



# **STRATHALLAN**

  

# **SIXTH FORM**

  

# **COURSES**

December 2011 for September 2012  
SCOTTISH CHARITY NO. SCO08903

## SIXTH FORM COURSES

At the beginning of the next Autumn term your son or daughter will, subject to a satisfactory performance in the Summer GCSE and SQA exams, be entering the Sixth Form.

The pages that follow give an introduction to the various subjects available in the Sixth Form. Together with general advice on Sixth Form courses, Careers and Higher Education, they are intended to guide pupils in thinking about their future and to provide a focus for discussion with Academic, House, and Careers staff, and with parents about the direction of their future studies.

Sixth Form courses last for two years and involve greater specialisation - fewer subjects are studied than at GCSE but to a greater depth. Strathallan offers courses that lead to certification at GCE AS and A level, or SQA Higher grade.

### A LEVELS

All courses are divided into two: an AS level which most pupils will take in the Lower Sixth, and an A2 level to be taken in the Upper Sixth, which completes the A level.

The examinations are modular. AS Level consists usually of two, sometimes three modules set at Lower Sixth standard and contains the more straightforward material from the A level course. The A2 also consists normally of two, sometimes of three modules and contains the more challenging work. When the module tests are taken varies between subjects, there being exams in January and in June each year. In 2010 a new top grade was added (A\*), for which candidates have to gain 90% in the A2 modules.

Pupils must take four subjects at AS level in the Lower Sixth, but some pupils will wish to study five. Four AS courses may be combined with one Higher course, but three AS courses may not be complemented by a Higher. In the Upper Sixth year pupils may discontinue one subject but they choose to continue with four.

Studying four or five subjects in the Lower Sixth has the potential to provide extra breadth in post-16 education, and we expect all pupils on A Level courses to take a subject which will complement their main area of study.

In choosing their courses pupils should not mix Highers and A levels. The exceptions to this are that a pupil studying Highers may also choose Art or Product Design A Level, and that pupils opting for English or for Maths Higher will follow the AS course in the Lower Sixth year and then move on to the Higher course. We strongly advise pupils wishing to study Biology to take Chemistry at least to AS Level, and those studying Physics, to take Maths.

### HIGHERS

Highers are the "Gold Standard" for admission to Scottish universities, and also allow admission to almost all universities in the rest of the UK as well as being accepted widely in the EU. They are therefore not an easy option, but because Strathallan runs Higher courses over two years we believe that they offer to pupils who might find top grades at A Levels too demanding, the opportunity to achieve excellence.

Higher English and Higher Maths are no longer requirements for a very large number of courses at university: the Careers Adviser, Mr du Boulay, will be able to give further information. We strongly advise pupils wishing to study Human Biology to take Chemistry, and those wishing to study Physics, to take Maths.

The courses are divided into units; for most subjects there is a test at the end of each unit which a candidate must pass in order to qualify for the award of a grade at the end of the course. The unit test

marks do not count towards the final grade and the test may be re-taken once if necessary. The actual grade awarded is determined by performance in the exam at the end of the course, together with any coursework component.

A very small number of Departments will be offering the Intermediate 2 level course in the Lower Sixth year, which allows pupils to take a national qualification on their way to a full Higher. Pupils taking Higher courses in the Sixth Form are expected to take five subjects.

### **Entry requirements for Sixth Form courses**

The School's principal concern in admitting pupils to courses in the Sixth Form is that each individual should embark on courses which are likely to lead to good qualifications and successful progression to Higher Education, Further Education or employment. To this end, the School will advise parents on the selection of Intermediate 2 / Higher, or AS/A2 courses in the light of the pupil's academic record.

It is most important to bear in mind that a pupil who might achieve modest results at A Level, but good results at Higher, is likely to find it easier to gain admission to a good university course by selecting the Highers route. The School expects pupils embarking on A Level courses to have the potential to achieve A or B grades.

Some universities in Scotland will not accept applications for some courses (Medicine, Veterinary Medicine, Law, for example) to applicants who have taken Highers over two years as opposed to one. However, applicants would find it no easier to gain entry to demanding courses by taking the A Level route.

### **Pupils entering Lower Sixth**

- Pupils entering the Lower Sixth from Fifth Form will be advised by their Housemaster/Housemistress in the light of recommendations from Heads of Department, as to which level to select.
- Pupils seeking admission from outside the School will be advised by the Headmaster and the Director of Studies, and this advice will be reviewed in the light of the examination results achieved in the year of admission.

### **Pupils moving from Lower Sixth to Upper Sixth:**

#### **Progression from AS to A2 courses**

- Should a pupil on an A Level course achieve grades at AS which indicate poor performance at A2, the School will advise the pupil to change some or all of the courses selected to Higher, or may in some instances advise the pupil to enter for the Higher exam as well as the A Level.

#### **Progression from Intermediate 2 to Higher courses**

- Pupils taking Higher courses, or progressing from Intermediate 2 to Higher at the end of the Lower Sixth, will be expected to make progress in the Lower Sixth consistent with a pass at Higher at the end of the Upper Sixth. A pupil whose performance makes a pass at Higher unlikely will not normally be entered for the final exam.

### **AS / A2 and SQA Higher courses**

The subjects available at Higher and A Level are listed below. Since the allocation of subjects to timetable blocks will inevitably change in the light of the choices which pupils make, there is deliberately no indication of subject combinations which are not possible – the School will adjust the timetable to try to satisfy as many combinations of choices as possible.

<b>A Level</b>	<b>Higher</b>
Art	Art (A Level)
Biology	Human Biology
Business Studies	Business Management
Chemistry	Chemistry
Computing	Information Systems
Classical Civilisation	Product Design
Product Design	Economics
Economics	English (AS progressing to Higher or A2)
English	French (via Intermediate 2)
French	German (via Intermediate 2)
Geography	Geography
German	History
History	Maths
Latin	Music
Maths	Physical Education
Further Maths (occupies two option blocks)	Physics (via Intermediate 2)
Music	Religious, Moral and Philosophical Studies
Physics	Spanish (via Intermediate 2)
Spanish	

Pupils should study subjects which interest them and in which they are likely to do well, but it is important to have a clear understanding of any requirements laid down by universities. The choice of Sixth Form subjects should reflect Higher Education intentions, and, as far as possible, career aspirations. An error in the choice of subjects in the Sixth Form could close several doors. Please read the Careers and Higher Education section of this booklet.

## AN OVERVIEW OF THE SUBJECT OPTION SYSTEM FOR FIFTH FORM PUPILS

- September to March:** Career and Subject choices are discussed as part of the Fifth Form PSHE programme. Pupils take the Futurewise careers profile test and have a follow-up interview.
- December:** 6th Form Option booklets are sent out to parents with the End of Term Reports.
- January:** Heads of Department make recommendations on Fifth Form pupils' suitability for Higher or A level. These recommendations are passed on to Housemasters. Departments explain their Sixth Form Courses to pupils.
- February:** The Option procedures are explained to Fifth Formers, and Option Forms are issued for completion with initial ideas. Heads of Department and Housemasters are reminded that this process is starting.
- One week later, Option Forms are collected and handed to Housemasters for discussion with pupils.
- Fifth Form Parents' Evening: a chance to discuss Subject Options with Teachers and with the Careers Adviser.
- March:** The Option Forms are returned to Mr Summersgill and are sent to parents with the End of Term Report. The School will, at this point, give preliminary advice on any problems seen in relation to choices of subjects or levels.
- April to May:** Heads of Department are asked for any concerns about pupils opting for their subject, these concerns being passed on to Housemasters.
- Option forms are re-issued to Housemasters to identify any changes. The Option Blocks are constructed to satisfy pupil choices as far as possible. Fifth Formers are seen by Mr Summersgill to make sure they have put down the subjects they wish to study. Any concerns are passed on to pupils, who are then referred to the relevant Head of Department.
- June:** The Timetable is constructed in late June, after which combinations of subjects are fixed.
- A statement of choices, with any problems of level, choice or timetabling highlighted, is sent to parents. Parents are asked to sign this statement and return a copy to the School.
- August** On publication of the GCSE and SG results the Director of Studies will send out to parents a forecast of A Level potential of each pupil, based on a range of subjects and including further advice on the choice of A Level or Higher courses.
- September** Pupils may change their options in light of their GCSE results or other factors, but will have to choose subjects which fit the timetable blocks. There will be time on the first full day of the Autumn Term for pupils and their Tutors to discuss any changes to their original choices.

