### **Assessment**

Both the Portfolio of Work (Coursework) and the Externally Set Task (examination) are marked according to the same criteria. There is an expectation in both that candidates address all four assessment objectives to the best of their ability.

## Careers in Art and Design

Accessory Designer	Advertising Director	Aerial Photographer
Airbrush Artist	Antique Specialist	Appliqué Artist
Archaeologist	Architect	Architectural Graphic Artist
Architectural Writer/Critic	Architecture Teacher	Art Activity Writer
Art Appraiser	Art Book Editor	Art Consultant
Art Co-ordinator	Art Dealer	Art Director
Art Critic	Art Insurance Agent	Art Librarian
Art Distributor	Art Researcher	Art Restorer
Art Historian	Art Therapist	Art in Residence
Art Magazine Editor	Audio/Visual Designer	Automobile Designer
Art Teacher	Botanical Designer	Calligrapher
Artists' Agent	Cartographer	Ceramicist
Background Artist (TV)	Cinematographer	Computer Graphic Artist
Camera Operator	Commercial Photographer	Costume Designer
Children's Book Illustrator	Designer	Editorial Illustrator
Comic Strip Artist	Environment Designer	Fabric Designer
Curator, Design Consultant	Fashion Consultant	Fashion Illustrator
Enamellist	Fashion Photographer	Film Animator
Fashion Art Director	Fine Artist	Forensic Artist
Fashion Merchandiser	Gallery Director	Glass Blower
Filmmaker	Graphic Arts Technician	Industrial Designer
Furniture Designer	Jewellery Maker/Designer	Legal Photographer
Goldsmith	Lithographer	Magazine Art Director
Interior Designer	Makeup Artist	Model Builder
Lighting Designer	Scene Painter	Mural Artist
Magazine Photographer	Museum Director	Special Effects Artist
Art Director	Television Art Director	Web Site Designer
Museum Curator		
Storyboard Illustrator		

## GCSE BUSINESS STUDIES

The aim of this course is to develop a thorough knowledge and understanding of the way in which businesses operate, including an appreciation of the wider environment in which they exist.

Areas covered include

- Enterprise & Business Start up
- Marketing
- Business Operations
- Business Finance
- People in Business

The course is assessed by final written examination 75% and a controlled assessment 25%.

Specifically:

<b>Unit 1 Setting up a Business</b>	Written paper (1hr) 40%. This unit will be assessed at the end of Year 10
<b>Unit 2 Growing a Business</b>	Written paper (1hr) 35%. This unit will be assessed at the end of Year 11
<b>Unit 3 Investigating a Business</b>	This controlled assessment worth 25% will take place at the end of Year 11

Students will have the opportunity to go on at least one industrial visit to give them an insight in to how real businesses operate. Teaching techniques include the use of group activities, role play and student presentations.

In Year 10 students have the opportunity to get involved in various activities including:

- |                  |   |                           |
|------------------|---|---------------------------|
| Mini-enterprise  | - | starting a small business |
| Student Investor | - | share dealing competition |

The course provides an excellent insight in to the world of work and provides a good basis for study of this subject and other related subjects, such as Economics, at a higher level.

In summary, this course will appeal to those students who:

- Have an interest in how a business operates
- Enjoy studying a subject that is relevant to their own lives and experiences
- Would like to do a subject that offers opportunities for a career in business
- Would like to learn how to make business decisions and solve business problems
- Want to keep their options open – business studies can be a useful choice for a wide range of careers and can be combined with a wide range of subjects.

## GCSE DESIGN AND TECHNOLOGY : PRODUCT DESIGN

Design and Technology is an activity which spans the curriculum, drawing on and linking a range of subjects. The work is coordinated to improve pupils' understanding of the significance of Technology to the economy and to the quality of life.

Design and Technology describes a way of working in which pupils investigate a need and respond to an opportunity to make or modify something. They use their knowledge and understanding to devise a method or solution, realise it practically and evaluate the end product and decisions taken during the process. Design and Technology draws on the knowledge and skills from many other subject areas; e.g. mathematics and science.

Pupils' enterprise and ability to work as members of a team contribute to their success in Design and Technology. They will acquire a range of skills and work with a variety of materials (i.e. construction materials - wood, metals and plastics, and graphic materials). Due to the nature of the type of work undertaken, it is necessary for pupils to provide suitable protective clothing (e.g. apron/overall).

