

**Sierra Bernia School**  
British School



***KEY STAGE 4  
INFORMATION***

***(YEARS 10 & 11)***



## KEY STAGE FOUR?

The school life of a pupil is divided in FIVE sections. These sections are referred to as ‘Key Stages’. These ‘stages’ are organised into years in the following way:

### PRIMARY

Key Stage One	Years 1 - 2
Key Stage Two	Years 3 – 6

### SECONDARY

Key Stage Three	Years 7 – 9
Key Stage Four	Years 10 & 11
Key Stage Five	Years 12 & 13

During the two years of KEY STAGE FOUR (Years 10 & 11) teachers prepare pupils for an exam that indicates the level they have reached, in that particular subject, at the end of their secondary education. This exam is called IGCSE. It is taken by all Year 11 pupils in England and those who attend British schools throughout the world. Outside of Britain there are approximately **324,000** candidates presented for this exam in over **124** different countries.

## COURSEWORK

Coursework is work carried out by students while they are studying an IGCSE course. The work completed counts as a percentage of a student’s final grade. It includes extended essays, investigations, practical experiments or performance work. Coursework is an excellent way for students to demonstrate the skills and knowledge they have gained throughout a course.

**As parents look through this booklet it’s very important to see which subjects require coursework.** This element is an important part of the exam and pupils need to ensure that they listen to teachers’ advice and guidance. Coursework takes time and effort, and because it counts towards a pupils’ final grade it is important that they do as well as they can.

## USEFUL INFORMATION

This booklet provides the details of the courses that the students will be following. As always the staff are available to help and explain to parents about the courses and the demands of each subject’s syllabus.

The internet is also a very useful resource for parents to get to know the courses the pupils follow. Here are some useful websites:

Edexcel International Examinations - <http://www.edexcel-international.org>

BBC (a great resource for parents and pupils): <http://www.bbc.co.uk/schools/>

The school web site: <http://www.sierraberniaschool.es>

## **TUTOR GROUPS**

In Key Stage 4 (Years 10 & 11) pupils will have a tutor who will remain with them throughout the two years. This gives the tutors more contact with the students, allowing them to get to know the pupils better and guide them through any difficulties they have over the two year period.

## **DIARIES**

The diary will still be our main form of communication with parents. We ask parents to sign the diaries on a weekly basis and check over the previous week to see the homework set and any notes/comments from teachers. We would ask that if any teachers make comments to parents, that the parents sign that comment to confirm that it has been read.

## **PARENTS' MEETING**

The school provides an opportunity for parents to meet and talk to teachers twice per school year. This is a fundamental part of school life and it is important that all parents attend. Apart from these general meetings parents are always welcome to arrange an appointment with the tutor in order to receive information about the pupil's progress or any other queries.

## **UNIFORM**

There is a school uniform. Pupils must have the correct school uniform and we ask parents to support the school by ensuring that their son or daughter is dressed appropriately. Pupils sometimes tend to interpret and improvise around the word 'uniform'. A good example is the current fashion for boys to reveal underwear because jeans are so loosely worn. Obviously and understandably adolescents take their image and clothing very seriously but far too much valuable teacher time and effort can be wasted by dealing with pupils who are not in the correct uniform – we would appreciate parents' help by taking this issue seriously.

## **OPTIONS**

Due the demands of the IGCSE courses pupils need to have more contact time with the subject specialists. Therefore pupils have to 'drop' certain subjects and choose two subjects that they will study in preparation for the IGCSE exam. For more details of subjects available see section 'Options' in the booklet.

## **IGCSE**

This current Year 9 will be presented for their IGCSE exams in May 2017 and these are the same as the GCSE exams taken in England. The cost for each component of an exam is around 90 euros but depends according to the exam and the exam board (Edexcel). Parents will be informed of the cost before students are officially entered.

## **SPANISH CURRICULUM**

All non-Spanish pupils can have full access to the Spanish curriculum and we would encourage any pupil considering studying in a Spanish University to make full use of this opportunity. In order to obtain the Spanish certificate of 'Gradulo Escolar' a pupil must have attended Lengua, Sociales and Valenciano classes.

