



ABINGDON

MIDDLE SCHOOL

CURRICULUM

September 2018

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Introduction

This booklet provides an introduction to the Middle School curriculum at Abingdon School. It covers the main academic subjects in the third, fourth and fifth years, together with topics such as personal, social and health education, physical education and sport, and career guidance. It does not deal, however, with the ethos of the school, or the pastoral system.

After a brief introduction to the curriculum, the pattern of subjects in the third, fourth and fifth years is outlined in two tables. Finally more detailed information about academic subjects and other topics are given, together with contact details of the relevant Head of Department.

Outline

The Middle School is comprised of the third year, fourth year and fifth year (National Curriculum Years 9 to 11). The third year is a foundation year, in which we integrate our intake from the Lower School and from preparatory schools, and begin in earnest the majority of GCSE courses. In the fourth and fifth years pupils pursue a more limited range of subjects for GCSE.

Set sizes

Pupils are taught in sets of twenty, on average. In some subjects, such as the top Mathematics sets, and in History and Geography in the options blocks, set sizes may be larger than this. On the other hand, in the lower mathematics sets, the languages, and the practical subjects, such as Art, Music, Design and Technology and Drama, they are smaller.

Assessment and Reporting

Each half term, teachers complete a report that summarises a pupil's academic progress, which is sent to his parents. Each year there is a parents' evening, at which the staff meet the parents face-to-face to discuss progress. There are internal examinations in summer in both the third and fourth years. GCSE mock examinations take place in the January of the fifth year.

GCSE and IGCSE grading

Since 2017 some GCSEs in England have been graded from 9 to 1 instead of A*-G. Many IGCSEs also use the new system. At Abingdon we anticipate all GCSEs and IGCSEs will be graded from 9 to 1 from summer 2020.

New grading structure	Current grading structure
9	A*
8	
7	
6	B
5	
4	C
3	
2	D
1	
U	E
	F
	G
	U

Distinctive features of the Abingdon curriculum

Several distinctive features of the Abingdon curriculum require some emphasis.

In the first place boys may choose whether to study three separate sciences to GCSE or to take “dual award science”. This choice is based on a pupil’s interest in science since the dual award scientists spend fewer periods per week studying science. This allows dual award scientists to timetable an additional optional subject for GCSE. This choice is discussed more fully in the Science section later in this document.

Secondly, in PSHCE lessons and in tutor time we have some additional teaching in personal and social education.

At each stage there are optional choices to be made. The relationship between the optional and compulsory subjects is shown for each of the year groups in the tables on subsequent pages.

Pupils are set by ability when this is appropriate, particularly in mathematics and science. Attention is paid to differentiation; that is, trying to ensure that all the pupils in a set are stimulated at a level relevant to their ability. In many subjects we enrich the GCSE curriculum with topics beyond the syllabus.

In the third year, all pupils study Art and Design & Technology. These subjects become optional in the fourth and fifth years.

For further information about the curriculum please contact the Curriculum Director.

Mr Oliver Lomax
Curriculum Director
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February 2018

Pattern of subjects

This is the pattern of subjects proposed for the 2018/19 timetable. Lessons are typically 55 minutes in duration.

Third year (National Curriculum year 9)

Boys are taught in the same groups for English, History, Geography and Religious Studies. There are also eight sets for Science, where boys are taught in the same groups for Biology, Chemistry and Physics. Boys are allocated sets based on ability in Mathematics, Science and in French after one term. There are two option blocks.

Compulsory subjects		lessons per fortnight
	English	5
	Mathematics	5
	Biology, Chemistry, Physics (rotated through the year)	6
	Main language (French for most, German for some from lower school)	4
	History	4
	Geography	4
	Religious studies	4
	Art	2
	Design Technology	2
	Computing	1
	Personal, Social, Health and Citizenship Education	1
	Physical education	2
Optional subjects: Two to be chosen from:		4 for each
	Latin	
	Greek	
	Ancient History	
	Second languages started from scratch: German, French, Spanish, Mandarin Chinese	
	Drama	
	Music	

Fourth and fifth years (National Curriculum years 10 & 11)

Compulsory Subjects:		Fourth Year (lessons per fortnight)	Fifth Year (lessons per fortnight)
	English and English Literature	6	6
	Mathematics	5	6
	Biology	5 (3 double award)	5 (4 double award)
	Chemistry	5 (3 double award)	5 (3 double award)
	Physics	5 (4 double award)	5 (3 double award)
	Main MFL (French, German or Spanish)	5	5
	Personal, Social, Health & Citizenship Education	1	
	Physical education	1	1
Optional Subjects: Separate scientists choose three Double award scientists choose four		5 for each	5 for each
	Geography		
	History		
	Religious Studies		
	Latin		
	Ancient History		
	Second languages: German, French, Spanish, Mandarin Chinese		
	Greek		
	Electronics		
	Computer Science		
	Music		
	Art		
	Design & Technology		
	Drama		

Boys are allocated sets based on ability in the Sciences, Mathematics and Latin. In maths, the boys will be re-set at the end of November, based in part on the results of an examination. From January the top set follow an accelerated course. There is the opportunity for some further changes to these sets at the end of the year if necessary. Science and Latin sets will usually remain unchanged throughout the year.

Pupils doing all three separate sciences to GCSE make **three** subject choices from the option blocks. Those taking double award science are still taught science by three separate, specialist teachers, but have fewer science lessons each week and gain only two science GCSEs. Double award science students make **four** subject choices from the option blocks. Within these four choices they must study at least one of History and Geography (they may study both). GCSE science is more fully discussed in the SCIENCE section later in this document.

ART

Edexcel GCSE Art & Design (2AD01)

<http://qualifications.pearson.com/en/qualifications/edexcel-gcses/art-and-design-2016.html>

Introduction

Art develops intellectual, imaginative, creative and intuitive capabilities. Working in a wide range of materials is encouraged and we therefore teach all the main disciplines: painting, drawing, printmaking, sculpture and ceramics. The study of the history of art runs alongside the practical teaching, providing boys with an increasing understanding of context and importance of visual literacy.

From September 2018, the department will be housed in the new Beech Court complex, with three fine Art studios, a specialist ceramics studio, darkroom and spacious Sixth form studio. The four teaching staff each have their own area of specialism and are supported by a full time technician

The Courses

In the third year, all boys have a lesson a week of art. The aim is to give a broad and exciting range of experiences and approaches to the subject, to develop skills and progress understanding. It is often a chance for boys to rethink their abilities and discover afresh an enthusiasm for the subject. The course also provides an insight into the skills required for GCSE.

At GCSE we offer Art and Design: Fine Art. Taught in 5 lessons over the two-week cycle, the course allows students to develop work in a variety of media and informed by the example of other artists and designers. The course allows for increasing specialisation but we believe it is important that a wide range is explored at the start.

The GCSE consists of two units. The first is a portfolio of work developed over the course to be submitted for final assessment early in the Summer term of the fifth year. The second is an externally set unit, the final piece of which, after almost a term of preparatory studies, has to be completed in ten hours, in exam conditions. This exam takes place in the last week of the Lent term. All the work is then marked internally and moderated by an external examiner who views an exhibition of the work in the school.

We run regular trips to galleries and organise workshops with visiting artists and designers. Details of recent events may be viewed on the art and design pages of the school website.

http://www.abingdon.org.uk/art_and_design

Boys thinking of careers in architecture or other design/creative areas should especially consider opting for art and design at GCSE. Most boys are capable of taking the subject through to A level if they wish. In the sixth form, boys combine A level art with a wide variety of other subjects and without detriment to their university applications in a wide range of subjects.

