

# **The Sixth Form Curriculum at MCS**



**(from September 2010)**

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## THE CURRICULUM IN THE SIXTH FORM

This booklet is intended to give students in the Fifth Form (Year 11), and their parents, some information about the Sixth Form curriculum. It gives syllabus and examination details of the A level courses offered by Magdalen College School, and information about university requirements for certain degree courses, in particular where this might affect a pupil's A level choices.

### The AS/A2 system at MCS

- A full A level is divided into two parts, the AS and the A2 each counting for 50% of the total A level marks.
- The AS consists of two or three modules (depending on the subject) and can be taken as a stand-alone qualification.
- The A2 also consists of two or three modules. The A2 cannot be taken as a separate qualification in its own right – it is merely the second half of a full A level.
- Examinations in some modules can be taken in January as well as in June. Modules may be re-sat: only the highest result is rewarded.

Students will usually complete **four** AS level courses in the Lower Sixth. While around half the boys study three subjects to A2, many boys do continue with all four subjects in the Upper Sixth. The AS modules will be examined in the summer of the Lower Sixth; the A2 modules in January or June of the Upper Sixth. Because of restrictions on numbers in certain subjects, the School cannot guarantee that every student will be able to pursue his first choice of AS subjects.

### Blocking

The subjects offered will be placed in four blocks, with students being asked to choose a subject from each. A "straw poll" will be taken before the blocks are finalised in order to maximise the number of students who can pursue their first choice combinations. After the blocks have been finalised, students will be asked to make a final choice.

### Important notes

Not every combination of subjects is possible. The blocks will be arranged in order to accommodate the majority of combinations indicated in the straw polls and will be issued in January.

**NB:** A subject will not be offered if too few students opt for it. A maximum number of pupils per teaching group may be enforced if a subject is over-subscribed in a particular block.

## **Enrichment**

### **Lower Sixth: Waynflete Studies**

Two periods a week are set aside for Waynflete Studies, which gives pupils the opportunity to research a topic of their own choosing. In the first half term, pupils are together as a whole year group and hear Lectures from academics across the whole range of possible subjects. In November and December, pupils choose a subject area in which to specialise and attend smaller seminars given by member of the teaching staff and other speakers. Once an appropriate question has been framed, targeted research begins after Christmas. There will be the opportunity of undergraduate style tutorials with academics within the University before the research is presented to the pupil's supervisor and faculty group and formally written up. Alongside the usual programme of 4 AS levels we believe this will allow pupils to broaden their knowledge and deepen their understanding of a subject area which may lead into a future university course and help to prepare them for interviews at the top universities.

### **Upper Sixth: Weekly Lecture**

Every Friday there is a lecture before lunchtime in which an outside speaker talks to the Sixth Form and answers their questions. Speakers booked recently include the chairman of ITV, Michael Grade, and the former Foreign Secretary, Sir Malcolm Rifkind.

### **Combined Cadet Force and Community Service**

The Combined Cadet Force consists of a Royal Navy Section, an Army Section and an RAF Section. The cadets parade after school on a Tuesday and follow a programme of instruction including first aid and weapons training. Opportunities exist in the Sixth Form to lead a section of cadets, complete courses giving nationally recognised qualifications in adventurous training activities, and take part in camps both in the UK and abroad.

Pupils who select the Community Service option are given the opportunity to work in a charity shop, school or hospital on any afternoon free of timetabled lessons. Within Community Service is a School Service option which allows Sixth Formers to assist with the running of School Activities, such as the Lower School chemistry club or Junior School Games; or to actively work on productions such as the Lily.

All pupils in the Sixth Form must opt for either CCF or Community Service.

### **Sport**

Games lessons are compulsory for all Lower Sixth students. Students required for the major sports (Rugby, Hockey, Cricket and Tennis) train on Monday lunchtime and Wednesday afternoon and attend two or three extra curricular practices per week. Matches take place midweek and on Saturdays.

All other students choose from options including rowing, golf, sailing, badminton, swimming, fitness training (in the fitness suite), and football. Some of these minor sports are only offered in one or two terms rather than throughout the year.

## Choosing A level subjects

At MCS you choose *four* AS subjects (see the list at the front of this pamphlet)

The factors that will affect the combination of subjects to be studied in the Sixth Form are many and varied: e.g. interest and enjoyment, ability, a sensible combination of subjects, university requirements and future career. In conjunction with discussions with Heads of Department, subject teachers and Tutors, these notes may go some way towards ensuring that a suitable combination of subjects is made.

Advice on subject choice and Higher Education is given in several ways, one of the most important and thorough of which is via the Careers Department. Most students take psychometric profiling tests in the Fifth Form (Year 11) and are interviewed afterwards by the Master. He will offer advice and guidelines on various questions such as the implications for Higher Education and the related implications for careers contemplated or suggested. Fifth Formers are encouraged to discuss the psychometric profiling report and the suitability of the suggested A level and career choices with their Tutors. The Careers Room is open whenever the school is open and the Head and of Careers, Dr Shrimpton, is readily available for consultation and advice.

The two most important factors to bear in mind when choosing A level subjects are *interest* (or enjoyment) and *ability*. If the two coincide, choosing should be relatively straightforward.

### Interest

It is likely that you will perform best at a subject and get the most out of it, if you enjoy the work and are fully committed to it. On the other hand, if you choose out a sense of duty or from external pressures you are unlikely to make the most of it.

Obviously you are the one best-placed to judge your interest in a subject, but bear in mind that interests change and may well do so during the course of this year. In the Sixth Form many students discover their potential in both old and new areas, and they develop interests which last a lifetime. You also need to realise that subjects change too: A level Physics, for example, is much more quantitative (i.e. mathematical) than GCSE Physics, where the emphasis is on qualitative aspects.

How do you find out about what an A level subject is like?

- Read the course descriptions in this booklet;
- Ask those taking the subject in the Sixth Form;
- Look at an A level textbook;
- Speak to your current teachers.

### Ability

Feedback on how able you are at a subject comes via assessments, tests, exams, and so on, all of which gives a general indication for how you would cope at a higher level. If you are thinking of a new subject you will not have this information, and you will have to make a judgement based on performance in related subject areas. Nevertheless, all A level subjects

will involve levels of complexity, analysis, abstraction and so on which are considerably more developed than are required for GCSEs; the main requirement is that you have the *potential* to develop in these and other areas.

Three other factors to bear in mind in choosing an A level subject are:

- Achieving a sensible combination of subjects;
- Considering the implications for Higher Education;
- Considering the implications for a future career.

### **Combinations of subjects**

When selecting your AS subjects think about the following:

- If all your choices are essay-writing subjects, ask yourself if you will be able to cope?
- Including an AS in a modern language could be useful for one of the many exchange opportunities on the EU Erasmus programme.
- If your AS choice includes science, you are strongly encouraged to study more than a single science subject. The lack of a supportive combination of science subjects inhibits progress at AS level and makes progression to A2 especially difficult. In particular, if you plan to study Biology you should also consider taking Chemistry; if you plan to study Physics, you are expected to take Maths. You should seek the advice of staff on this matter.
- Further Maths cannot be done without doing Maths, so if you opt for Further Maths you will gain two A levels – Maths and Further Maths. Further Maths occupies just one block in Lower Sixth, but you should be aware that by choosing this, the workload will be higher than that for one standard A-level

### **Extra subjects**

In past years, a small minority of boys have taken on more than four subjects at A-level by studying subjects outside the timetable. While this is admirable, and may get your photograph in the Oxford Mail, it is far from necessary. Admissions Tutors from the best universities will only be looking at your grades (and marks) from your three most relevant or strongest A-levels.

As a rule of thumb, most able science students tend to carry on with 4 subjects to A2 (often including Further Maths) while those pursuing humanities tend to take 3 subjects to A2 with more time spent reading around their chosen university subject. At this level a thorough understanding of a few subjects is valued more than a superficial knowledge of several subjects.