## **PUPILS PROGRESS**

During Year 10 and 11, every pupil will have an individual interview with their tutor to discuss their progress, hopes and dreams for the future, any difficulties in subjects and to receive advice. Parents will be informed if any concerns are raised.

# ENGLISH LANGUAGE & LITERATURE

## Aims

- to enable students to communicate accurately, appropriately and effectively in speech and writing;
- to enable students to understand and respond appropriately to what they hear, read and experience;
- to encourage students to enjoy and appreciate variety in language;
- to explore ideas and areas of universal human concern, thus leading to a greater understanding of themselves and others.

### The IGCSE examinations:

Students are prepared for the following IGCSE examinations:

IGCSE English as a Second Language

IGCSE First Language English

IGCSE English Literature

In Key Stage 4 English students are divided into smaller teaching groups with targeted support where necessary. By the end of Year 11 the students will have been prepared for the IGCSE English and IGCSE 2nd Language English exams as well as the IGCSE Literature exam. 40% of the Literature exam is coursework - a series of extended pieces of writing that students produce during Years 10 and 11. It is imperative that students produce their best work and meet all coursework deadlines in order to achieve the best possible grade for their IGCSE exam.

### The set texts for this year are:

*Of Mice and Men*

*An Inspector Calls/ Our Town*

*Poetry Anthology*

### Homework

Students will normally receive ONE or TWO pieces of homework **per week**

### What can I do to help my child?

Parents can motivate their children by taking an interest in their child's learning, looking over their work and talking to them about their progress. Students need as much exposure to English as possible outside of school. English DVDs or videos are excellent for improving listening skills. They should read approximately one book a month. Teachers can help students to choose appropriate reading books if necessary. Finally, the internet provides students with many useful websites, for example:

[www.bbc.co.uk/bitesize](http://www.bbc.co.uk/bitesize)

[www.learn.co.uk](http://www.learn.co.uk)

[www.englishresources.co.uk](http://www.englishresources.co.uk)

# MATHEMATICS

## Description

Pupils in Years 10 and 11 are prepared for the Cambridge IGCSE Mathematics Exam (0580). There is no coursework element and the final assessment is in the form of TWO written exam papers (both with calculator) in the *Extended* curriculum. The *Extended* curriculum is targeted at grades A\* to C. The aim of the Mathematics Department is to enter all students for this exam. All exam papers are externally marked.

Paper 2 carries a 35% weighting and consists of short-answer questions. It lasts 1 hour 30 minutes.

Paper 4 carries a 65% weighting and consists of longer structured questions. It lasts 2 hours and 30 minutes.

## Textbooks

All pupils will use the *Oxford Essential Mathematics for Cambridge IGCSE Extended* textbook throughout the two years of the course. It is recommended that they also purchase a revision guide too. We recommend the *Hodder and Stoughton IGCSE Revision Guide for Mathematics* but there are a number of others available.

## Assessment

Students in Key Stage 4 are tested regularly using a similar format to the final CIE examinations. The aim is to complete the syllabus towards the middle of the second term in Year 11 to allow for plenty of revision and past exam paper practice.

## Aims and Objectives of the Course

Successful Cambridge IGCSE Mathematics students gain lifelong skills, including:-

- the development of their mathematical knowledge,
- confidence by developing a feel for numbers, patterns and relationships,
- an ability to consider and solve problems and present and interpret results,
- communications and reason using mathematical concepts,
- a solid foundation for further study.

All candidates will study the following topics:

1. Number
2. Algebra and graphs
3. Geometry
4. Mensuration
5. Co-ordinate geometry
6. Trigonometry
7. Matrices and transformations
8. Probability & Statistics

## **Homework**

Homework will generally be set once a week and should take about an hour to complete. Students should never say they have “no homework” as in KS4 there is always revision to be done. The students should take responsibility for reviewing and repeating exercises, especially if they have not fully understood the topic.

Please refer to the list of useful websites and encourage your child to visit them regularly, no matter which topic they are currently studying in class.

## **Equipment**

Students are expected to be responsible for bringing the correct equipment to every Maths lesson. The following are essential items:

Pen (black or blue) Pencil

Ruler with centimetres Rubber

Protractor Compass set

Exercise book Text book Scientific calculator

Programmable calculators (such as the Casio FX-991 or FX-115 range) are not allowed for the final exams. We recommend the Casio FX-85 range and your child’s Maths teacher can advise further on this. It is particularly important that each student becomes familiar with the functions of his/her own calculator.