## CAREERS AND HIGHER EDUCATION

The choice of Sixth Form subjects should reflect Higher Education intentions, and, as far as possible, career aspirations. The Futurewise Guidance Report may indicate the broad direction in which a pupil should aim. It will be available to the new Lower Sixth Formers by the end of their first term and to present Fifth Formers by the end of the Spring term.

During the Sixth Form years there will be chances to explore careers and higher education through such events as: the Higher Education Fair (held in March of the Lower Sixth year alternately at Strathallan and Kilgraston Schools); talks given by professional, university representatives and current students; attendance at Open Days at universities and colleges. All Lower Sixth Formers are invited to purchase, at a modest cost, 'Course Finder', which lists higher education courses which might suit their needs. The extensive Careers Library holds the prospectuses of all UK universities and many specialist colleges. The UCAS web site can be accessed at [www.ucas.ac.uk](http://www.ucas.ac.uk) on the Internet and there is also a CD-Rom library. A full time Careers Officer, Mr. N.T.H.Du Boulay, is available to see pupils at almost any time and to see parents by appointment (Tel. 01738 815018).

Those leaving school are usually recommended to read for degrees. However, there are cases, especially when the pupil has a strong practical bent, when a Higher National Diploma (HND), with its more vocational emphasis, would be more appropriate. If a student is successful on an HND course it is often possible to transfer to a degree. A number of newer universities run both degree and HND courses. Also some run Foundation degrees as a step towards an Honours degree; this is often appropriate for those wanting to take a creative degree

Current copies of 'The Big Official UCAS Guidebook' and the Scottish Guide are in the Careers Library and in each House. Although at present potential university students can apply for up to five courses on their UCAS form (normally completed before December in the Upper Sixth year), only two offers, one 'firm' the other an 'insurance', can be held. There is therefore a need for careful research and judicious choice of university and course. Applicants who are applying to Oxbridge or for Medicine, Veterinary Medicine or Dentistry need to apply before the 15<sup>th</sup> October and those who are applying for competitive courses are advised to apply early.

### **'GAP' years**

Some leavers take a 'gap' year between school and university, in which case it is wise to obtain a deferred degree course place before leaving school. Some university departments are willing to grant such places, but it is essential to check in every case. The proposal to defer entry is made on the UCAS form. Applicants should have clear plans for the 'gap' year before completing the UCAS form.

There is a large number of attractive projects available either for the whole year (in practice about 15 months) or some part of it. Voluntary or paid work in the UK or abroad can be arranged through a number of specialist organisations, and the school has links with schools in South Africa, South America and Australasia which may enable leavers to take up teaching, helping, and sports coaching posts. Personal skills can be extended through business and language courses. A section in the Careers Library is devoted to 'gap' projects. Those interested should contact Mr Du Boulay by the summer term of their Lower Sixth year for advice.

### **Entrance to Oxford and Cambridge Universities**

This is only open to those with high academic potential, with the expectation that candidates will gain at least three A grades at A Level. Selection is by interview, although short tests may be given and work done at school may have to be submitted. Application is made to individual colleges by October 15<sup>th</sup> of the Upper Sixth year, but cannot be made to both universities. It counts as one choice on the UCAS form,

which must be sent by the same deadline. Those who wish to consider entry should contact the Careers Adviser early in the Lower Sixth year.

### **Transferable skills and employment**

Employers are now looking for graduates not just with good degrees but also with skills gained in their latter years at school and at university. Among these are verbal and written communication (least developed in the modern graduate according to a recent employers' survey), information technology, leadership, teamwork, foreign languages, taking responsibility, practicality, coping with change, and handling stress. Many of the extracurricular activities in the Sixth Form develop these qualities, but students need to enhance and extend them at university by participation in work experience, clubs, societies, sports teams and some of the elective courses on offer. Being a graduate is no longer enough to get you a job.

### **Sponsorship**

Sponsorship through university is less available than it once was. Only in engineering are there a significant number of opportunities. The Careers Adviser can give details to those interested.

### **The Services**

The Army, Royal Air Force, Royal Navy and Royal Marines offer cadetships, bursaries and scholarships, which, while highly sought after, may enable Sixth Formers and university students to finance their course. As in civilian life, there is a strong demand for engineers. Most schemes involve some long-term commitment. Liaison officers visit the school regularly, and if interested pupils have not already been seen in the Fifth Form they should contact the Careers Adviser for an appointment with the appropriate Liaison Officer early in their Sixth Form career.

### **Admissions Tests**

These are becoming increasingly common. Potential Medics, Vets and Dentists will need to take BMAT, UKCAT or both, depending upon where they are applying. Some Law Schools require LNAT. Individuals have to make their own applications as they are sat externally.

In addition, prospectuses will state that additional Tests or Papers are required for some competitive courses. These are sat either at School or at Interview. The Exams Officer needs to be forewarned as early as possible so that he can make entries.

### **Overseas Universities**

Applicants to Universities abroad need to be aware that they should be doing their research in the LVith. In many cases separate applications need to be made to each University and those applying to US Universities are required to take SATs.

THE FOLLOWING LIST OF RECOMMENDED SIXTH FORM SUBJECTS MAY BE USEFUL BUT IT IS BY NO MEANS EXHAUSTIVE AND SHOULD ONLY BE REGARDED AS A GENERAL GUIDE. THE CAREERS ADVISER CAN GIVE MORE SPECIFIC INFORMATION

UNIVERSITY COURSE	RECOMMENDED SUBJECTS (underlining indicates that the subject is sometimes essential)
Accountancy	Maths
Agriculture	<u>Chemistry</u> , Physics, Maths/Biology
Architecture	<u>Art or Design (portfolio)</u> , Maths, Physics
Art and Design	<u>Art</u>
Biology	<u>Biology</u> , <u>Chemistry</u> , Physics
Business Studies	Any subjects, English, Maths
Chemistry	<u>Chemistry</u> , <u>Physics/Maths</u>
Classics	<u>Latin</u> , Classical Civilisation
Computer Science	<u>Maths</u>
Dentistry	<u>Chemistry</u> , Biology, Physics
Drama	<u>English</u>
Economics	Maths
Engineering (Chemical)	<u>Chemistry</u> , <u>Maths</u> , Physics
Engineering (Other)	<u>Maths</u> , <u>Physics</u>
English	<u>English</u>
French	<u>French</u>
Geography	<u>Geography</u> , any Science
Geology	<u>Maths</u> , <u>Physics/Chemistry</u>
German	<u>German</u>
History	<u>History</u>
Hotel Management	<u>English</u>
Law	Any subject, <u>English</u>
Mathematics	<u>Maths</u> , possibly Further Maths
Media Studies (Journalism)	English
Medicine	<u>Chemistry</u> , Biology, Maths, Physics
(A Levels are usually essential. In some cases the third A level can be an 'Arts' subject)	
Music	<u>Music</u> (Grade exam may be needed)
Pharmacy & Pharmacology	<u>Chemistry</u> , Biology, Physics, Maths
Philosophy	Any subjects
Physics	<u>Physics</u> , <u>Maths</u>
Politics	Any subjects
Product Design	<u>Maths</u> , <u>Physics</u> , <u>Art</u> , <u>DT</u>
Psychology (Arts)	Any subjects
Psychology (Science)	<u>Two Sciences</u>
Sociology	Any subjects
Spanish	<u>Spanish</u>
Surveying	Any subjects
Tourism	Any subjects
Veterinary Science (A levels usually essential)	<u>Chemistry</u> , <u>Biology</u> , <u>Physics/Maths</u>

## PART 1:

### OPTIONS FOR PUPILS CHOOSING SQA HIGHERS

#### ART AND DESIGN

##### A LEVEL ART & DESIGN

The two-part specification is designed to extend and develop the practical and critical skills to a greater depth than GCSE and forms a natural progression from that course. It is desirable but not essential, that candidates have previously reached a good standard at GCSE in Art and Design.