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CAREER GUIDANCE

Abingdon School's Career Guidance Programme takes pupils aged 12-18 (2nd Year to U6) on a journey of self-discovery, helping them to identify potential careers to which they are well suited, understand and experience the world of work, make educational choices informed by careers planning, and learn key skills needed in education and employment.

In short, our goal is to help every pupil think carefully about, and take practical steps towards realising, his future career.

The Career Guidance Programme combines online career information resources with career planning lessons, skills workshops, one-to-one career guidance meetings, and a wide range of events and activities, including career sector talks, a career fair, alumni career advice evenings, and work experience schemes.

Every Year group enjoys a set of bespoke activities designed for its step in this journey, with one Year's activities smoothly transitioning into that of the next Year. This design ensures coherence from Year to Year and puts pupils in the best position possible to make informed educational choices at the end of each key stage in their education: GCSE, A-Level, and all post-18 options, including Higher Education.

3rd Year Programme

In September, the Head of Career Guidance speaks at 3rd Year Assembly to inform all new pupils (and remind all returning pupils) of the career resources that are available to them in the main school library and on the school's study site (intranet). Boys are again encouraged to browse print and online career materials suitable for their age with a view to making their GCSE subject choices in February. Throughout the rest of the term, tutor groups visit the library and get a presentation of online resources.

Concurrently, every 3rd Year pupil attends an 'Exploring Careers' lesson in which they explore a wide range of careers and learn how these careers are similar to and different from one another in a variety of very important ways. In so doing, pupils will learn how to research and evaluate careers against what is important to them. Equipped with these analytical skills, they can continue their own independent career research in the library and online, all with a view to identifying some potential careers to which they are well matched. If entry into any of these careers requires study of a specific subject, this information can be used to help pupils make GCSE subject choices in late February. The Head of Career Guidance is available to meet pupils 1:1 to discuss their career interests until GCSE subject choices are made.

In the Summer Term, 3rd Year pupils receive training in team working skills, which become especially critical during GCSE Years.

4th Year Programme

The focus of career guidance in 4th Year is to help pupils build additional GCSE-critical soft skills, clarify and refine potential career directions (in so far as is natural), and prepare for the following Year's work experience programme.

In Michaelmas term, 4th Year pupils receive training in group decision making skills, which are critical during GCSE Years, especially for academic group project work and various 'Other Half' activities and competitions.

Throughout the Year, 4th Year pupils continue to have access to the Online Career Information Programme as well as the library and study site (intranet) and can schedule 1:1 meetings with the Head of Career Guidance.

In Lent Term, every 4th Year pupil attends an 'Applying for Work Experience' lesson in which they learn how to write a CV and covering letter. Pupils can attend subsequently a walk-in clinic to get bespoke help with their CV and covering letter, which they will use to secure a work experience placement in 5th Year.

Finally, in May after 4th Year exams, pupils and parents can attend an evening event called 'The Truth Behind the Most Misunderstood Jobs' which helps to debunk persistent myths and shed light on the realities of a range of popular, if often misunderstood, occupations which boys may be considering (but potentially should reconsider) before making A-Level subject choices in 5th Year.

5th Year Programme

5th Year pupils have many opportunities to engage in Abingdon's Career Guidance Programme; 5th Year is a very important Year in terms of choosing A-Level subjects and preparing for the Sixth Form, getting first-time experience of the world of work, and deepening an understanding of potential future careers.

Given that tentative A-Level subject choices are made in late November of 5th Year, early in Michaelmas term, pupils complete an online skills and interest questionnaire that generates a report identifying potential career matches based on their specific answers to questions. Pupils receive this report and then have a career guidance meeting with an independent and experienced career adviser to discuss the findings in the report. This service is offered for a fee on an opt-out basis by an external career guidance supplier.

5th Year pupils continue to have access to career information resources in the library, on the study site (intranet) and via licensed online programmes, and for pupils interested in discussing further the findings in their report, and possible implications for A-Level subject choices, the Head of Career Guidance is available for follow-up 1:1 meetings through early February, at which time firm A-Level choices are made.

Kicking off at the beginning of the Year, and continuing in stages throughout, is a 5th Year Work Experience Scheme, strongly encouraged for all 5th Year pupils. Pupils are charged with finding their own placement and undertaking the placement for one or two weeks immediately after completion of their GCSE exams in Summer Term.

The annual Abingdon Career Convention, jointly run by Abingdon, St Helen's, and Our Lady's, is held on a Friday evening in mid-March and features parents and alumni of all three schools, as well as local employers, representing a wide range of careers. Pupils can meet with representatives one to one, participate in small group discussions, and attend panel presentations. The event is compulsory for 5th Year pupils.

Several times a year, the Career Guidance Programme brings external speakers to Abingdon School to host informal 'Career Insight Talks' either on a Thursday during P5/P6 or on a Friday during P8. These talks are designed to give pupils insights into what certain careers are like; highlight key personal qualities needed for success; explain the rewards and sacrifices of the job; describe different specialisms within the career; and reveal the different educational routes into the career. Career Insight Talks are especially useful to pupils unsure of what career they might pursue.

Finally, 5th Year pupils continue to receive skills training, this Year during Michaelmas term and covering project planning skills, which will be critical during their A-Level Years and beyond.

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CLASSICS

The classical subjects taught in the Middle School are Latin, Ancient Greek and Ancient History. No classical subject is compulsory, but most pupils study at least one; the range of subjects offered is such that there should be something to interest and fulfil every pupil. Most of those who studied Latin in the Lower School opt to continue in the Middle School.

There are six full-time classics staff, teaching in the departmental suite of rooms located in Greening Court. The department is keen to encourage pupils to see the importance of the study of the past to an understanding of the present, and to this end runs annual Classics trips abroad (recent destinations have included Provence, Tunisia, Italy, Greece, Sicily, Turkey and Crete) as well as trips to the Ashmolean, the British Museum and to Greek drama productions in Oxford and London. Pupils also attend GCSE conferences of relevance to set texts where possible, and speakers are regularly invited to the school to talk on a variety of associated topics.

LATIN

OCR GCSE Latin (J282)

<http://www.ocr.org.uk/qualifications/gcse-latin-j282-from-2016/>

Latin is taught using the new course written by Henry Cullen and John Taylor. This prepares pupils well for the GCSE course, since it concentrates on the relevant language skills, while we introduce pupils to an appreciation of Latin literature through reading a range of poetry and prose texts using our own materials. Before the end of the fourth year every pupil will have been exposed to all the grammar which he will need for GCSE, as well as having read a selection of the greatest Latin authors. The department also supplements the course with its own linguistic material, laying particular emphasis on the understanding of grammar.

Those pupils with more experience of Latin or exceptional ability are set together, with the intention that they will be able to pursue a broader course of reading in the fourth year.

The aim is to have completed the language element of the GCSE syllabus by the end of the fourth year. In this year, each set also begins to read real Latin literature, in preparation for the literary part of the GCSE. This is also an opportunity to study broader aspects of the Roman world, such as life in the city of Rome or the development of the Roman political system from republic to empire. The top sets are able to pursue this reading in more depth, but by the end of the year all the boys are ready for the final year's work, irrespective of their previous experience.