## A level choices for degrees and careers

There are a limited number of degree courses which make specific A-level requirements as a condition of entry. In general, degrees in subjects where an A-level course exists require that the appropriate course has been studied at school. Below are shown some of the preferred A level combinations for many popular courses:

Anthropology	Any subject
Archaeology	Any subject; Sciences & History an advantage
Architecture	None compulsory: Maths, Physics, Art all useful
Biochemistry	Chemistry, Biology & preferably Physics and/or Maths
Biology	Biology & Chemistry
Chemistry	Chemistry, Mathematics & Physics
Computer science	Maths – for Oxbridge: Further Maths. Computing also useful.
Dentistry	Biology, Chemistry & Physics
Drama	English, Arts subjects
Economics	Maths – for Oxbridge: Further Maths advised
Engineering (Aeronautical, Civil, Electrical, Mechanical)	Maths & Physics – Oxbridge: Further Maths
Engineering (Chemical)	Maths, Physics & Chemistry – Oxbridge: Further Maths
Environmental studies	Any two sciences
Geology	Chemistry & Maths; other sciences & Geography useful
Languages	At least one and preferably two language A-levels.
Law	Any subject
Medicine	Chemistry, Biology. Also useful: Maths, Physics or a Humanities subject
Philosophy	At least one essay subject, Maths useful
Physics	Physics & Maths – Oxbridge: Further Maths A2
Physiology	Chemistry and two from Sciences and Maths
Physiotherapy	One or two sciences
Politics	Any social science or arts subject
PPE (Oxford)	Maths & History (or similar essay subject)
Psychology	Maths & Biology useful
Theology	Any arts subject
Veterinary Science	Chemistry, Biology & Maths or Physics

Note that, although some universities do not insist on the requirements listed above, their courses may not be as valuable when seeking employment as those that do.

Full information can be found in *The Big Guide* and the *Directory of University and College Entry*, both of which are available in the Careers Room, as well as in *Degree Course Offers* and the *CRAC Degree Course Guides* (20 volumes).

### **Career implications**

Unlike most of the rest of the world, the majority of careers are open to all applicants whatever degree they have studied. The obvious exceptions are Architecture, Engineering and the Medical Sciences. Nevertheless it is useful and natural to use the opportunity of choosing A levels to think ahead, even beyond university, to how you intend to earn your living - and hence the reason for the Psychometric profiling Tests in the Fifth Form: to choose A level subjects in the light of career aspirations, no matter how vague they may be.

# Art

## **Exam Board:** Edexcel

Studying Art is immensely satisfying with its emphasis on your own ideas, imagination and creativity. A level Art is a practical course with a large contextual component and is considered an academic A level. You will be encouraged to build on the skills and understanding you have developed during your GCSE course. By the Upper Sixth year, under supervision, you will be working independently and choosing which genre of art you wish to focus on. Decision making, risk taking, autonomy, self-criticism and rigour are therefore essential qualities for an A level artist. You must be willing to approach artwork with an open mind and enjoy discussion and group activities.

The main purpose of the course is to heighten your appreciation of the visual world and to respond in a personal and creative way. You will build a working knowledge of materials, practices and technology in a range of the disciplines within art. You will develop your imaginative and creative powers and your experimental, analytical, research and documenting skills. You will also develop a specialist vocabulary and the knowledge and understanding of the place of art and design in history and in contemporary society.

## **What do I need to know or be able to do to take Art?**

The syllabus at AS and A2 Level incorporates and builds on the aims of GCSE Art and we would expect that you have obtained an A\* or A grade by the end of the Fifth form course. However, it is not essential that you have taken Art at GCSE and, should you have a portfolio of recent work which demonstrates your real interest in the subject, we are happy to discuss whether you will benefit from the course.

## **Course Requirements**

At AS, candidates produce one piece of coursework as well as an examination piece, for which they have eight weeks to prepare. At A2, candidates also produce one piece of coursework and an examination piece, for which they have eight weeks to prepare also. The AS forms 50% of the assessment weighting of the full A level.

The AS course starts with half a term of foundation lessons which explore the formal elements and develop pupils' skills in a range of activities. Activities include stretching canvases, printmaking, painting en plein air, group critiques and 'art walks' around Oxford, as well as the weekly life drawing classes held after school. We believe that anyone can be taught how to draw and expect all our students to complete their AS year with evidence of this. All units are marked in school and moderated by a visiting moderator as at GCSE level.

## **Key Skills**

These specifications will offer considerable scope for candidates to develop the key skills, in particular communication and information technology. Key skills give candidates the opportunity for development in a range of ways. Communication, whether in visual, verbal and/or written form, is central to these specifications. It is covered in all units but most explicitly in the Upper Sixth coursework unit which requires candidates to make thorough investigations into the work of artists, craftspeople or designers.

### **Contextual Work**

A level students will have the opportunity to visit some major London exhibitions during their course and will be expected to familiarise themselves with collections in Oxford. Some students will attend courses run by centres including The Tate Galleries, The Royal Academy of Art, The Wallace Collection and Modern Art, Oxford. During the Michaelmas term, we have an artist in residence who works alongside the A level students and engages with them in developing their work. Lower Sixth pupils attend weekly two hour Life Drawing Classes after school. There is a department computer suite and library where Art, Design and Architecture periodicals are available, as well as up-to-date information on careers in Art and university courses.

### **Further and Higher Education**

Boys often go on to Foundation Courses at Oxford Brookes University, The North Oxfordshire College of Art at Banbury and elsewhere. These courses are a year long and carry a Diploma qualification. From there, students apply to higher education courses at universities around the country. Some Magdalen College School pupils apply directly to university to study their chosen field; Graphic Design, Fine Art, Film, Architecture or History of Art. Recent destinations have included Cambridge, Falmouth, Westminster and the Architectural Association.

# Biology

## Exam Board: OCR

The A level specifications allow the study of a variety of current biological topics backed up by traditional principles. This specification has a good balance of subject areas between Lower and Upper Sixth with a generous weighting towards human biology. It is an accessible yet challenging A level with scientists and non-scientists gaining much from studying the subject. Past pupils have progressed to read any one of a number of subjects at university including; Biological Sciences, Natural Sciences, Medicine, Veterinary Science, Law, Engineering, Environmental Science, Geography, Architecture, French, English.

## Aims of Specification:

The aims of these specifications are to encourage candidates to:

- develop their interest in and enthusiasm for biology, including developing an interest in further study and careers in biology;
- appreciate how society makes decisions about scientific issues and how the sciences contribute to the success of the economy and society;
- develop and demonstrate a deeper appreciation of the skills, knowledge and understanding of *How Science Works*;
- develop essential knowledge and understanding of different areas of biology and how they relate to each other.

## AS Level Papers

### Unit F211: *Cells, Exchange and Transport* (30% of the total AS marks)

Module 1: Cells

Module 2: Exchange and Transport

### Unit F212: *Molecules, Biodiversity, Food and Health* (50% of the total AS marks)

Module 1: Biological Molecules

Module 2: Food and Health

Module 3: Biodiversity and Evolution

### Unit F213: *Practical Skills In Biology 1* (Coursework: 20% of the total AS marks)

A series of mini practical exams will take place under controlled conditions during the year. Three types of task must be completed – a quantitative task, a qualitative task and an evaluation.

## **A2 Level Papers**

### **Unit F214: *Communication, Homeostasis and Energy* (15% of the total A-level)**

Module 1: Communication and Homeostasis

Module 2: Excretion

Module 3: Photosynthesis

Module 4: Respiration

### **Unit F215: *Control, Genomes and Environment*(25% of the total A-level)**

- Module 1: Cellular Control and Variation
- Module 2: Biotechnology and Gene Technologies
- Module 3: Ecosystems and Sustainability
- Module 4: Responding to the Environment

### **Unit F216 *Practical Skills in Biology 2*(10% of the total A-level)**

A series of mini practical exams will take place under controlled conditions during the year. Three types of task must be completed – a quantitative task, a qualitative task and an evaluation.

Mrs Groves, Mr Skipwith, Dr Pearson, Mr Seager and Dr Ooi carry out the teaching with lessons including practical investigations, use of IT, group and project work, demonstrations, discussions and analysis of written work. We also carry out field work, which takes place in the June of the Lower Sixth.

The Biology Department also runs the Biological Society, which invites local biological and medical speakers and visits sites of scientific interest, the Bioethics Discussion Group and a Biology Safari to South Africa every second year.

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NB If your AS choice includes science, you are strongly encouraged to study more than a single science subject. The lack of a supportive combination of science subjects inhibits progress at AS level and makes progression to A2 especially difficult.

In particular, if you plan to study Biology you should also consider taking Chemistry.