The AS is made up of 2 units; Art and Design Coursework, and Externally Set Assignment.

The A2 comprises 2 further units: Art and Design Coursework (Practical work and Personal Study are combined) and Externally Set Assignment.

All our candidates are encouraged to take part in Art historical trips, which range from becoming familiar with our National galleries to expeditions to the Hebrides, Tuscany, Venice or Prague. All those on excursions experience the excitement of open air painting and whether the pupils are painting in Tuscany or are immersed in a Hebridean landscape, they will learn to analyse style and expressive content in Art and Architecture and the human effect on environment. The completion of a portfolio suitable for Art College is an important by-product of this course.

See also “A Student’s Guide to the AS and Advanced GCE in Art and Design”, which is provided to all 5<sup>th</sup> Form pupils taking GCSE Art.

##### HIGHER PRODUCT DESIGN

The course is designed to extend and develop skills fostered during GCSE study and to prepare students for the future by enhancing a combination of creative, technological and personal competences. It is desirable, but not essential, that students have previously attained a good standard at GCSE in Design and Technology. All students are encouraged to investigate factors which influence design and the relationship between designer, materials and manufacture, to explore how mass-produced artefacts look and how they are used, and to develop an awareness of the most innovative designs currently available.

The course consists of a series of units designed to test the candidates’ capabilities in product design in terms of designing, modelling and evaluating both their own work and the work of others. Key elements of product design such as target market need and the use and awareness of modern manufacturing systems and technologies are investigated.

The course comprises of a series of internally assessed units (NABs) and external assessment. The internally assessed units generally consist of design activity work and the testing of knowledge, understanding and manual drawing skills.

Internally Assessed Units:

- DF4V Design Analysis
- DF4W Developing Design Proposals
- DF4X Manufacturing Products

**External Assessment:** Design and Assignment: 70 marks Examination: 70 marks

Each unit attempts to relate school-based work to that in industry and commerce. The creative use of a variety of materials is encouraged as pupils seek effective modelling solutions to design problems.

## **BUSINESS AND ECONOMICS**

### **HIGHER BUSINESS MANAGEMENT**

The study of Business Management at Higher places the key elements of management in a study of the business as a whole and draws from a number of other disciplines. It will enable pupils to acquire knowledge and understanding of the role and operation of business, to exercise analytical skills, to employ these skills in real and simulated situations and to communicate by means of spoken or written language. This should benefit all pupils whether or not they subsequently follow a career in business. Pupils will gain from both the theoretical underpinning and the vocational relevance of the study of business management at this level.

Examples of the areas studied are:

Marketing; Financial Management; Human Resource Management (People); Operations (Production issues); Business Enterprise; Information Technology and its impact on business.

### **HIGHER ECONOMICS**

All societies, organisations and individuals face the economic problem of allocating scarce resources among competing uses. Economics is the social science which provides the knowledge and skills required to make decisions about the production and consumption of goods and services. This course is concerned with the ways in which such decisions are made and the implications which these decisions have for individuals and society. The course will help pupils build up a knowledge of economic principles and develop skills in interpreting and analysing economic information as well as evaluating the costs and benefits of decisions.

This economics course looks at both the world of business and the economic environment in which business is set. It will benefit anyone thinking of a career in central or local government, commerce, finance or industry.

The course comprises 3 units:

Microeconomics

The UK Economy

The International Economy

Assessment is by 3 internal assessments, one for each unit and an external examination of 2 hours and 30 minutes covering all aspects of the course.

## **COMPUTING**

### **HIGHER INFORMATION SYSTEMS**

This course is a two year Higher which has a heavy focus on the use of information and the technologies that are currently being used in organisations today. It allows pupils the opportunity to look at the types of systems that underpin most multinational organisations. The course is organised as follows:

**Lower Sixth year:** Pupils study two units:

#### **Relational Database Systems**

This unit provides pupils an opportunity to investigate and use systems analysis and design techniques with a view to producing data processing systems. Data Modelling and implementation is a key part of a large organisation's IT strategy and pupils will investigate a number of case studies to enhance their understanding of how large databases are created and used.

## **The Internet**

This unit is designed to develop knowledge and understanding of the operating principles of the Internet, Internet Services and Web Site Design. It provides an opportunity to apply this knowledge to solve practical problems through the use of contemporary hardware and software.

**Upper Sixth year:** Pupils study one unit and complete the coursework component.

## **Using Information**

This unit develops knowledge and understanding of the wide-ranging implications of the growing use of information systems within society. Information and data usage in the context of Management Information Systems, Data Processing and Decision Support Systems in the business world are studied.

## **Assessment**

The course is assessed through two components in the Upper Sixth:

An exam paper which covers the material studied in the two years (70%)

A Practical coursework which involves use of the skills and concepts covered in the course (30%)

# **HUMANITIES**

## **HIGHER ENGLISH**

The Higher course is designed to satisfy the demands of Institutions of Higher Education. A highly effective and demanding course, it tests levels of competence in a range of language skills as well as the appreciation of literature. Candidates for Higher English will follow the AS English Literature course in the Lower VI year and may, in the light of their AS grade, opt to take the Higher course in the Upper VI year or continue to complete the A Level in English Literature. A B grade pass at AS Level at the end of the Lower VI is a prerequisite for entry to the Higher course.

A willingness to read widely is essential for success at Higher. Assessment is through a combination of external examination (80%) and a writing folio (20%).

## **HIGHER GEOGRAPHY**

Geography embraces both the Arts and Science curriculum and is an ideal choice for those pupils wishing to add breadth to their subject choices without sacrificing the academic rigour of study at this level. Combining the subject with Biology, Chemistry or Physics is as valid an option as with English, History and Economics. There has been considerable investment in upgrading all literature specifically selected to assess the pupils' progress. In addition to this, the pupils are encouraged to attend talks given by visiting Lecturers from the tertiary sector on a range of relevant topics in current Geographical research.

Higher Geography is a popular subject choice in Scotland, largely because the course is illustrated with contemporary issues including climate change, population growth, the distribution of diseases, rural land degradation and urban management parallel to a consideration of the physical landscape. The course comprises 3 Units: Physical Environments, Human Environments and Environmental Interactions.

Internal assessments (NABS) are a formal component of the courses and are conducted in End of Unit Assessments which provide continual feedback on the pupils' progression during the course and must be successfully passed before they take the external examinations. The final assessments consist of two examination papers (Paper 1: Physical & Human Environments and Paper 2: Environmental Interactions, equally weighted). Examples of the subject content are illustrated below:

- **Physical Environments:** Atmosphere, Lithosphere, Biosphere and Hydrosphere.
- **Human Environments:** Population Distribution, Rural, Urban and Industrial Geography.

- **Environmental Interactions:** River Basin Management, Rural Land Degradation, Development and Health.

Useful website: [www.sqa.org.uk](http://www.sqa.org.uk)

## HIGHER HISTORY

History in the Sixth Form tends to be associated with English, Geography, Modern Languages and Economics but there are many instances where it is taken as an interest subject alongside Mathematics or the Sciences. It can, of course, be followed through to University and a full degree course, or combined with other subjects particularly in the first two years of the Scottish Universities' four-year course where, as at school, history is regarded as a demanding but increasingly popular option.