### Coursework

Unit 1	Title	Mandatory or Optional	Weighting	Time
Stage 1	Investigating a Context	M		
Stage 2	Research	M		
Stage 3	Communicating Design Ideas	M		
Stage 4	Using materials	M		
Stage 5	Using tools and equipment	M		40-45 hours
Stage 6	Evaluation Techniques	M	60%	
Stage 7	Understanding Quality Control and Manufacturing	O		
Stage 8	Overcoming problems	O		
Stage 9	Adaptation and Improvement	O		
Stage 10	Team Working	O		
Unit 2	Knowledge and Understanding of Product Design		40%	1.5 hours

**Controlled Assessment –**

Designing a product and the production of a prototype (Manufacturing)  
Presentation plus supporting portfolio evidence  
(Externally set, internally assessed and externally moderated)

Terminal Examination

It is essential for boys to gain a deep understanding of the theory of this subject in order to apply this into problem solving and their design work. To assist this there are regular homework tasks to focus their attention on developing an awareness and appreciation of the tools, processes and equipment used, in both a school and industrial context. They will also need to carry out a significant amount of work at home, both in and out of term time, to support the coursework undertaken in school.

The boys will work with a range of constructional and graphics materials and then, they are to apply their newly acquired knowledge and skills into completing a "design and make" portfolio. This is carried out through a 'Controlled Assessment which is externally set, internally marked and externally moderated. It will consist of one project focussing on the design and making of a single product or closely related range of products that addresses all of the assessment objectives in an integrated way and will take 40-45 hours to complete. Boys must complete the **six** mandatory stages together with **two** optional stages and this will account for 60% of the overall assessment.

### **Careers In Which The Subject Has A Direct Or Indirect Bearing**

Careers in design require the ability to conceive, develop and apply ideas creatively, with imagination, conviction and tenacity to see the job through. In addition, the ability to communicate and get on with people is essential because designers normally work as part of a team. They must have knowledge of materials and manufacturing methods and bear in mind safety, costs and reliability.

Careers can be found in Engineering Design (Mechanical, Civil, Chemical, Aeronautical or Marine), Graphic Design, Teaching and many other careers involving scientific, technological or engineering discipline.

## GCSE DESIGN AND TECHNOLOGY: GRAPHIC PRODUCTS

Design and Technology: Graphic Products endeavors to develop students' creativity and skills of critical analysis by teaching an appreciation and understanding of the impact that design has on culture, society and peoples' lifestyles.

With strong links to other areas of the curriculum, such as Art, Mathematics and Science, GCSE Graphic Products provides a specific understanding of the fundamental skills and topics surrounding Design and Technology, and can assist learning in these other key subject areas.

During this exciting course - new to the school - students will actively engage in Design and Technology, whilst learning to make important decisions and explore ways in which aesthetic, technical, economic, environmental, ethical and social dimensions interact to shape the designing and manufacturing of products. Furthermore, they will become skilled at analysing products and become knowledgeable on issues such as sustainability when designing products.

### Coursework

#### **UNIT 1: Creative Design & Make Activities (60% of overall mark)**

<b>Stages</b>	<b>Tasks</b>	<b>Suggested Times</b>	<b>Assessment</b>
1. Investigate	1.1 Analysing the Brief 1.2 Research 1.3 Specification	1 hour 3 hours 1 hour	Internally assessed and externally moderated
2. Design	2.1 Initial Ideas 2.2 Review 2.3 Communication	5-6 hours 1 hour Evidenced Throughout	
3. Develop	3.1 Development 3.1 Final Design	5-6 hours 1-2 hours	

<b>Stages</b>	<b>Tasks</b>	<b>Suggested Times</b>	<b>Assessment</b>
4. Plan	4.1 Production Plan	1-2 hours	Internally assessed and externally moderated
5. Make	5.1 Quality of Manufacture 5.2 Quality of Outcome 5.3 Health & Safety	16 hours Evidenced Throughout	
6. Test & Evaluate	6.1 Testing & Evaluation	1-2 hours	

#### **Unit 2: Knowledge and Understanding of Graphic Products (40% of overall mark)**

<b>Stage</b>	<b>Tasks</b>	<b>Allocated Time</b>	<b>Assessment</b>
Knowledge & Understanding	Terminal Examination	1-1/2 hours	Externally assessed

It is essential for students to gain a deep understanding of the theory of this subject in order to apply this into problem solving and design work. To assist with this regular homework tasks

will be set to focus their attention on developing an awareness and appreciation of the tools, processes and equipment used, in both a school and industrial context. They will also need to carry out a significant amount of work at home, both in and out of term time, to support the coursework undertaken in school.