# Chemistry

**Exam Board:** OCR

The course will aim to:

- develop essential knowledge and understanding of the concepts of chemistry, and the skills needed for the use of these in new and changing situations.
- develop an understanding of the links between theory and experiment.
- be aware of how advances in information technology and instrumentation are used in chemistry.
- appreciate the contribution of chemistry to society and the responsible use of scientific knowledge and evidence.
- sustain and develop the enjoyment of, and interest in, chemistry.
- develop awareness of how scientific work is conducted and communicated.
- enhance knowledge of ways in which different areas of chemistry relate to each other.

The subject has six Units of Assessment. To obtain certification at Advanced Subsidiary (AS) GCE, you will need to have studied and be assessed on the three AS units, two of which are written papers with a third that is practical assessment. To obtain certification at Advanced GCE you will need to have studied and been assessed in a further three A2 units; again, two are written papers and the third comprises practical assessment. The two written AS units will be taken at the end of the Lower Sixth year. The written A2 units will be taken at the end of the Upper Sixth year.

## AS Units

*Atoms, Bonds and Groups. F321 (30% of AS, 60 minute written paper)*

Atoms, electron configuration, bonding and structure; moles and equations; acids and redox reactions; patterns in the Periodic Table, including Groups 2 and 7.

*Chains Energy and Resources. F322 (50% of AS, 1 hour 45 minute written paper)*

Basic organic chemistry; chemicals from oil; alcohols and organic halogen compounds; analytical techniques, energy changes in reactions, reaction kinetics and dynamic equilibrium.

*Practical Skills. F323 (20% of AS)*

A series of mini practical exams will take place under controlled conditions during the year in the course of normal lessons. Three types of task must be completed – a quantitative task, a qualitative task and an evaluative task.

## A2 Units

*Rings, Polymers and Analysis. F324 (30% of A2, 60 minute written paper)*

Use of organic compounds in the manufacture of pharmaceuticals, antiseptics, perfumes, dyes and polymers; the use of various forms of spectroscopy and other analytical techniques in the determination of molecular structure. Some synoptic assessment will be included.

*Equilibria, Energetics and Elements. F325 (50% of A2, 1 hour 45 minute written paper)*

The physical chemistry that explains and quantifies much of the chemistry encountered already. Reaction rates, equilibrium constants; acids, bases and buffer solutions; lattice enthalpies, entropy and electrode potentials; chemistry of the Transition elements. Some synoptic assessment will be included.

*Practical Skills in Chemistry. F326 (20% of A2)*

A series of mini practical exams will take place under controlled conditions during the year in the course of normal lessons. Three types of task must be completed – a quantitative task, a qualitative task and an evaluative task.

With a qualification in Chemistry you could go on to higher education to study chemistry or one of the other sciences or related subjects such as chemical engineering, materials science, biochemistry or biotechnology. It is essential if you wish to study a subject in a medical field or pharmacology or environmental science.

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If your AS choice includes science, you are strongly encouraged to study more than a single science subject. The lack of a supportive combination of science subjects inhibits progress at AS level and makes progression to A2 especially difficult.

# Computing

**Exam Board:** AQA (<http://www.aqa.org.uk>)

## Description

The AQA Computing A-level is a study of computational thinking and does not overlap with material previously studied in ICT. Rather than training to use existing tools and systems, this course looks at the forms of logic and reasoning used by humans and machines. The course develops skills in problem solving while looking in depth at the theory of computing and the technical details of many current computing systems. No programming knowledge is required prior to the course.

## Structure of the course

Two modules are covered for AS with two further modules for A2:

### Module 1: Problem Solving, Programming, Data Representation, Practical Exercise

Problem solving: Stages in problem solving, decision tables and finite state machines, algorithm design. Programming: High level languages and structured programming. Data Representation: The binary system and the encoding of data. Practical Exercise: A practical examination using programming techniques for problem solving.

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

Computer Components and The Stored Program Concept: Hardware, software, programming languages, logic and Boolean algebra, machine level architecture and the operation of computer processors. The Internet: The use and structure of the internet, internet protocols, web page design.

### Module 3: Problem Solving, Programming, Operating Systems, Databases and Networking

Problem Solving: Complexity, solvable and non-solvable problems, Turing machine, regular expressions. Programming: Recursion, abstract data types, standard algorithms. Operating Systems: The virtual machine. Databases: Modelling, normalisation, SQL, DDL. Networking: Types of network, wireless networks, networking hardware.

### Module 4: The Practical Project

The Practical Project: A computer programming project, providing a solution to an identified realistic problem. This module is examined through a written report.

## Higher Education

At top universities, Maths and Further Maths are often a requirement for an application to Computer Science. Oxbridge candidates must take these two A-levels. The study of Computing at A-level is excellent preparation for those wishing to study Computer Science or Maths, as well as Engineering, Physics and other scientific disciplines at university level.

# English Literature

## Exam Board: OCR

The new A level English Literature course promises a real chance to expand your intellectual horizons and to enjoy exploring a wide variety of genuinely fascinating and rewarding literature. As well as some excellent choices available on the set texts lists, there are a number of opportunities for you to explore your own interests in literature.

It would be a mistake to assume that the study of English Literature at A level will be similar to what you have experienced at GCSE; the course is much more interesting and significantly more challenging and rewarding than in the English GCSEs which have to be suitable for virtually everyone in the country. At A level, the study of literature is about being able to approach ideas, points of view and personal expression with intelligent individuality. Your critical views are as valid as anyone else's, as long as you develop the skills to argue them closely, so this is a subject that offers you the chance to be original and adventurous in your work whilst enjoying some of the most exciting and influential writing to hit the shelves over the last six hundred years.

You will need to read widely and independently, but the scope for learning is not limited solely to linguistic study: your skills in history and philosophy and your knowledge and understanding of such central issues as politics, society, religion and aesthetics will be augmented by work undertaken both in the English classroom and in private literary study.

If you choose English Literature, you must be willing to read widely with an open mind and you will have many opportunities to explore your views in discussions. You will write coursework pieces, as well as studying exam texts and you will also get to think for yourself, and make progress in your handling of written English, which will directly benefit your other courses. It is a subject that has a direct and broad application to the fundamental requirements of employable adults who are required to read the demanding written material and make appropriate judgements on it, and who must respond humanely and imaginatively to the complexity of situations that they face every day.

English Literature is a highly regarded A level which is accepted as entry to university in an array of courses from law to medicine, psychology to accountancy. It is also welcomed as evidence of an inquiring and flexible intellect by employers. Although courses are well-subscribed at universities, Magdalen boys will usually reach the end of the A level course well prepared to embark on Literature courses at all of the country's best universities, and in the last few years many have done so.

**So, who should do it?**

Those who enjoy reading, who are willing to take risks and think for themselves, who are curious about their cultural heritage, about ideas and beliefs, who relish debate and discussion, and the opportunity to express original, individual responses in cogent, lucid and effective writing.

It is a chance to be part of a dynamic and compelling subject. (You will have the chance to learn about Irish literature on the Sixth Form trip to Dublin, as well as numerous opportunities to see plays in London and Stratford.)

If you are bright, brave, hard-working and have a fascination with literary life, this is for you!

# French

**Exam Board:** Edexcel

## **Introduction**

The primary goal of the Sixth Form courses in Modern Languages at MCS is to encourage boys to develop an expertise in their chosen language through a concentrated study of its grammar, vocabulary and idiom. We also seek to broaden boys' understanding of French culture and society by an exploration of sources from literature, cinema and other media. Finally, we aim to strengthen boys' skills of communication and critical analysis and instil positive attitudes towards learning in general.

Knowledge of foreign languages is hugely important, not only for its own academic ends, but also in the world of work beyond school. Languages enrich our mind and increase our appreciation of the world around us. Learning languages can also enhance Sixth Form studies elsewhere, and an A-level in French complements most other subjects, from Arts to Sciences. Studying a language post GCSE can add an extra dimension to science candidates, for example in Medicine.

## **Syllabus – grammar**

Grammar is taught discretely, beginning with a consolidation of GCSE grammar and extending to include all the new verb tenses and other structures needed at AS and A level. The main additional grammar areas taught in French are the past historic and different perfect tenses and the subjunctive mood. However, there are many other new points of grammar and idiomatic usage to be learnt as well.