There are two elements of external assessment in this two-year course – an essay-based paper focusing on British and World History, and a paper devoted entirely to Scottish History. In addition to this, pupils have the chance to show greater knowledge of an issue they choose themselves, in the Extended Essay.

Paper One: *two essays in one hour and 20 minutes*

### **Historical Study British: Church, State and Feudal Society**

A study of the fundamental elements of society from the twelfth to the fourteenth century in England and Scotland, illustrating the themes of feudalism, Church, authority and conflict.

### **Historical Study European and World: The Crusades 1071-1204**

A study of religious, political and economic factors in the crusading movement between 1071 and 1204, illustrating the themes of ideology, authority and conflict.

Paper Two: *4 source-based questions in one hour and 25 minutes*

### **Scottish History: The Wars of Independence, 1286-1328**

A study of political change and military conflict arising from the Wars of Independence, illustrating the themes of authority, conflict and identity.

Assessment is both internal and external. Pupils must pass three NABs – SQA Board-produced assessments – before proceeding to sit the two papers at the end of the Upper 6<sup>th</sup> Year. There is also an Extended Essay, researched and written up by the pupils in a 2 hour writing session, also completed in the latter stages of the Upper 6<sup>th</sup> Form. This is worth 30% of the final Higher mark.

## HIGHER RELIGIOUS, MORAL AND PHILOSOPHICAL STUDIES

Theology, Ethics and Philosophy are among the oldest academic disciplines and have always been an important part of a classical education.

For the twenty-first century, RMPS offers students a chance to study the wisdom of the past and its meaning in today's world. RMPS encourages you to think for yourself and to break the chains of previously held ideas and wisdom.

Religious Studies is currently more popular than ever on a national scale, not least because of the skills developed and the importance of the questions raised for life in today's world. It attracts a variety of students with an interest in 'people issues' and ideas. Students undertaking Religious Studies may have any or no religious faith.

**Higher Religious, Moral and Philosophical Studies is a nationally recognised certificate course.**

The course is divided into three sections:

### 1. **Science and Religion**

In this unit, you will study the debates between Christian belief and science. You will get the opportunity to consider issues such as whether the world was created by God with a purpose or came about as the result of the “Big Bang” where humans have simply evolved.

### 2. **Ethics**

In this unit, the chosen areas of study will be: War and Peace, Crime and Punishment and Medical Ethics. You will study the various theories, religious and secular, governing ethical thought, and some of the most urgent application of ethics in the world today such as: – is going to war ever morally justifiable? How should we punish criminals? Should we bring back the death penalty? Is it ever right to use human embryos for research and should terminally ill people be allowed to choose when to die?

### 3. **World Religions**

In this unit, you will study Islam and Judaism. It only takes a look at world affairs to realise the importance of understanding these two major religions. You will consider how each religion deals with the human condition, the problem of evil and suffering as a challenge to religious belief and beliefs about death and beyond. You will also have the opportunity to consider issues such as terrorism, Jihad and conflict in the Middle East.

## **MATHEMATICS**

### **HIGHER MATHEMATICS**

Mathematics may be regarded as a bridge subject between Arts and Sciences. It combines well with any subject. While it is the language of science and engineering, the problem solving and logical thought processes inculcated are good training for many other areas such as computer science, legal work, history and philosophy.

All the skills acquired during the study of the subject at GCSE will be needed for the Sixth Form courses and no one should embark upon the Higher or A level unless their algebra is sound. Pupils embarking on an A level course will be expected to have achieved at least a grade A at GCSE or 1 at Standard Grade. Likewise those embarking on the Scottish Higher course should also have at least a grade A at GCSE, and anyone who has not attained this standard should seek special permission from the Head of Department before embarking on the course. Most importantly, pupils should have a depth of well established knowledge which should be evident from results in prelims or trial exams: those pupils who manage to gain an A at GCSE by cramming just before the exams are unlikely to have the well established skills required for the course.

In the Lower Sixth, students will work alongside AS students to complete C1, C2 and C3 and cover most of the Higher course. In Upper Sixth, students will complete the course and work reviewing the material and complete the continuous assessment part of the course, drawn from the National Assessment Bank (NAB.) It is important that pupils pass the three internally assessed NABs with good scores, as it is not possible to obtain a grade in the final exams without doing so. In January there will be a Prelim exam and then the rest of the year will be spent working through past papers and perfecting exam technique. There are two papers in the final exam, one with and one without a calculator.

It is not an easy course, but it is highly regarded by Universities and employers. Although the content is very similar to C1-C3, the course is harder than AS because of the way in which it is examined. As the course is linear, all of the course content is examined in one go at the end of the course. Pupils will have to draw together answers to questions that blend ingredients from all aspects of the course, and solve problems with a variety of techniques. This is very demanding and these skills will form the focus of Upper Sixth work.

## MUSIC

### HIGHER MUSIC WITH PERFORMING

This two-year course is currently available to candidates who wish to study music at Sixth Form level but in not so formal a context as **AS Music**. Although the course can be studied with little previous knowledge, candidates who have attained Standard Grade Music at Credit level, a grade 'C' or above at GCSE Music or a pass at Intermediate 2 Music will be at a considerable advantage. Those who have taken two or three Associated Board/Trinity Guildhall grade exams will also find this advantageous.

Candidates must take **two mandatory** units, **Composing** and **Listening**.

#### Composing

Over the two-year course candidates learn to compose in a variety of styles, and for a variety of instrumental/vocal combinations, using traditional composition skills as well as the latest audio and sequencing software. One audio folio of **two** original works, including a score or performance plan, must be produced, lasting a minimum of **two** minutes, which display competence in handling appropriate compositional techniques.

#### Listening

At the end of the two-year course, candidates are required to sit a written examination in which they demonstrate their knowledge of core *concepts* in music (genre, style, compositional devices, *etc.*) through responding to recorded excerpts.

The third unit is optional: **Performing** or **Performing with Technology**. For the Higher Music with Performing, **Performing** is the requisite unit.

#### Performing

All candidates are required to perform in a prepared recital on **two** instruments to a minimum of ABRSM **Grade 4** standard by February in the second year of the course. The recital may also be performed on one instrument and voice, or on one instrument and one accompaniment. A programme of **10 minutes** should be prepared for Instrument 1 and a programme of **5 minutes** for Instrument 2. The recital is assessed and marked by an external examiner.

## MODERN LANGUAGES

### HIGHER FRENCH

The depth and breadth of study are not as great as for A level (less literature is studied for example). In order to gain an end of course award you will require to pass end of unit tests throughout your course. In each of these tests there is an oral and you **must** be prepared to talk at length and use your French extensively in class. There will be an internal assessment on the completion of every topic taught.

You are strongly advised to stay in France at some time during the course. You will be expected to subscribe to a French magazine in order to widen your vocabulary and your knowledge of contemporary France.

The exam at the end of the course will include a listening test, in which you listen to language spoken at normal speed by native French; an oral exam, involving a discussion with your teacher on matters arising from a prepared speech, a comprehension passage (including translation into English) and an essay paper.

### HIGHER GERMAN

German speakers in the UK are relatively rare, since we usually learn French as our first foreign language. To continue with the language should be rewarding, and will give you a much greater insight into the

cultural life, social structures, and complex history of a people who have produced some of the greatest musicians, philosophers, writers, artists and scientists in western civilisation.

If there is sufficient demand to run a two-year course to Higher, the information for French is applicable to German. We recommend that all Higher pupils undertake a solo exchange, or visit, to Germany at some point during the course.

### **HIGHER SPANISH**

Spanish is a language of increasing significance in the world of commerce and diplomacy, and knowledge of Spanish is of enormous benefit to anyone envisaging working in the European Community, or in North or South America. Recent years' results have shown that reaching a high fluency in the language, and very good exam grades, are quite accessible. The structure of the course and the exams is identical to that of French and German.