## **MyMaths Website**

The school subscribes to the MyMaths website giving students full access to a range of Maths lessons and on-line exercises and allowing teachers to monitor progress. Students find this resource very helpful and a good way to practise topics further. The site also contains a games section where students can practise their mental maths and agility skills. All students have their own personal login and password to access the site.

## **Other Useful Websites**

[www.cimt.plymouth.ac.uk/projects/mepres/allgcse/allgcse.htm](http://www.cimt.plymouth.ac.uk/projects/mepres/allgcse/allgcse.htm)

[www.bbc.co.uk/bitesize](http://www.bbc.co.uk/bitesize)

[www.studymaths.co.uk](http://www.studymaths.co.uk)

[www.mathsrevision.net/gcse](http://www.mathsrevision.net/gcse)

[www.s-cool.co.uk](http://www.s-cool.co.uk)

[www.cie.org.uk](http://www.cie.org.uk)

# SCIENCE

## COORDINATED SCIENCE (DOUBLE AWARD)

All students in Year 10 and Year 11 will follow the IGCSE **Double Award Coordinated Science** Syllabus. The course is designed to provide a valuable educational experience, through the study of experimental and practical science, whether or not they go on to study science beyond this level. The course is designed to enable students to acquire understanding and knowledge of the concepts, principles and applications of biology, chemistry and physics.

Emphasis is placed on learning by enquiry, and practical work forms a significant part of the course.

### **Homework**

Homework is regarded both as an essential extension of class work and as a means to promote independent study. Year 10 and Year 11 students are expected to do 30 minutes of Biology, 30 minutes of Chemistry and 30 minutes of Physics each week.

### **Performance Assessment**

Homework, topic tests and periodic examinations (including practical examinations) will provide teachers with opportunities to assess performance and monitor progress.

### **External Assessment**

All students will be entered for three papers:

1. Paper 1 (45 minutes): A multiple choice paper consisting of forty items of the four-choice type.
2. Paper 3 (2 hours): Extended theory paper consisting of short-answer and structured questions.
3. Paper 5 (2 hours): Practical exam with questions covering experimental and observational skills.

### **Progress into Year 12**

Given the big step up from IGCSE Coordinated Science to Advanced Level Biology, Chemistry and Physics, students intending to study science courses in Year 12 may be asked to sit an internal entrance examination to assess their suitability for such courses. These entrance examinations will take place at the end of Year 11 when the external IGCSE examinations have finished.

## General Expectations

By the end of Key Stage 4/Year 11, pupils should be able to:

1. Plan simple investigations, distinguishing between independent, dependent and control variables and understand the need for a fair test.
2. Decide on the extent and range of data to be collected and the techniques, equipment and materials to use.
3. Use a wide range of equipment and materials appropriately and safely.
4. Produce a simple risk assessment.
5. Make a range of observations and measurements, including the use of ICT for data logging, to an appropriate degree of precision.
6. Understand the difference between qualitative and quantitative data.
7. Record observations, data and results in the following ways:
  - Drawings
  - Diagrams
  - Tables
  - Charts and graphs
8. Identify and explain patterns or relationships in data.
9. Perform calculations and present results of calculations to the appropriate degree of accuracy.
10. Use observations, measurements and data to draw conclusions and link conclusions to predictions.
11. Use scientific knowledge and understanding to explain and interpret results and conclusions.
12. Evaluate methods and suggest any possible improvements.
13. Work effectively within a team during practical work.
14. Present all work in an appropriate and acceptable format.
15. Use a wide range of scientific, technical and mathematical language.
16. Use appropriate symbols and conventions, including S.I. units and balanced equations.
17. Understand the meaning of key words in science questions.

# FRENCH

In Year 10 & 11, students consolidate and build upon what they have previously learned in Year 7-9, culminating in the Cambridge IGCSE Foreign Language French Examination at the end of Year 11.