## **Syllabus – vocabulary and topics**

Vocabulary and idioms are mainly taught through an exploration of topics concerning French society and culture, including:

- Youth culture and concerns  
Music and fashion, technology, relationships, drugs
- Lifestyle, health and fitness  
Sport and exercise, food and diet, smoking, health services
- Travel, tourism and the environment  
Tourist information, pollution and recycling, global warming
- Education and employment  
Schooling and higher education, student issues, the world of work

**A2 subjects** will include:

- Customs, traditions, beliefs and religions
- National and international events, past, present and future
- Literature and the arts

## **Syllabus – literature and background topic area**

Candidates can choose to study whole works or extracts from literature as part of their Research Based Essay, and some literary texts will complement class work throughout the course. Films and media will also feature in the classroom, and could also form the basis for the RBE.

All students supplement their normal studies with at least one period per week with the French language assistant for conversation practice and training for the oral examinations. In addition, the exchange with a school in Grenoble includes places for Sixth Formers. In any case, boys studying one or more Modern Languages to A-level should spend some time in the appropriate country, and assistance can be given in arranging stays abroad. The languages website complements both teaching and learning, and students are encouraged to practice listening and reading from the many online articles and reports available there.

## **Examination**

### **AS**

Unit 1 Spoken expression and response 30% of AS / 15% of A2  
 Responding to set questions and discussion

Unit 2 Understanding and written response 70% of AS / 35% of A2  
 Listening and reading comprehension, written task

### **A2**

Unit 3 Understanding and spoken response 35% of A2 / 17.5% total  
 5 minutes speaking on chosen issue, discussion

Unit 4 Research, understanding and written response 65% of A2 / 32.5% total  
 Translation into French, Target language essay,  
 Research based essay

By the end of the course you will be able to converse and write with some confidence, fluency and sophistication on a range of topics covered. You will have engaged in independent research and will be able to argue and justify your points of view. You will be able to express your ideas in a range of registers from formal to slang. You will have become familiar with new media in order to broaden your knowledge of contemporary society, but will be equally at ease with the language of literary debate. You will have studied diverse subjects, from globalisation, media and advertising, to genetic modification, immigration and European politics, enabling you to see the bigger picture of the emerging world order and your possible place in it.

Whether on interview, at university or in the wider world of employment, the skills learned here will make you a more attractive and employable candidate, and will prepare you for life beyond the classroom.

# Geography

**Exam Board:** EdExcel

Geography has never been more relevant than it is today in its attempt to understand the most significant challenges facing mankind in the 21<sup>st</sup> Century. From climate change to natural hazards and from water supply to biodiversity loss, the subject attempts to achieve an understanding of the complex inter-relationships between people and their physical environment. At its heart is an increasingly environmental agenda and whilst retaining the rigour of scientific understanding of physical landscapes and processes, Geography at A-level encourages you to think across traditional boundaries, utilising social, economic and political, as well as scientific skills.

## **Geography with other subjects**

Geography can be studied in any combination of A/AS level subjects and its cross-curricular nature makes it an attractive accompaniment to any subject combination. For the candidate with an artistic leaning, geography lends breadth through the processes of scientific enquiry. For the candidate with a scientific leaning, geography lends breadth through essay writing and Arts skills of communication.

**Please note:** *Candidates do not have to have studied the subject at GCSE level.*

## **What Geographers go on to study**

In recent years, geographers have gone on to study a wide range of subjects at university, indeed its broad subject base and wide ranging skills make it attractive for many university courses e.g. English, History, Marine Biology, Physics, Law, Medicine etc. Geography is specifically relevant to those wishing to pursue courses in Land and Business Management, Urban Planning, Environmental Science, Ecology, Earth Science, Geology, as well as for Geography.

## **Geography Society**

The Geography Society aims to offer a variety of geographical activities and events to enhance knowledge and appreciation of the subject beyond the confines of the classroom. This year (2009-10) the society has invited a number of external university lecturers to speak on their specialist topics. Lectures represent the diversity of the subject and range from landforms in arid environments to urban planning and congestion.

## **Field Trips**

Both L6th and U6th geographers are invited to attend a geography field trip to north Africa in December. This year's trip is to Morocco and takes place after Michalemas and before Christmas. We study desert landforms and processes in the idyllic setting of the Sahara as well as investigating urban issues in Marrakech and staying with nomadic tribesmen in the Dades Valley. Additionally to this, L6th fieldwork also takes the form of a residential course in Weymouth, Dorset (October, 2009); L6th geographers investigate coastal and fluvial environments by collecting primary data for analysis in the on site classrooms.

## **Teaching**

All 6<sup>th</sup> form sets are taught by four specialist geographers (Mr. Hewlett, Mr. Dixon, Mr. Lemoine and Miss. Liddiard). Teaching is divided and based on staff specialist areas and interests.

## Specification

We study Ed-Excel, a synopsis of which can be found below.

<b>UNIT 1 - Global Challenges (AS)</b>	
Hazards	Global Hazards and Climate Change
Globalisation	Globalisation and Global Networks World Cities, Immigration and Global Challenges
<b>UNIT 2 - Geographical Investigations (AS)</b>	
Coastal Environments	Competition for coasts Coping with the pressure Coastal Management
Redevelopment	Redeveloping Strategies Managing Urban Redevelopment Managing Rural Redevelopment
<b>UNIT 3 - Contested Planet</b>	
Students investigate 6 of the most important issues to face our world in the C21st: <ul style="list-style-type: none"><li>• Energy Security</li><li>• Water Conflicts</li><li>• Biodiversity under threat</li><li>• Superpower Geographies</li><li>• Bridging the Development Gap</li><li>• The Technological Fix</li></ul>	
<b>UNIT 4 - Geographical Research</b>	
Student's to research one of 4 possible topic areas: <ul style="list-style-type: none"><li>• Tectonic Activity and Hazards</li><li>• Cold Environments - Landscapes and Change</li><li>• The world of cultural diversity</li><li>• Pollution and the human health risk</li></ul>	

# German

**Exam Board:** Edexcel

## **Introduction**

The primary goal of the Sixth Form courses in Modern Languages at MCS is to encourage boys to develop an expertise in their chosen language through a concentrated study of its grammar, vocabulary and idiom. We also seek to broaden boys' understanding of German culture and society by an exploration of sources from literature, cinema and other media. Finally, we aim to strengthen boys' skills of communication and critical analysis and instil positive attitudes towards learning in general.

Knowledge of foreign languages is hugely important, not only for its own academic ends, but also in the world of work beyond school. Languages enrich our mind and increase our appreciation of the world around us. Learning languages can also enhance Sixth Form studies elsewhere, and an A-level in German is well regarded as a serious qualification which complements most other subjects, from Arts to Sciences.

## **Syllabus – grammar**

Grammar is taught discretely, beginning with a consolidation of GCSE grammar and extending to include the new verb tenses and other structures needed at AS and A level. The main additional grammar areas taught in German are the subjunctive and more complicated syntax. However, there are many other new points of grammar to be learnt as well.

All students supplement their normal studies with one period per week with the German language assistant for conversation practice and training for the oral examinations. Boys studying one or more Modern Languages to A-level should spend some time in the appropriate country, and assistance can be given in arranging stays abroad.

## **Syllabus – vocabulary and topics**

Vocabulary and idioms are mainly taught through an exploration of topics concerning German society and culture, including:

- Youth culture and concerns  
Music and fashion, technology, relationships, drugs
  - Lifestyle, health and fitness  
Sport and exercise, food and diet, smoking, health services
  - Travel, tourism and the environment  
Tourist information, pollution and recycling, global warming
  - Education and employment  
Schooling and higher education, student issues, the world of work
- A2 subjects** will include:
- Customs, traditions, beliefs and religions
  - National and international events, past, present and future
  - Literature and the arts

## **Syllabus – literature and background topic area**

Candidates can choose to study whole works or extracts from literature as part of their Research Based Essay, and some literary texts will complement class work throughout the course. Films and media will also feature in the classroom, and could also form the basis for the RBE. The school languages website is an excellent source of material, which complements both teaching and learning, and students are encouraged to practise their listening and reading skills using the many online articles and reports available there.

## **Examination**

### **AS**

Unit 1 Spoken expression and response 30% of AS / 15% of A2  
Responding to set questions and discussion

Unit 2 Understanding and written response 70% of AS / 35% of A2  
Listening and reading comprehension, written task

### **A2**

Unit 3 Understanding and spoken response 35% of A2 / 17.5% total  
5 minutes speaking on chosen issue, discussion

Unit 4 Research, understanding and written response 65% of A2 / 32.5% total  
Translation into German, Target language essay,  
Research based essay

By the end of the course you will be able to converse and write with some confidence, fluency and sophistication on a range of topics covered. You will have engaged in independent research and will be able to demonstrate the ability to argue and justify your points of view. You will be able to express your ideas in a variety of styles and registers from formal to slang. You will have become familiar with new media in order to broaden your knowledge of current affairs, but will be equally at ease with more traditional literature. You will be aware of current issues in German society. You will have studied widely varied subjects, including globalisation, media and advertising, genetic modification, immigration and European politics, enabling you to see the bigger picture of the emerging world order and your possible place in it.