If there is sufficient demand to run a two-year course to Higher, the information for French is applicable to Spanish. We recommend that all Higher pupils undertake a solo exchange, or visit, to Spain at some point during the course.

## **HIGHER PHYSICAL EDUCATION**

This course will offer pupils the opportunity to study Physical Education at a challenging level. The course provides opportunities for candidates to develop their individual interests and talents in a variety of ways.

**Recommended Entry:** Pupils would normally be expected to have gained either a credit level award in Standard Grade Physical Education, an Intermediate 2 course award in Physical Education, or other relevant prior experience in Physical Education/Games, including experience gained outwith a certificated course.

**Course Content:** The units of the course are as follows:

**Performance:** The outcome at all level requires you to "Demonstrate effective performance in challenging contexts". You will have to demonstrate your practical ability (performance) in two activities.

**Analysis of Performance:** Analysis of Performance will give you the opportunity to think more deeply about your performance. As a result you will be able to gain insights into how your own personal performance can be improved. You will be expected to keep a training diary, video evidence, notes, observation schedules and any other evidence staff consider to be necessary. This section is sub divided into four areas which are; Performance Appreciation, Preparation of the Body, Skills and Techniques and Structures, Strategies and Composition.

Candidates are required to demonstrate knowledge and understanding in three areas of analysis:

**Internal Assessment:** Your teacher will assess performance in your best two activities from the course. This assessment will compare the quality of your whole performance against a Performance Scale and will be continuous throughout the course.

**External Assessment: Performance** – the internal assessment will be subject to external moderation.

**Analysis of Performance** – you will have to answer three questions each from a different section of Analysis of Performance and this will be marked out of a total of 60 marks. The examination will last 2 hours and 30 minutes.

## SCIENCES

### HIGHER HUMAN BIOLOGY

Human Biology is offered as a two year course. It comprises three units;

1. Cell function and inheritance
2. The Continuation of life
3. Behaviour, populations and the environment

Pupils have to pass a unit test for each of these units and a final examination if they are to pass the course.

The course would complement Higher P.E. and there is also overlap with Higher Geography and Higher Chemistry. Since this is a two year course, pupils should show that progress is being made throughout the duration.

The School advises that pupils opting for Biology should also take Chemistry.

### HIGHER CHEMISTRY

Chemistry is an important component of many university degrees and a pass at A Level or Higher level will often be a prerequisite on such courses as Medicine, Dentistry, Veterinary Science, Agriculture, Materials Technology, Biology and Biochemistry. On many other science and technology based courses, Chemistry would be a useful additional subject.

Higher Chemistry covers three units:

- Energy and Matter;
- The World of Carbon
- About Chemical Reactions

Much of the work is exemplified by experiments and some of these (Prescribed Practical Activities) form part of the course assessment.

Each unit has an internal assessment, and an external examination is taken at the end of the course; passing the unit tests is a prerequisite for award of a grade at Higher.

### INTERMEDIATE 2 AND HIGHER PHYSICS

These courses involve a considerable amount of practical work and require a good degree of analytical and mathematical ability, although the latter should not be over-emphasised. Pupils should seek advice before undertaking Physics if they are not studying Mathematics in the Sixth Form.

For Sixth Form study the subject combines strongly with Mathematics, followed by the other sciences. However pupils have combined the course successfully with a wide range of other subjects. The subject is acceptable for entry to most university courses, particularly for all types of Engineering, Medical and Computing courses, but also for Surveying, Design, Communication, Law, Pharmacy, etc.

The Intermediate 2 and Higher courses both assume a good knowledge of the material covered for GCSE.

The Intermediate 2 course will be completed in the Lower Sixth as part of the Higher course and examined at the end of the year. The syllabus consists of the following subject areas:

Mechanics and Heat  
Electricity and Electronics  
Waves and Optics  
Radioactivity

The Higher syllabus consists of the following units:

- 1) Mechanics and Properties of Matter
- 2) Electricity and Electronics
- 3) Radiation and Matter.

The Intermediate 2 course provides a very good introduction to nearly all of the topics to be covered in more depth in the Higher course.

In order to pass the two courses a pupil must satisfactorily complete a report on one of the practicals from the course. The final grade is awarded on the basis of an exam at the end of the courses.

## **PART 2:**

### **OPTIONS FOR PUPILS CHOOSING A LEVELS**

#### **ART AND DESIGN**

##### **A LEVEL ART & DESIGN**

The two-part specification is designed to extend and develop the practical and critical skills to a greater depth than GCSE and forms a natural progression from that course. It is desirable but not essential, that candidates have previously reached a good standard at GCSE in Art and Design.

The AS is made up of 2 units; Art and Design Coursework, and Externally Set Assignment.

The A2 comprises 2 further units: Art and Design Coursework (Practical work and Personal Study are combined) and Externally Set Assignment.

All our candidates are encouraged to take part in Art historical trips, which range from becoming familiar with our National galleries to expeditions to the Hebrides, Tuscany, Venice or Prague. All those on excursions experience the excitement of open air painting and whether the pupils are painting in Tuscany or are immersed in a Hebridean landscape, they will learn to analyse style and expressive content in Art and Architecture and the human effect on environment. The completion of a portfolio suitable for Art College is an important by-product of this course.

See also “A Student’s Guide to the AS and Advanced GCE in Art and Design”, which is provided to all 5<sup>th</sup> Form pupils taking GCSE Art.

##### **A LEVEL PRODUCT DESIGN**

The course has been designed to encourage candidates to take a broad view of design and technology, to develop their skills in both the design and manufacture of new products and to appreciate the complex relations between design, materials, manufacture and marketing.

It is desirable, but not essential, that students have previously attained a good standard at GCSE in Design and Technology.

All students are encouraged to participate in design-based trips and excursions such as industrial manufacturing visits, and these allow students a first hand insight into factors which influence design and the relationship between materials and manufacture, in particular how mass-produced artefacts look, how they are used, and how they are economically manufactured.

The course tests the candidates’ capabilities in product design in terms of designing, manufacturing and evaluating both their own work and the work of others. Key elements of product design such as target market need and the use and awareness of modern manufacturing systems and technologies are investigated.

##### **AS Unit 1 Materials, Components and Application (Written exam)**

Questions are based primarily on materials and components and their use in manufactured products. Product life cycle, as well as broader issues of design such as sustainability and inclusive design are also addressed.

##### **AS Unit 2 Learning Through Designing and Making (Coursework)**

Portfolio of design work with a manufactured product.

### **A2 Unit 3 Design and Manufacture (Written exam)**

Synoptic assessment paper with questions based on issues of design and manufacture including appropriate material and process choice for economics of manufacture as well as the influence of design technologies and market demands on product design.

### **A2 Unit 4 Design and Making Practice (Coursework)**

The final coursework should be a single substantial designed and manufactured product accompanied by a design folder.

## **BUSINESS AND ECONOMICS**

### **A LEVEL BUSINESS STUDIES**

The Business Studies specification has been designed to give pupils a critical understanding of the following:

- The internal functions of contemporary business organisations of all types.
- The dynamic external environment within which businesses operate and the effects this can have upon decision-making within a business.
- Major topical issues that can generate change for business organisations and the ways in which businesses respond to these issues.
- The range of stakeholder perspectives that can be taken on business activities.

It encourages candidates to acquire a range of important and transferable skills:

- Data skills: candidates will be expected to manipulate data and to interpret their results.
- Presenting arguments and making judgements and justified recommendations on the basis of the available evidence.
- Recognising the nature of problems and making decisions using appropriate business tools and methods.
- Planning work, taking into account the demands of the task and the time available to complete it.
- Conducting research into a specific theme.
- Challenging their own assumptions.

**The AS units** focus on small to medium-sized businesses operating within national, as opposed to international markets:

**Unit 1** covers the issues involved in a business start-up, such as research and planning, as well as the factors that determine success.