The GCSE itself consists of three examined papers (there is no coursework element). The language paper (worth 50%) tests the candidate's linguistic competence with unseen translation, comprehension and grammatical questions. For this paper there is a set vocabulary list, which we work towards learning gradually over the course. The other two papers are on set texts, one verse (25%) and one prose (25%). Pupils are expected to translate and comment upon their set authors. We expect almost all pupils who take the GCSE to achieve a very high grade on the new numerical GCSE grading system.

ANCIENT GREEK

OCR GCSE Classical Greek (J292)

<http://www.ocr.org.uk/qualifications/gcse-classical-greek-j292-from-2016/>

Ancient Greek offers a demanding and very highly respected GCSE. The influence of the Greeks on our modern world is almost limitless: science, drama, philosophy, history, democracy, architecture and art are but a few of the areas which the ancient Greeks either invented or developed hugely. The GCSE course offers a window onto these ideas through the study of their language and some of their literature, a literature of almost unparalleled impact. Most pupils come to Greek, having previously started Latin, but this is not essential: it has been studied very successfully by non-Latinists.

Pupils may start Greek in the Third Year, the GCSE being taken in the Fifth Year. A handful of boys - those who have read Greek to scholarship standard or higher common entrance level already at preparatory school - choose to take "Express" Greek outside the timetable, sitting the GCSE at the end of the Fourth Year.

Pupils are taught using the JACT course, which gives them a thorough grounding in grammar, and this is supplemented with the department's own material. As the course is shorter than Latin, with only three years to GCSE, it is not usually possible to read a selection of Greek authors before embarking on set texts, though the new course contains many passages from classical authors adapted to an appropriate level of difficulty.

The exam itself follows the same pattern as the Latin GCSE, with half the marks for language and half for literature. As in Latin, there is a set vocabulary for the language paper, and no coursework. The literature papers provide the opportunity to study some of ancient Greece's great literature, such as Homer, in the original.

ANCIENT HISTORY

OCR GCSE Ancient History (J151)

<http://www.ocr.org.uk/qualifications/gcse-ancient-history-j198-from-2017/>

Those who wish to study the ancient world without the further linguistic study required by Latin or Greek, may pursue a course in Ancient History, which offers a challenging and exciting programme of study of the military, political and social history of the Greek and Roman worlds.

There are usually about forty pupils a year who pursue such a course in the Third Year, and they will study foundation topics devised by the department. After a general introduction to the ancient world, they will study ancient entertainment (looking at the Greek Olympics and in Rome chariot-racing and gladiatorial shows), and Greek and Roman politics (focusing on Athenian democracy and the Roman republican system run by the senate). We also study Roman Britain in the form of an extended essay: in the summer term to support this we undertake a trip to relevant ancient sites, whether on Hadrian's Wall or closer to home.

The GCSE course proper starts in the Fourth Year, and thus it is possible for pupils to opt for Ancient History at this point if they wish. Pupils have to study four topics, and there is no longer any coursework module. For the four papers, we study: the Persian Empire and the attempted wars of conquest against the Greeks; the development of democracy in Athens from the tyrannies which preceded it; the foundation of Rome from the mythical period of Romulus through to the origins of the republican political system; and finally the exotic figure of Cleopatra and the impact she had on Roman politics.

All ancient authors are read in translation, and so no knowledge of Latin or Greek is needed or assumed.

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DESIGN & TECHNOLOGY

AQA GCSE Design & Technology (8552)

<http://www.aqa.org.uk/subjects/design-and-technology/gcse/design-and-technology-8552>

The department has 3 well-equipped workshops, a design classroom and two dedicated ICT suites located within the design and technology centre. Pupils are encouraged to work with a diverse range of materials and the department has a wide range of computer-controlled machines, allowing an industrial approach to design and manufacture.

The department is open most afternoons for boys to pursue their own interests or to enable them to continue with their coursework projects.

Third Year

Approximately a half of the third year pupils are new to the school and may have very different design and technology experiences. All of the projects that they cover are designed to follow an iterative design process, starting with the design brief, research and idea generation, through to the modelling, making, testing and evaluation. The main emphasis in the third year is on developing confidence in the workshop and gaining an understanding of materials and manufacture. The projects taught develop in difficulty and demand as the year progresses and include an introduction to the laser cutter and 3d printing facilities. The aim is to ensure that when the pupils finish the third year they are able to make informed decisions about their GCSE options.

Fourth and Fifth Year GCSE Options

During the fourth year the boys will complete a selection of mini projects designed to give them experiences in a wide range of material areas, while developing their graphical communication and computer aided design skills. These provide them with the bulk of the knowledge for the written examination (50%) and also help them decide what materials they may wish to incorporate into their coursework. Projects will combine traditional practical skills with more innovative processes such as 3d printing and computer controlled manufacture. The emphasis is on developing their theory knowledge through practical skills but also covers the major design movements of the 20th century and the study of several influential designers.

The coursework project is an important element of the GCSE and it contributes 50% of the GCSE mark. The project will be chosen by the student from some exam board contexts that are released on the 1st of June and will include, identifying a need and researching the problem through to generating initial ideas and developing a chosen solution, planning for construction and finally product manufacture. The design folio will involve a large amount of ICT and CAD work.

The course aims to encourage students to develop and sustain their own innovation, creativity and design and technology capability. The GCSE course will suit those who are problem solvers, enjoy challenges and those who have the motivation to work consistently throughout the design and manufacture of their coursework piece. Students will need excellent time management skills to excel in the coursework and there is also a maths content that is assessed in the written paper.

Design and technology aims to provide boys with the skills needed to solve practical problems that reflect D&T in the wider world where materials are combined together in the manufacture of innovative products, as well as foster awareness amongst boys of the need to consider sustainability and the environmental impact of their designing.

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DRAMA

Edexcel GCSE Drama (DR0)

<https://qualifications.pearson.com/en/qualifications/edexcel-gcses/drama-2016.html>

Drama is a popular option for many boys with an interest in the arts. It is taught by members of the drama department. Pupils studying drama see a number of plays and take part in productions as part of the assessment. They are also encouraged to participate in extra-curricular productions (many involving girls from St Helen's). The subject often attracts those with an interest in film, such as members of the Abingdon Film Unit. At GCSE level, drama involves some rehearsals in out-of-school time, so a firm commitment is essential. Above all, drama has a three-dimensional character so that in addition to the key academic skills of reading and interpreting, writing, analysing and evaluating, you also need to be able to bring ideas to life as a performer. You need a good imagination. Perhaps most importantly, you need to be able to work well with others.

In the third year, boys choosing to study drama are taught in three or more sets for four periods per fortnight. The course shadows many aspects of Edexcel's GCSE course, and our aim is to introduce all the key components of that course: acting skills (movement and voice); the study of a play text from the point of view of an actor, designer and director; evaluation of live theatre; devising and performing an original piece of theatre alongside presenting extracts from scripted plays. At all stages, students learn to evaluate their own and others' work, and to assess their skill levels more objectively. The third year course also involves visits to live theatre productions, usually during the evening.

The Edexcel GCSE Drama course (DR0) occupies fourth and fifth years. At this level, there are usually two sets in each year, both taught for five periods per fortnight. The GCSE course is assessed in three main components. Component 1 involves devising and performing an original piece of theatre, followed by a 1,500-2,000-word portfolio analysing and reflecting on the devising process. This component accounts for 40% of the total marks and is internally marked and externally moderated. Component 2 requires students to prepare and perform two key extracts from a published play text in front of a visiting examiner. Extracts can be any combination of 2-3 minute monologues, 3-5 minute duologues or group pieces involving 3-6 performers and lasting 10-15 minutes. Component 2 accounts for 20% of the marks. Component 3 is a 90-minute written paper set at the end of the course. It requires students to answer questions on the staging of a set play from the perspectives of an actor, director and designer, and answer a question involving the evaluation of a live theatre performance. It constitutes the remaining 40% of the marks and is externally marked.