Topics include: *School, Home life, Family and Relationships, The World of Work, Holidays and Travel, Free Time and Hobbies.*

## Our Aims

- To provide an enjoyable and stimulating language learning experience for students of all levels of ability.
- To develop the ability to use French effectively to communicate both within and outside the language classroom.
- To establish competence in the four key skills: Speaking, Listening, Reading and Writing – all of which will be examined at IGCSE level
- To develop a knowledge and understanding of French speakers throughout the world.
- To establish skills and awareness of the language learning process which will facilitate the learning of other languages.
- To promote a range of learning styles, including collaborative work and independent learning.

## Resources and Materials

The course book used is supplemented by a range of material from other sources. Resources include listening material, songs, poems, videos, DVD's and other visual aids. The use of Information Technology and the Internet have endless possibilities for language learning and their use is encouraged where appropriate. The majority of every lesson is conducted in French.

### The IGCSE Examination

1. SPEAKING	25%	<i>two role plays, a presentation and conversation in French</i>
2. READING	25%	
3. LISTENING	25%	
4. WRITING	25%	<i>3 written responses</i>

## **Homework**

Each week students will normally receive a written homework and/or a learning homework for French. In addition, we strongly recommend that pupils revise French independently on a regular basis (e.g. 15 minutes of revision of work 3 times a week or making visual aid to help consolidate vocabulary or grammar). Students could read simple books or magazines in French, try and watch DVDs in French, and course there are many useful web sites for French learners.

## **What can I do to help my child?**

Parents can motivate their child by taking an interest in their child's learning. It is a good idea to help the child to revise for tests (regardless of their own ability in French!), taking an interest in their child's homework and class work. Ideally, they might take their child to a French speaking country and encourage the child to practice French whenever possible.

# OPTIONAL SUBJECTS

Students must choose ONE subject from LIST A and ONE subject from LIST B.

## LIST A

- ICT
- French

## LIST B

- Art and Design
- History

# ART & DESIGN

This is a two-year course. The first year of the course serves to teach the student many techniques and ways to investigate a theme in depth, covering all of the possible specialisms offered within the Art and Design course:

**Graphics Design**– design posters, CD/DVD covers, logos etc.

**Observational work** – drawing and painting from direct observation

**Interpretative work** – developing skills towards producing more conceptual and abstract work.

Within all of these areas are the opportunities to develop skills using painting and drawing, 3D media, computer programs and photography.

At the end of this year it is hoped that students have a clearer idea of where their strengths lie and in which area they wish to specialise in the second year.

In the second year, students work on their final coursework project, investigating a theme of their own choice or working to a design brief clarified through discussion with their teacher.

At the end of the first term in Year 11 students will produce a final piece for their mock exam (10 hours) usually sat over two days.

In the second term of Year 11 students will work in improving their final pieces and presenting their coursework folder.

The examination questions usually arrive at school in the second week of February and students are given them as soon as possible in order to start the preparatory work for the 10 hour practical exam which they sit approximately 6 weeks later.

**The coursework and exam work are graded as follows:**

<b><u>COURSEWORK</u></b>	
Coursework folder (25%)	Final coursework piece (25%)
<b><u>EXAM</u></b>	
Preparatory work (25%)	Final piece (25%)

## **Equipment:**

Students should have the following materials:

A good set of water colours A least two good brushes  
2B, 4B pencils and rubbers Primary colours in acrylic

Students will receive topic plans at the beginning of each session of coursework in which classwork and homework pieces along with dates of submission will be clearly listed.

# BUSINESS STUDIES

Business Studies is a popular 2 year option taken in Year 10. Many students then opt to take it at A2 level due to finding the transition into the higher level easier but also because this subject is relevant in many careers such as engineering, architecture and of course, entrepreneurs.

Students will learn through a variety of teaching and learning methods such as case studies, information technology, extended essay answers, presentations and role play.

## **During Year 10 students will cover the following topics:**

- Business activity and the changing environment* – examines areas such as the objectives of the business, the economic climate, Government intervention, stakeholders and location of industry.
- Human Resources* – covers areas such as the internal organisation of a business and the main functions, communication, recruitment, selection, training and motivation.
- Accounting and Finance* – students start to understand where businesses obtain sources of finance from, what the costs are, how to calculate business profits, how they are distributed and they also learn to compose financial statements.