Whether on interview, at university or in the wider world of employment, the skills learned here will make you a more attractive and employable candidate, and will prepare you for life beyond the classroom.

# Greek

**Exam Board:** OCR AS/A2

www.ocr.org.uk

**Syllabus code:** AS/A2 (H041/H441)

Everyone who is privileged to study the Greeks finds that study stimulating, for the ancient Greeks lived in a time when the civilised world was young and they were fully conscious of their own creativity, and their enthusiasm is catching. So much of European civilisation began with the Greeks and was carried by them to great heights of achievement. Literature, history, philosophy, politics and science look back to Greek beginnings and the clarity of their perceptions, and nourish new offshoots. In these modern times, as Samuel Johnson remarked, “Greek, Sir, is like lace; every man gets as much of it as he can.”

A level Greek is divided between language and literature, with a slant towards literature at AS and towards language at A2. As in all subjects a final total of 320/400 will get you an A, but, if you are aspiring towards Oxford or Cambridge entry, you should be looking for 360 or more. The aim of enjoying the subject for its own sake, for the mental stimulus it provides and the intellectual curiosity it satisfies, should be readily attainable.

There is large continuity between the Greek literature studied at GCSE and that of AS/A Level.

Set texts for 2010-2011 include extracts from **Homer** and **Lysias** at AS level, whilst for A2 verse there is a choice between **Euripides** and **Aristophanes**, and for prose between **Plato** and **Thucydides**.

**AS: both units are taken at the end of the L6th**

- **Unit G1: Language (50% of AS, 25% of whole A level) – 1½ hrs – 100 marks**

A prose unseen (Greek to English) translation from Lysias, pitched at a level of difficulty mid-way between GCSE and A2 level, followed by **either** a little more of the same, **or** some basic English to Greek sentences.

- **Unit G2: Verse and Prose Literature (50% of AS, 25% of whole A level) - 1½ hrs - 100 marks**

Three set text passages are quoted, on which straightforward content, context, literary appreciation and translation questions are set.

## **A2: both units are taken at the end of the U6th**

- **Unit G3: Greek Verse (50% of A2, 25% of whole A level) – 2 hours – 100 marks**

Two set text passages are quoted, on which comprehension and literary appreciation questions are set. One verse unseen translation and comprehension questions (+ scansion) from a specific author.

- **Unit G4: Greek Prose (50% of A2, 25% of whole A level) – 2 hours – 100 marks**

Two set text passages are quoted, on which comprehension and literary appreciation questions are set. Then **either** one prose unseen translation and comprehension questions from a specific author **or** a piece of English prose to be translated into Greek.

## **Academic Achievements and Classics at University**

The School has an excellent record of success in Classics in the Sixth Form and, more importantly, beyond. Seven of our last nine entrants for Honour Moderations in Classics at Oxford were awarded Firsts.

Oxford offers courses in Classics, Classical Archaeology and Ancient History, Classics and English, Classics and Modern Languages, Classics and Oriental Studies and Ancient and Modern History. A similar range of courses is available under the ‘Tripos’ system at Cambridge, and at many other excellent universities. Greek can usually be studied with or without Latin (or vice versa) and in combination with many other Arts subjects. Oxford and Cambridge both offer to teach *one* of the Classical languages to beginners. Where you see “Classics” twinned with another subject, e.g., English, you can assume that you will be allowed to opt for either Latin or Greek.

For further details of the careers enjoyed by Classicists, see under the entry for Latin.

# History

**Exam Board:** OCR History A [www.ocr.org.uk](http://www.ocr.org.uk)

Sixth Form History aims to combine academic excellence with the desire to enjoy the subject for its own sake. Above all, those studying the subject need to display an enthusiasm for learning about the past, through investigating key events, issues and personalities, through analysing their significance and through debating their effect on the modern world.

We have opted to continue with a combination of topic areas that offer breadth, both chronologically and geographically, across the A level. Too many schools study 20<sup>th</sup> century history, to the exclusion of all other periods and leading universities tend to despair at such a restricted diet. Therefore, we offer a medieval paper, two from the early modern period and a modern paper. In addition, you will have the option of picking your own area to investigate independently at A2.

Groups vary in size, from 8 to 14. The more intimate environment encourages discussion and debate in lessons. One of the joys of history is that there is not always a 'right' answer, so it's important to test your ideas and develop your own justifications. However, a willingness to read is the most important requirement of an A level Historian. The school library boasts a well-stocked History section and the department's own Sixth Form collection would not disgrace an undergraduate library. Sixth Formers are encouraged to use this resource to develop independent learning habits and to read round their courses. There is a weekly L6th Reading Group and periodic History Society meetings to extend interest in the subject beyond the confines of the course.

History can be taken in conjunction with a wide variety of subjects. Traditionally, it is chosen to complement the arts, languages and social sciences but, increasingly, we provide a safe haven for scientists wishing to broaden their horizons. Beyond the Sixth Form, History AS and A2 affords a good preparation for a range of degrees and careers such as the law, journalism and the media, teaching, business, accountancy and banking.

## **The structure of the course:**

<b>AS</b>	Unit F961	British History Period Studies (an essay paper) <b>Liberals and Conservatives 1846-95</b>
	Unit F964	European and World History Enquiries (a source-based paper) <b>The First Crusade and the Crusader States 1073-1130</b>
<b>A2</b>	Unit F965	Historical Interpretations and Investigations (two pieces of coursework, internally assessed) <b>Oliver Cromwell 1599-1658 or Napoleon I 1799-1815</b>
	Unit F966	Historical Themes (an essay paper) <b>England's Changing Relations with Foreign Powers 1485-1603</b>

# Latin

**Exam Board:** OCR

**Syllabus Code:** AS/A2 (H039/H439)

www.ocr.org.uk

The benefits of studying Advanced Latin are great. Not only does it introduce the student to a people who have had an immense influence upon European civilisation (Europe itself learnt unity from the Romans whose language was the basis of communication, law and religion, and hence continues to provide the unifying vocabulary of science), but also puts him into direct contact with some of the finest and most influential human minds. The thoughts and words of Cicero and Caesar, of Livy and Virgil have influenced our literature and our politics, our history and our laws in ways too numerous to mention. More's Utopia was written in Latin. It was in Latin that Sir Isaac Newton wrote his Principia which formulated the law of universal gravitation. Queen Elizabeth the First talked Latin with diplomats, and Cromwell had Milton for his Latin secretary.

A level Latin, like GCSE Latin, is divided between language and literature, with a slant towards literature at AS, and towards language at A2. As in all subjects a final total of 320/600 will get you an A, but, if you are aspiring towards Oxford or Cambridge entry, you should be looking for 360 or more. Upper Sixth Latinists are also encouraged to prepare for the Advanced Extension Award, which goes well beyond A level standard.

You should enjoy studying the subject for its own sake. The literary skills which you have already learnt at GCSE will stand you in immensely good stead and there is large continuity between the Latin literature studied at GCSE and that of AS/A Level.

Set texts for 2010-2011 include extracts from **Cicero** and **Ovid** at AS level, whilst at A2 there is a choice between **Virgil** and **Catullus** for verse author, and **Livy** and **Tacitus** for the prose text.

## **AS: both units are taken at the end of the L6th**

- **Unit L1: Language (50% of AS, 25% of whole A level) – 1½ hrs – 100 marks**

A prose unseen (Latin to English) translation from Cicero, pitched at a level of difficulty mid-way between GCSE and A2 level, followed by **either** a little more of the same, **or** some basic English to Latin sentences.

- **Unit L2: Verse and Prose Literature (50% of AS, 25% of whole A level) - 1½ hrs - 100 marks**

Four set text passages are quoted, on which straightforward content, context, literary appreciation and translation questions are set.

## **A2: both units are taken at the end of the U6th**

- **Unit L3: Latin Verse (50% of A2, 25% of whole A level) – 2 hours – 100 marks**

Two set text passages are quoted, on which comprehension and literary appreciation questions are set. One verse unseen translation and comprehension questions (+ scansion) from a specific author.