All students on the course will work with a Graphics materials and design methods. They will then apply their newly acquired knowledge and skills into completing a "design and make" portfolio. This is carried out through a Controlled Assessment, which is externally set, internally marked and externally moderated. It will consist of one project focussing on the design and making of a single product or closely related range of products that address all of the assessment objectives in an integrated way. This project will take 40 hours of lesson time to complete; the sections are outlined above.

### **Careers and Further Education**

Careers in design require the ability to conceive, develop and apply ideas creatively, with imagination, conviction and tenacity to see the job through. In addition, the ability to communicate and get on with people is essential because designers usually work as part of a team. They must have knowledge of materials and manufacturing methods and bear in mind safety, costs and reliability.

Upon successful completion of the GCSE Graphic Products course, students will have relevant knowledge and skills to begin further education in the areas of Art, Design (Graphics, Resistant Materials, and Product Design etc.), Media and/or Film. The nature of the course also prepares students for careers in creative and technical areas including Graphic Design, Industrial/Product Design, Teaching and many more.

## GCSE GEOLOGY

Geology provides an essential contribution to an understanding and appreciation of the Earth. The subject centres on the study of minerals and rocks and the processes which have contributed to their formation and distribution. Uniquely, it introduces the concept of geological time, which, with the study of fossils and the rock record, enables a reconstruction of Earth history. It is perhaps the most interdisciplinary and integrated of the sciences, providing a broad, relevant and scientifically based education. Scientific laboratory work is carried out during the course and is assessed as part of the final examination grade. Fieldwork is also assessed and develops students' observation and analytical skills. At present, students visit Mill Road, Spital and Thurstaston Hill on a number of occasions in Year 10 as part of their fieldwork; these visits being for a short duration during lesson time. In Year 11 longer visits are planned to Anglesey. In total, fieldwork accounts for a minimum of three "full" days work.

The frequently inconclusive nature of geological evidence rarely produces an indisputably correct answer, but constantly demands reasoned evaluation and interpretation - the essence of science education and Geology's attractiveness to students.

Geology affects the environment we build ourselves; it provides the resources for the building and manufacturing industries, the energy to fuel them and the environment for society's waste; issues of increasing social concern.

The syllabus studied in Wirral Grammar School is Welsh Joint Education Committee GCSE Science: Geology.

### Assessment

#### Examination:

Candidates will do an on-screen non-tiered written paper consisting of compulsory structured data and stimulus response questions. This will be marked by the WJEC and equates to 75% of the final grade. This paper will be sat in the summer of Year 11.

#### Controlled Assessment:

A directed investigation of an actual location presented as field notes and a written report. This will be marked by the centre and equates to 25% of the final grade. A series of field excursions will be undertaken throughout the course. The controlled assessment based on these visits will be submitted in the Spring term of Year 11.

### Careers In Which The Subject Has A Direct Or Indirect Bearing

The exploration and extraction of coal, oil and gas, mining industry (copper, iron ore, uranium, gold, diamonds etc.) construction industry (site investigation, geological survey, nuclear waste disposal, bulk material industries (clay, gypsum, limestone, roadstone), Geophysics, Geochemistry, Hydrology, Agriculture, Forestry, Hydro-geology (considered a new expanding area for careers).

## GCSE INFORMATION AND COMMUNICATION TECHNOLOGY

### **Examination Board ICAA Controlled Assessment 60% Final Examination 40%**

The aims of the course are to develop in pupils an ability to solve problems through the use of ICT systems and to develop a broad and balanced view of the range of applications which are in current use. The course requires pupils to develop their ability to use ICT to communicate and handle information in a variety of contexts, to analyse, design, implement, test and document systems for themselves and others, to reflect critically on the use of ICT in the wider world and to consider some of the social, moral and legal issues associated with the use of ICT. The course also considers the impact of these systems on society and businesses.

The course is highly practical to match the nature of the subject. Much of the teaching is carried out by the use of practical exercises and by requiring pupils to complete a series of skill based tasks. While some lessons are devoted to the use of software, boys are expected to work out for themselves techniques for using the available software and to discover some of the more advanced features.

Approximately one third of the time is devoted to more traditional teaching methods which cover the theoretical aspects of the course, which can be quite demanding. There is regular written homework to support this learning. The boys will be expected to complete and extend their work in their own time. This could include using the computer facilities at lunchtime or after school.

There will be two Controlled Assessment components and they will build on and use the skill-based teaching throughout the two years. Each Controlled Assessment will require candidates to provide a working solution to an ICT problem, incorporating relevant skills and knowledge.