## **During Year 11, students will cover the following areas.**

- Marketing* – the role of marketing, market research, advertising and promotion, how products are distributed and pricing strategies.
- Production* – this unit covers the different production methods which businesses use, productivity and quality.

At the end of Year 10, students will sit a ‘mock’ IGCSE exam based on the topics which they have been taught. The final exam is taken at the end of Year 11 and consists of a two hour exam. Students are expected to have a good level of English and Maths in order to be able to cope with the demands of this course.

Useful web pages are:

[www.bized.co.uk](http://www.bized.co.uk) [www.tutor2u.com](http://www.tutor2u.com) [www.s-cool.co.uk](http://www.s-cool.co.uk)  
[www.businessstudiesonline.com](http://www.businessstudiesonline.com)

# DRAMA

The course aims to develop an understanding of drama through practical and theoretical study.

The syllabus also requires candidates to understand the process leading up to performing, e.g. direction, lighting, stage management, etc.

There are THREE compulsory coursework components which are recorded on video and sent to Cambridge.

**The assessment is as follows:**

- 40%          Written work
- 60%          Coursework

The students use repertoire as well as writing their own material.

It would be advantageous to seek opportunities to go the theatre and watch performances of any type of dramatic production, including ballet.

# FOOD AND TECHNOLOGY

## WHAT IS IT ABOUT?

The GCSE Food Technology qualification is designed for students that wish to explore the scientific and creative elements of food. The course will allow students to develop a range of skills such as researching, designing, reviewing, planning, making, testing and evaluating.

## COURSE STRUCTURE

The course is divided into 2 units. Unit 1 allows the student to design and make food items and it is worth 60% Of the final grade. This unit is internally assessed and will be presented in the form of a portfolio.

Unit 2 is a 1hour and 30 minute external examination accounting for 40% of the overall qualification grade. The exam will include multiple choice questions, short answer questions and extended writing.

## WHY STUDY THIS SUBJECT?

*You should study this subject if:*

You enjoy testing food products.

You would like to develop your skills in making food products.

You would like to experiment with different ingredients and equipment.

You are interested in how new foods are developed for large scale production.

You are prepared to research, evaluate and record your findings to help with designing food.

You think you might be involved in the many types of jobs linked to the food industry.

You are a creative person.

## COURSE CONTENT

*What will you study?*

The composition, structure and properties of food.

The importance of taste, texture, appearance and smell of food. What food contains that help our bodies to function.

How ingredients behave when used in food preparation.

How science and technology have influenced food development. Ways to preserve food successfully.

How to control and prevent food poisoning.

How to use Computer Aided Design (CAD) and Computer Aided Manufacture (CAM).

## PROGRESS ROUTES

There are many different careers and job opportunities in the food industry. GCSE qualifications can enable you to progress directly to employment or to choose a course of further education. Depending on grades achieved at GCSE you could go on to study: **AS/A level Design and Technology Food Technology**

# GEOGRAPHY

In Years 10 and 11 this subject is taught in mixed ability groups.

## Assessment

There are two examinations at the end of the course, worth 45% and 27.5% of the total marks available. Each student will also complete coursework, which is worth 27.5% of the total. The coursework is based on fieldwork.

## Content:

### **Physical Geography:** *Water and Hazards*

The water cycle, rivers, coasts and flooding plus the major natural hazards of tropical storms, earthquakes and volcanoes.

### **Economic Geography:** *Production and Development*

Agriculture, industry and energy supply and the development patterns in a changing world.

### **Human Geography:** *Population, Migration and Urban Environments*

Population change throughout the world, war, famine and refugees, changes in urban environments and the growth of cities.

### **Fragile Environments:**

A study of the major issues facing the world today: pollution, global warming, climate change, the loss of rainforests and the spread of deserts.

### **Globalisation:**

The growth of the global economy and the increasing importance of large transnational companies. Also a study of international tourism.

## Homework

There will be work to complete at home each week. This will take a variety of forms:

- Graphical skills: compiling graphs, using symbols, annotating diagrams;
- Map skills: using grid references and scales and referring to an Atlas for information;
- Photo interpretation skills: reading satellite images, aerial photographs, Google Earth;
- Sketching skills: communicating ideas through simple sketch maps and field sketches;
- Statistical skills: interpretation of data using statistical analysis;
- Exam style questions will be provided from time to time in order to check understanding of each topic.