- **Unit L4: Latin Prose (50% of A2, 25% of whole A level) – 2 hours – 100 marks**

Two set text passages are quoted, on which comprehension and literary appreciation questions are set. Then **either** one prose unseen translation and comprehension questions from a specific author **or** a piece of English prose to be translated into Latin.

### **Academic Achievements**

The School has had a marvellous record of success in Classics in the Sixth Form and, more importantly, beyond. Seven of our last nine entrants for Honour Moderations in Classics at Oxford were awarded Firsts.

**For “Classical Subject Combinations at University”, see under the entry for Greek.**

### **Career Prospects**

Careers statistics unerringly pinpoint Classicists as being at the top end of the spectrum of Arts Graduates. The courses are highly valued for their intellectual content, and the students are highly regarded for their adaptability and flexibility, for their analytical skills, for being judicious, lucid and articulate, and for their humanity and sensitivity in dealing with people. Among careers followed are the law, politics, local government, civil service, journalism and publishing, teaching, management, finance and computing. A recent survey of OW Classicists turned up: (1) a barrister, (2) a legal advisor to an investment bank, (3) a freelance journalist, (4) a travel writer, (5) a World Bank Loan Administrator in Bosnia, (6) a lawyer, (7) manager of a packaging company, (8) studying for a Ph.D. at Yale and (9) studying for a doctorate at Oxford.

### **Trips and competitions**

There were school trips to Greece in 2002, 2004 and 2006, to Sicily in 2007, to Rome and the Bay of Naples in 2008, to Turkey in 2009, and a trip to Provence is planned for 2010. We attend local events organised by the Oxford Classical Association, including the Sixth Form (A/AS level) Conferences and the annual Reading Competition, in which last year MCS walked off with a number of prizes.

Latin is the enemy of looseness, indirectness and inconsistency.  
It is no dead language: it is the life of the minds that know it.

## Mathematics and Further Mathematics

**Exam Board:** OCR (MEI) [www.ocr.org.uk](http://www.ocr.org.uk) (See also <http://www.mei.org.uk/>)

### Overview:

**A Level Mathematics** is highly valued by both universities and employers for the skills of reasoning, problem solving, logical argument and analytical thinking which it cultivates. Likewise, a mathematics degree is becoming increasingly prized in the employment world and A-level Mathematics is a vital cornerstone of many other degree courses.

**Further Mathematics** is a separate A Level which extends the core topics of A Level maths and introduces new material normally encountered during the first year of a degree course. It is therefore a particularly demanding A level although many find it even more exciting and rewarding than single maths. In recent years, the majority of students taking Further Maths have gained Oxbridge places and anyone considering applying to a top university to study a subject with substantial mathematical content would be well advised to give serious thought to taking this option.

**Further Maths AS** is also possible for those students who wish to study beyond A level but not complete the full A2 Further Maths course.

### Prerequisites:

Many students find the step from GCSE to A Level quite difficult; the experience of most pupils is that the subject becomes harder but a lot more interesting and rewarding. As a general rule, it is probably unwise to contemplate taking A-Level maths without at least grade A\* at IGCSE, but if in doubt, discuss the matter with your teacher.

### Course Structure:

Six modules are taken for each A-Level qualification. At MCS, we offer modules from three different strands: *Core Mathematics*, *Mechanics* and *Statistics*.

The following three modules are taken during Lower 6<sup>th</sup> and can be cashed in for an AS-Level in *Mathematics*:

- Core Mathematics 1: This serves as an introduction to advanced mathematics by extending GCSE work in areas such as algebra and coordinate geometry.
- Core Mathematics 2: Work on algebra, functions and calculus is developed beyond GCSE. We will also have a look at some sequences and series and you will see that sometimes infinitely many numbers can be added together to give a finite sum!
- Statistics 1: This is a solid introduction to statistics and will be useful in a variety of other subjects such as biology, geography and business studies/economics as well as the physical sciences. You will extend your understanding of probability and meet your first theoretical statistical distribution.

For the full A Level, the following three modules must also be taken:

- Core Mathematics 3: More calculus and trigonometry and an introduction to numerical methods for solving equations. The extraordinary number ‘ $e$ ’ makes an appearance! This module includes a coursework assignment which counts for 20% of the total for this module.
- Core Mathematics 4: The unifying concept of this module is integration and much of the earlier work in pure maths is brought together to enable a wider variety of functions to be integrated. There is some work on vectors and their application.
- Mechanics 1: This includes work on vectors, forces, Newton’s Laws of Motion, the behaviour of connected particles, kinematics and projectile motion.

**Further Mathematics** students study another six modules:

- Further Pure Mathematics 1: Work on series, trigonometry and algebra is extended while matrices and complex numbers are introduced. Complex numbers can be thought of as two-dimensional numbers having a real part and an imaginary part; quite apart from their intrinsic beauty, complex numbers are valuable in various fields of pure and applied maths, physics and engineering. Mathematical Induction – an elegant method of proof – is introduced.
- Further Pure Mathematics 2 & 3: Calculus, algebra and complex numbers are extended and ‘hyperbolic functions’ are introduced. Group Theory and Markov Chains are also investigated. Find out how to use calculus to find the length of a curved line or the area of a curved surface
- Differential Equations: Differential Equations are central to many areas of study from Economics to Ecology to Engineering. This module provides a solid introduction to the subject which anyone considering a science-based degree would find particularly valuable. This module includes a coursework assignment which counts for 20% of the total.
- Mechanics 2 & 3: Energy, momentum, circular motion, dimensional analysis, solid bodies and simple harmonic motion are studied in these modules.

**Further Maths AS** students study three modules beyond A level:

- Further Pure Mathematics 1: as above
- Mechanics 2: as above
- A third module which could be Statistics 2 or Differential Equations.

**Note:**

Students may opt to study just Maths or both Maths and Further Maths. Transition between Single and Further Maths sets are possible in the early weeks of the course.

Those students who have studied mathematics beyond GCSE before starting the sixth form can join the accelerated class which will complete A level Maths and Further Maths within one block (allowing three other subjects to be studied). Boys following the non-accelerated programme (IGSCE in summer of 5<sup>th</sup> form), and Sixth form entrants who have not gone beyond GCSE in Year 11 can opt for Further Maths across 2 blocks in the Lower Sixth, allowing 2 other subjects to be studied.

# Music

Exam Board: Edexcel

Music AS and A2 offers an excellent opportunity to strengthen the skills of composition, analysis and performance. It is a highly regarded course, which will compliment any set of subjects since it requires confidence, clarity of thought, rigour of practice and analytical thinking. The course encourages the study of academic music within a practical context. Each unit compliments each other and allows knowledge to be developed in a variety of ways.

Candidates who wish to take A level should have a passion for music and be able to play an instrument to at least grade 5 standard. Whilst the A level is designed to build upon the skills developed in the GCSE course, there may be circumstances where boys who have not done GCSE will be suitable candidates for A level.

## AS MUSIC

This is undertaken in the Lower Sixth and consists of 3 Units:

### Unit 1 – Performance

A number of lessons are devoted to performance skills, but most of the performance work will take place out of the classroom, taking part in ensemble activities and performing in concerts. Every AS level candidate should regularly take part in an ensemble activity at school. For the final assessment, boys will need to submit performance recordings lasting 5-6 minutes.

### Unit 2 - Composition

Compositional techniques used by composers are studied both in an analytical way as well as through composition in a variety of styles. Boys develop these skills and learn to structure pieces and present scores. In the final assessment, the boys will have to create an original composition from a given brief.

### Unit 3 – Developing Musical Understanding

The unit focuses upon listening to familiar music and understanding how it works. The boys will study a selection of set works, which contain a wide mix of musical styles. They learn to identify features and comprehend the harmonic principles. For the final assessment, there is a written examination which will require the boys to listen to extracts, and demonstrate their analysis skills by aurally identifying musical elements. In addition they will comment on how the features help to place works in a social and historical context and finally show their harmonic understanding in a series of exercises.

## **PROGRESSION TO A2**

There are three further units at A2 which build on the units studied at AS level.

### **Unit 4: Extended Performance**

This extends the work from Unit 1 and requires that the boys present a balanced and coherent programme of music lasting 12-15 minutes.