The first term of the fourth year course involves induction activities and skills development sessions, alongside a trial devising and portfolio unit as an introduction to the demands of Component 1. In the second term, students study a set play and perform two key extracts from it as a way of preparing for the demands of Components 2 and 3. Across terms 1 and 2, they also attend live theatre productions and develop the skills to write with insight about what they have seen. In the third term, students sit a trial written exam before embarking on the process of devising their final Component 1 pieces. Starting the process at the end of 4th year allows research and development activities to continue over the summer holidays, so that the finished pieces can be performed and assessed around October in the fifth year. Drafting and finalising the portfolio occupies the remainder of the Michaelmas term of fifth year alongside preparation for the Component 2 acting exam pieces. These are assessed by a visiting examiner some time in January-March. At the start of January, students sit a mock written paper. After the Component 2 exam, the final weeks of the course involve practice and revision for the Component 3 written paper in June.

The GCSE course leads on to GCE A Level Drama and Theatre (Edexcel 9DR0) in the sixth form, where it is taught jointly with St Helen's, offering pupils a taste of co-education. It combines well with almost any other A Level subject, especially other Arts subjects such as English, Art, Music, History or Languages.

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ELECTRONICS

WJEC GCSE Electronics

http://www.wjec.co.uk/qualifications/electronics/edugas-electronics-gcse-from-2017/edugas-gcse-electronics-spec-from-2017-e.pdf?language_id=1

Electronics is part of everyday life. It has applications in computers, telecommunications, radio and television, industrial process control etc. Research and development in the electronics industry plays a key role in the country's economic success. Electronics GCSE level reflects up-to-date practice into electronics, and highlights real world applications.

Pupils will be given a broad understanding of the fundamental aspects of electronics. In the fourth year they are taught basic electricity, timing circuits, digital logic, and use of semi conductors. The fifth year syllabus covers sequential logic, microprocessors, amplification systems, and communication systems.

Electronics is a practical subject and practical work is given a strong emphasis throughout the course.

There is a practical project that is worth 25% of the overall GCSE grade. In this project, the pupil should identify a specific, applied electronic problem to be solved. He should consider alternative solutions and give reasons for selecting the chosen solution, conduct background research, devise appropriate circuit diagrams, construct and test the system, suggest suitable modifications, and produce a report which details all stages of the development.

Although the basic electricity taught in Physics underpins Electronics, most of the subject content in Electronics is unique and not part of the Physics syllabus. Electronics is, in essence, an engineering subject and not a science. Its emphasis is, therefore, much more on practical application.

Electronics is suitable for candidates from a wide ability range: for some, the summit of achievement may be to construct and describe simple circuits, while others may gain sufficient depth of understanding to design systems to solve original problems.

Electronics combines a high level of academic rigour with a high level of invention and design. It gives pupils the vital knowledge and expertise to enable them to contribute in an increasingly technological society. The intention is to allow 'hands-on' experience in order to promote a deeper understanding, as well as a broader appreciation of potential applications. Electronics compliments and enriches a broad curriculum. It provides a contrast to arts and humanities subjects. It offers skills such as problem solving, analytical thinking, communication of complex ideas, acquisition of knowledge, numeracy, and fine manual dexterity. Electronics extends and encourages a pupil's interest in science and technology.

The school does not offer Electronics at AS or A-level.

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ENGLISH

AQA English Language (8700)

<http://www.aqa.org.uk/subjects/english/gcse/english-language-8700>

AQA English Language (8702)

<http://www.aqa.org.uk/subjects/english/gcse/english-literature-8702>

The vision of Abingdon School's English department is to foster boys' love of reading and writing through creativity and pursuing new ideas. We pride ourselves in the personalised nature of our teaching, focusing on innovative lessons and active learning, with a particular emphasis on precision and personal response.

At Abingdon, we believe that success at the higher levels is underpinned by a breadth and depth of knowledge through study in the Lower and Middle Schools. In the Middle School, pupils study a wide range of texts, beginning the year with our new *History of English Literature* unit, taking boys through the canon from Chaucer, Shakespeare, Milton and Dickens, through to Blake, Eliot and Woolf. We are extremely proud of the breadth and rigour of this unit, and we truly believe boys' knowledge of literature underpins their future love of it. Following this, boys study a full Shakespeare play, a 19th-century novel such as *A Christmas Carol* or *Frankenstein*, before exploring creative writing where they learn how to vary language and to construct persuasive arguments. This year, boys are also studying Blake's *Songs of Innocence and Experience* in the summer term. We are confident our Third Year curriculum equips the boys most excellently before they embark on the new 9-1 English GCSEs. As well as being essential for success in English, these skills are invaluable across the school curriculum and in the world of work.

Pupils in all year groups are encouraged to read widely outside the classroom and in the first and second year we work closely with the Library to use the Accelerated Reader scheme which monitors boys' reading progress and helps them to choose books appropriate to their reading level. We also maintain a strong focus on technical accuracy with a programme of explicit grammar teaching and regular tests.

English is compulsory up to the end of the fifth year, with all pupils studying towards two GCSEs. We believe the AQA GCSE offers pupils the strongest and most rounded experience of English in Middle School years. The qualification is widely respected for its rigour and quality, and is 100% exam-assessed. As examinations approach, staff offer regular drop-in clinics (English Plus) for all pupils.

The study of English at Abingdon provides the gateway to future success; it is a subject which fosters creativity and naturally leads to discussion and debate. As a result, the English Department places a special emphasis on co-curricular classes and activities. The Literary Society and Creative Writing Group *Scribble* encourage boys to extend their reading and writing beyond the curriculum. Pupils produce their own creative writing magazine, *Words and That*, and can contribute to the school newspaper: *The Martlet*. We arrange regular theatre trips and lectures, plus we work closely with theatre companies who perform productions of set texts.

Joanna Bridgeworth (joanna.bridgeworth@abingdon.org.uk)

GEOGRAPHY

Edexcel IGCSE Geography

<https://qualifications.pearson.com/en/qualifications/edexcel-international-gcses-and-edexcel-certificates/international-gcse-geography-2017.html>

The IGCSE course is taught over two years: geography is compulsory within our third year curriculum and then becomes an option subject for the fourth and fifth years. We intend to cover a range of themes in the third year that, we hope, offers a broad and contemporary experience of geography and therefore allows pupils to make a measured judgement about the subject. Themes studied include fragile environments, population geography and the geography of health and disease.

This modern course includes many contemporary issues that are becoming increasingly relevant and important: geography is uniquely placed to give pupils an insight into these issues that will affect them in the future. Fieldwork is incorporated into our teaching throughout the middle school. GIS (Geographic Information Systems) is now also integrated into our teaching. GIS is now at the core of most academic geography teaching and certainly all undergraduate geography courses.

Assessment: From 2019 there will be 2 exam papers: both will include fieldwork questions:

Paper One: Physical Geography

Paper Two: Human Geography

There are 4 components to the course:

A. The Natural Environment and People: the following themes will be developed:

River Environments – including water resources, and the growing cause for concern that this crucial resource poses in some parts of the world.

Hazardous Environments – this includes the study of both tectonic and meteorological hazards and the impacts they have on societies and development.