**Unit 2** focuses on how established businesses might improve their effectiveness by making tactical decisions at a functional level

**The A2 units** build on the AS units by considering more complex business scenarios and focusing on strategy as opposed to tactics:

**Unit 3** focuses on larger businesses which may be trading in international markets, and how managers might measure the performance of the business. This unit considers functional strategies that larger businesses may adopt to achieve their objectives.

**Unit 4** assesses the external factors that can act as catalysts for change, and considers these in relation to a range of businesses. This unit also examines the ways in which businesses can manage change successfully when responding to external stimuli.

Both A2 units are synoptic.

- Unit 1 Planning and Financing a Business
- Unit 2 Managing a Business
- Unit 3 Strategies for Success
- Unit 4 The Business Environment and Managing Change

There are no prior learning requirements for this course.

## **BUSINESS AND ECONOMICS**

### **A LEVEL ECONOMICS**

The aims of this course are to:

- develop an interest in and enthusiasm for the study of the subject.
- appreciate the contribution of economics to the understanding of the wider economic and social environment.
- use an enquiring, critical and thoughtful approach to the study of economics and develop an ability to think as an economist.
- develop skills, qualities and attitudes which will equip them for the challenges, opportunities and responsibilities of adult and working life.

- Unit 1 Markets and Market Failure
- Unit 2 The National Economy
- Unit 3 Business Economics and the Distribution of Income
- Unit 4 The National and International Economy

Both A2 units are synoptic.

Wherever possible the teaching of both microeconomic and macroeconomic theories and concepts will be related to the performance of the UK economy and other real world contexts. For example, some of the issues that will be studied during the course are: the impact of globalisation on the UK plc, the enlargement of the EU and the likely consequences for the UK economy, the effectiveness of the WTO in promoting trade, the impact of a national minimum wage on UK business, Competition Policy in the UK, why some people earn more than others.

No prior learning is required.

## **CLASSICS**

### **A LEVEL LATIN**

This course is open to those with a good pass at GCSE. It combines more technical linguistic work with a more rigorous treatment of longer Latin texts. At AS these texts are Cicero's *In Catilinam* book 1 and part of Ovid's *Metamorphoses*; candidates will therefore be expected to deal with the rhetoric of one of the Western world's most stylised orators and the complexity and depth of one of the most famous Latin poets. At the end of the year there are two papers: translation and set texts.

For the A2 course the language becomes again more complicated, and candidates will be expected to translate original authors' passages of prose and verse. The set text for this year is Sallust, with his history of the Catiline revolt. The A2 examinations comprise a translation paper, a comprehension paper and a literature paper.

## **A LEVEL CLASSICAL CIVILISATION**

Classical Civilisation is the study of the Greek and Roman worlds: their literature, history and culture. No Latin or prior knowledge is needed for this subject.

We follow the AQA syllabus, and a wide range of topics are available for the two annual modules. We will almost certainly be teaching the Odyssey and Greek Tragedy as two of the modules. Among the others are Socrates and philosophy, the Persian wars (as “immortalised” in the film, ‘300’), and Athenian comedy.

Each module demands a literature element, so a fear of reading would be unhelpful. Otherwise the subject attracts a diverse range of applicants: an interest in the Ancient World is, of course, useful, but the subject can also be very useful to candidates taking English and History. Although assessment is very similar to other humanities subjects, through gobbet questions and essays, the demands are slightly different, and so very little repetition or stagnation takes place.

Classical Civilisation leads directly to an increasing number of non-language university Classics courses. In addition to this, with its wide range of material and demands, it provides a good broad background for anyone wishing to pursue a humanities course.

## **COMPUTING**

### **A LEVEL COMPUTING**

The AQA AS and A2 specifications encourage pupils to develop an understanding of the main principles of computing, develop a sound understanding of the internal structure of computers, how they operate and their use in solving problems, acquire the programming skills necessary to apply this understanding to developing computer-based solutions to problems and enhance the development of their key skills.

#### **AS**

##### **Module 1 – Problem Solving, Programming, Data Representation and Practical Exercise**

Pupils develop programming skills and investigate methods of representing data within the computer.

- This module is assessed by a 2 hour on-screen examination which includes programming and short questions based on pre-seen material

##### **Module 2 – Computer Components, The Stored Program Concept and The Internet**

Pupils study the internal workings of the computer and concepts related to how the computer is able process program commands. The Internet topic investigates the technical workings of network protocols and how web pages are transferred then displayed on screen.

- This module is assessed by a 1 hour exam paper with short answer questions.

#### **A2**

##### **Module 3 – Problem Solving, Programming. Operating Systems, Databases and Networking**

Concepts relating to different types of programming languages and program design methods are studied. The Operation and purpose of the operating system is considered and techniques for producing relational databases are developed. The Networking topic builds on the Unit 2 course and introduces advanced networking theory.

- This module is assessed by a 2 hour 30 minutes written exam with short answer and extended answer questions.

## **Module 4 – The Computing Practical Project**

This is internally assessed coursework, moderated by AQA which involves production of report documentation of a programmed solution to a real life problem.

Pupils follow the stages of Analysis, Design, Implementation, Testing and Evaluation to produce a software system that they choose. This gives the opportunity to implement many of the techniques studied in the other units while producing a substantial piece of usable software.

- This module is assessed through the marking of the report produced.

## **HUMANITIES**

### **A LEVEL ENGLISH**

The OCR English Literature syllabus that is followed is designed to broaden literary horizons, deepen literary understanding and develop literary tastes. An interest in reading literature and a willingness to study independently are prerequisites for success at this level. The course covers 4 'units'; two are taught and examined in the Lower Sixth and two in the Upper Sixth.

In Lower Sixth, classes are introduced to a wide range of texts (poetry, prose and drama) both of the twentieth century and before; they also experience a variety of teaching styles and enthusiasms. One unit is assessed by course work; the other is externally examined.

In Upper Sixth, a further 2 'units' are studied, including the externally examined unit on *Pre-1800 Poetry and Drama*, as well as *The Texts in Time* unit which is examined by coursework. It is recommended that pupils should have achieved at least a grade B at GCSE English Literature or equivalent to gain entry to this course.

### **A LEVEL HISTORY**

At AS, from September 2010 onwards, we have embarked upon a new course with the EDEXCEL Examination Board. This consists of two modules for first examination in summer 2011.

#### *Unit 1 Historical Themes in Breadth*

##### **D2 Mao's China, 1949-76**

- The Government of the People's Republic of China: Mao's authority and ideas; his leading colleagues; the People's Liberation Army; the Hundred Flowers Campaign and its consequences.
- The nature of economic policies: agricultural change in the 1950s and early 1960s; attempts at industrialisation; five-year plans and the Great Leap Forward.
- Social changes, 1949-65: gender, class and culture.
- The origins, course and consequences of the Cultural Revolution, 1962-76.

##### **D3 Russia in Revolution, 1881-1924: From Autocracy to Dictatorship**

- The challenges to the Tsarist state, 1881-1906: nature of the regime; economic and social changes; opposition parties; the 1905 revolution.
- Tsarism's last chance, 1906-1917: the Dumas; Stolypin; the impact of War; the downfall of the Romanovs.
- February to October 1917: the Provisional Government and the Bolshevik coup.
- Holding on to and consolidating power, 1918-24: civil war; changing economic policies; creating the Soviet state.

#### *Unit 2 British History Depth Studies*

## D2 Britain and the Nationalist Challenge in India, 1900-47

- The importance of the Indian Empire to Britain: politically, commercially and culturally. British rule in India, c1900-14 and its impact on Indians and the British living in India; the Morley-Minto reforms.
- The significance of the First World War on the relationship between Britain and India: the impact of the Rowlatt Acts and the Amritsar Massacre on Britain and India; consultation and conflict in the 1920s and 1930s.
- The rise of nationalism in India: development of Congress and growing importance of the Muslim League; Gandhi, Nehru and Jinnah to 1939; attitudes towards nationalist ideas and independence both among the British in India and the indigenous populations.
- The impact of the Second World War; economic and political imperatives in Britain and India driving independence; the role of Mountbatten; the decision to partition and the immediate consequences of that decision.