### **Unit 5: Composition and Technical Study**

In this unit, the boys show their compositional technique in writing both original compositions as well as pastiche exercises showing their understanding of particular musical styles.

### **Unit 6: Further Musical Study**

An aural analysis test related to unfamiliar music, building on the skills learned in unit 3. It requires the boys to use their analysis skills and describe features as well as place the music in context. In addition they will be required to answer essay questions relating to the set works studied.

### **Conclusion:**

The course provides the musician with the flexibility to develop his own particular musical interests and talents as well discover other genres and skills. By approaching music from the three angles of listening, composition and performance, the boys have an enjoyable and unique insight into how music operates and how they can develop their own musicianship.

## Philosophy

**Board:** AQA

Philosophy is, literally, the love or pursuit of wisdom. It is often regarded as an *activity* rather than as a subject or discrete body of knowledge, and people have engaged in philosophical thought and debate ever since they have been able to think beyond their immediate situation and needs. Philosophical questions tend to be abstract, contentious and hard; answers are often tentative, and rarely satisfy everybody.

Why bother then? One reason might be that such questions are very obviously the interesting ones: the fact that an idea fails to win universal assent hardly makes it redundant. Another reason might be that Philosophy's forensic approach to solving problems is in itself deeply satisfying. Instead of wallowing in superficial disagreement and knocking down straw men, you aim to clarify what the problem is and to establish what might count as a satisfactory answer. As for the questions themselves, they tend to be concerned with what is fundamental, and give little clue as to how we should go about answering them. Indeed, part of the philosopher's job is to discover or invent a suitable method.

Philosophical thinking typically places great emphasis on reasoned argument. You will be taught to develop your ability to analyse, reason and form judgements, to express yourself coherently and to contribute to the process of debate. You will be expected to know and understand texts and arguments, to evaluate your reading critically and to express and support your own views effectively. A Level Philosophy introduces you to a range of important philosophical issues and ideas, their development and their importance today. It teaches – and demands – the kind of intellectual autonomy that will equip you well for undergraduate study, whatever the subject. It also equips you with a set of transferable skills that have application beyond academia, their use extending to any arguments you encounter in everyday life.

The AQA specification places special emphasis on the acquisition of philosophical skills, recognising that students mature during a two-year course of study. The AS course comprises two parts: Unit 1 offers a choice of five philosophical themes, ranging from the idea of God to the relationship between reason and experience. Unit 2 scrutinises some enduring questions about the possibility of free will, alongside themes like the nature of tolerance.

The second half of the A level course demands a more mature approach, reflected in a deeper engagement with two philosophical themes in Unit 3 (currently Political Philosophy, and Epistemology and Metaphysics). Unit 4 demands close knowledge of an important philosophical text, currently David Hume's *An Enquiry Concerning Human Understanding*. Greater emphasis is placed on the interconnectedness of issues, on intellectual autonomy, and on evaluation.

No particular GCSE background is expected or required. Indeed, Philosophy is unusual in its straddling of the ‘two cultures’ of Arts and Science. However, bear in mind that the most important skill needed to enjoy and succeed in Philosophy is the ability to express oneself clearly and economically on paper.

Magdalen Philosophers have followed many paths; recent leavers are reading Philosophy at Cambridge, Warwick and Durham; others are doing PPE or Philosophy and Theology at Oxford and in London; others are medics, linguists, mathematicians and students of literature.

### Summary of Subject Content

The Advanced Subsidiary Award will consist of Units 1 & 2. Each unit is worth 25% of the total A Level, and is assessed through an exam lasting 1 ½ hours.

The A2 Award will consist of Units 3 & 4, the former being worth 30% of the total A Level and the latter worth 20%. Unit 3 is assessed through a 2 hour exam and Unit 4 through a 1 ½ hour exam.

### AS Units

1. **An Introduction to Philosophy 1**  
**Reason and Experience**, and one theme chosen from:  
 Why should I be governed?                      **The idea of God**  
 Why should I be moral?                              Persons
  
2. **An Introduction to Philosophy 2**  
 Two themes chosen from:  
 Knowledge of the external world      The value of art  
**Tolerance**    God and the world  
**The debate over free will and determinism**

### A2 Units

- 3 **Key Themes in Philosophy**  
 Two themes chosen from:  
 Philosophy of mind                                      Moral philosophy  
**Political Philosophy**                                      Philosophy of Religion  
**Epistemology and metaphysics**
  
- 4 **Philosophical Problems**  
 One text chosen from:  
 Plato: *Republic*    Nietzsche: *Beyond Good and Evil*  
 Mill: *On Liberty*    **Hume: *An Enquiry Concerning***  
 Descartes: *Meditations*    ***Human Understanding***

# Physics

## Exam Board: AQA

We teach the Physics Specification A (2450) set by the Assessment and Qualifications Alliance.

The AS course is suitable for pupils who wish to extend their studies in physics beyond GCSE, but who do not wish to take a full 'A' level course. It will be also be the first year of a two year course for those who wish to study for a full 'A' level in physics.

**Aims:** These courses aim to:

*at AS and A2 level*

- a. develop essential knowledge and understanding in physics and, where appropriate, the applications of physics, and the skills needed for the use of these in new and changing situations;
- b. develop and understanding of the link between theory and experiment;
- c. appreciate how physics has developed and is used in present day society;
- d. show the importance of physics as a human endeavour which interacts with social, philosophical, economic and industrial matters;
- e. sustain and develop enjoyment of, and interest in, physics;
- f. recognise the quantitative nature of physics and understand how mathematical expressions relate to physical principles;

*at A2 level*

- g. bring together knowledge of ways in which different areas of physics relate to each other;
- h. study how scientific models develop.

**Content:** Each year of the course is divided into 3 modules.

AS    Module 1 – Particles, Quantum Phenomena and Electricity  
      Module 2 – Mechanics, Materials and Waves  
      Module 3 – Experimental Work

A2    Module 4 – Field Physics and Further Mechanics  
      Module 5 – Nuclear, Thermal and Applied Physics  
      Module 6 – Experimental Work

**Assessment:** Each module will be assessed as follows:

AS	Module 1	Written Unit	1h15m	20%
	Module 2	Written Unit	1h15m	20%
	Module 3	Practical Exam	2h	10%
A2	Module 4	Written Unit	1h45m	20%
	Module 5	Written Unit	1h45m	20%
	Module 6	Practical Exam	2h	10%

**Timing of Assessment Units:**

<b>AS</b>	Module 1,2 & 3	June 2011
<b>A2</b>	Module 4	January, 2012
	Modules 5 & 6	June, 2012

Most of our pupils go on to read for degrees in engineering, physics, mathematics, medicine, computing or other sciences. However, former pupils have gone into law, economics, history and estate management.

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If your AS choice includes science, you are strongly encouraged to study more than a single science subject. The lack of a supportive combination of science subjects inhibits progress at AS level and makes progression to A2 especially difficult.

In particular, if you plan to study Physics, you are expected to take Maths. You should seek the advice of staff on this matter.

# Politics

Exam board: Edexcel

## Introduction

Politics, in its broadest sense, is the activity through which people make, preserve and amend the general rules under which they live. As such, Government and Politics at A-Level is principally a study of the systems, form and nature of power, authority and government in the UK and abroad. Politics, by its very nature, remains topical and vital to the running of society regardless of the current political climate.

Potential students should be aware of modern political issues and the changing nature of how power is distributed and shared in both the UK and other states. They should be keen readers of broadsheet newspapers and viewers of political and news broadcasts. Lastly, students should also enjoy debate and discussion. The political landscape constantly evolves and changes and, as such, students will be required to remain up-to-date and informed on a day-to-day basis.

At AS all boys study the compulsory 'Introduction to British Politics' which provides a broad diet of analysis, evaluation and reform. At A2 we have chosen the 'Ideologies' route. This is a theoretically demanding and stimulating course, in which we explore the core ideas which underpin British and world politics.

## Why Opt for Politics at AS and A2?

- Highlighted by leading universities (including Oxford and Cambridge) as a social science subject that is effective preparation for courses such as SPS, Law, History and PPE.
- Politics would complement other A-level subjects such as History, Philosophy, English Literature and Theology.

## Specification and Syllabus

Unit	Unit Description	Content
1 – 6GP01 (AS)	People and Politics	The unit introduces students to the key channels of communication between government and the people. It encourages them to evaluate the adequacy of existing arrangements for ensuring representative democracy and participation.