B. People and Their Environments: includes

Economic Activity and Energy – includes an assessment of the relative importance of different economic sectors, changing industrial locations and global shift. In addition, this unit examines the rising demand for energy and the growing energy gap.

Urban Environments – considers the nature of urbanisation and the associated problems of rapid urbanisation and change within urban areas eg: the rise of the megacity. Also issues related to segregation of different socio-economic and ethnic groups will be explored. During this option a field day visit to Oxford is arranged during the summer term of the fourth year.

C. Global Issues: this set of themes brings this specification up to date and deals with many contemporary issues that geography should be tackling in the middle school.

Development and Human Welfare: this unit explores the differences in development, human welfare and inequality that exist around the world at a variety of scales. The significance of population policies and changing demographic patterns and structures will also be explored.

D. Practical geographical enquiry and fieldwork skills: students are required to complete two pieces of fieldwork research during the course: one physical geography and one human geography. This is then examined in the respective examination paper. Fieldwork is undertaken in Abingdon and Oxford for this section of the course. There is no need to complete any formal project for submission and assessment.

Ian Fishpool (ian.fishpool@abingdon.org.uk)

HISTORY

Edexcel IGCSE History (4HI1)

<https://qualifications.pearson.com/content/demo/en/qualifications/edexcel-international-gcses-and-edexcel-certificates/international-gcse-history-2017.html>

The History department at Abingdon prides itself in being academically rigorous and educationally forward thinking. We believe that it is vital that lessons are dynamic, engaging and interactive so that pupils enjoy their learning. It is our aim at all times to use creative and imaginative teaching techniques which are geared to challenge and facilitate learning for the full range of learning styles.

The central objectives of the department are twofold: to foster enthusiasm for, and a life-long interest in, the past, its events and characters, and to help boys to develop an understanding of the significance of these events and characters and the connections between them. Boys not only investigate 'who?' and 'what?' but are also encouraged to analyse 'why?'

The department is housed in modern, purpose-built accommodation in Mercers' Court and the boys are encouraged to make increasing use of the opportunities afforded by the ICT Centre nearby.

History is a compulsory subject in the third year. The theme for the year is 'War and Revolution'. Boys are encouraged to understand causation and also to examine how both war and revolution act as catalysts for change. The year focuses on the French Revolution and the origins and course of the First World War, which should provide an interesting and stimulating range of material for all.

The department has amassed a wide variety of resources - topic books, 'in-house' booklets, videos, DVDs and computer-generated materials - to support the chosen subject matter. To add an extra dimension to the course all third year boys are offered the opportunity to visit the First World War battlefields of the Ypres Salient and the Somme at the start of the Easter holiday.

GCSE history, an optional subject at Abingdon, is a two-year course in the fourth and fifth years. The syllabus (Edexcel IGCSE) has been updated for 2017 and is examined in two one and a half hour papers:

Paper 1:

- Themes section-Germany 1918-1945 and Superpower relations 1945-73

Paper 2:

- A depth study on Russia in Revolution, 1905-24
- A study in change section, Conflict, crisis and change: The Middle East 1919-2011

An optional trip to Germany in the summer half term of the fourth year will help to bring to life elements of Hitler's rise to power as well as introducing boys to some of the key elements of the Cold War (focused on events around Berlin) that they will also study in the fourth form.

We are fortunate in having excellent resources for the GCSE course. We have a number of topic books and ICT resources and a rich variety of DVD and video materials. Once again, the boys benefit from the use of the ICT Centre close by and the use of data projector and interactive whiteboard materials in the History classrooms. The students subscribe to *Hindsight* magazine throughout the two years, which is also a helpful resource.

It is our intention that the range of history topics offered in the Middle School at Abingdon should provide many insights into the essential underpinnings of the world in which we all live. Furthermore, the skills of argument and critical evaluation developed during these key years contribute significantly to individual academic development, irrespective of the path a boy chooses to take in the sixth form.

David McGill (david.mcgill@abingdon.org.uk)

THIRD YEAR COMPUTING

Through their work in the Computing department, pupils are encouraged to develop informed, intelligent and confident attitudes to computers and technology, so that they will develop abilities which, as well as being of value in school, prepare them for their further education and careers. Cross curricular links with Computing are strongly encouraged and many lessons in other subjects either take place in our shared Computing suites or in the departments themselves.

Abingdon has a school-wide network of Apple Mac computers in addition to the BYOD scheme that now runs across all of Middle and Upper School. The Computing department has a dedicated suite and there are clusters of computers elsewhere in the School. This arrangement enables departments throughout the school to share centralised resources, including the storage of pupils' work, access to material prepared by staff, a wide range of software, access to the Internet and Study Site, etc.

The 3rd Year compulsory Computing curriculum will focus on combining functional skills (e.g. using word processors and spreadsheets), digital literacy (e.g. research skills and online behaviour) and Computer Science (e.g. coding and how networks work). This broadly follows the Key Stage 3 National Curriculum, tailoring it to the needs of an Abingdon student and enabling them to get the most out of using the internet and technology throughout their school career.

Ben Whitworth (ben.whitworth@abingdon.org.uk)

COMPUTER SCIENCE IGCSE

Cambridge IGCSE Computer Science

<http://www.cie.org.uk/programmes-and-qualifications/cambridge-igcse-computer-science-0478/>

Computers and computerised devices are everywhere today. An understanding of how computers work, and how to solve problems using them, transforms you from being simply a consumer of modern technology to having the potential to shape our modern world. A computer scientist undertakes a creative role which connects the very fast but very rigid calculating power of a machine with a myriad of interesting human problems, from science and engineering to art.

At this level Computer Science helps to develop an interest in computing and to gain confidence in computational thinking and programming. 60% of the course is Computer Science theory including data representations, communication and internet technologies, computer hardware and software, and security and ethics. The remaining 40% relates to practical problem-solving and programming, which includes a study of algorithms, programming and databases. If you have an interest in logic puzzles, and also have a persistent approach to problem-solving, you should take to programming. The programming itself will be in Python, a high-level language which has many applications beyond the classroom. You will need access to your own computer to undertake programming tasks.

There is no coursework component to this course and both sections are examined via external exam.

NB: Due to the similarity of some aspects of the courses we only allow you to take one of Computing and Electronics at Abingdon at GCSE level.

Peter Willis (peter.willis@abingdon.org.uk)

MATHEMATICS

Edexcel IGCSE Mathematics A

<http://qualifications.pearson.com/content/dam/pdf/International%20GCSE/Mathematics%20A/2016/Specification%20and%20sample%20assessments/International-GCSE-in-Mathematics-Spec-A.pdf>

OCR Additional Mathematics (6993)

<http://www.ocr.org.uk/Images/457916-specification-from-2018-.pdf>

Mathematics is compulsory for all students in the Middle School, and all will have taken at least the equivalent of GCSE in the subject by the end of the fifth year. As well as enabling each student to achieve his potential in examinations, the course is designed to give everyone the opportunity to develop their ability to think through problems, and develop the mathematical skills and understanding which will support work in other scientific subjects, in the social sciences, and for later employment and adult life. The department aims that students should become aware that mathematics is an interesting and enjoyable field in its own right, and also that it continues to be central to many diverse and important branches of endeavour in the modern world. The mathematics course for the Middle School covers the requirements of the National Curriculum, adapted as necessary to the requirements of Abingdon.