While it is not necessary to have achieved a specific grade at GCSE, it is recommended that pupils taking the subject at this level should have a respectable pass and an interest in History. The particular skills required are those traditionally of Arts students, namely the ability to write clear, cogent and analytical English, allied to a keen and enthusiastic interest in history.

### A LEVEL GEOGRAPHY

Geography embraces both the Arts and Science curriculum and is an ideal choice for those pupils wishing to add breadth to their subject choices without sacrificing the academic rigour of study at this level. The AS programme of study provides a coherent and relevant programme of study in itself and the necessary foundation for pupils' progress to A2. Combining the subject with Biology, Chemistry or Physics is as valid an option as with English, History and Economics. The AS/A2 specification is designed to foster an appreciation of the dynamic earth and to develop an understanding of the synergy and potential conflicts between human cultures and their environment. The course offers a wide degree of choice, flexibility, a variety of geographical and transferable skills, and an awareness of contemporary issues within manageable course content. It is designed to develop an appreciation of our earth parallel to human and physical interactions in time and space and to encourage global citizenship.

**The AQA - AS Specification** is assessed by written examination at the end of LVI.

- **Unit 1** - Physical & Human Geography - Core & Optional topics (70% of total AS mark, 35% of total A level mark).

Pupils study the Core elements and select **one** of the Physical Optional topics and **one** of the Human Optional topics.

**Physical Core:** Rivers, Floods & Management (Optional topics: Glacial, Coastal or Desert Environments)

**Human Core:** Population Change (Optional topics: Food Supply, Energy & Health Issues)

- **Unit 2** - Geographical Skills based upon the content of Unit 1 (30% of total AS mark, 15% of total A level mark).

Skills include investigative, cartographic, graphical, ICT & statistical analysis

**The AQA - A2 Specification** is assessed by written examination at the end of UVI.

- **Unit 3** - Contemporary Geographical Issues (30% of total A level mark).

Pupils must select **three** topics; at least **one** from the physical Optional topics and at least **one** from the human Optional topics.

**Optional Physical topics:** Plate Tectonics and associated Hazards; Weather and Climate and associated Hazards; Ecosystems: Change and Challenge.

**Optional Human topics:** World Cities; Development and Globalisation; Contemporary Conflicts and Challenge.

- **Unit 4** - Fieldwork Investigation (20% of total A level mark).

This Unit enables the pupil to extend and develop subject knowledge and understanding of an area of particular interest within the course content. **The assessment comprises an examination** of structured short and extended questions based on the fieldwork investigation.

**The new AS/A2 specification** allows for the inclusion of up-to-date issues and events, which permits the use of material from contemporary news media and the Internet parallel to literature. There has been considerable investment in upgrading all AS/A2 text specifically selected to assess the pupils' progress at both levels of enquiry. In addition, the pupils are encouraged to attend talks given by visiting Lecturers from the tertiary sector on a range of relevant topics in current Geographical research.

Useful websites: [www.aqa.org.uk](http://www.aqa.org.uk)

## MATHEMATICS

### A LEVEL MATHEMATICS

Mathematics may be regarded as a bridge subject between Arts and Sciences. It combines well with any subject. While it is the language of science and engineering, the problem solving and logical thought processes inculcated are good training for many other areas such as computer science, legal work, history and philosophy.

All the skills acquired during the study of the subject at GCSE will be needed for the Sixth Form courses and no one should embark upon the Higher or A level unless their algebra is sound. Pupils embarking on an A level course will be expected to have achieved at least a grade A at GCSE. Likewise those embarking on the Scottish Higher course should also have at least a grade A at GCSE, and anyone who has not attained this standard should seek special permission from the Head of Department before embarking on the course. Most importantly, pupils should have a depth of well established knowledge which should be evident from results in prelims or trial exams: those pupils who manage to gain an A at GCSE by cramming just before the exams are unlikely to have the well established skills required for the course.

The syllabus followed is the modular Edexcel course consisting of four Pure Mathematics Modules (C1 to C4) together with two Applied Modules M1 (Mechanics) and S1 (Statistics). In the Lower Sixth students study C1, C2 and C3 leading to an AS level in Mathematics. The content of C1-C3 is very similar to Scottish Higher; pupils will be taught these modules together in Lower Sixth, whether they are aiming for A level or Higher.

There are several options for Upper Sixth. Pupils can stop having completed their AS Maths; they can progress to Higher, or they can continue with A2 modules to complete the A level, in which case C4 is

taken together with S1 and M1. Depending on numbers it may be possible to offer C4 together with S1 and S2, as well as C4 together with M1 and M2.

There will be 8 periods a week in both Lower and Upper Sixth.

### **A LEVEL FURTHER MATHEMATICS**

It is recommended that able pupils who wish to study a mathematically based course at university (Engineering, Physics, Mathematics etc.) should study at least three Further Maths Modules (to make a total of 9 modules, and these should comprise of FP1, FP2 or FP3, and one from Mechanics or Statistics) to obtain an AS in Further Maths.

Those who wish can take Further Maths as a complete A-level and must sit 12 modules (C1 to C4, FP1, FP2, FP3, M1, M2, M3, S1 and S2).

Those embarking on either course in the Lower Sixth will have 8 periods of Pure Maths per week, and 3 periods of Applied Maths (Mechanics) and 3 period of Further Pure Maths (FP1). **Pupils need to be aware when selecting other options that TWO timetable blocks are taken up by the Further Maths option.** Prospective candidates must opt for this in their Lower Sixth choices: it is not possible to start Further Maths in the Upper Sixth Form. Pupils joining the School for three years in the Sixth Form will not start the Further Maths course until their second year.

## **MUSIC**

### **AS Level**

This one-year course is the first part of the full A-level and is available to candidates who wish to study music at Sixth Form level. It is mandatory for anyone who wishes to read music at University or Conservatoire level. Candidates must have gained a minimum grade 'C' pass at GCSE Music, or alternatively should have a pass at Intermediate 2 or Standard Grade credit level in Music. Those who have passed Associated Board Grade 5 theory will also be at a considerable advantage. Candidates must also be able to perform to Associated Board grade 6 level on at least one instrument.

The AS course consists of three units:

**Performing Music** – accounts for 30% of the AS.

Candidates will have to prepare a **5-6 minute** performance of one or more pieces of their choice. Any instrument or voice can be used, and you may perform either as a soloist or as part of a small ensemble.

**Composing** – accounts for 30% of the AS.

Candidates will study a variety of different compositional styles and instrumental/vocal combinations, using traditional composition skills as well as the latest audio and sequencing software to create a **3 minute** piece based on one of four briefs:

1. **Composing expressively** – a piece based on different moods and emotions for acoustic instruments and/or synthetic sounds.
2. **Composing idiomatically** – a piece for piano or for two or more acoustic instruments that exploits the characteristic sounds of the resources used and makes use of variation technique.
3. **Words and music** – a vocal piece that explores the relationship in structure between text and music.
4. **Text, context and texture** – a piece that explores vocal textures and techniques suitable for a given context.

This composition must be submitted in May as a detailed score, either computer-printed or hand-written, along with a recording of the work and a 'sleeve-note' that describes important features of the

composition and how you have been influenced by the music you have studied as initial research for the chosen brief.

### **Developing Musical Understanding** – accounts for 40% of the AS

Over the course of the year, you will learn melodic, harmonic, structural, textural, historical and contextual concepts of Western music through the study and analysis of four instrumental set works and five or six vocal set works. You will also learn the basic principles of Western tonal harmony. This unit culminates in a written examination in June that is split into three different sections, the first two of which are based on the set works you will have studied:

Section A - With the aid of a skeleton score you will listen to excerpts from two set works, identifying specific features of the music.