For each task candidates should provide evidence of ability to do the following:

- Analyse the problem and carry out research to produce a solution.
- Clearly record all research and store it appropriately for use in the solution
- Devise an action plan for the tasks and formulate Critical Success Factors for the solution.
- Produce a system specification including hardware selection, processing needs and justify decisions.
- Produce a solution using a range of software, ensuring audience and purpose are considered throughout.
- Conduct appropriate testing to ensure the solution works and refine as necessary.
- Evaluate success, using peer-evaluation and refine as necessary.
- Consider recent and future developments.

The Controlled Assessments will last approximately 40-45 hours combined.

## GCSE MEDIA STUDIES

It is recognised that the mass media play an increasingly important role in our lives, providing us with entertainment, information and social values. Students spend more time in a year watching television and listening to the radio than they spend at school. A critical understanding of the media is, therefore, an important skill for any student to acquire.

60% of the marks for this subject will come from coursework, made up of three written assignments, one of which is a practical production piece. The Practical work, ending in a real media product, will allow students to investigate media techniques, processes, representations and audiences. The main areas we will cover are TV Advertising, Pop Music and Magazine Publishing.

Students should be warned, however, that this is also an academic subject that demands genuine commitment and an ability to work well with others as a team and involves building up a lot of knowledge of media concepts and working practices as well as having a creative flair.

The examination at the end of Year Eleven is a written test lasting 1 ½ hours. This is worth 40% of the overall marks for the subject. Recent subjects have included; television documentaries, the tabloid press, comedy films, comics and quiz shows.

## **GCSE MUSIC**

Students follow the AQA GCSE Music specification. The work builds on the knowledge, skills and understanding developed at Key Stage 3 and includes performing, composing and listening in a wide variety of musical styles. There are further opportunities to use music technology, including presenting compositions through sequencing software, such as Sibelius 5 and Cubase Essential.

The Performance (40%) is assessed internally and will include both a solo and an ensemble performance on any instrument or voice. Most students will continue to benefit from the support of an instrumental teacher and lessons are available in school on a wide range of instruments at the usual cost of £120 for a set of ten individual lessons.

The Composition (20%) will consist of one piece in a style of the candidate's choice and could be anything from a classical instrumental piece to a "pop" song. The completed composition will be recorded and accompanied by either a score or a detailed commentary. This work is completed in school during 25 hours of supervised time and submitted for internal assessment at the end of the Spring term 2013.

A second Composition will require students to compose and appraise music based on a specified Area of Study. This work will be completed in school during 20 hours of supervised time and submitted for external assessment.

The Listening and Appraising Test (20%) will consist of a one hour written paper at the end of the course. A CD recording of musical extracts will lead to questions on music from The Western Classical Tradition, Popular Music of the 20<sup>th</sup> and 21<sup>st</sup> Centuries and World Music.

An increasing number of students find that their experience of practical music-making at KS3 is an excellent foundation for continued study at this level. Some students choose to study Music simply because they enjoy it or as the basis for future leisure activities. Success at GCSE can lead to further study in the Sixth Form, careers in the music industry, publishing, entertainment, teaching or any job which involves communication and expressive skills.

### **Careers In Which The Subject Has A Direct or Indirect Bearing**

Performer, Teacher, Dance, Acting, HM Forces, Librarian, Piano Tuning (a shortage area), Musical Instrument Technology, TV and Radio.

## **EXTENSION COURSES IN YEAR 10**

## **Extension Courses In Year 10**

A range of provision exists to supplement the standard year 10 curriculum:

- AS Critical Thinking
- General Studies GCSE
- Astronomy GCSE
- Courses taken by supported private study

As has been explained earlier, boys are not required to 'opt' for these subjects at this stage. Given the emphasis on independent study, having both the ability and commitment are essential requirements. As a guide, we would expect boys to have a record of good performance in relation to target grades (greens and blues) and a track record of good 'effort' (mainly Grade 1s).

## **AS CRITICAL THINKING**

### **What is Critical Thinking?**

Critical Thinking is different to other AS courses in that it is not about learning information but about learning how to analyse arguments and evaluate evidence. As such, it imparts a set of particularly valuable transferable skills which have been shown to enhance academic performance and which are increasingly widely recognized in higher education admissions procedures.

### **Who is the Course For?**

This is an intellectually challenging course and so is offered to the twenty most academically able pupils, based on their performance in core subjects at the end of year 9. Those selected for the course are expected to complete it, unless there are sound academic reasons for not doing so.