An important part of the focus at Abingdon is that Mathematics can be the basis of rigorous and creative thinking skills. The third year programme of study concentrates on ensuring that all boys reach at least a common minimum standard of proficiency, (regardless of their previous mathematical experience), but has also been designed to give students the opportunity to engage with more open-ended tasks which require thought and tenacity. The 4th and 5th years are spent focussing on the requirements of the syllabus for IGCSE and/or Additional Maths.

There are usually nine sets for Maths in the Middle years. Students are assigned to sets based on their previous attainment, but also to where they will flourish and be happy. Movement between sets is possible when necessary, usually taking place at the end of a year. The majority of our students achieve very high grades, no matter which set they are in. The top sets complete the material for IGCSE at a fast pace. They will have completed most of the syllabus for IGCSE by the end of their 4th Year and will then begin on the material for Additional Maths, in the 5th Year.

All sets take IGCSE at the end of the 5th Year. Students are entered for the International GCSE examination provided by Edexcel (4MA1). Assessment consists of two written papers, of two hours each, which are taken at the end of the course. The requirements for this examination are comparable to GCSEs offered by other boards. All boys will be entered for the Higher Level of this examination, which means that the highest grades are accessible, in principle, to all. Top sets will be entered for Additional Maths provided by OCR (6993). This consists of a single 2 hour paper.

All good mathematicians enjoy solving problems and puzzles, and a regular diet of these is provided to boys to stimulate interest and enthusiasm for the subject. There is a regular 'puzzle of the fortnight' competition aimed specifically at Middle School pupils. Some boys are entered each year for the UK Intermediate Mathematics Challenge contest, with a number regularly being invited to take part in the second round of this competition. There are weekly Maths Clubs, who spend a good proportion of their time on the National Cipher Challenge in the autumn term and then work on other mathematical projects and puzzles through the rest of the year.

Samantha Coull (samantha.coull@abingdon.org.uk)

MODERN LANGUAGES

French, German, Spanish and Mandarin Chinese are all offered to boys entering the third year. We aim to foster a love for the countries in which these languages are spoken and to generate an enthusiasm for learning languages. We provide opportunities for pupils to appreciate the culture of the countries of their target languages, running exchanges in France, Germany and Spain, organising visits of touring theatre companies and many other trips. The study of modern languages at Abingdon gives them enjoyment and satisfaction, as well as intellectual stimulation.

All boys in the third year must study French or German and may study any one or two of the starter languages on offer alongside. All boys must study French, German or Spanish up to IGCSE, and many continue with two languages and in some cases even three. Many boys combine a modern foreign language with other A-level subjects in the sixth form.

We create a secure, supportive and respectful learning environment within the classroom so that each student feels confident in his own ability to communicate effectively. We endeavour to enable all students to achieve their potential, thus embracing not only the idea of communicative competence, but also that of academic excellence. Extra lessons are provided to both weaker and gifted pupils, tailoring what we offer to ensure every boy's individual needs are met.

We are committed to the predominant use of the target language in all classes, whilst acknowledging that the use of the English can sometimes be more appropriate, particularly for the delivery of grammar, in order to ensure full comprehension. We deliver lessons using a variety of techniques and a broad range of resources. Regular opportunities for success in learning provide students with a positive attitude towards their own language acquisition. This is reinforced by regular contact with our foreign language assistants, particularly for boys in the fifth year who benefit from an additional weekly oral lesson.

Our modern languages classrooms are all equipped with state of the art equipment. The department also has a set of iPads minis that can be booked for use during lessons and during the many clubs and support groups we run. We make the best use of vocabulary learning apps and authentic video resources on websites we subscribe to. A range of enriching Other Half opportunities are on offer including grammar and skills-focused clinics.

In French, German and Spanish, all boys are ready to begin the IGCSE course by the start of the fourth year. For IGCSE the skills of listening, reading, speaking and writing are developed and assessed with equal importance. The topic areas include media, school, future careers, health and fitness, home life, sport, entertainment, local area and the environment, travel and the wider world. For details of GCSE Chinese, please see the Mandarin entry which follows.

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GERMAN

Cambridge IGCSE German (7159)

<http://www.cambridgeinternational.org/programmes-and-qualifications/cambridge-igcse-german-9-1-7159/>

In third year, we are currently following the Foundation Stimmt course in preparation for the IGCSE. . From 4th year onwards, we follow the *Stimmt Higher GCSE course* throughout the Middle School. In the fourth year the majority of Germanists participate in our longstanding exchange with the *Ratsgymnasium* in Bielefeld, which has been running for fifty years, jointly with St. Helen's.

Alexandra Widdern (alexandra.widdern@abingdon.org.uk)

FRENCH

Cambridge IGCSE French (0520)

<http://www.cie.org.uk/programmes-and-qualifications/cambridge-igcse-french-foreign-language-0520/>

Our third year course is based on our own resources that we have developed in-house and boys are taught in entirely mixed sets for the whole year. In fourth and fifth year, we follow the *Tricolore Totale* course which matches the CIE IGCSE syllabus. There are two top sets and three or four mixed sets bases on boys' third year results and their linguistic potential. Boys in the fourth year are invited to participate in our exchange with *Lycée la Nativité* in Aix-en-Provence, which has been running successfully for over ten years.

Jane Mansfield (jane.mansfield@abingdon.org.uk)

SPANISH

Cambridge IGCSE Spanish (0530)

<http://www.cie.org.uk/programmes-and-qualifications/cambridge-igcse-spanish-foreign-language-0530/>

The Spanish department follows the Heinemann *Mira Express* course, which matches the CIE IGCSE syllabus. Boys in the fifth year have the opportunity to take part in our Spanish exchange with *Colegio Peleteiro* in Santiago de Compostela. This is also run jointly with St. Helen's.

Victoria Pradas (victoria.pradas@abingdon.org.uk)

MANDARIN CHINESE

AQA GCSE Chinese (Spoken Mandarin) (8673)

<http://www.aqa.org.uk/subjects/languages/gcse/chinese-spoken-mandarin-8673>

The Mandarin Chinese Department follows the AQA GCSE course, which takes three years. The AQA GCSE (8673) in Spoken Mandarin consists of four externally examined papers based on the following skills: listening, speaking, reading and writing. They are organised into three themes, each broken down into topics and sub-topics. The three themes are: 1. Identity and culture 2. Local, national, international and global areas of interest 3. Current and future study and employment

All themes and topics must be studied in the context of both the students' home country and that of countries and communities where Chinese is spoken.

All Abingdon students always take the Higher Tier paper in four skills. Boys studying Chinese are invited to various of culture events and may have the opportunity to take part in the trip to China as part of the course.

Gao Zhang (gao.zhang@abingdon.org.uk)

MUSIC

Examination Board – Edexcel GCSE Music 1MU0

http://qualifications.pearson.com/content/dam/pdf/GCSE/Music/2016/specification/Specification_GCSE_L1-L2_in_Music.pdf

The aims of the music department in the Middle School fall broadly into line with those published in the Edexcel specification for music which is adopted in the fourth and fifth years: We aim to inspire the pupils through a broad course of music study; to develop broader life skills, such as aesthetic understanding, emotional awareness, self-discipline, self-confidence and self-motivation. We want the pupils to engage actively in the study of music, and appreciate a range of different kinds of music. These aims are developed through a range of engagement with music as performers, composers and listeners.