Section B – You will have to answer questions on two other set works, but without the aid of a recording or score.

Section C – You will have to identify features of the harmony in a printed score of unfamiliar music and then complete a short passage of four-part harmony.

## **MUSIC**

### **A2**

This one-year course is the second part of the full A-level and is only available to candidates who have gained a pass at AS-level grade 'C' or above. It is mandatory for those wishing to read music at University or Conservatoire. Candidates who have passed Associated Board Grade 5 theory will be at a considerable advantage. You must also be able to perform to Associated Board grade 7 level on at least one instrument.

The A2 course consists of three units:

### **Extended Performance** – accounts for 30% of the A2.

This unit gives candidates the opportunities to extend their performance skills as soloists and/or as part of an ensemble through performance of a prepared and balanced programme of **12-15 minutes** in length. You may choose to perform music in any style and on any instrument, including voice, and may even choose to present an improvised performance.

### **Composition and Technical Study** – accounts for 30% of the A2.

This unit comprises of two sections, which must be completed under controlled conditions by May:

**Composition** – this further develops candidates' composition skills, culminating in a **3 minute** portfolio based on a prescribed brief. This composition must be submitted as a detailed score, either computer-printed or hand-written, along with a recording of the work.

**Technical Study** – this builds on the knowledge and awareness of harmony gained within the **Developing Musical Understanding** unit of **AS** music through the medium of pastiche studies.

All candidates must complete two tasks in this unit; either one composition and one technical study *or* two compositions *or* two technical studies.

### **Further Musical Understanding** – accounts for 40% of the A2.

This unit focuses on listening to music, familiar and unfamiliar, and understanding how it works. It is divided into three sections, **Aural Analysis**, **Music in context** and **Continuity and change in instrumental**

**music.** Candidates will study set works similar to those studied at AS-level, firstly as a whole, then concentrating on important musical features, context and/or elements of continuity and change. You will also listen to a wide range of unfamiliar music related to the two areas of study and learn how to compare and contrast pairs of excerpts, contextualise music and identify harmonic and tonal features. Assessment is through a written and listening examination in June.

## MODERN LANGUAGES

### A LEVEL FRENCH

For today’s student France remains one of our most accessible neighbours and one with whom we trade extensively. Furthermore Scotland has age-old links with France. Knowledge of, and ability to communicate in French not only opens up career prospects in countries of the EU but also other countries such as French speaking Canada, many African countries and the West Indies. French is a key skill in so many careers – Law, Medicine, Business, Technology, and Science.

The A level comprises four units, the first two of which make up the AS level.

Level	Unit	Assessment	Weighting	Content
AS	1	2 hour listening, reading and writing paper	35%	Media, popular culture, healthy living and lifestyles, family and relationships.
AS	2	15 minute oral exam	15%	“
A2	3	2 ¼ hour listening, reading and writing paper	35%	Environment, multicultural society, contemporary social issues, cultural topic (based on study of literary texts).
A2	4	15 minute oral exam	15%	“

You are strongly advised to stay in France at some time during the course. You will be expected to subscribe to a French magazine in order to widen your vocabulary and your knowledge of contemporary France.

### A LEVEL GERMAN

German speakers in the UK are relatively rare, since we usually learn French as our first foreign language. To continue with the language should be rewarding, and will give you a much greater insight into the cultural life, social structures, and complex history of a people who have produced some of the greatest musicians, philosophers, writers, artists and scientists in western civilisation.

The German A level comprises 4 units, of which 2 are taken for AS level: the topic titles are the same as those for French and Spanish, as are the means of assessment. We recommend that all A Level pupils undertake a solo exchange, or visit, to Germany at some point during the course.

### A LEVEL SPANISH

Spanish is a language of increasing significance in the world of commerce and diplomacy, and knowledge of Spanish is of enormous benefit to anyone envisaging working in the European Community, or in North or South America. Recent years’ results have shown that reaching a high fluency in the language, and very good exam grades, are quite accessible. The structure of the course and the exams is identical to that of French and German.

The Spanish A level comprises 4 units, of which 2 are taken for AS level: the topic titles are the same as those for French and German, as are the means of assessment. We recommend that all A Level pupils undertake a solo exchange, or visit, to Spain at some point during the course.

# SCIENCES

## A LEVEL PHYSICS

The A level course involves a considerable amount of practical work and requires a good degree of analytical and mathematical ability, although the latter should not be over-emphasised. Pupils should seek advice before undertaking Physics if they are not studying Mathematics in the Sixth Form.

For Sixth Form study the subject combines strongly with Mathematics, followed by the other sciences. However pupils have combined the course successfully with a wide range of other subjects. The subject is acceptable for entry to most university courses, particularly for all types of Engineering, Medical and Computing courses, but also for Surveying, Design, Communication, Law, Pharmacy, etc.

The AS/A2 courses both assume a good knowledge of the material covered for GCSE.

**AS LEVEL:** The course will consist of three modules. The main headings for these units are:

Module 1	Particles, Quantum Phenomena, and Electricity
Module 2	Mechanics, Materials, and Waves
Module 3	Practical Unit

The first module taught should be ready to be assessed in the January session of exams; the other two will be completed for the May / June exams.

**A2 LEVEL:** At this level the topics become more intellectually demanding. The main headings are:

Module 4	Fields and Further Mechanics
Module 5	Nuclear and Thermal Physics, and Turning Points in Physics
Module 6	Practical Unit

The first module taught will be assessed in the January session of exams; the other two will be completed for the May / June exams.

## A LEVEL CHEMISTRY

Chemistry is an important component of many university degrees and a pass at A Level or Higher level will often be a prerequisite on such courses as Medicine, Dentistry, Veterinary Science, Agriculture, Materials Technology, Biology and Biochemistry. On many other science and technology based courses, Chemistry would be a useful additional subject.

### AS

1. *Atoms, Bonds and Groups:* Atoms and reactions; Electrons, bonding and structure; The Periodic Table.
2. *Chains, Energy and Resources:* Basic concepts of organic chemistry and hydrocarbons Alcohols, halogenoalkanes and analysis; Energy; Resources.
3. *Practical skills:* Qualitative, quantitative and evaluative tasks

### A2

4. *Rings, Polymers and Analysis:* Organic chemistry of aromatics, acids and amines Polymers and synthesis; Analysis
5. *Equilibria, Energetics and Elements:* Rates of reaction, equilibrium and pH; Energy; Transition elements
6. *Practical skills:* Qualitative, quantitative and evaluative tasks

## **A LEVEL BIOLOGY**

A Level Biology combines well with Chemistry, Physics, Maths or Geography and is extremely useful (essential in some cases) in preparing for medical, dental and veterinary courses or degrees in the pure or applied sciences. The demands of A2 are greater and the topics studied are more complex.

### **AS**

**Unit 1 – Biology and Disease:** The first term will build on material learnt at GCSE, adding more detail and providing opportunities for learning more complex practical skills. It includes topics that link to disease, including biochemistry, cell ultrastructure and immunology.

**Unit 2 – The Variety of Living Organisms:** In the second term, pupils will learn more about the genetic code (DNA structure and how proteins are made) as well as taxonomy and biodiversity.

**Unit 3 – Internal Assessment:** This comprises a practical experiment followed by a test. It contributes 20% of the marks available at AS level.

### **A2**

**Unit 4 - The Populations and the Environment:** Apart from fieldwork techniques in the context of investigating populations, there are also topics on photosynthesis, respiration and inheritance.

**Unit 5 - Energy, Control in Cells and in Organisms:** This unit includes detailed work on nervous coordination, muscles and regulating mechanisms such as control of blood sugar levels. It also includes aspects of gene cloning and gene therapy.

**Unit 6 – Internal Assessment:** This comprises a practical experiment followed by a test. It contributes 10% of the marks available at A level.

**The School advises that pupils opting for Biology should also take Chemistry**