### **How will it be Taught?**

There will be four half-day sessions devoted to preparing the candidates for this course, two in the spring term of Year 10, the others in the autumn term of Year 11. In addition there will be a limited number of preparatory tasks and some follow-up work to be completed. Compared to other AS (or even GCSE) courses the workload for students of Critical Thinking is very limited – ways of thinking are more important than knowledge of facts; nevertheless, candidates are expected to ensure that they are familiar with the key concepts and that they are familiar with the format and demands of the examination.

### **How is it assessed?**

The AS examination consists of two units which candidates will sit in the summer of Year 10 and January of Year 11. Unit 1 focuses on core concepts and assessing the credibility of evidence while Unit 2 deals with the evaluation and construction of arguments.

Those who do well at AS (grade A or B) will be offered the opportunity to sit the A2 examination in the Lower Sixth. More information on the specification can be found on the OCR website: [www.ocr.org.uk](http://www.ocr.org.uk).

## **GCSE GENERAL STUDIES**

### **What is General Studies?**

General Studies is rather different to most other GCSE courses in that it has little or no taught content but rather relies on candidates to draw on their knowledge and skills acquired across the curriculum as well as an awareness of issues from society generally. Candidates will have opportunities to develop their ability to use information provided to construct coherent arguments and to write essays based on their existing knowledge. The study skills required will be of lasting value at GCSE and beyond.

### **Who is the Course For?**

The opportunity to do this course will be offered to students who are considered capable of coping with the discipline of additional private study.

Those who opt for the course are expected to complete it unless there are sound academic reasons for not doing so.

### **How will it be taught**

Preparatory tasks will be set each half term. Depending on uptake and timetable constraints it may be possible to provide tutorial or lesson time but essentially candidates are expected to prepare themselves for the examination by completing sample questions.

### **How is it Assessed?**

The GCSE examination consists of two papers which candidates will sit in the summer of Year 10. One paper consists of multiple-choice questions, structured writing and a short essay; the other requires candidates to have studied pre-release materials on a given theme.

More information on the specification can be found on the AQA website – [www.aqa.org.uk](http://www.aqa.org.uk).

## **GCSE ASTRONOMY**

### **What is Astronomy?**

Astronomy is a fascinating subject. It covers no less than the entire cosmos – past, present and future! You will learn about the nature and origin of sun, moon, solar system, stars, galaxies and even the universe itself. Under no circumstances is it to be confused with astrology, which is the non-scientific belief that the stars and planets influence our lives!

### **Who is the course for?**

Year 9 pupils are not expected to express an interest in studying Astronomy until the end of the academic year. Those who are interested in the course will be able to attend an induction lesson in the Summer Term. Astronomy is open to any interested pupils but it is important to note that there is an emphasis on mathematics, ICT and some Physics. As the course is taught through lunch time sessions pupils will need to be self-motivated and able to work independently. Once a pupil has started the course he will be expected to complete it.

### **What does the course involve?**

There is an examination at the end of Year 10 and two pieces of controlled assessment – one involves naked-eye observation of the stars (or use of a shadow stick to create a sundial), the other requires candidates to use a sundial.

In addition, candidates will be set past-paper exercises on each topic which they need to complete in order to be allowed to continue with the course.

### **How is the Course Taught?**

The material for the course is provided in booklet form and candidates are expected to complete the work set in their own time. A number of websites and other IT resources are available to support learning. Teaching will be through weekly lunch time tutorials, attendance at which is a required part of the course, and through supported study activities.

### **The Value of Astronomy**

This course introduces pupils to the core concepts in one of the most interesting of the sciences. A good result at GCSE will enhance any curriculum vitae as well as providing an academic challenge to the more able. Those intending to study Physics at A Level will find the course particularly relevant.

### **Courses Taken by Supported Private Study**

This option offers students the opportunity to study subjects that interest them but are not normally available as part of the taught curriculum.

In theory almost any GCSE or AS level subject is a possibility depending on the ability, motivation and self-discipline of the pupil but it will not be possible in every case to guarantee teaching support.

In the past pupils have obtained qualifications in a range of modern and community languages, sometimes in collaboration with Wirral Grammar School for Girls Language College, and in Classical Studies. Other possibilities might include Ancient History, Critical Thinking, Ancient Greek, Sociology, Psychology, Humanities, History of Art.....indeed the only real restriction is personal interest. Any student interested should consult Dr Favager in the first instance to assess the possibility of their interest being catered for.

The most highly motivated may also have the opportunity to study an Open University module through the YASS scheme. This gives a taste of study at degree level in a manageable chunk. So far students in Year 11 and the sixth form have passed modules in topics as varied as Astronomy, Geology, History and Medicine. A wide range of other options is available. Further information is available at: <http://www8.open.ac.uk/choose/yass>