In the **Third Year music option** sets (four periods per fortnight) pupils are given a grounding in the three areas of experience required at GCSE (performing, composing and listening). **Performing** is delivered through instrumental lessons and ensembles, with a class concert involving all pupils towards the end of each term. The **Introduction to Composition** course includes basic melody writing, simple harmonization, and bass line construction. Knowledge of form is applied through the writing of a simple piece in Rondo Form. Work in **Listening and Analysis** is delivered through the study of selected works under the following six headings: Form and Structure, Harmony and Tonality, Texture, Melody, Rhythm and Metre, Instrumentation. The selected works show a progression of musical form through the Baroque and Classical periods of History: Binary Form (*Bach - Gigue from Partita 4*), Ternary (*Handel - Dove Sei*), Rondo (*Rameau - L'Ingenue*), Theme and Variations (*Haydn – Theme from Judas Maccabeus*) and Sonata (Mozart – *Eine Kleine Nachtmusik*). The boys are also introduced to the use of music technology (Sibelius software) in the department's technology room. The boys take a listening/theory of composition examination at the end of the year. The course highlights the importance of a sound theoretical training as a preparation for the GCSE music course in the fourth year. Pupils cover the topics associated with the grade 3 syllabus of ABRSM and take the examination at the appropriate level (minimum grade 3) in the Lent Term. Those who have already achieved their grade 5 level use lesson time to study advanced performance techniques.

In the **Fourth Year** the two music option sets start the Edexcel Music GCSE course and take the examination after two years. The **listening** work (two periods) involves the analysis and discussion of a wide variety of music through four areas of study and eight set works of different style and origin. **Performing** continues to be coordinated through instrumental lessons and boys are allocated various chamber groups during the course of the year as well as in school orchestras, bands and choirs. The boys are expected to sing at least once a week and are encouraged to perform regularly at informal concerts. In **composing (two periods)** the boys undertake a number of compositional exercises using Sibelius software.

In the **Fifth Year** the boys complete the four areas of study and have a mock examination paper set at the start of the fifth term of the GCSE course. By the end of the Lent Term they expect to have recorded and assessed the prepared **performances** (solo and ensemble) and to have submitted the two **compositions** required.

The music department provides regular opportunities for the boys to attend trips to concerts and operas, both in Oxford and further afield in Birmingham and London. As singing and confident pitching is regarded as an essential element of musicianship, the boys are required to take part in the Choral Society (Michaelmas Term). They are also encouraged to take part in the wide range of weekly meeting choirs and ensembles. This results in a busy and rich programme of concert giving throughout the year, which is enjoyed by pupils and parents alike.

Michael Stinton (michael.stinton@abingdon.org.uk)

Personal, Social, Health & Citizenship Education

PSHCE is an important part of life at Abingdon, and aims to foster boys' emotional growth through personal and social education within a programme that engages boys' emotional intelligence as much as their intellect.

The importance of PSHCE at Abingdon is such that in third and fourth year, it is taught by specialist teachers in fortnightly 55 minute lessons, covering the following topics:

3rd Year

- Friendship and Self Esteem
- Actions and Consequences: Bullying
- Risk taking behaviour
- Alcohol
- Healthy Eating
- Body Image
- Sex and Relationships

We also run an SRE morning every May for third years, which in the past has included performances about sexual health from professional Theatre-in-Education companies, as well as talks about men's health issues from the School Medical Officer, and STI's from visiting health practitioners.

4th Year

- Rights and Responsibilities
- Government and Politics
- Drugs Education
- Emotional Wellbeing
- Self Awareness
- Sex and Relationships II
- Pornography

In addition to these lessons, all pupils are under the guidance of a form tutor. In tutor time they will cover various topics centred around national focus weeks such as anti-bullying, mental health, e-safety, homophobia awareness, and SRE. Tutors work on a number of life skills topics with their tutees, including study skills.

5th Year

In fifth year, PSHCE is delivered in weekly tutor time by tutors, focussing on the following topics that are explored via a number of learning methods, such as discussions and practical activities:

- Healthy living
- Medical ethics
- Men's health issues
- Stereotypes and prejudice
- Personal finance
- Work experience
- Exam preparation
- Emotional resilience

The Librarian works with the third year on information skills and the fourth year on resourcing information.

Finally, a number of aspects of PSHCE are also taught cross-curricularly throughout the school via weekly chapel services, biology lessons and religious studies. This is also underpinned in the School's philosophy of the Other Half. Further information can be obtained by contacting Mr Ben Phillips, Head of Personal Development

Ben Phillips (ben.phillips@abingdon.org.uk)

RELIGIOUS STUDIES

Edexcel GCSE Religious Studies B (2016)

<http://qualifications.pearson.com/en/qualifications/edexcel-gcses/religious-studies-b-2016.html>

Religious Studies is a challenging academic subject that requires pupils to learn and understand difficult material and then to argue their viewpoint clearly. It is valuable in developing skills in writing and thinking and expressing an idea clearly and persuasively. It helps pupils to interpret information and to assess its importance.

Pupils need to be ready to consider new ideas and to argue a case. They do not need to have any particular religious conviction or any religious conviction at all. Religious Studies includes the study of fundamental questions about humanity and allows students to make informed personal responses to difficult contemporary issues.

The Third Year

This includes a study of religion and science, looking at fundamental issues of difference and compatibility. We focus in particular on issues relating to creation and evolution.

We also tackle areas relating to human conflict that contribute greatly to human suffering. We consider conflict in war and contemporary issues such as terrorism and nuclear proliferation as well as conflict in society: questions of justice and punishment, crime and execution.

A third area focuses on Philosophy, which is central to Religious Studies dealing as it does with the fundamental questions of existence. We study questions of evil and suffering and the extent to which humanity is to blame. Or can we blame God? We also consider arguments for and against the existence of God in order to give ourselves material to consider these questions carefully.

There is also a chance to consider particular case studies, such as the execution of Mark Stroman or the role of aid in Africa. These are intended to draw together learning and express it in a new way allowing it to feel relevant outside the classroom

GCSE

At GCSE we offer one of the new courses in Religious Studies based on the new guidelines. Everyone is required to study two religious approaches towards issues of philosophy, ethics and religious faith. We currently take the Edexcel B course studying two out of the three possible components: religion and ethics; religion, peace and conflict; religion, philosophy and justice. In one we study a Jewish or Buddhist approach, in the other a Christian one. There is an exam for each course, making a total of two, 1 hour 45 minute papers.

George Moody (george.moody@abingdon.org.uk)

SCIENCE

An overview of Science in the Middle School

At the start of the Middle School in the third year, all boys are put into general sets to study Physics, Chemistry and Biology, each taught by a subject specialist. These are taught on a rotation basis so that boys study each science for one term, before moving on to the next. In the fourth and fifth year, boys continue to be set by science ability, but study all three sciences every week. We offer two routes through fourth and fifth year science; boys study either separate sciences (Biology, Chemistry and Physics) or Double Award Science. Those who take Double Award Science have fewer periods of science than those taking separate sciences but study four optional subjects to GCSE rather than three. This course is suitable for boys who wish to take an extra optional subject; for example, the combination of History, Geography, Latin and German. Even if the pupil ultimately intends to take up one or more sciences for A level, his parents might consider that the breadth of education provided by four arts subjects up to the age of sixteen is more important than a wholehearted immersion in science at this stage. Each case must be considered on its merits. If a boy intends to do more than one A Level science then he would usually study separate sciences for GCSE but boys can successfully take up A Level science after Double Award provided their grades are very good.

A boy should consult his science teachers or the Curriculum Director for advice on the suitability of Double Award Science or separate sciences for him.