## **How can parents help?**

Geography has something for everyone. Join in whenever possible. There are many films, both entertainment and documentary, which you could watch about earthquakes for example. Many parents have knowledge about things such as the floods in Valencia years ago, or the volcano on Lanzarote. Many families travel abroad for their holidays, which is always useful for this subject. Also there are many issues in the news, such as the problems of global warming, events such as Hurricane Katrina, the development of the port area in Valencia, etc., which are directly linked to the work the students will be completing.

# HISTORY

The students will be taught in mixed ability groups, there is no extended or core group.

## Assessment

The exam is broken up into **THREE** papers:

Paper 1	<b>40%</b>	- this examines all the themes studied
Paper 2	<b>33%</b>	- source work - <i>each year the topic will change.</i> - <i>the theme is set by Cambridge Board</i>
Paper 3	<b>27%</b>	- <i>this examines the chosen depth study:</i> <i>Nazi Germany</i>

## Content

The syllabus is based on the years 1919 – 1995 and the seven topics studied are:

1. The Peace Treaties of 1919 – 1920
2. The League of Nations
3. The breakdown of International Peace in the 1930's
4. Causes of the Cold War
5. U.S efforts to contain communism in Cuba and Vietnam
6. The breakdown of Soviet Control in Eastern Europe
7. The Middle East and events in the Gulf 1970 - 2000

In addition, students will complete an in depth study of **Nazi Germany 1919 - 1945**

## Trips

They will be one field trip to complement student studies and enhance learning.

## Skills

Across the syllabus the emphasis is on explanation and evaluation rather than description. Students will also have to be able to interpret and evaluate sources.

## Homework

This will be set once a week and will take a variety of styles, e.g.

- past questions
- empathy exercises
- learning for tests
- presentations
- research
- preparing for debates
- role play

### **Recommendations**

Ideally students should have a very good level of written and spoken English and most importantly an interest in the subject.

### **How can you support your child?**

This is a very contemporary course and there are often television programmes on the related themes. The internet is also a very useful resource but be cautious about political bias. The students will have two textbooks which should be read regularly as this will help their vocabulary and understanding.

# INFORMATION & COMMUNICATION TECHNOLOGY

This subject places importance on the understanding of the practical aspects of I.C.T. Much of the course for the first year involves ‘hands on’ experience with a range of software which builds on the knowledge and skills acquired in Key Stage

3. Students will become competent users of key software packages such as the Microsoft Office suite of programs.

The second year has a greater emphasis on the wider use of computers in society and the use of software for solving problems. Students examine the effects that computers have on society, how technology is used globally and how world-wide communications affect the way we live.

## **The IGCSE course falls under the following headings:**

1. **Components of a computer system:** covers the basic hardware and software that constitutes a typical computer system.
2. **Input and output devices:** covers input and output devices and suitable uses of each.
3. **Storage devices and media:** covers common storage media and how to identify their uses, different access methods, and back-up facilities.
4. **Computer networks:** covers network structures, analogue and digital data, modems and other methods of communication such as fax and video conferencing. Confidential issues and data encryption are also discussed.
5. **Data types:** covers data types, files, records, fields and key fields. Students learn how to design and create a database (taught in conjunction with section 8).
6. **The effects of using ICT:** covers software rights, hacking, computer viruses and how to protect against them, patterns in employment and health and safety issues.
7. **The ways in which ICT is used:** covers a range of ICT applications in everyday life: communications, publicity and corporate image publications, manufacturing, finance, schools, booking systems, banking, medicine, libraries, expert systems and the retail industry.
8. **Systems analysis and design:** students learn the steps involved in creating a new computer system.

The course is practical and fun as it offers students the chance to explore the software applications and extend their knowledge as far beyond the course as they would like. There is a mixture of some academic work and a lot of practical activities which will enable the students to acquire a broad understanding of the nature of ICT together with a sophisticated level of user skills

With most areas of employment now requiring at least basic ICT skills, the course provides a valuable qualification in its own right. It also provides a good foundation for students who wish to continue their studies at AS and A Level.