2 – 6GP02 (AS)	Governing the UK	The unit introduces students to the major governmental processes within the UK. It encourages them to develop a critical understanding of the role and effectiveness of key institutions, and of the relationship amongst them in the context of multi-level governance.
3 – 6GP03 Topic B (A2)	Key Themes in Political Analysis - Introducing Political Ideologies	The topic introduces students to the subject of political ideology and examines the major ideas of liberalism, conservatism, socialism and anarchism.
4 – 6GP04 Topic B (A2)	Extended Themes in Political Analysis - Other Ideological Traditions	The topic examines the ideological traditions that have developed out of, or emerged in opposition to, liberalism, conservatism and socialism.

### **Assessment**

Each unit is worth 25% of the total A2. Each unit will be assessed by an examination (AS 1 hr 20 mins / A2 1 hr 30 mins). There is no coursework for Government and Politics at AS and A2.

### **Extra-Curricular**

All Politics students are encouraged to hone their political awareness and communication skills at the Model United Nations and the Debating Society. However, there is also a dedicated Politics Society that is open to both Sixth Form and the Middle School. Recent trips have included a talk given by former Director of Policy to Tony Blair, Matthew Taylor at the RSA.

# Spanish

**Exam Board:** Edexcel: [www.edexcel.org.uk](http://www.edexcel.org.uk)

## **Introduction**

The primary goal of the Sixth Form courses in Modern Languages at MCS is to encourage students to develop an expertise in their chosen language through a concentrated study of its written and spoken forms. We also seek to broaden students' understanding of Spanish and Latin American culture and society by an exploration of sources from literature, cinema and other media. Finally, we aim to strengthen students' skills of communication, logical thinking and critical analysis and instil positive attitudes towards learning in general.

## **Further Education and beyond**

An A2 level in Spanish complements most other subjects, from Arts to Sciences. The world of international business and finance, international political and development organisations (World Health Organisation, United Nations), main charities, international publishing and media organisations and of course universities value and rate highly candidates who can speak Spanish as it opens the doors of vast geographical areas in the world.

## **Syllabus – grammar**

Grammar is taught discretely, beginning with a consolidation of GCSE grammar and extending it to include all the new verb tenses and other structures needed at AS and A2 level. The main additional grammar areas taught are the passive voice, future and conditional perfect tenses and the subjunctive mood. Individual sessions are arranged for students who may find particular grammatical points difficult.

## **Syllabus – vocabulary and topics**

Vocabulary and idioms are mainly taught through an examination of topics concerning Spanish and Latin American society and culture, including:

- Lifestyle: health and fitness
- The world around us: travel, tourism, environmental issues and the Spanish-speaking world
- Education and employment
- Customs, traditions, beliefs and religions
- Literature and the arts

## **Syllabus – literature**

Students can study whole texts as well as extracts covering different eras and genres. Although the texts may vary from year to year Lorca is the main author studied. Students also look at any text that they may be watching in play-form live on stage.

## **Syllabus- oral**

All students have at least one period per week with the language Assistant for conversation practise and preparation for the oral examinations. By the end of the academic year all students are fluent in their chosen topic.

In addition an exchange with the Nuestra Señora del Pilar school ([www.nspilar.com](http://www.nspilar.com)) in Madrid runs in October. Students are very much encouraged to take part in order to develop natural conversational skills to support their exam technique and to enjoy a taste of the Spanish way of life.

### **Examination**

Spanish is assessed in the four units below:

#### **Unit 1: Spoken Expression and Response in Spanish**

30% of AS 15% of A2

Students are examined in a topic such as: Pollution and Recycling, Technology, Relationships, Sports and Exercise, Food and Diet, The World of Work

#### **Unit 2: Understanding and Written response in Spanish**

70% of AS 35% of A2

Students listen to and read material in Spanish and provide answers to short questions. There is also an essay to write in Spanish.

#### **Unit 3: Understanding and Spoken Response in Spanish**

17.5% of A2

For the A2 oral examination students can choose any topic of their interest that can be debated. Students will have to outline their chosen issue first, then defend it and justify their opinions. Examples of possible topics are: bullfighting, the legalization of cannabis, death penalty, abortion, experiments with animals, religion and violence in the media.

#### **Unit 4: Research, Understanding and Written Response in Spanish**

32.5% of A2

Students translate a few sentences from English to Spanish to test their grammatical accuracy and write two essays in Spanish. The first essay can be creative or discursive and the second one is based on a topic researched throughout the year. The research areas that we choose are the Spanish Civil War, Pedro Almodóvar and *Bodas de Sangre* by García Lorca.

### **Conclusion**

Above all the Spanish department aims to provide enjoyment and intellectual stimulation as well as a rewarding and successful learning experience that will allow students to participate confidently and competently in communicative exchanges with native speakers.

# Theology

**Exam Board:** OCR

## **Introduction**

Theology has been called the ‘Queen of the Sciences’. Modern Universities evolved from the monastic institutions and from the beginning, theology served as the capstone to the *Trivium* and *Quadrivium* that young men were expected to study at Oxford and Cambridge.

Theologians use various forms of analysis and argument (philosophical, ethnographic, historical, spiritual and others) to help understand, explain, test, critique, defend or promote any of myriad religious topics. To study Theology is to wrestle with the arguments for the existence of God and whether religious experiences and miracles are real; whilst learning how Greek thought provided the framework for early Christianity and thereby underpins everything we think and believe in 21<sup>st</sup> century Britain. Faced with some of the most important questions of existence, you will learn how to argue in the Socratic tradition and how to think on your feet. You will walk the streets of Athens, travel the length of Roman-occupied Palestine and learn to inhabit the language of the most influential thinkers of all time. In learning about Liberation Theology you will be given the opportunity to see how Theology has the power to radically change the socio-political landscape of an entire continent, whilst throwing down the gauntlet to the highest authorities of the Roman Catholic Church. The department has a reputation for inventive teaching and regular school trips. The syllabus is supplemented with walking tours in Oxford, literary festival lectures, invited guest speakers and the chance to visit the Vatican.

The syllabus has been chosen to combine a wide range of topics. The **Philosophy of religion** modules in Lower and Upper 6<sup>th</sup> look at what can be known about God by reason alone, without relying on sacred scripture. This includes both religious philosophers and their atheist critics. The **Christian Theology** module looks at how biblical revelation was interpreted over the centuries. It does not shy away from the discussion of more arcane beliefs like the nature of the soul and of angels. The **Ethics** module looks at the nature and role of the conscience and virtue ethics and then applies the ethical theories of the scholastics and the enlightenment to contemporary medical, environmental and business ethics.

In an essay based subject extensive guided reading will be essential, which will be helped by the second largest book collection in the school library. You will refine your critical thinking skills in class discussions and essays.

Theology has never been pigeon-holed simply as another humanities subject. Sixth form students from MCS have taken it with Classics, with Philosophy and alongside the sciences, to prepare for Medicine. The department has a track record of achieving some of the highest marks in the country.

## **For the future**

You will develop skills that are valuable for many occupations, including teaching in schools and colleges, broadcasting and print journalism, publishing, banking, law, personnel, public sector professions, civil service, non-governmental organisations, and many others.

### **Assessment**

AS year: two exams of 1.5 hours each.

A2 year: two exams of 1.5 hours each.

### **Requirements**

The main requirement is enthusiasm for exploring questions of existence through the framework of religion. You should also enjoy reading and defending your own opinion in debate and in writing. It is not essential, although helpful, to have done Theology GCSE.

### **AS Syllabus**

#### Unit G571: Philosophy of Religion

Ancient Greek influences (Plato and Aristotle)

Judeo-Christian influences (God the Creator, the goodness of God)

Arguments for the existence of God (ontological, cosmological, teleological, moral)

Challenges to religious belief

Religion and Science

#### Unit G575: Developments in Christian Theology

St Augustine on human nature

St Thomas Aquinas on creation

John Calvin on the knowledge of God

James Cone on the person of Christ

Interpretation of the Bible

Liberation theology

### **A2 Syllabus**

#### Unit G581: Philosophy of Religion

Religious language

Religious experience

Miracles

The nature of God

Life after death

#### Unit G584: Religious Ethics

Meta-ethics

Free Will and Determinism

The nature and role of Conscience

Virtue Ethics (Aristotle)

Natural Law (Aquinas)

Kant

Utilitarianism

Christian Ethics

Medical Ethics

Business Ethics

Sexual ethics