SCIENCE (DOUBLE AWARD)

Edexcel GCSE Science (Double Award) specification (4SD0)

<http://qualifications.pearson.com/en/qualifications/edexcel-international-gcses-and-edexcel-certificates/international-gcse-science-double-award-2017.html>

Double Award Science is taught in ten periods a fortnight in the fourth year and fifth year and leads to two GCSEs. The Physics, Chemistry and Biology components are taught by subject specialists. There is no coursework but practical ability is examined by written questions on the design of experiments and the handling of data.

Double Award Science is about the same level of difficulty as separate sciences, but less science is covered. The course contains a broad range of scientific topics that are designed to engage and stimulate boys' interest in science whilst providing the knowledge and understanding required for progression to A Levels (see advice above).

Richard Fisher (richard.fisher@abingdon.org.uk)

BIOLOGY

Edexcel International GCSE (9-1) in Biology (4BI1).

<https://qualifications.pearson.com/en/qualifications/edexcel-international-gcses-and-edexcel-certificates/international-gcse-biology-2017.html>

The course covers five key themes:

- The natures and variety of living organisms
- Structures and functions in living organisms
- Reproduction and inheritance
- Ecology and the environment
- Use of biological resources

The material is assessed terminally by two written examination papers. The papers are un-tiered so a full range of grades are available. Pupils will do a large number of practical activities during the course in order to develop their practical and investigative skills. There are also some practicals in the specification content. Knowledge of these practicals, and the ability to interpret the resulting data, is required for the examinations.

Pupils will be issued with a text book that is specific to the course.

The Biology department has developed its own course in the Third Year in which we try to develop some of the important underlying skills necessary to do well at GCSE. We use a lot of experiments and other exercises to enable boys to learn to apply their facts to various problems, and to be able to evaluate data from a range of sources. There is some factual content linked to the experiments and this is appropriate to both Biology and Double Award pupils.

Simon Bliss (simon.bliss@abingdon.org.uk)

CHEMISTRY

Edexcel IGCSE Chemistry (4CH1)

<http://qualifications.pearson.com/en/qualifications/edexcel-international-gcses-and-edexcel-certificates/international-gcse-chemistry-2017.html>

Chemistry – as the fundamental basis behind most scientific and technological progress – has shaped the course of the last hundred years to a vast extent. This would never have been possible unless chemists had been interested in two major areas: practical problems and problem solving. Ability in these areas can only come about through a thorough knowledge of the underlying principles behind the chemical reactions being manipulated. In the Chemistry Department, we aim to provide a significant degree of factual knowledge, allow pupils to develop greater practical skills and above all to foster the spirit of scientific enquiry. These skills will be invaluable for any further study of science at A Level or beyond, although the primary aim is to ensure that boys perform to the highest possible level of which they are capable.

Students who opt to study Chemistry as a separate subject at GCSE will be taking the Edexcel IGCSE qualification. The course covers the following areas:

- 1) Principles of Chemistry
- 2) Inorganic Chemistry
- 3) Physical Chemistry
- 4) Organic Chemistry

The course content provides an essential grounding in the subject and is an excellent platform from which to approach the A level course. Typically around half the students opt to continue their study of Chemistry into the Sixth Form.

The final examination will consist of two papers. Paper 1 (worth 61%) lasts for two hours and covers the core elements of the course. Paper 2 (worth 39%) lasts for 75 minutes and covers all the syllabus content and as a result includes questions on the most demanding topic areas. Grades will be awarded on the new 9-1 scale. Practical work is a key component of the chemistry teaching and both papers have questions that focus on examining the skills the students have acquired as a result of the experiments they have completed as part of the course. As a consequence there is no coursework element to the examination.

Students who study Chemistry as a separate subject at GCSE are in a stronger position from which to approach the A level course. However, the most able students are certainly capable of handling the transition from Dual Award to Sixth Form studies by undertaking some extra work.

Ian Middleton (ian.middleton@abingdon.org.uk)

PHYSICS

Edexcel IGCSE Physics 4PHO

<http://qualifications.pearson.com/content/dam/pdf/International%20GCSE/Physics/2017/specification-and-sample-assessments/IGCSE-Physics-2017-specification.pdf>

The aim of the middle school physics course is to provide a sound understanding of natural phenomena suitable for the pupil, irrespective of whether they aim for a science-based career or not. Physics is the fundamental science and underlies chemistry and biology.

All boys take physics in the middle school either as a separate science or as an element in 'double award' science. It is more important to get a high grade if a boy wishes to continue to A level, than to worry about which course is followed, however weaker students will find the A level course easier if they do the separate physics course. In the third year, we aim to look at all the major areas of physics to build the foundation for the fourth and fifth years. We are very well equipped for practical work including data-logging equipment

The course content is organized into five themes, each of which is returned to over the course allowing pupils to revise and consolidate on previous work.

- Forces & effects
- Waves
- Heating Processes & Kinetic Theory
- Electricity & Electromagnetism
- Nuclear Physics

Ben Simmons (ben.simmons@abingdon.org.uk)

Sport & Physical Education

Physical Education

There are six full-time physical education specialists in the Department. Compulsory PE lessons are integrated within the academic timetable in the middle school, giving individual pupils, access to specialist teaching. The emphasis is on challenging each individual to be the best that they can be, without comparing themselves to others. Within PE lessons a wide and balanced range of activities is offered, including, amongst others, net/wall sports, gymnastic and athletic activities, swimming, health related fitness, and strength & conditioning.

The aims are five-fold:

Fitness: To instil the importance of a healthy body and mind, by promoting physical activity as a means to a healthy lifestyle.

Social and Moral: Through small-sided games and group activities, we encourage boys to mix and co-operate. Through competition, we aim to instil the correct attitudes towards winning and losing and develop the pupils' self-discipline and positive sporting behaviour. Boys should develop a sense of purpose, confidence, politeness, perseverance, initiative and independence.

Cognitive: To instil knowledge and understanding of the rules, skills, tactics and aims of the various activities, and encouraging pupils to apply these concepts appropriately in the different activities and critically evaluate their performance.

Leisure: By providing a wide variety of sports, we hope to encourage pupils to continue their participation in physical activity way beyond their school years.

Aesthetic: To encourage pupils to appreciate and evaluate form and movement as well as giving them the opportunity to express their creative ability.

Sport

The emphasis is on providing 'more opportunity for more pupils' by taking part in two sessions of changed activity per week, throughout the year. It also gives boys the opportunity to represent the school in competitions with other schools and to progress to represent higher teams at county, divisional and national level.. The Sports programme is run within the curriculum, and at the end of the school day, there is further opportunity to engage in other sporting activities. The pupils have the opportunity to choose which sporting activity they would like to do each term.

Core Sports Activities provided within the curriculum (chosen on an option basis)

Michaelmas Term	Lent Term	Summer Term
Badminton	Badminton (5 th Yr)	Athletics
Cross Country	Cross Country	Cricket
Rugby	Football	Tennis
Squash	Hockey	Rowing
Swimming	Squash (5 th Yr)	Waterpolo
Health Related Exercise	Swimming	
	Rowing	

PE specialists and other members of staff, who have an interest, and often expertise, in particular sports, staff the Sports programme. The use of non-specialist teaching staff for sport gives both teachers and pupils the opportunity to communicate and develop a relationship outside the classroom. Pupils are streamed into teams depending on their ability and we fulfil fixtures against other schools regularly. Where we are short of expertise in a particular discipline, we employ the services of external professionals to ensure to high standard of provision.

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